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1 Architecture

1.1 Access

Euphony is an operating system that has been highly optimized for music playback with a selected set of essential software. It is a so called headless system. This means you don’t need a monitor or keyboard attached to it for regular use. It will however need to be connected to your network with an ethernet cable (to access the user interface). You will also need at least one DAC connected via USB (for music playback).

Euphony can run on a regular PC, MAC, or a laptop, but it is best suited for a mini-PC or MAC mini.

Our recommended configuration (to guarantee the best sound quality) is 4GB RAM, and a four gen (Haswell) or newer processor (Intel i3 or better). Lesser hardware will work fine, however the best possible sound quality will not be achieved.

To interact with Euphony you will only need a Web Browser (optimized for Chrome and other Webkit-based browsers - Opera, Safari) on any other computer or mobile device (either on your smartphone/tablet or another desktop computer).

1.2 Topology and licenses

Euphony operating system and it’s default Stylus player are intended to be used on a single machine with DAC attached. In our opinion this will provide the best sound quality you can achieve on particular system.

However, we also offer other music services in addition to the Stylus. Some of those services are ‘servers’ (they encompass both roles: Library manager and Player - like Roon), and some are only ‘endpoints’ (only have Player role - like squeezelite program). An endpoint is controlled remotely, through network connection and as such can be placed on different machine than server. This enables dual-machine setups which some people prefer.

Disclaimer: we do not advocate dual-machine setups but we also do not discourage it. It’s up to you. (For a long time we did not even fully support it but audiophile community encouraged us to do so.)

If you want to have dual machine setup and want to benefit from finely tuned Euphony operating system on both machines you will have to buy 2 Euphony licenses. To make this more optimal, we provided 2 types of licenses:

- Regular, full price license which enables full functionality of Euphony system - all music services are available for selection. You can use it in single machine setup but you can also use it as a server part in dual-machine setup.
- Endpoint only license (half price) which enables subset of music services - only endpoint-type services are available for selection (HQPlayer embedded, StylusEP,
RoonBridge, Squeezelite, NAA, Airplay). This is intended for use on endpoint side of a dual-machine setup. You don’t need to have Euphony on both machines in dual-machine setup. You can buy only Endpoint-type license and choose to have server part hosted on another system (although we won’t deny that a lot of people who prefer dual-machine setups found that having Euphony on server side brings as much improvements to sound quality as having it on endpoint side.) If you test dual-machine setup, regardless if your Euphony machine is in the server or endpoint role, during Trial registration you will have full functionality. Only when you buy endpoint only license and fully register you will have your selection of music services reduced to endpoint-type services.

1.3 Storage

Euphony installation has dedicated data partition for you music, configuration files, cache files. You can also attach other USB or network devices and add them to Music library or you can use internal tools to copy selected music to your data partition. If you have other internal drives you can also use them as part of the Music library. If you fear delays or noise while using network drives know that Stylus will try to seamlessly cache all played songs to Euphony drive so next time you add them to queue they will be played from there (and accessible even if your original drive is no longer connected).

1.4 Sound quality

Euphony is highly optimized for audio playback. We used every trick in the book to minimize latency and reduce jitter to barest minimums even on less powerful devices. If you choose our own Stylus player and library management there are additional benefits. If you worry about interference while playing from network or rotating disk drive you can choose 100% buffer option which will put whole song in RAM and play it from there.
2 Installation

There are 2 ways to get Euphony:
- Buy a Euphony Drive (SSD) with our pre-installed Euphony system
- Download and install a Euphony System image to a USB flash drive and boot from it.

2.1 Euphony Drive

When you buy a Euphony Drive (SSD) with our pre-installed Euphony Audio Transport you only need to physically install the SSD into your machine. If you are up to the task you can do this yourself or you can contact your local pc shop/service center to do it for you. Power-on your machine and check the 'Basic usage' section of this article to learn how to connect and interact with Euphony.

2.2 Image download

We also offer a Euphony System image which can be downloaded and written to a USB flash drive. To make this easy for you we provide a little program to simplify the process. Follow the procedure:

1. First get Euphony Downloader for Windows, unzip the downloaded file and double click on the EuphonyDownloader.exe icon.
2. Insert an empty USB device (min. 8BG) and select the corresponding drive in the Euphony Downloader.
3. Click GO! and wait until the Euphony image is downloaded and then written to your USB device.
4. Now insert the USB device into your target PC/Music server and power it on. If your machine is not set-up (in the BIOS) to first boot from a USB device, you will need to connect a monitor and keyboard to your system to interrupt the boot process. This is usually done by holding the F10 key for most PCs, or the Option key for MACs. Press the needed key (F10 or Option) immediately after you physically power on the system, then choose the USB device with Euphony on it from boot menu.
5. After the boot process is finished, check the ‘Basic usage’ section to learn how to connect and interact with Euphony.
3 Basic usage

3.1 Access

Few important notices:

1. If your system boots by default from drive you have Euphony on, then **you don't ever need to connect keyboard or monitor** to your Euphony device. Otherwise, you may need to have a monitor and keyboard attached to force USB boot.
2. Your Euphony device **must be connected to your local network** via ethernet cable.
3. To function properly Euphony has to be registered and to have access to internet.

As mentioned before, Euphony is a **headless** system, you interact with it through network connection from another computer via Web Browser. Main control/playback interface to Euphony is the **Euphony Web Application**. It can be accessed by visiting web address: [http://euphony](http://euphony) (or [http://euphony.local](http://euphony.local) for MAC) on your main PC device/laptop or your tablet/smartphone. Euphony web app is well optimized for mobile use.

It is possible your Android device won’t find Euphony on network by it's name. To get around this go to [http://euphony-audio.com/launch-euphony/](http://euphony-audio.com/launch-euphony/) and tap on a big launch button in the middle. Your Euphony device must have had access to internet during startup for this to work.

(You can also connect monitor to see Euphony console output: there you will find Euphony network IP address which will guarantee you access on all devices.)

(Your browser may display ‘Not Secure’ in the address bar when accessing Euphony Web Application. This should not worry you. It’s just a warning by browser that it does not have a secure (https) connection with the site. Since the site is on your local network secure connection is not really needed.)

(Remark about this guide: throughout this document you will find many screenshots of practical use of Euphony web application. These screenshots are taken by emulating relative screen dimensions of various mobile devices: from IPhone 4 to IPad Pro. It is done so mainly for informative purposes - to illustrate how application looks like on devices of various sizes using both orientations. Also note that some screenshots are cropped - usually just to highlight a specific feature.)
3.2 Registration

Unregistered version has limited functionality: playback service is restarted periodically and some settings and features are not available. Euphony can be registered if you have a valid voucher code (received together with SSD you bought) or obtained via our site by buying Euphony licence.

You can also try Euphony for free for 30 days if you use voucher code: ‘TRIAL’.

Start registration process by going to top menu and select ‘Registration’. A dialog will appear and you must first click ‘registration page’ external link to go to our Registration page. New tab will be opened and there you must enter your name, email and voucher code. If entered data is valid you will shortly receive an email with the link. Clicking on that link will forward you to a page with your registration number. Copy that number, enter it into dialog and click ‘Register’ button. If registration number is valid you will see following messages:

Bear in mind that Euphony must be connected to the internet for this to completely succeed like above.
3.3 Music Services

**Euphony system** is first and foremost superbly tuned to output sound bytes to digital audio converters with minimum latency and thus ideally suited to produce the best quality sound regardless of the software used to choose the source of that sound, decode it, convert it and output it to system sound library. Although we believe that our own Stylus solution is the best both in terms of performance and usability we don’t want to lock you into our music ecosystem. Even if you have already invested into other systems, you can still significantly benefit by choosing Euphony as an endpoint between your favorite Music service and your DAC. That is why we provided several popular Music service options to choose from.

### 3.3.1 Stylus

Stylus is our own Music Service which provides both roles: Music Library and Music Player role. When Stylus option is selected, you will have the option to turn on upsampling which is handled by separate player application: **HQPlayer embedded**. HQPlayer embedded requires additional license which you must buy on HQPlayer site. Stylus can work in dual-pc configuration with StylusEP as an endpoint.

### 3.3.2 Roon Server

If bought pre-installed on SSD, Euphony offers Roon Server (also called: Roon Core component in Roon architecture) option. To control music library and music playback you will use your preferred Roon Client. If you choose to leave default music library folder (/data/Music) in Roon then you can manage your songs the same way as when using Stylus option. Because of Roon’s flexibility, where you can have client, core and music endpoint each on a different machine we support this flexibility by providing several different ways to use Roon Core:

1. **Roon Core** - Only Roon Core is started on Euphony machine. Library management and music endpoint are part of the Roon Core
2. **Roon Core + HQPlayer** - HQPlayer is started in addition to Roon Core. To be able to use it you have to use Add HQPlayer in Roon Client and in “Hostname or IP address” field enter: localhost
3. **Roon Core + StylusEP** - StylusEP is started in addition to Roon. Look for Squeezebox-type audio output named StylusEP in Audio part of Roon’s settings
4. **Roon Core + Squeezelite** - squeezelite program is started in addition to Roon core. Look for Squeezebox-type audio output named euphony in Audio part of Roon’s settings

### 3.3.3 HQPlayer embedded

HQPlayer embedded can be started solely. You can control playback from Roon with core located elsewhere (usually together with Roon Client).
3.3.4 StylusEP
StylusEP is a Squeezebox emulation program which uses the same sub-program to process and output audio data to DAC as Stylus player itself. StylusEP can be started together with Roon or it can be employed on endpoint machine in dual-machine setup. Although it implements Slimproto Squeezebox protocol it’s only been tested to work with Roon. LMS is not yet supported.
StylusEP will be automatically found by Roon (if Squeezebox support is enabled) under the name: StylusEP.
StylusEP will also work as client to Stylus exposing it’s local audio cards for remote use. Stylus on server machine can then select those ‘remote’ audio cards for it’s audio output.

3.3.5 Roon Bridge
Only Roon music endpoint is started. That means that Roon Core must be started elsewhere. This music endpoint will be automatically found by Roon Core and it will have the name 'euphony' (or your chosen hostname for euphony machine)

3.3.6 Squeezelite
Euphony can also function as a squeezelite end-point for Roon/LMS. Squeezelite does not have any user interface of its own and must be controlled via Logitech Media Server's web interface or another client like Roon.

3.3.7 Networkaudio
In this configuration Euphony system becomes networkaudio endpoint. Use HQPlayer to manage your music library and connect to this endpoint.
**Network Audio Adapter** or **NAA** is a way to expose remote audio devices to **HQPlayer desktop** over asynchronous network link. It is just an audio "renderer" with support for a number of different audio endpoint devices. Playback by NAA is completely clocked by the audio endpoint device and NAA performs only buffering, no decoding or processing at all.

3.3.8 AirPlay audio server
All content you have on your iOS devices can be streamed to euphony AirPlay audio server.

**NOTICE:** Airplay audio server and StylusEP are available only in Euphony major version 3!
3.4 Music library

Your main music library is located on Euphony drive. Depending on which music service you selected you may or may not need it. For Stylus this local library is essential. For Roon Server it is optional, for other services it is not needed.

If you choose Stylus then you have a couple of other options for finding and/or playing music. All options are:
- Local Library
- Tidal
- Qobuz
- Youtube
- Webradio

Local library is also available to Roon core if started on euphony system.

**NOTICE:** Qobuz and Youtube are available only in newest v3 major euphony version.

### 3.4.1 Local library

Euphony system includes an album for quick testing. To add more songs to music library you can:
- Attach external USB storage
- Add network drives (SMB) via Euphony Web Application

For simple file/folder operations, copying music files to Music library or deleting them you can use *File View* inside main application.


Attached USBs and network drives will appear in File Manager as additional drives. Use File Manager Copy function to copy desired songs/directories to *Euphony Drive*. *Euphony Drive* is location that Music Service will scan and add content to Music library.

Euphony Drive can also be shared for network access from Windows. To enable that, head over to Tools → Settings, Music Library section, and enable *Share Music Library on network* option.

Although Euphony requires internet connection for seamless use it is possible to just play music from local library without it. For other libraries internet connection is a must.

### 3.4.2 Tidal

If you have a Tidal account you can use your Tidal credentials to access your favorite content (albums, artists, songs, playlists) inside Euphony Web application.
You can also perform Qobuz search and mark search result content (albums, artists, songs, playlists) as favorite (or unmark it). You can also use few ‘Music discovery’ options: Top and Recommended sections. For full Tidal experience we still suggest using Tidal's own web application.
It's important to understand that Tidal songs remain on their servers and when you select a song for playback it is streamed from their servers to your machine. It is never stored locally and it is not available for offline use.

3.4.3 Qobuz
If you have a Qobuz account you can use your Qobuz credentials to access your favorite content (albums, artists, songs, playlists) inside Euphony Web application. You can also perform Qobuz search and mark search result content (albums, artists, songs, playlists) as favorite (or unmark it). You can also list ‘Featured’ content. For full Qobuz experience we still suggest using Qobuz's own web application.
It's important to understand that Qobuz songs remain on their servers and when you select a song for playback it is streamed from their servers to your machine. It is never stored locally and it is not available for offline use.

3.4.4 Youtube
Youtube contains an enormous amount of music videos. Now you can search Youtube videos or playlists and play audio stream part of chosen video.

3.4.5 Webradio
To listen music streaming from web radio stations you have options to search Shoutcast live database of web radio stations and play them or you can manually enter the web address of a streaming endpoint of a web radio station you found by other means.
4 Euphony Web App

Euphony Web Application allows you to:
1. Choose Music Service in use
2. Adjust settings (system wide or related to particular service)
3. Browse music library and control playback (if Stylus is music service in use)

Static parts of all pages are header and footer.
Header contains logo and product name, Power Menu and Tools menu.
Footer contains cover photo of currently playing (or paused) song’s album and playback controls. Playback controls can be expanded (by clicking on vertical dots icon) to show song seek and volume (if available) controls and additional playback flags.

Application has three main pages and header and footer bar that are present on all pages:
- Audio systems
- Library
- Settings.

Main Menu is accessible behind the blue gear icon 🎧 in header.
Power menu is accessible behind green power icon ⚪️ in header.

Audio systems page is used to change your designated Music Service. It is accessible from the Tools Menu -> Audio systems

Library page is accessible only if chosen music service is Stylus. Other music services have their own front end for browsing/choosing/playing songs from their own Music Library.

Library page actually contains three overlapping screens:
- Music Library
- Playing Now
- Queue

Music Library is default screen which allows you to browse your library in many ways and select songs for playing.

Playing now screen pops up to display all available info about the song that is currently playing (or paused).

Queue is a list of songs ready for playing (according to playback options: Random, Repeat, Single, Consume). You can remove or rearrange songs in queue and you can save it to a playlist file.

Settings page allows you to tweak various options related to euphony system, music library and playback engine. Content of settings page depends on Music Service in use.
4.0 Main Menu / Power Menu

**Main menu** can be accessed by clicking the blue gear icon in the header bar.

It contains the following options:
- Home - link to Home page
- Settings - link to Settings page
- File Manager - opens File Manager application in separate window
- Update music library - rescan your library file for changes that occurred after the last scan (scan is always performed at startup)
- Temp/Cpu - Opens small dialog to show Cpu core usage and temperature
- Check for updates - checks if there are new updates to Euphony system (check is also performed at startup)
- Help - link to this guide
- Support system - link to help-desk pages on euphony-audio.com

Access **Power menu** by clicking on green power icon: ⚡️

Power menu contains options:
- Shutdown - turn the computer off
- Reboot - restart the computer
- Restart App - restart the web application
- Reload page - full page reload (bypassing cache)

If, by any case, the system starts to behave erratically you can try first by restarting the Web application, and if problems persist then restart the computer.

If problems don’t go away you can open a ticket via our support system or contact support directly at: contact@audiokernel.com
4.1 Audio Systems

Here you can select audio system and check which audio system is active.

If you select some other audio system besides Stylus, some parts of the application may become unavailable altogether (Library page) and some sections in Settings screen will not be visible.

If you select another music service when you click ‘Start’ the application will be restarted to reconfigure itself.

If Roon Server is already selected service you can change Roon Server configuration option and just click “Restart Roon”. This will stop and start appropriate services, save option choice and application will not be restarted (no need to click ‘Change’).
This page is available if Stylus is the selected Music Service and is loaded when you click on Euphony-Stylus Icon-name part in header.
4.2.1 Library

Playing now page, and Queue page remain largely the same no matter which library you use. It’s even possible to have local songs, Tidal songs, and Web radio stations all on the Queue at the same time (there will be an icon to indicate the origin of each song in the Queue).

As for the Library, although the view is always the same, available options differ.
First, we will describe how everything works for **My music** (songs on your euphony drive and on connected drives that are part of Music Library) and in other sections we will mainly focus on the things that are different.

4.2.1.1 My Music

Default page can display your music library in various views: Dashboard, Albums, Songs, Artists, Genres, Playlists, Files.

Note that Dashboard, Artists and Genres don’t actually provide direct means for selecting songs for playback - they are here to provide a quick way to filter your library by specific fields (artist, genre) or usage patterns (Dashboard: most played, recently played, not played yet, largest collections).

Filtering your view will be explained later because it can be accomplished in several ways which need detailed explanations. For now, while we go through visuals, bear in mind that
content presented on these screens is always the subject to some current filter (which can be empty, of course).

4.2.1.1.1 Albums

Albums view contains most options so it will be explained in detail.
Clicking on album cover expands section with album songs. Selected album is highlighted in blue.
Clicking on ‘Add +’ for particular song will add it to the end of the Queue.
Clicking on Play icon 🎵 which appears when you hover or touch song row will add the whole album to Queue and start playing from this song.
Clicking anywhere else on song row will add song at the end of the Queue and start playing it.
Clicking on the info icon 📄 (before song time) will bring up a dialog with all attributes of that song.
Clicking on a horizontal ellipsis icon ⋯ on the end of the first row of expanded section with album songs presents a menu with several options:
‘Add all’ will add all album songs to the end of the queue.
‘Add & replace’ will replace queue content with album songs.
‘Add & play’ will replace queue content with album songs and start playing from the first song.
‘Album info’ will list some fields related to the selected album.

Clicking on horizontal ellipsis icon ⋯ in the corner of album cover brings up a menu similar to the one explained above with additional options related to album cover picture.
‘Next cover’ will try to fetch another image from your album folder (when you have front, back etc. images you may want to cycle through them with this to select the desired one)
‘Cover from web’ will try to find album cover on web using current album and artist name. If no image is found a dialog is presented which allows you to adjust album and artist names (i.e.: maybe to drop ‘- Disk 1’ from album name: ‘Gold - Disk 1’ and similar)
‘Upload cover’ gives you the option to manually select local image and upload it to Euphony. You also have the option to copy that image to your album folder under name: cover.png (In most cases Euphony never changes anything inside your album folders - this is an exception)

Album view actually has two forms: album cover form which is default and list form.

You toggle between them by clicking the icon 🔍 before paging controls.
4.2.1.1.2 Songs

Songs view lists individual songs filtered by current filter (there is no point paging through your entire library in this view without some filter applied).

Screenshot below has filter: *title CONTAINS take* applied (more about filters later).
Same as before, clicking on ‘+’ sign will add the song at the end of the Queue, clicking anywhere on the row will add the song and start playing it, clicking on the info icon will present all of song’s attributes.

Song row has two lines. First line contains track number and song title. Second line contains album and artist names (if available). Note that long song titles may be truncated on narrow screens so sometimes it may be helpful to orient your device to landscape orientation.

4.2.1.1.3 Artists & Genres

**Artist** and **Genres** views are very similar. They give you unfiltered (initially) list of all artists and genres in your library.
You can filter that list by entering something into **Search** field. Resulting list items will contain the string you entered in search field (Like above ‘Ja’ filter for Genres). Search is not case sensitive.

Each row, in addition to Artist/Genre name will give you a small icon in front and number of songs for that item. Clicking the item row will create a new filter and transfer you automatically to Albums view with that filter applied.

In example, if you clicked on the **“B.B. King”** row filter: **artist = “B.B. King”** will be created, and all albums where artist field is **“B.B. King”** will be displayed.

Exactly the same thing for genre: clicking on “Jazz” row will create a filter **genre = “Jazz”** and display all albums with genre field exactly equal to “Jazz” (you can later easily correct that filter to: **genre CONTAINS “Jazz”** so you can see albums of all Jazz variants).

Clicking on **horizontal ellipsis icon ***** will again give you three familiar options:

- **‘Add all’** will add at the end of the Queue all songs that have the view’s attribute (artist or genre) exactly equal to row’s value (so, instead of creating a filter and display albums or songs with that filter applied, with this you can immediately retrieve a list of songs and add them to the Queue).
- **‘Add & replace’** will replace current queue content.
- **‘Add & play’** will replace queue content and start playing from the first song.

Artists and Genres views are just another quick way to browse your library and instantly create appropriate filter for your current listening moods. There are several more ways to do it...
4.2.1.1.4 Playlists

Playlists are “.m3u” files found in your library that usually reference songs in the same folder. You can also create your own playlists by saving current queue content to named playlist file. User playlists are stored in separate directory and listed only when you choose ‘User’ from sub-menu in top bar.

Playlists behave like albums, they contain a number of songs which can be displayed if you click on a playlist row and expand it.

Songs can be added individually in similar way as album songs (click on “+” to add to the end of the queue, click on row to add and play) or all together: click on three-dot icon for:

- **Add All**
- **Add & Replace**
- **Add & Play**

You can also create your own playlists by saving current Queue content to named file (will be explained in detail in Queue document section).

Playlist view can also be filtered by entering a string in the Search box.

Another way to create a playlist is when you right-click (or long touch) on the info icon of the song. ‘Add to playlist’ dialog opens and list all previously saved user playlist. Clicking on “+” next to playlist name will add the song into that playlist.

You can change the name of any listed playlist just by editing the playlist name in the input field.

You can also create a new playlist by adding the song to first playlist entry: “New playlist” by changing the default name to something else.

User playlists can contain songs from any source, local or remote but.

Bear in mind that corresponding .m3u files that are created are not actually compatible with standard m3u file format and can be used only inside Euphony.
4.2.1.1.5 Dashboard

Dashboard is another quick way to create filters.

It uses songs attributes: genre, samplerate, year, artist, albumartist, album, composer, performer to present you maximum of 12:

- Most recently played
- Most often played
- Largest collections of particular song attribute
- Not played yet
Click on any of the dotted rectangles in any of the sections to quickly create a filter and go to albums view with that filter applied.

Note that “Recently played” and “Most played” will be empty at first until you start playing some songs.

(Notice: usage statistics used for this is updated only upon actual playing of songs, not by adding them to queue.)

4.2.1.1.6 Files

Files view will show you all folders and music files on your data partition.

Data partition is the largest partition on your system disk and it is dedicated to storing music files. It has one default folder that we call Euphony Drive where your music content is physically stored and optional folders (mountpoints/links) which are created when you connect network drive or attach another disk or USB drive.

When USB is attached or network drive is added it does not automatically becomes part of your Music Library because you may not want to add the whole device but only attach it to copy specific content to Euphony Drive.

Because of this File View has two initial sections: “In library”, “Not in library” to indicate which devices/network drives are part of the library and which are not. (To add drive to Music Library you must use Settings page).

Clicking on a particular folder you will enter that folder and see its contents. You can repeat that and traverse the folder tree. Your current path and links to parent folders are always present at the top of the list.

Clicking on the three-dot menu will give you an option to copy that folder to Euphony Drive (only if you are not already inside Euphony drive folder tree).

If your root folder is part of Music Library then you will have additional options:

Add All - append to queue
Add & Replace - replace queue content
Add & Play - replace content and play first song

These will add all songs found in that folder (including all subfolders) to Queue.
To prevent you from accidentally adding huge amount of songs to queue, number of songs inside folder tree is checked first and if it exceeds 50 songs popup dialog will ask you to confirm your intentions.

For lines that represent files you have the following options:

**Add to queue** - add song at the end of the queue

**Add & Play** - add a play song

If the song is not in Euphony Drive folder tree then you will have additional option: **Copy to Euphony Drive**

This will copy the song and also the folder structure of the song’s path. In example, like on the screenshot below, if you copy the song from location on network share:

“DSS-robert-music/albums/Moses Mayes - Second Ring (2006)/01 - Intrafusion.mp3”

to Euphony Drive, then it’s new full path will be:

“Euphony Drive/albums/Moses Mayes - Second Ring (2006)/01 - Intrafusion.mp3”

Euphony system tries it’s best to detect changes in paths that are part of the library and scan new folders for new songs but sometimes it is necessary to manually trigger the scan and update music database. You can do that by clicking “Update library for this path” (If you know where changes occurred this is better than invoking “Update Music Library” from the Tools Menu which will trigger the scan of entire Music Library folder structure).

For folders with great number of files you can filter the list by entering some string into Search box.
4.2.1.1.7 Navigating your library

When you have a large library, finding the next thing to listen can be cumbersome. Granted, sometimes you just know the exact song and it is just a matter of how to find it quickly but more often than not you will need some inspiration, some guidance. You will know your mood, maybe a genre you want to listen to, music period or composer. Sometimes you will just want to browse, see what you have, in what ways can your library be grouped and categorized. That is what filters are for.

During Music Library scan we record all of the song's attributes that can be found. Filters are a way to show only albums and songs that satisfy conditions placed on those attributes.

**NOTICE:** Since albums are abstract entities conditions are placed only on songs. If you are filtering **Albums** view then if only one song in the album satisfy filter conditions that album will be displayed and if you click on album to view it’s songs - all songs will be listed (not just the one that satisfied the conditions). The logic is that when listing album songs you will always want to see all songs. If you are specifically interested just in songs that satisfy given conditions switch to **Songs** list view.

The attributes that we use for filtering are: **artist, album, artist, title, genre, year, samplerate, file, albumartist, composer, performer, duration** (in seconds).

Filter is a **set of conditions** and an **operator** to bind them.

Operator to bind conditions together can be:
- **ALL** - all conditions must be satisfied - displayed as ‘AND’ in filter string
- **ANY** - any one of conditions needs to be satisfied - displayed as ‘OR’ in filter string

Condition are in form: **attribute <condition operator> value.**

Condition operator can be one of:
- **Contains** - attribute contains value string anywhere inside - displayed as “CONTAINS” in filter string
- **Begins with** - attribute begins with value string - displayed as “BEGINS WITH”
- **Ends with** - attribute ends with value string - displayed as “ENDS WITH”
- **Is equal** - attribute is equal to value string - displayed as “=”
- **Is less than** - attribute is smaller that value - displayed as “<” (mostly used for number-type attributes like year or duration but will also works for strings - **less than** means alphabetically before)
- **Is more than** - attribute is bigger than value - displayed as “>”

Examples of filters (as displayed upon applying):
- **genre = jazz AND year > 1960 AND year < 1980**
- **album BEGINS WITH best of OR album CONTAINS compilation**
- **samplerate > 325000 AND duration > 600**

All string comparisons are case insensitive!
Filters can be created in several ways (some of which we already covered):

- **Dashboard view** - clicking on any of the dotted rectangles in any of the sections (adds simple condition: attribute = value)
- **Artist or Genre view** - clicking on particular artist row will add simple condition: artist = row value (same for genre)
- **Filter dialog** - used to view and edit current filters, delete or add new filters and change ALL or ANY bind type (more a little later)
- **Browse wizard dialog** - a quick way to drill down through your library via several fields - end result is a filter with one or more conditions binded by ALL type (more later)
- **View profile menu item** - saved filters appears as a View profile menu items - this applies all conditions in a saved filter with one click
- **Search** - while in Albums or Songs view, typing anything in search box will execute several database queries at once and offer you sample set of results from which to choose from (more later)

### 4.2.1.1.7.1 Filter dialog

Filter dialog displays your currently applied conditions, allows you to change them, delete them or add new ones. You open it by clicking on a filter icon in toolbar near the top.

Any condition in a list can be changed as you wish either by changing the attribute or condition operator or value. New condition can be added by "Add new condition" and any condition can be removed by "Remove" button. "Clear" will remove all conditions and "Apply" will apply your current changes to the view.
If you just cancel the dialog (by clicking on the ‘x’ in the top-right corner, Close button or clicking anywhere outside dialog) changes you made will be lost.

If you find that you are using some filter very often you can save. It will appear in filter dialog in saved filters list and you can apply it with one click.

Filters are applied only for Albums and Songs views and you can switch between them with same filter in effect.

Other views (Artist, Genres, Playlists, Files) can filter their output by entering some string in Search box.

Entered search box value is essentially a one-condition filter applied only to current view and only on the attribute you are viewing: genre for Genres view, artist for Artists view etc.

When you switch to another view this condition is lost and search box is emptied.

When filter is active filter icon in the top bar becomes orange. Filter stays ‘in memory’ until you change it or clear it. It is saved as a browser Cookie so it will be recovered even after restart the next day.

Another useful shortcut is that you can doubleclick/double tap the filter icon to clear all conditions.

4.2.1.7.2 Browse wizard

Browse wizard is a nice way to browse your library and ‘drill-down’ via several attributes that are useful for grouping. Those attributes are: genre, year, samplerate, composer, artist.
Here you can see initial dialog shown after you click wizard icon 🚀:

The idea is to quickly see all values for specific attribute (i.e. genre - click on **Browse by genre**), select one of them after list is presented (i.e. Jazz) and then see all values for another attribute (i.e. year) with filter genre = Jazz applied.

This moment is displayed here:

Now you can:
- go deeper - select value for current attribute by clicking on dotted rectangle of some year (2016 is selected in above screenshot) and browse by another attribute - i.e. **Browse by: artist**
- browse by another attribute - without any of the year values selected click on one of the **Browse by** buttons
- clear specific condition to return to **Browse by: <cleared condition>**
- apply current conditions as filter by clicking "Apply"
- values for currently displayed attribute values are sorted by number of songs that have it (the number in parenthesis) but you can opt to sort it by value (that means
alphabetically for string-type attributes and naturally for number-type attributes) by clicking on **Sort by** button

- If the list is too big to fit the screen only portion of values is displayed and you can display the rest by clicking on “Show all” that will appear in that case (the logic is that Browse wizard should be like: click, click, click and you are done - if you need to scroll first then this purpose is defeated).

Since it is a drill-down method, conditions in created filter are binded with **ALL** type.

If you have an active filter and you enter Browse wizard then the conditions in that global filter will be applied and the starting point for browsing. You can clear them in Browse wizard but this only applies internally, global filter remain in effect unless you click **“Apply”** which will replace global filter with the one created in the Wizard.

### 4.2.1.7.3 Filter by search

Since you may want to search your library by any of the attributes, we made search ‘smart’ so when you enter something in search box we try to find answers by applying that value to several search queries, take first three results for each and present you with many instant filter options. For screenshot to the right I entered **jazz** in search box and got those results.

Every line is a ready-made condition. You select one or more of them, click **“Apply”** and filter is created.

In this example search found 5 attributes that contained matches to entered search string.
First condition is always that attribute **contains** the search string and following conditions (3 max) are specific instances when attribute **exactly matches** found string.

You can use it to create filters or you can use it to quickly find a specific artist, album or even a single song (by selecting: file = <found file name>).
4.2.1.1.7.4 Sorting

When you use Albums or Songs view, resulting content is sorted by globally set params. These params are displayed when you click Sort icon  in top toolbar. You can sort by following attributes: artist, album, genre, year, samplerate, albumartist, composer, performer. You choose one of the fields and the sort direction. When you click “Ok” these will be applied to current view. As stated before, this does not apply to other views. Artist, Genre, Playlist, Files are sorted alphabetically by their respective values.

Not all attributes are plainly shown in default view. If you are in Albums-Cover view and currently selected sort field is Year you will not know which years are shown on current page and you will not know which album is the first one for particular year. This is why sort dialog will also list you all years that appear on current page and by clicking on particular year: dialog will be closed, view scrolled to show first album of that year near the top of view and album cover will blink a few times.

4.2.1.1.7.6 Adjusting Album-Cover grid.

Depending on the width of your screen there are some defaults set about how many albums are displayed in one row of Album-Cover view. You can change that default by clicking any empty area in gallery view (the easier way is to click immediately below last row of albums. Repeated clicking will loop through several numbers of albums per row (again depending on the width). Wider screens can loop from 4 to 7 albums per row. Mobile screens can loop from 2 to 3 albums per row (more in landscape mode). If you double-click on empty area in album view then your choice will be reset and number of albums per row will revert to defaults for given screen width. Default view for iPhoneX in landscape mode and with maximized number of albums per row:
4.2.1.1.8 Tag editing

For your songs and albums you can edit some common tags. This is available in Song Info dialog which shows when you click information icon 📒 in song row.

Tags that can be changed are listed first and have edit icon 📒 next to them. When you click the edit icon field becomes editable and you are free to enter your corrections. When you are done changing tags click ‘Apply edits’ button which is now available.

New dialog appears which will show you your changes and present you with two set of options. You must choose if you want to change that tag only in database or do you want to change corresponding song file too.

You can also choose if you want to change only this song or all songs in corresponding album. Album is defined by combination of album name and artist name (albumartist field).

If you choose to change all songs in the song’s album and previous value of that field is not the same for all songs in the album you will get a warning about that.
4.2.1.2 Tidal

When you select Tidal as your library source for the first time you will be asked for your Tidal credentials. Credentials are checked by logging in to Tidal and if that was successful this credentials will be stored locally and used in the future.
We do not aim to provide complete Tidal experience here, for that we suggest you use Tidal’s own online application.
Having said that we are still committed to give users a good access to their Tidal content.

You can list following categories (click first dropdown in the top toolbar):
- New
- Recommended
- Favorites
- Search

You can view the following type of content (click second dropdown menu in the top toolbar):
- Albums
- Artists
- Songs
- Playlists

4.2.1.2.1 New
Displays new content on Tidal. Works for albums, songs and playlists.

4.2.1.2.2 Recommended
Displays content recommended by Tidal. Works for albums, songs and playlists. This is default view.

4.2.1.2.3 Favorites
Displays the content that you favorited in the past either via this application or by Tidal online application. You can choose to remove the Favourite status from three-dot menu.

4.2.1.2.4 Search
If you want to search entire Tidal database then when you select ‘Search all Tidal’ nothing will be shown by default. You have to enter something into search box and it has to be at least 2 letters.
Tidal search works in a way that matches your string to album or artist name but is searches anywhere in the names. Tidal does not offer search for content that starts with a particular string nor it offers search against specific attributes.

4.2.1.2.5 Albums view
Albums view, once content is loaded, looks and behaves similar to Albums view for local content:
- You can choose to have Cover view or List view.
- Clicking on cover expands a list of album songs
- Clicking on songs row behaves the same as for local songs: “+” to add to queue, click on song row to add and play that song, click on the play icon in the middle add the whole album and plays from clicked song
• Click on horizontal ellipsis icon on cover or on album row presents same options for album: Add, Add & Replace, Add & Play

Things that are no present:
• No filters or any filter related functionality
• No option to choose sort conditions (it’s sorted alphabetically by album names).
• No option to quickly scroll to desired content

Things specific to Tidal:
• Favorite content is indicated by star icon in the corner of Album cover or at the end of the row in list view (When displaying ‘Your favorites’ all items have a star icon in the top left corner of cover image. When you search through all of Tidal some search results will be items you favorited before and then only they will have a star icon).
• horizontal ellipsis icon menu gives additional item: Make favorite/Remove favorite
• Some albums are rounded with a thin red box. These albums are not available for playback (Tidal’s thing…).

4.2.1.2.6 Artists view

Artist view for Tidal is a little more complicated. Initial result is a set of rows with artist names. When you click on the row (or on the “+” icon in the front) the list of all artists' albums is filled below. If you click again on the album row then album songs are filled in bellow.

Album row has again three option to add album songs to queue: Add, Add & Replace, Add & Play

Artist row currently does not support adding all of artist’s song to queue although the option is present in the menu.

We have here 3 types of rows in the same list: artist, album and song row. Each has its own slightly different background.

Clicking on the expanded album row again will collapse (hide) it’s songs, and click on expanded artist row will collapse it’s albums.

Like before, clicking on “+” in song row will add it to the end of the queue, clicking on the play button in the middle of the row will add whole album to queue and start playing the album from that song, and
clicking anywhere else will add and play just that song.

4.2.1.2.7 Playlist view

Playlist view shows list of playlists. Clicking on the playlist row will expand it to show all songs in the playlist.

Song row behaves exactly the same as before.

Playlist’s three-dot menu can be used to add all songs from playlist to queue in three ways explained before: Add, Add & Replace, Add & Play.

4.2.1.2.8 Songs view

Songs view shows a list of songs where song row behaves exactly like before.

4.2.1.3 Qobuz

Qobuz behaves almost identically as Tidal. Only minor difference is that for discovery Qobuz has ‘Featured’ instead of ‘New’ or ‘Recommended’ as Tidal has.
NOTICE: Qobuz is available only in Euphony major version 3!

4.2.1.4 Youtube

Youtube videos or playlists can be searched by keyword. When videos are searched resulting videos are displayed and by clicking on three-dot menu you have again familiar options for adding to queue or playing them immediately.
When searching playlists results are shown in a format similar to Playlist view in Tidal and Qobuz.
Clicking on cover will expand list of videos inside the playlist and you can again add them or play them as in other view.
**Of course, only audio track is played, video part isn’t even downloaded.**

**NOTICE:** Youtube is available only in Euphony major version 3!

### 4.2.1.5 Webradio

Euphony uses **Shoutcast API** to give users the ability to find Web Radio streams (more than 70,000 streams in Shoutcast library at the time of writing this guide) on the internet.
It is also possible to browse **TuneIn directory** of stations and podcasts presented as a browsing tree organized by various categorizations.
You can also directly add webradio stream urls.
Webradio music source gives you several view options:

- **My stations** - station that you added to queue before
- **Top 500** - top 500s station by listener count
- **Search** - search by keywords
- **TuneIn browsing** - browse TuneIn directory

### 4.2.1.3.1 My stations

My station contains list of all radio stations that you added to queue at some point in the past.

Every row displays station name (default one or the name you have chosen while renaming a station) and three-dot menu with options to rename the station or remove it from the “My stations” list.

Search box is used to filter displayed items by hiding all stations that do not contain the search string.

“+” icon in the toolbar next to the number of stations found is used to add known station url.
In the popup dialog you can choose a name for the station and enter station url.

Station’s stream url is checked first and if it is not playable it won’t be added to the queue.

**Few things to note:**

- Some web pages that provide Web Radio stream urls actually give links to playlist file that contains actual stream url. Euphony tries it’s best to detect this and parse the playlist file for actual stream url but it’s possible it will not always succeed. (if you encounter this for all stream urls from a specific site please let us know so we can investigate and support that site too)
- Some urls you find may be old, obsolete or don’t work temporarily. To be sure try again later.
• Some radio stations have geo restrictions. You will be able to add them to queue and play them but they will only play a recording informing you of that restriction. (It is best not to add previously unknown stations to Queue without checking first if they actually play music)

4.2.1.3.2 Top 500
This will display top 500 station by listener count as recorded by Shoutcast.

Station row shows station name, currently playing song’s title and genre all separated by vertical bar: “|”.

At the end of the line is declared bitrate for the station. Bear in mind that those are not always correct.

“+” icon will add this station to the queue. Station’s stream url is checked first and if it is not playable it won’t be added to the queue.

Search box is used to filter displayed items by hiding all stations that do not contain the search string.

4.2.1.3.3 Search
Search results are in the same format as in the Top 500 view.

Station row shows station name, currently playing song’s title and genre all separated by vertical bar: “|”.

“+” icon will add this station to the queue. Station’s stream url is checked first and if it is not playable it won’t be added to the queue.
4.2.1.3.4 TuneIn browsing

TuneIn has browsing directory of stations. Initially you choose one of the categories and get either: a list of other sub-categories to choose from or station list.

When you get station list it behaves exactly like in other views and in the top right you get your path in the browsing tree which enables you to go back one or more levels.

4.2.1.6 Paging

Total number of items available is always displayed in small font below chosen view label. If you have more that PAGE_SIZE items then paging UI will be displayed. It consists of a couple of small buttons in the top toolbar for previous/next page (with current page number and total pages) and paging toolbar at the end of the list with <select page number> buttons. PAGE_SIZE can be adjusted in Settings -> Library -> Miscellaneous
4.2.1.7 History

As you browse your library by changing filters, views or music sources, every step is recorded in history. You can go back and forward through it by using chevron buttons on the top near the Euphony logo.

By right clicking on the buttons or by long touch on mobile devices the whole history is shown.

You can select any history item to go to that moment or clear the history if it becomes too large.
4.2.2 Playing Now

Playing now screen is shown/hidden when you click on cover photo in the footer on the bottom of the screen. It displays info about the song that is currently playing (or paused). It also offers album and artist information. In addition to title, album, artist, genre and disk fields it will show the table with all other attributes (even non-standard one) that could be found during scan.

If you click on album cover photo and the folder that this song belong to (presumably album folder) contains other files except music files or playlists then a dialog will open with list of those files:

If you click on the filename the file will be downloaded to your computer. If file is a picture file or PDF file, clicking on the file icon will open full screen overlay where you can view the file in detail.

In this screen picture files can be rotated and if there are more picture files in song’s folder you can cycle through them with “<” and “>” buttons.

PDF files cannot be viewed on mobile devices directly in the browser, you must download them and then use PDF-viewing app but most desktop browsers will display the PDF directly.
4.2.3 Queue

Queue screen overlay displays songs in the play queue. It is shown/hidden when you click on list icon  or any part of empty space in the footer. To go back to library view click music icon  that appears on the same place.

Currently playing song is highlighted in blue. Clicking on currently playing songs row will function as Play/Pause button. Clicking on any other song will start playing it immediately.

Clicking on the info icon  (before song time) will bring up a dialog with all attributes of that song.

**Horizontal ellipsis icon  menu** contains options to remove the song from queue or move it up one place in the queue.

Queue song list supports drag-and-drop rearrangement. It is achieved by grabbing the row by it’s cover photo and move up-down on desired position.

At the top of the queue list there are options to clear the queue or save it as a playlist.

This playlist file will be saved with your name and .m3u extension and it will be placed in User-Playlists folder on Euphony Drive.
4.2.4 Playing controls

Playing controls are located in the footer bar. You have standard buttons: Previous ⬅️, Play/ Pause ➪ / II, Next ⏯️.

Play/Pause button changes appearance depending on play status.

Previous button doubles as “Rewind to start” button. That means that unless the song is in the first 5 seconds of playing Previous button will rewind the current song to start.

Vertical ellipsis icon ⚫️ will open small panel above footer. Here you can seek to desired position in the song, change volume (if software mixer is enabled in settings) and change the status of following queue options:

- **Random ↗️** - next song is chosen at random
- **Repeat ↤️** - after the last song play starts again from first song in queue
- **Single ⚪️** - only plays single song (and repeats it if Repeat is also on
- **Consume ◗️** - song is removed from queue after play finishes

If icon is blue then option is ON, otherwise it's OFF. Click on the icon toggles the option’s state.

Top row of the footer also indicates:
- Which Player is in use at the moment: Stylus or HQPlayer.
- What is the format/bits/samplerate of input and output.

Clicking on this row opens addition small panel that will display audio parameters of input file, instant bitrate and song title, album name and artist of the song currently playing separated by “•”.

On bigger screens this line is shown directly in the footer (see first couple of screenshots in the document).
4.3 Tools/Settings

Place to change system settings with subsections related to various system aspects:
- Music service
- Music library
- Euphony system
- Complete installation
- Install
- System Update
- Feature update

Depending on several things some sections may be hidden.

**Music Service** section is displayed only if Stylus is not selected.
**Music Library** section is displayed only if Stylus or Roon Server are selected.
**Euphony system** section is always displayed
**Complete** section will only be displayed for registered users and for Euphony system made by writing downloaded Euphony image directly to disk.
**Install** is available only if the system was booted from the drive that has been made by downloading image file from our site. It will not be available on a system made by this install function or on a system that you receive on pre-installed SSD drive that you bought.
**Update** section will only be displayed for registered users.
**Feature update** section will only be displayed for registered users.
4.3.1 Music Service

Music Service section displays:
- Your connected DACs (you can have more than 1 connected)
- Settings specific for each connected DAC
- Other music options

Clicking on radio button in front of the card line selects that card for playing.

Note that cards detected by connected remote StylusEP endpoint have “(StylusEP)” at the end of its name. They can be selected and will function the same way as local cards.
Clicking on blue information icon 🔄 at the end of your sound card line you can view detailed runtime parameters:

4.3.1.1 DAC specific options
DAC specific options are divided into two sections:
- Stylus related options
- HQPlayer related options

In order to activate HQPlayer upsampling you must enable “HQPlayer upsampling” option.
This will show you HQPlayer options and activate HQPlayer playback for all song file formats that HQPlayer supports. Those are: dff, dsf, flac, wav, aiff.

It’s important to notice that even when HQPlayer upsampling is activated, when the song to be played does not have one of these formats Stylus player will take over and play the file.

That is why there is an indication icon in the footer to show which player is currently active.
4.3.1.1.1 Stylus options

4.3.1.1.1.1 DSD
You must choose appropriate option depending on the way your DAC supports native DSD play. You can choose between:
- Native
- DOP (DSD Over PCM)
- Convert to PCM

4.3.1.1.1.2 DSD to PCM samplerate
When converting DSD to PCM this sets conversion samplerate.

4.3.1.1.1.3 Volume control
For Native and DOP DSD playback this will be forced to: ‘None’ but if you choose DSD option: ‘Convert to PCM’ then you can choose between:
- Hardware
- Software
- None

Every DAC has its own quirks so choose what works best for yours.

4.3.1.1.1.4 DAC delay
Delay between playing songs of different formats. (It solves problems with DACs that are slow to switch rates and formats ie.: from PCM to DSD)

4.3.1.1.1.5 Samplerates mapping
Euphony will always try to detect which samplerates the attached DAC supports and it will create default mapping. This mapping maps unsupported samplerates to supported ones. Default mapping follows simple algorithm: Map unsupported rate to:
- closest larger supported rate OR
- the largest supported rate

This default mapping can be changed here.

4.3.1.1.2 HQPlayer options
If HQPlayer upsampling option is checked then you have access to HQPlayer tuning options. Click on HQPlayer Settings to expand this section.
We will not try here to explain all HQPlayer options. Please refer to HQPlayer Desktop manual where all this is explained in detail. There is one important option that needs closer attention: **Output**.

‘Default output’ means that HQplayer will send song data to locally attached DAC. If you choose ‘Networkaudio (NAA)’ for output that means HQplayer will try to find Networkaudio daemon running on some other machine on your network and send song data over the network to it. **Notice**: if HQplayer cannot find Networkaudio running anywhere it will exit. That means you have to start it again when you make Networkaudio available.

HQPlayer needs a separate license to work without interruption. Without license file HQPlayer will stop every 20 minutes and you have to make an intervention in UI to start it again and resume playback.

HQPlayer registration process involves sending a machine fingerprint to contact@audiokernel.com and paying for a license. After payment you will receive license key file which you can then upload to Euphony machine. For more info about payment process look on http://euphony-audio.com. HQPlayer registration is started from Main Menu -> HQPlayer license. Dialog with open with fingerprint string to copy and when you receive license key file you will upload it via same dialog.
4.3.1.2 Common settings

4.3.1.2.1 Buffer before play = 100%
This option will load entire song into memory. We recommend enabling this option for best performance and audio quality. (This option has no effect on streaming sources - Web Radio streams and Tidal/Qobuz songs)

4.3.1.2.2 Start Playback Service in paused mode
If not checked then Playback will resume after startup or after Playback Service is restarted (Playback Service needs to be restarted when you change any options in this section)

4.3.1.2.3 Song histogram
If turned on, the song loudness histogram will be displayed above progress seek bar. Depending on the song this will incur additional processing cost during the first several seconds of playback and it may slightly influence sound quality during that time.

4.3.1.2.4 Enable internal cards
Internal sound cards are disabled by default. If you need them enable this option.

4.3.1.2.5 Prefered view
Euphony by default remembers your last menu/submenu selection for each music source in a browser cookie. If you wish to have default view for a music source fixed to some menu/submenu combination, you can do it here.
4.3.2 Music Library

In this section there are several subsections:

- Library paths
- Network Drives
- External Storage
- Internal Storage
- Credentials for external services
- Miscellaneous
- Music Info
4.3.2.1 Library paths

When you attach some USB device or add network share, it will be accessible on your data partition under some folder name.

- Folder name for attached USB devices will be it's volume name (Created during device format or set by manufacturer).
- Folder name for linked network shares will be comprised from: server name + share path

This folder will not be part of your Music Library at once. You have to explicitly add it to the library (see next section).

**Library paths section lists all paths that are part of your music library.** You can remove the path from library. Paths that are not accessible at the moment are listed in red color.

**Roon specific notice:** If you select Roonserver as your music service, library paths added via Euphony app as explained in this and following sections will not be part of the Roon library automatically. You have to add them also in Roon. The path to add is visible in the second column of Library paths table. Copy this path and paste it in Roon.

4.3.2.2 Network drives

Here you can add network shares to the music library and you can see listing of shares you added before. Existing shares can be:

- Added directly to Music library (attached Library Paths list)
- Removed from it
- Detached - share remains present in app configuration
- Deleted - detached and removed from configuration (naturally, only link is deleted, content on network share remains untouched.)
- Used for Music library **backup** (all music files + configuration files + cover and info files)
- Used for Music library **restore**

**Backup and restore** are used in a manner of one way synchronization. This means that:

- Repeated backup on the same share will copy only newer files in your Music library
- Restore will add only files that are missing in your Music Library

Here you have a system view of your block devices and attached network shares. You usually have several options for every item. (If you are ever in doubt what certain button does, just hover your mouse over it to view explanation in tooltip.)

If you want to add and delete files in your Music Library on Euphony drive from another computer then enable option ‘**Share Music Library on network**’ and you will be able to access Euphony drive as Samba network share. Connect to euphony through it’s hostname (default: euphony) or IP address.

In Windows open Windows Explorer, type \euphony in address bar and press enter.

User/password: **audiouser/euphony**
4.3.2.3 External drives/Internal drives

Here are listed your external/internal devices (disks and their partitions). In three-dot menu you have options to:
- Add/Remove it from Music Library
- Mount/Unmount (for safe removal)
- Format and add to Music Library

(Only partitions can be attached, disks are listed for informational purposes and initially hidden. The device that has the euphony operating system on it and its partitions are initially hidden. You can view them by clicking on the eye icon in table’s header row).

4.3.2.4 Credentials for external services

If you accessed one of external services like Tidal and entered some credentials here you have the option to change them (in case you changed passwords or you changed whole account).

4.3.2.5 Miscellaneous

4.3.2.4.1 Use cache

Notice: enable this only if euphony is installed on fast-access drive like SSD. Songs from external drives added to queue will be copied to cache (folder E_CACHE) on Euphony drive (for fastest access and playback). Later, when you browse your library you will have duplicate songs for some album but songs from E_CACHE will be displayed by default, and songs from original location will be hidden. You can view all songs for an album with duplicate songs by clicking eye icon near the end of the album row.

4.3.2.4.2 Download missing covers

Euphony tries to find album cover images in the folder structure of your album. If no such files can be found you have options for specific album: to download cover image from web or upload it yourself. If you want euphony to try to download missing covers from web automatically, without your intervention, for every album in your current album view select this option.

(This function will not automatically go through your entire music database at once - it will only try to download covers for albums that you are currently viewing in your web application - 50 at a time, since only one page of 50 items is initially displayed). It is still possible that some covers will not be found - for these use manual option and adjust album and artist names if needed.(i.e.: when you have album name ‘Gold -- Disk 1’ maybe you can try without ‘-- Disk 1’ and use only ‘Gold’)

4.3.2.4.3 Results/Page

Here you can choose number of results per page in library views. More results per page: less pages - more scrolling and vice versa (Warning: don’t use page size 96 if you need
Youtube browsing - it will return no results - this is a known problem which will be resolved at a later date.

4.3.2.4.4 Webradio Search

Choose sorting: by bitrate or by listener count (descending).

4.3.2.6 Music Info

This section is for informative purposes - it lists some statistics from music database and the state of some playing-related flags. It also gives you option to Rescan entire library and rebuild database and to Erase cover cache.

Euphony library manager scans library folders for changes after every startup. It only checks file timestamp. If timestamp has changed (after last scanning of that file) file is read and scanned for tags and other properties. If timestamp has not changed file is only marked as valid in database. By rescanning entire library and rebuilding database you are essentially erasing database and building it from zero by rescanning the entire library.

During library browsing Euphony will try to find cover files in song’s folders or download them from the internet (if ‘Download missing covers’ was turned on). All these covers are resized and copied to Cover cache folder. If you ever feel that this folders takes too much space or is somehow not showing the covers you expect to you can erase it so it can be again recreated during your browsing.
4.3.3 Euphony system

Here you can change couple of operating system related options:

- Timezone
- Hostname

4.3.3.1 Timezone

Change your timezone by entering **nearest major city** in your timezone. Use underscores instead of spaces if needed, i.e.: New_York

4.3.3.2 Hostname

If you prefer, you can change the name of Euphony system as it appears on the network. You need to do that if you plan to have multiple Euphony installations running on the same network. If you change it to i.e.: ‘euphony-bedroom’ then you must access Euphony Web App via: [http://euphony-bedroom](http://euphony-bedroom).

After changing this option, Euphony system will be restarted. Wait until browser redirects itself to new hostname after approximately 40 seconds.

4.3.3.4 Fallback IP address

If euphony does not acquire an IP address from DHCP server it will use this IP address.

4.3.3.5 Fallback router IP address

If euphony does not acquire router IP address from DHCP server it will use this IP address.

4.3.3.6 Bridging

If you have more than one ethernet interface and you plan to connect another machine directly with this one via ethernet cable you can bridge all ethernet interfaces to achieve that. Changing this option will cause machine reboot.

4.3.3.7 System info

Here are listed some system parameters including euphony version number and euphony release number. Click on release number to see recent changes.

Here are also listed your registration details and device fingerprints. Your euphony license is connected to euphony hardware fingerprint. If you change the device we can transfer your license to new device. Old device will become unregistered again.

If you enabled HQPlayer upsampling then here will be listed HQPlayer hardware fingerprint and HQPlayer license status ('Trial' or your registered name).
4.3.3.7.1 Revert
Starting from release 20190215 after updating to new version you can choose to revert to previous release. To do this use ‘Revert’ button which appears next to ‘Previous release’ number.

4.3.3.7.2 Logging
In order to minimize disk interaction you can reduce the internal logging by changing the logging level from ‘All’ to ‘Errors only’ or even ‘None’. In case of problems and need for support make sure to first set the logging level to ‘All’, try to reproduce the issue and then generate logs for support.

4.3.3.7.3 Generate logs for support
By clicking on the button ‘Generate logs for support’ Euphony will collect relevant system information and log files and generate archive file: `logs.tar.gz` which should be automatically downloaded by your browser. In case of problems open a ticket on our support system and attach this archive file.

4.3.3.7.4 Toggle RC!
When you click on red Toggle RC button you open secure SSH tunnel which will enable Euphony support to remotely connect to your Euphony machine in order to better diagnose the issue you have and possibly offer immediate solution by making direct changes to your Euphony system.
Please, do not use this without direct coordination with Euphony support.

4.3.3.7.5 Credits/Licenses
Clicking on Credits/Licenses button will open a dialog with listed credits, links to all license files and Written offer for source code.
4.3.4 Install

*Install option is not available for unregistered installations.*
*Install option is not available on systems made by this function or on pre-installed SSD drives.*

Install will perform Euphony installation/repair on another disk (not on your current running Euphony instance).

If your first Euphony installation came to you as USB image and you have a dedicated machine for use as Euphony system then you will probably want to have it on your machine’s hard disk. (You may also want to show Euphony to a friend and put it on his usb). You can perform such installation here. (Note that installation from Euphony Web Application is faster and simpler than writing original Euphony image file to target disk).

Install section will not be shown if there are no possible target devices attached (You cannot install it on disk from which you booted the system up.)
If you went to Settings screen and attached a device after that, refresh the page so app can pick up changes).

**Important:** after starting installation don’t leave the Install screen until installation is finished.

**WARNING:** Install procedure erases all data on selected disk (all partitions). This means that if you do this on a disk that already has Euphony installation, all your data there will be lost (including Music Library).

If the disk you install to already has euphony installed then you will have the option to ‘Repair’ installation. This action will preserve your configuration and your music library and only system partitions will be overwritten.
To update your current running Euphony installation to newer version always use Update option.

4.3.5 Complete installation

*Complete option is not available for unregistered installations.*

Main purpose of Euphony installation made by writing downloaded image to a device is to make trying Euphony extra simple. Write image to usb, boot from usb and play with it to see all the features. If you decide to have permanent Euphony instance you will probably want to install it on hard disk and you will use previously described ‘Install’ option.

Nevertheless, if you, for any reason, want to make such ‘image’ installation your permanent one you must make this additional step: to ‘Complete’ the installation. Without this you wouldn’t be able to receive System updates.
‘Complete’ option will create and initialize additional partition which is vital for seamless live updates of your running Euphony instance.
**NOTICE:** This option is not ideal for permanent Euphony installation. The reason requires additional explanation.

They way Euphony does updates to it's system is based on having two system partitions:
- active one - which you boot from
- inactive one - which you use during update

Update essentially downloads the whole system partition filesystem image and applies it to inactive partition. Once that is done system is simply told to boot from updated partition. Previously active partition becomes inactive one (and retains previous release to which you can always return to).

**Important:** When you burn euphony image to USB and boot from it you only have one system partition, the one you booted from. Inactive partition still **does not exists.**

To be able to receive updates you first have to register (Trial or full paid registration). If you register for Trial and you wan't to receive updates during trial period you have to crete this second, inactive partition. This is done by `Complete installation` function. Complete installation will create this inactive partition from filesystem image that is already present in the filesystem of the image you burned to your USB.

If you register fully, you will have 2 options:
- Install - installs Euphony on another drive creating all needed partitions and restoring the filesystem from the filesystem image to both system partitions.
- Complete installation - creates only second partition like before thus enabling updates

Both of these options will work and behave in the same way if everything is alright. In case of problems, Install option is preferable.

Potential issues have to do with partition UUIDs. In Euphony we use UUID as main identifier for mounting partitions. Default system partition in euphony image that you burn to USB has always the same UUID: d85fe591-2026-4e75-a314-44d5c435c372.

If you run your Euphony from USB or other drive that you created by burning Euphony image to it you will always have that same UUID for your first system partition.

If something happens to your installation (corrupt filesystem or some other unforeseen error) you have an option to boot from another USB with fresh Euphony system image and run Install/Repair with your primary drive as the destination. Install/Repair will preserve your music data and you can again have working Euphony installation with relative minimum fuss.

However, if you used Complete installation, your corrupt drive would have the same default UUID for it's system partition as the new USB drive you created for repair purpose. This will cause conflict, your system will behave unpredictably and you will not be able to do Repair procedure. You will have to install everything from scratch, lose your music that you copied to Euphony Drive and all metadata.

If you used Install, newly created partitions would get new UUIDs with no chance of UUID conflict.

That is why Install is preferable option.
4.3.6 System Update

*Update option is not available for unregistered installations.*

Use this to update your existing Euphony installation without losing your configuration and already built Music Library.

Update procedure:
1. Backs up important configuration and state files
2. Overwrite your disk partition with new Euphony image
3. Restore backed up files

Update procedure does not touch your data partition which contains your Music Library.

4.3.7 Feature Update

*Feature update option is not available for unregistered installations.*

Some updates will come in the form of a **feature update**. This form of update is reserved for simple changes of web application interface or functionality. It will not replace your system image but only update some files and maybe restart web application server or reboot to pick up changes.

Feature updates are not cumulative. They only update last System update image. Consequently, feature update will not appear if you have a pending system update. This means that if you fall behind on updates it is possible that you will have to do 2 updates. First you will do a System update and after completing that you may also have a pending Feature update with more recent date.