Recommended Roon Settings

This document contains detailed steps to making the ideal Roon settings.

There are 7 steps in this process:

1. Set Bit Depth and Sample Rate
2. Disable the Music Folder
3. Set Background audio analysis to Off
4. Set On-Demand audio analysis to Off
5. Do not enable any audio zone except ASIO
6. Set Resync Delay to zero
7. Disable DSP and remove filters

Optionally, set TAS Buffers (Legacy - only required when you have TAS installed).

Please Note

Each Roon Zone has its own settings and the below settings pertain to the default Roon Zone. If a new DAC is introduced or the Zone is removed and re-added, the settings may need to be re-made.

Some of these settings can revert after a Roon update.

Step 1

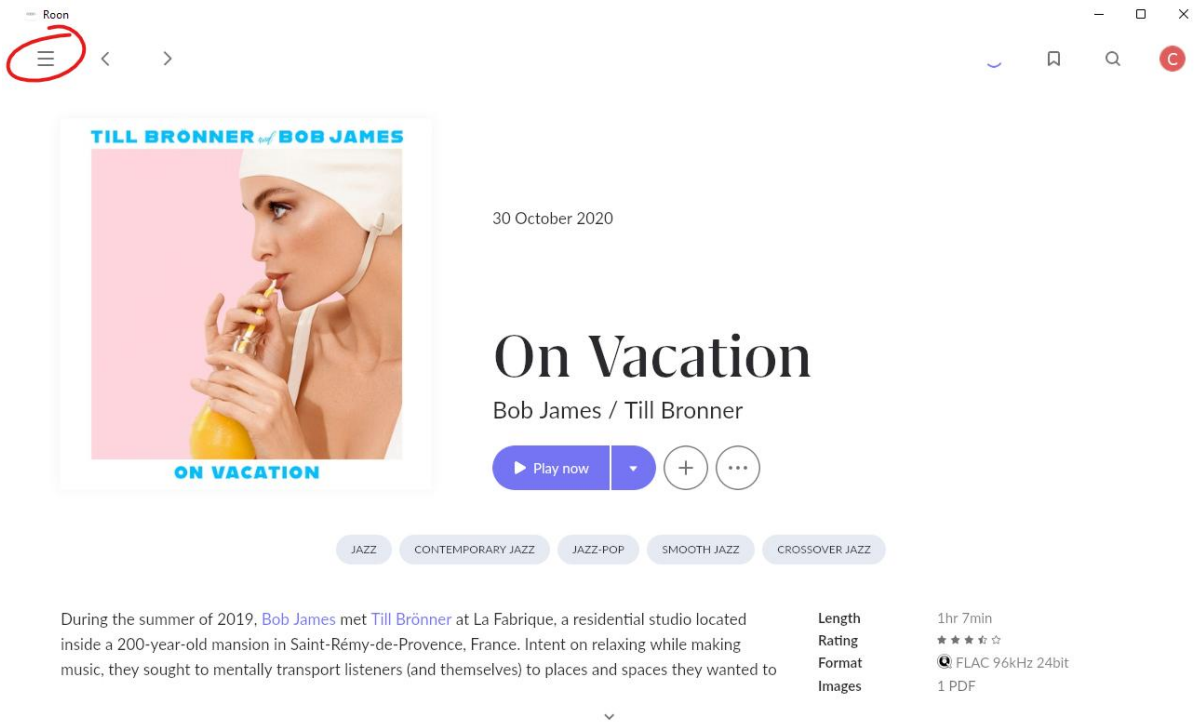
Bit Depth and Sample Rate

Bit Depth and Sample Rate

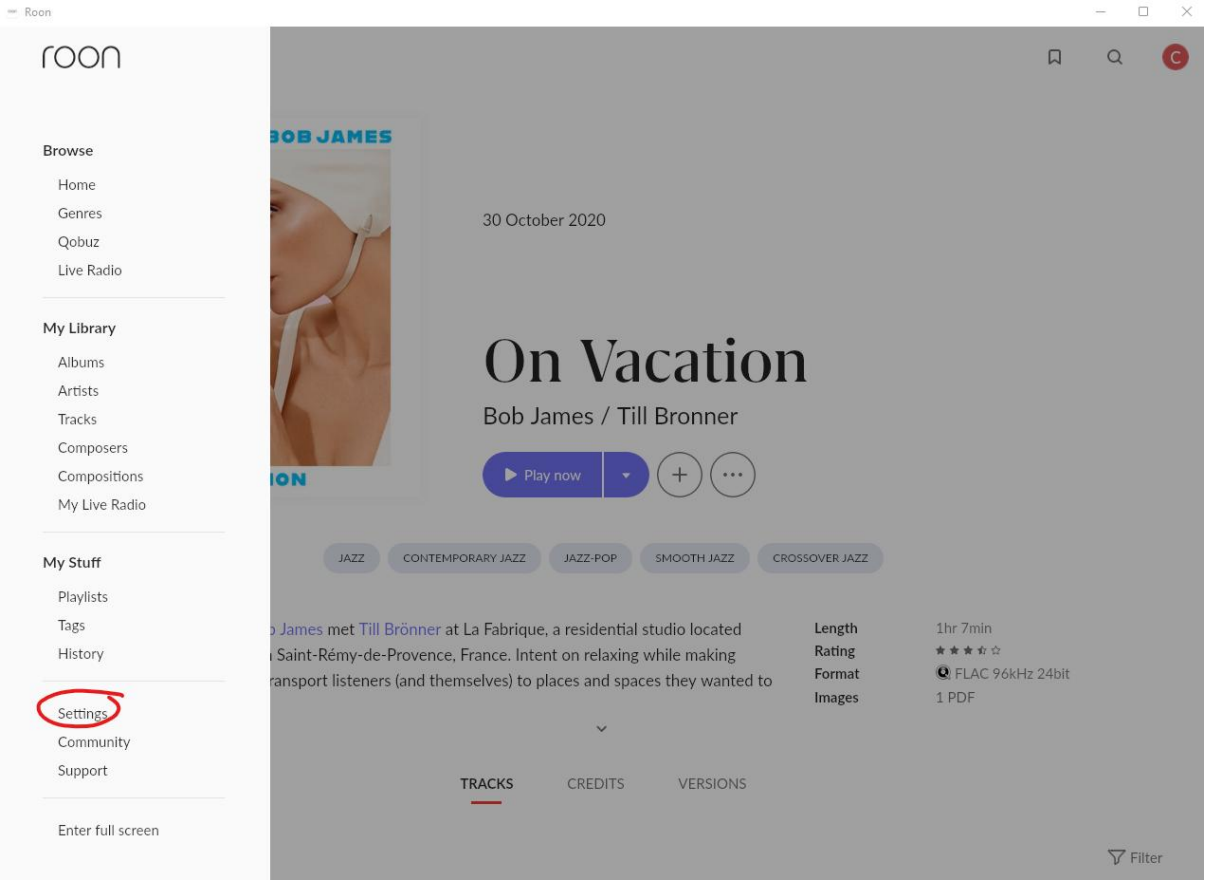
Look up the appropriate output bit depth for your DAC in the table above. Then, look up the maximum sample rate in your DAC's manual.

Enter these values in Roon, as follows.

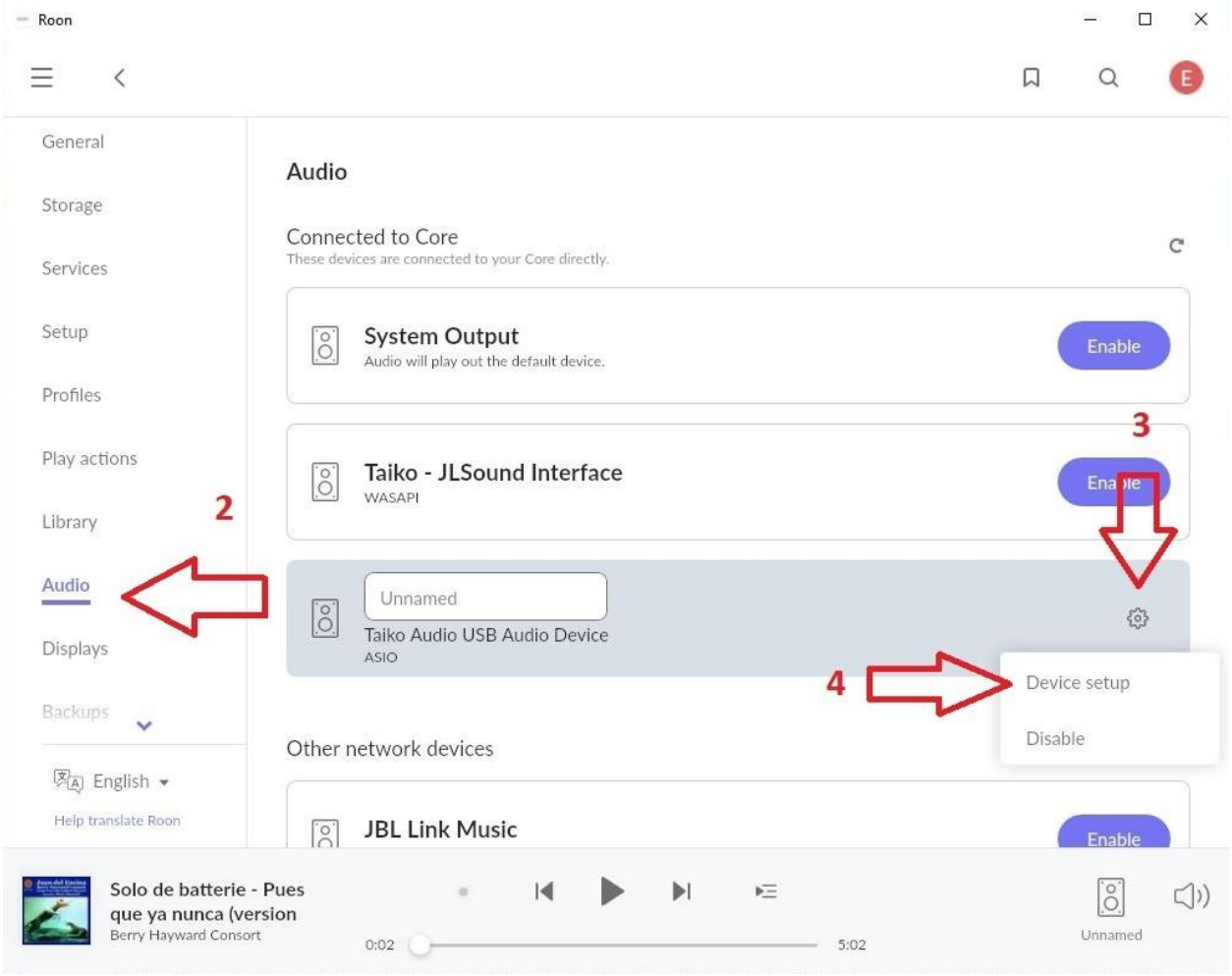
First, open the Hamburger Menu



Go to Settings (1).



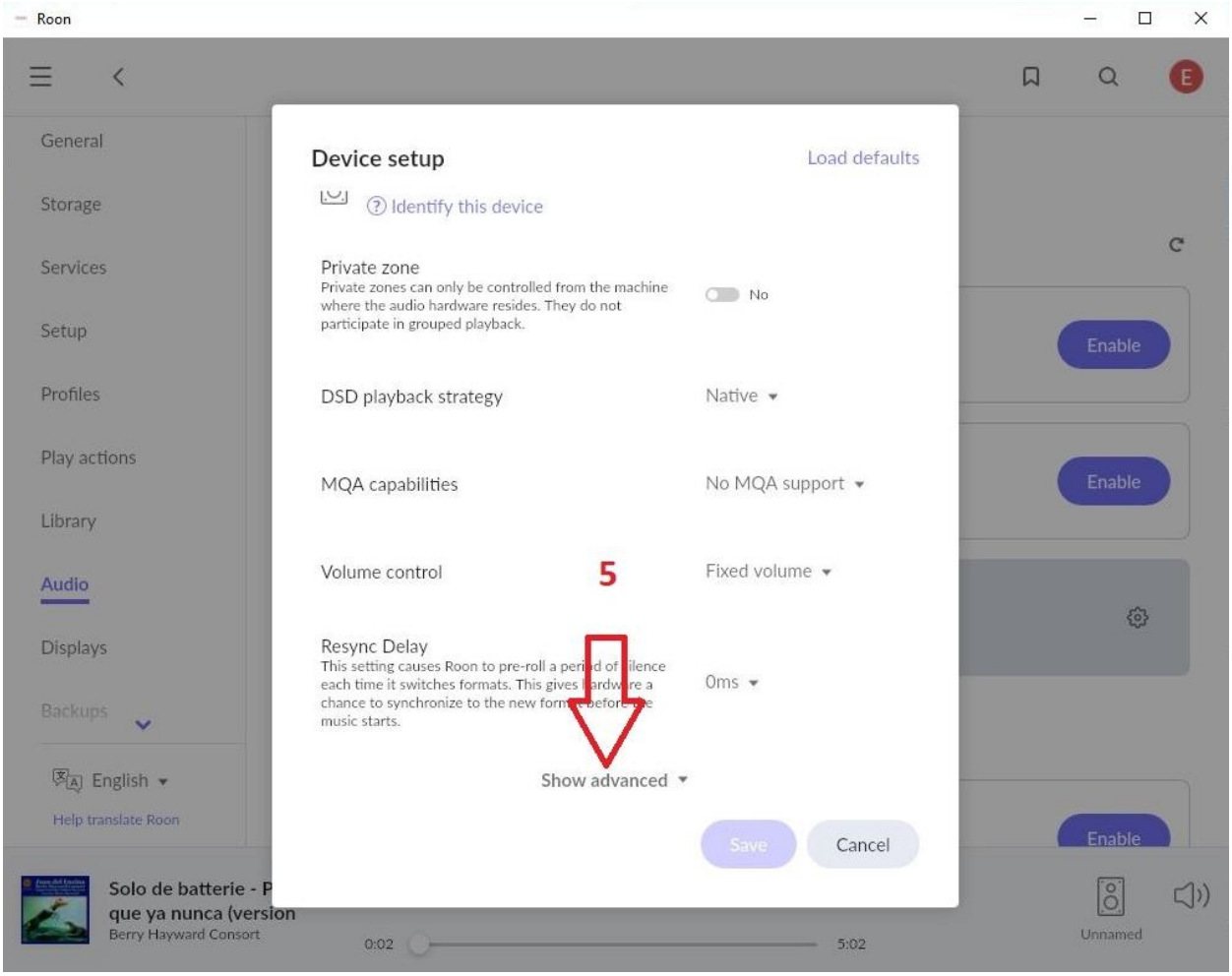
Then, select the Audio page (2).



From there, find your main audio zone, which is the ASIO output, normally called “Taiko Audio USB Audio Device” (although this can be renamed by the user), and use the gear wheel on the right side to select Device Setup (4).

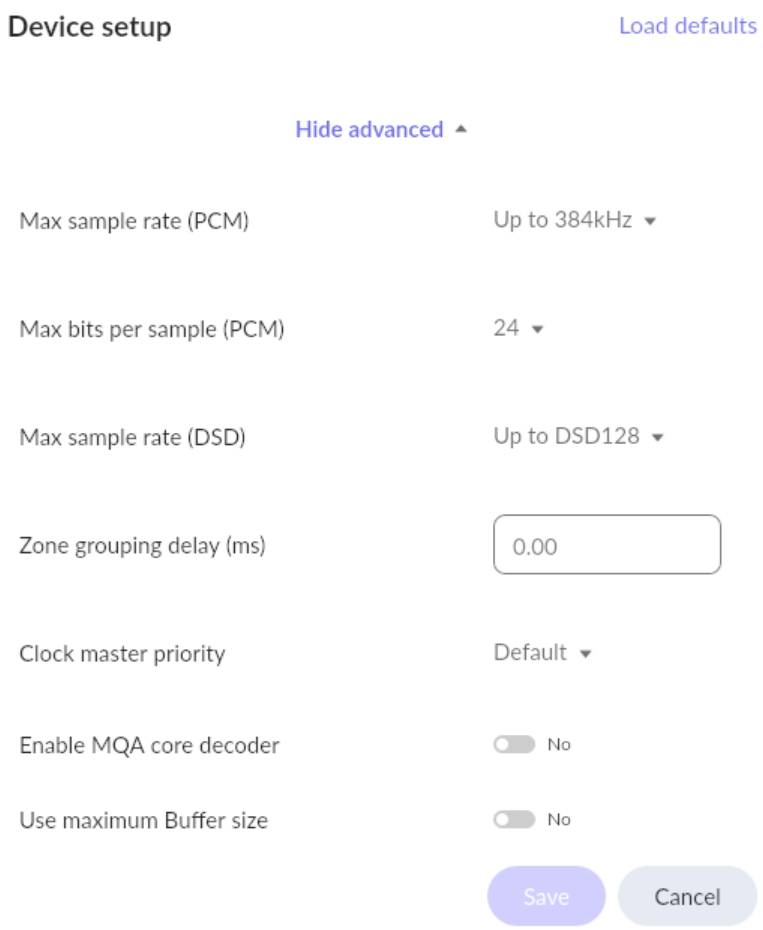
This brings up the below pop-up window.

Click ‘Show advanced’



Select your DAC's maximum sample rate and bit depth

Settings – Audio – ASIO – Device Setup – Show advanced



- Select your DAC's maximum Sample Rate for PCM (this is specified in your DAC's manual)
- Select the PCM bit depth as specified in this document for your DAC (either 24 of 32 bit)
- Select your DAC's maximum sample rate for DSD (this is specified in your DAC's manual)

Click Save, and this step is complete.

If you decide that you want to change the USB profile, simply repeat the same steps.

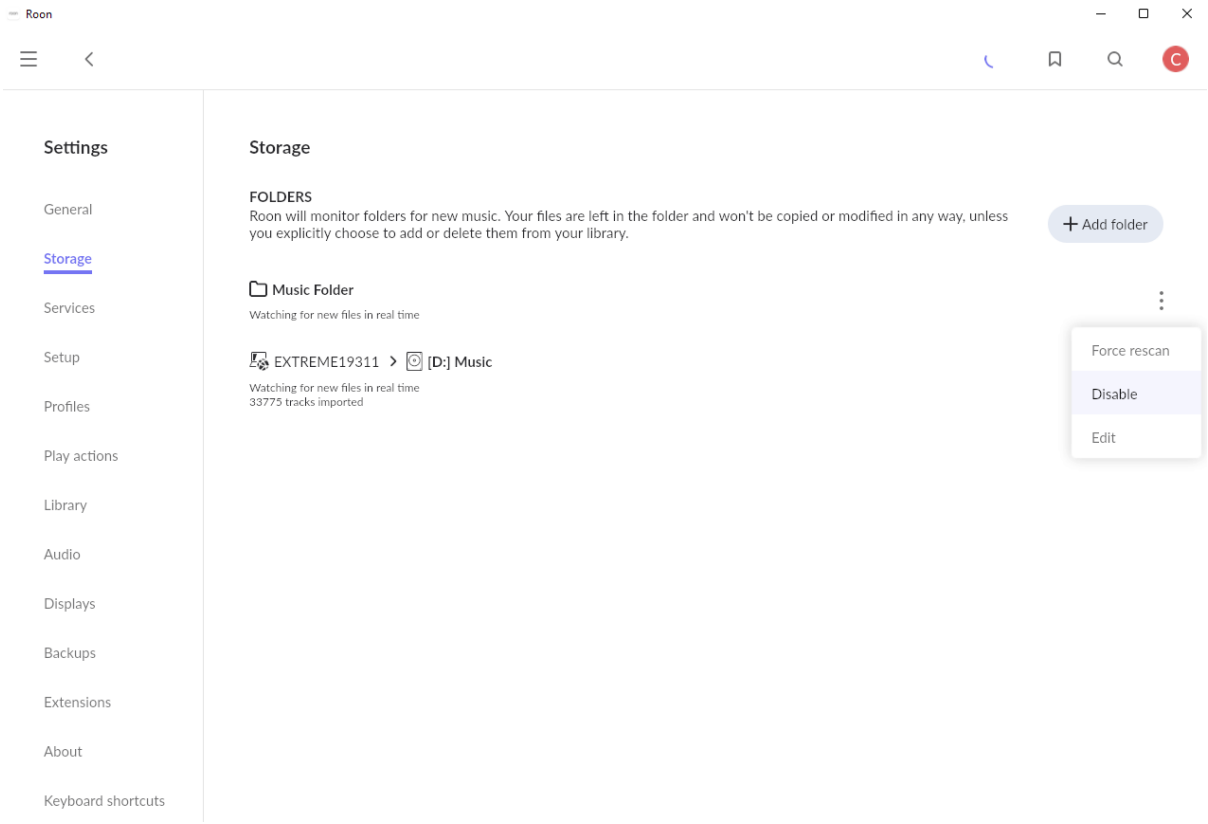
Step 2

Disable the Music Folder

If enabled, disable the Music Folder

(Roon should only index the Extreme Music Drive D:)

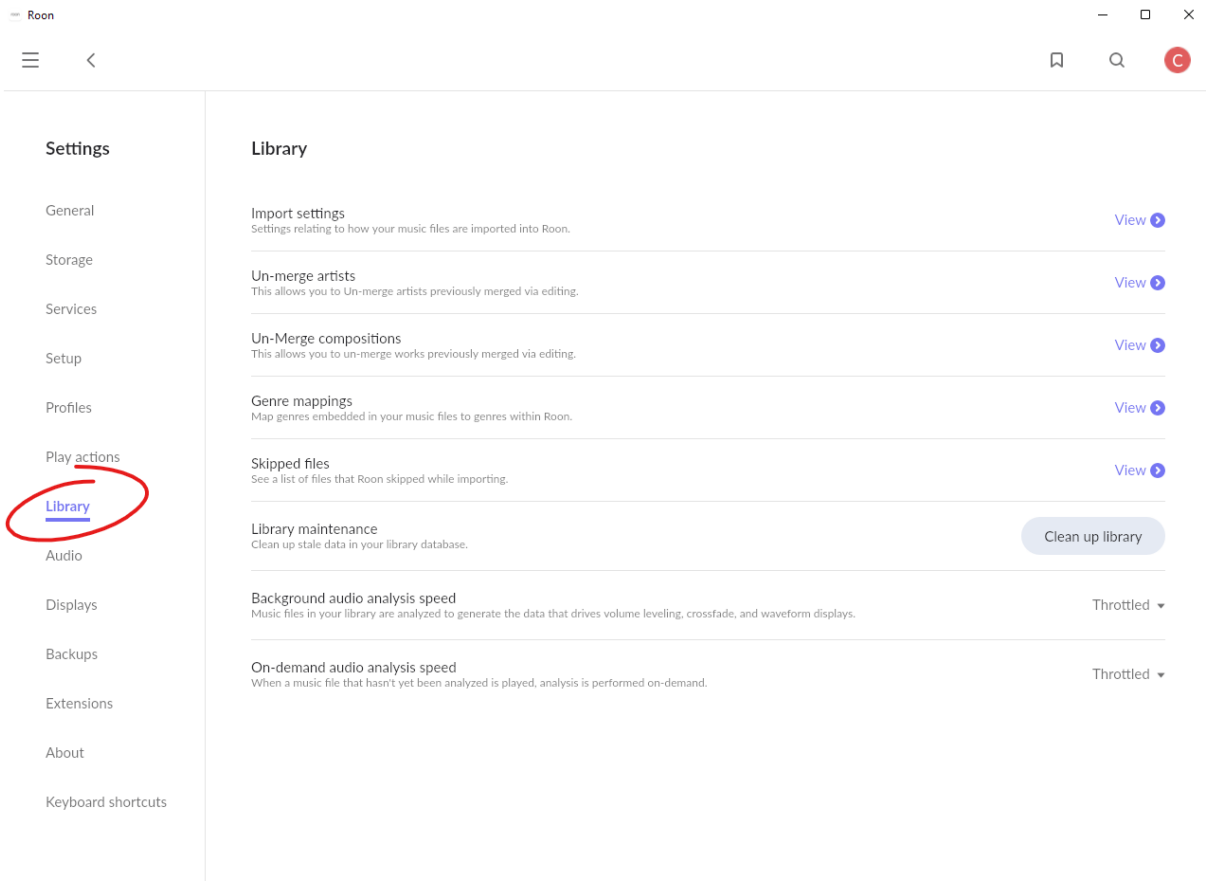
Settings - Storage



After disabling the Music Folder, this is what this section should look like:

Select Library

Settings - Library



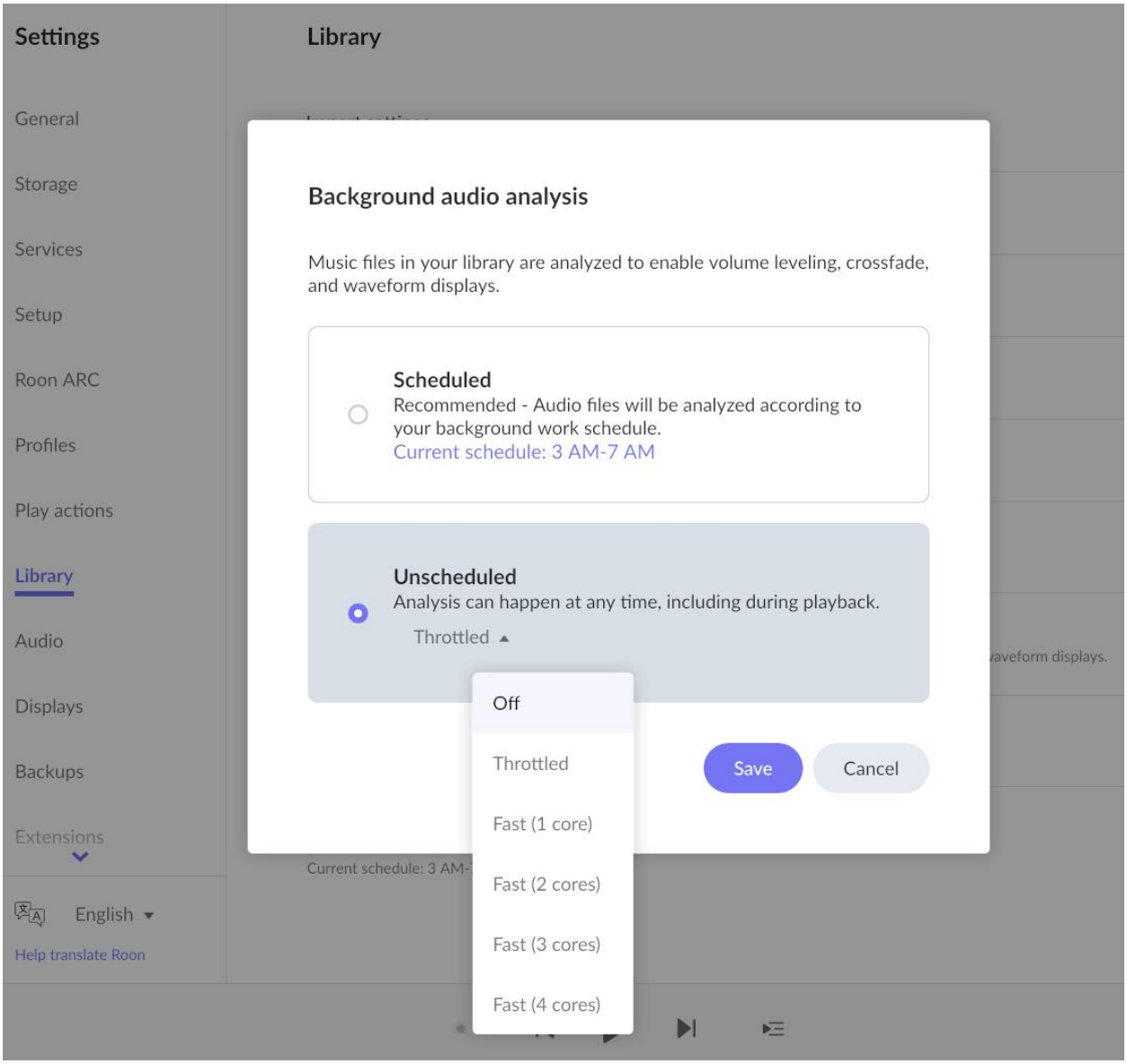
Step 3

Set Background and On Demand audio analysis speed to Off

Set Background audio analysis speed to Off

Settings – Library – Background Audio Analysis

If you have a regular listening routine, you can choose ‘Scheduled’ and select a timeframe during which you do not listen to music. Alternatively, you may select ‘Unscheduled’, and turn Background Audio Analysis off, which completely halts automatic, non-essential file analysis. This stops Roon from analyzing files in the background, though it may prevent waveform display or volume leveling on newly added, unanalyzed tracks.



The processing can take a very long time to finish, depending on the amount of processing required. For example, if you copied lots of new music or made changes to the entire library. If you find that it interferes with your listening, you can always switch it off at any time, even during the process.

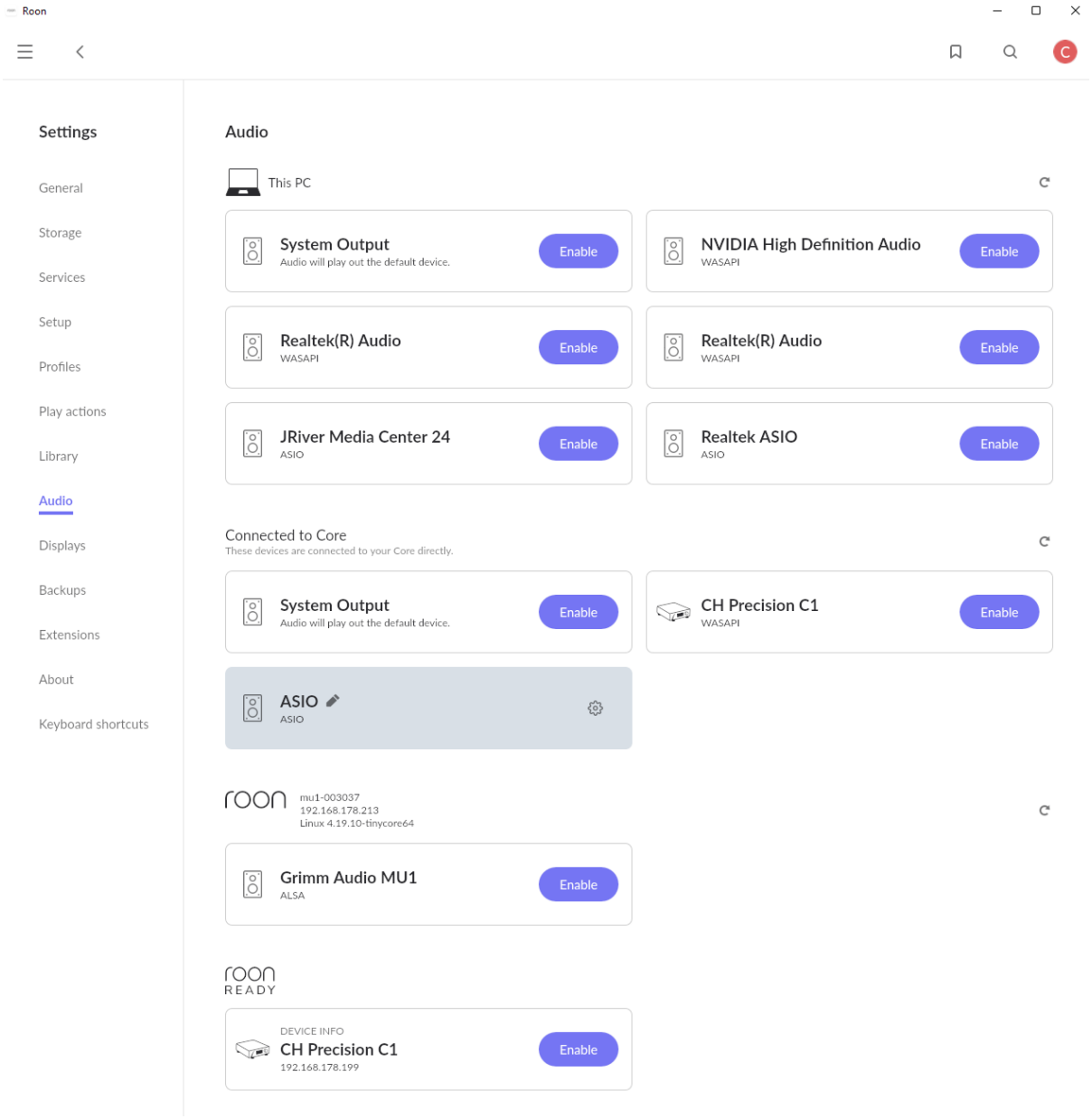
The setting only impacts Sound Quality while the process is running, not thereafter, unless you specifically enable features, for example, using the generated data to apply volume levelling.

Step 5

Do not enable any audio zone except ASIO

Do not enable any audio zone except ASIO

Settings – Audio



Step 6

Select DSD strategy

Select DSD strategy

Settings – Audio – ASIO – Device Setup

Find the ASIO Zone, click the gear wheel and select ‘Device Setup’

In the Device Setup popup window, select the appropriate DSD transport stream according to your DAC’s capabilities. The setting should always be Native, unless that option is not available. Some DACs cannot process DSD directly, in which case it should be set to DoP most of the time.

Settings – Audio – ASIO – Device Setup – DSD Playback Strategy

Device setup

Load defaults

Audio device

Unidentified device
Taiko Audio USB Audio Device
Identify this device

Private zone
Private zones can only be controlled from the machine where the audio hardware resides. They do not participate in grouped playback.

No

DSD playback strategy

DSD over PCM v1.0 (DoP)

- Convert to PCM
- Native
- DSD over PCM v1.0 (DoP)
- Initial dCS method

MQA capabilities

Volume control

Resync Delay
This setting causes Roon to pre-roll a period of silence each time it switches formats. This gives hardware a chance to synchronize to the new format before the music starts.

0ms

Save Cancel

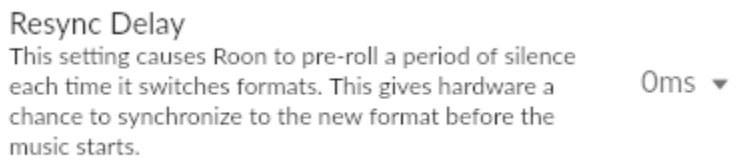
Step 6

Set Resync Delay to zero (0ms)

Set Resync Delay to zero (0ms)

Settings – Audio – ASIO – Device Setup – Resync Delay

Set Resync Delay to '0ms' unless your DAC needs some time to lock after Sample Rate changes. If the first few milliseconds of a track are cut off, you can try setting this to a higher value.



Step 7

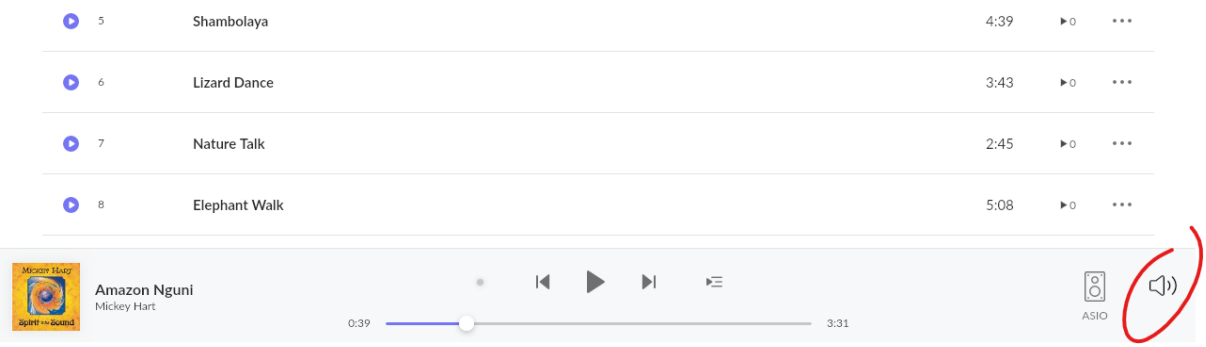
Disable DSP and remove filters

Disable DSP and remove filters

Remove the filters for the purest, most direct sound. For a smoother balance, leave the filters in place.

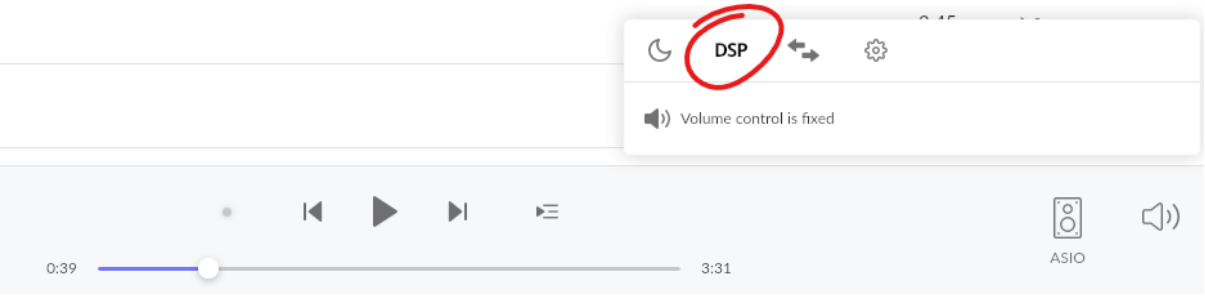
Home – Speaker icon

Click the speaker icon at the right-hand bottom



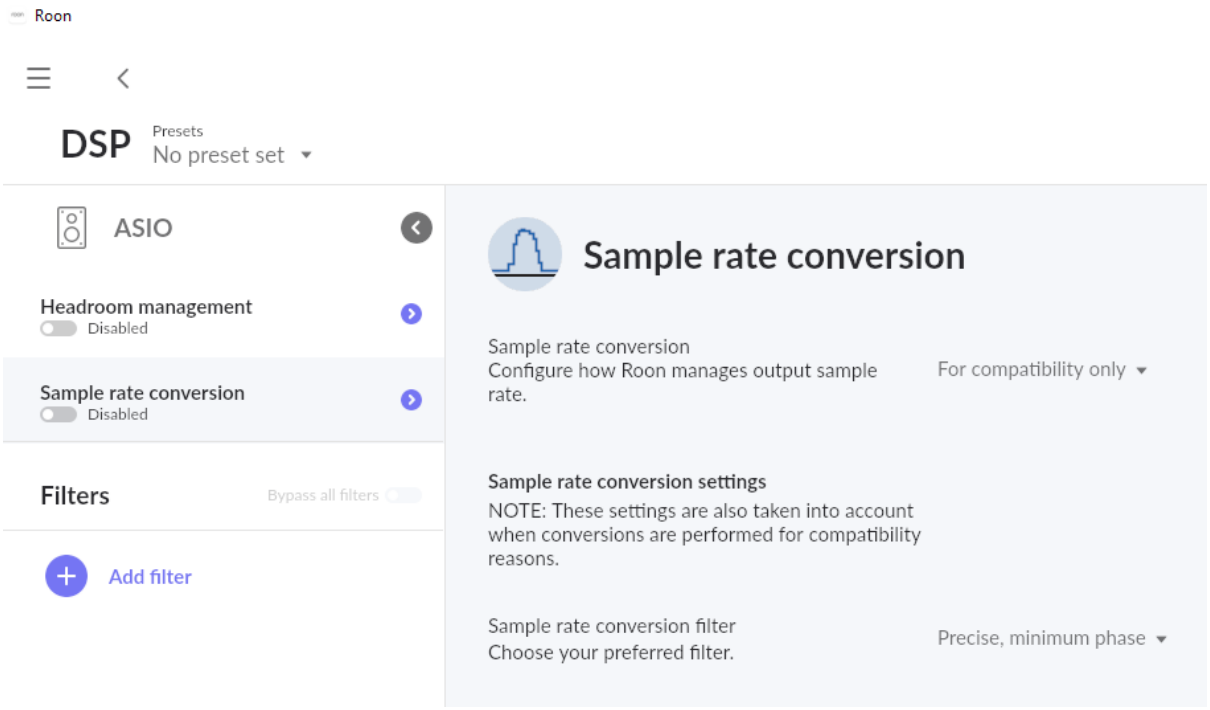
Click ‘DSP’

Home – Speaker icon



This will open the following DSP screen

Home – Speaker icon – DSP

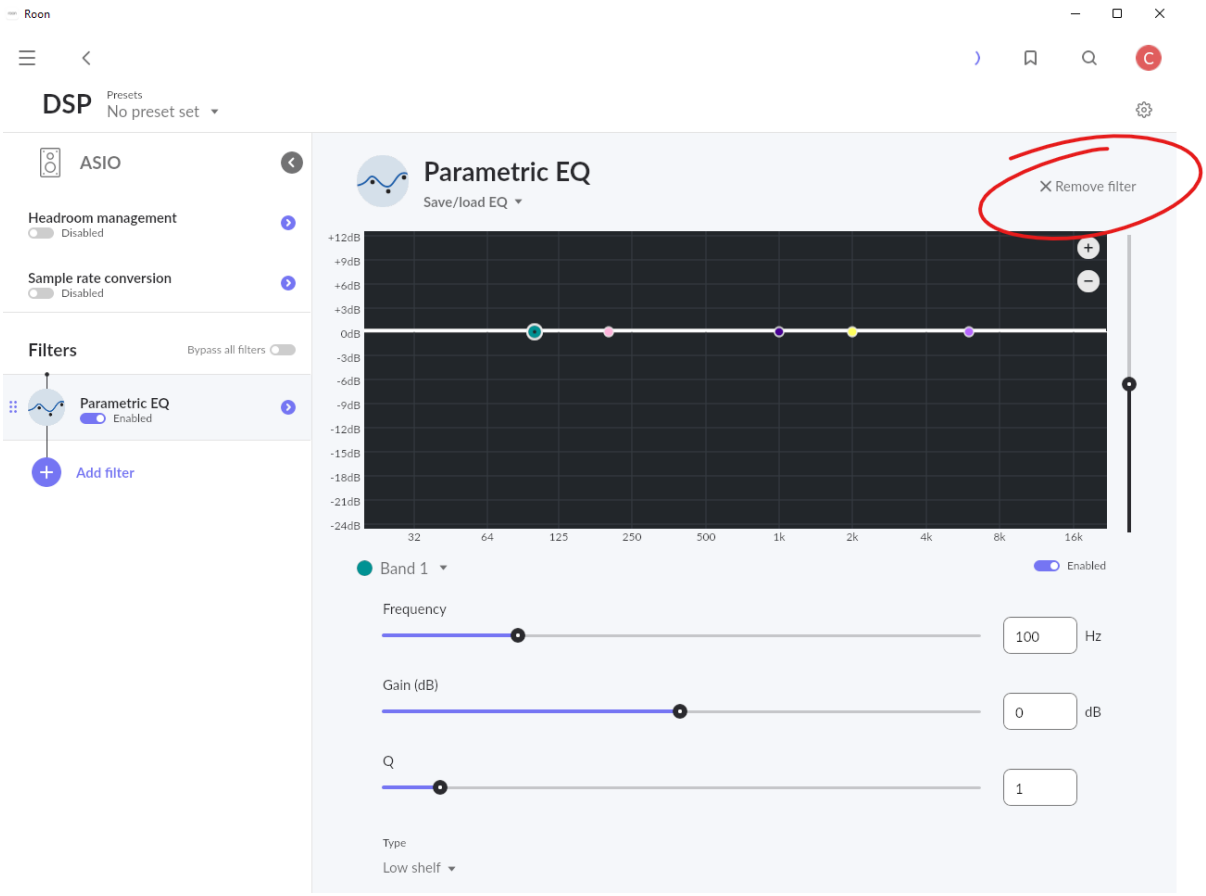


Confirm that Headroom management is disabled

Confirm that Sample rate conversion is disabled

Confirm that no Filters have been added

Added filters can be removed by clicking ‘Remove filter’ as illustrated below.



Addendum

Multi-channel mixing

This is a user preference. Unless you have a surround setup, leave it at "Downmix as needed". This only applies to multichannel music, where 2-channel users will want Roon to mix the multiple channels into 2 for the main speakers.

Use Maximum Buffer Size

Leave at default “No” setting.

Power-Of-2 Hardware Buffer Size

Leave this at the default "No" setting. For more information, see the below quote from the Roon site.

Use Power-Of-2 Hardware Buffer Size (CoreAudio Exclusive Mode + ASIO only)

This one is sort of like Use Max Hardware Buffer Size except it forces buffer sizes to the nearest power of 2 instead of the largest possible size. This is a workaround for bugs in some audio drivers and devices. It's worth a shot if you're experiencing dropouts, clicks, or pops during playback, but in 99% of cases, it adds nothing of value. We don't recommend turning this on unless it solves problems for you.

https://help.roonlabs.com/portal/en/kb/articles/audio-setup-basics#Clock_Master_Priority

TAS (Legacy)

Legacy - only required if you have TAS installed!

If you still use TAS, we recommend giving Roon a second chance. We are working on a successor for TAS, called XDMS. More info can be found here: https://www.whatsbestforum.com/threads/taiko-audio-xdms-extreme-direct-music-server-software

For those who still use TAS, please refer to the following.

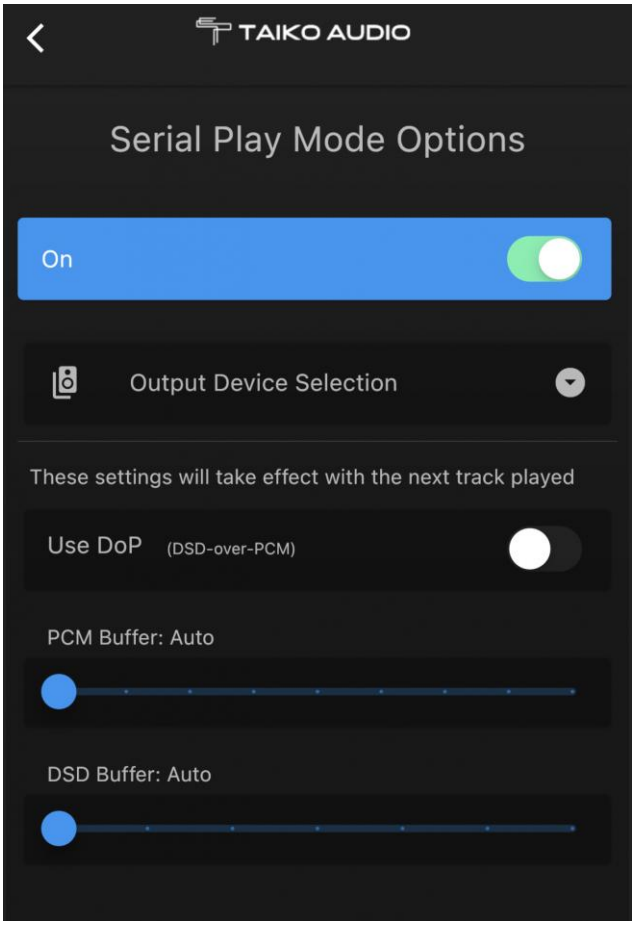
Setting TAS Buffers

As part of the recent update to the OS and USB driver, Roon has been made the default music player on system startup. To use TAS you will have to launch the TAS remote on your phone or tablet and switch to TAS.

Part of TAS has now been integrated into the new USB driver and this has led to major sonic benefit when using Roon. As a result, there is one setting in TAS that needs to be changed, also when you are using Roon.

To access the player settings screen, tap and hold your finger on the green player button and the relevant settings screen will open.

- Tap on Output Device Selection and ensure you have the appropriate ASIO device selected
- If our DAC must use DOP, select it here
- Choose your USB buffer sizes for PCM and DSD



- The TAS buffers need to be set to Auto
- Tap the top left arrow to save changes and Exit