HOW TO PREPARE YOUR FILES

FOR MIXING & MASTERING

Foreword

This is a short document detailing the best method of preparing your audio files for mixing and mastering services delivered by JMH Sound Design. Other audio engineers and audio engineering businesses may have different procedures that allow them to obtain greater results, but these steps allow us to achieve our best results. This short document details the steps you can take to ensure your project has the best outcome.

Step 1 – Check the audio quality of your recordings

Are you happy with your recordings? Can you identify any mistakes or audio errors that can be amended with another take? Simply ask yourself "are my recordings of an acceptable quality for the end result that I want?". If you can obtain a better recording it is recommended, as a higher quality recording means a high quality mix and/or master.

For further mistakes and errors to look out for, use this list:

- Are there any timing errors? Is everything played in time to the song's chosen BPM?
- Can you identify and digital audio glitches (artifacts) such as clicks, pops, clipping?
- Is the performance of an acceptable standard?
- Is the signal to noise ratio to an acceptable standard? Signal to noise means the difference between the signal level and the level of the noise floor. The noise floor can be the background noise, or the electrical ground noise of audio equipment.

In many situations it may not be possible to re-record a part. If it is possible to identify an issue with your recording, there may be a few methods of amending the issue without needing to re-record. JSD is capable of fixing the above potential issues, but this will increase the time spent on your project, and may incur additional costs.

These are a few methods of amending audio issues:

- For BPM issues, use 'time alignment' features within your respective DAW.
- For digital audio artifacts and errors, use audio repair tools such as Izotope's RX software.
- Performance issues can generally only be amended with re-recordings and overdubs.
- Signal-to-noise ratio is difficult to amend, but can be improved with audio repair software and through use of negative expansion.

It is very important to maximise the quality of your recordings before sending them off to a mixing or mastering engineer, as the quality of the end result is heavily dependent on the quality of the initial recordings.

Step 2 – Remove all unnecessary processing

This means two different things depending on the service that you have chosen.

For mixing, this means ensuring that you have not 'over-processed' all of your recordings with audio plugins. Over-processed would be any processing past what is necessary for you to have obtained the characteristic sound of your recording.

The more processing you use, the less freedom we have to make changes to your mix, and it is likely that this will result is a lesser mix.

For mastering, this means ensuring you are not using any plugins over your master fader, or pre-master. If you have plugins on these channels that give your mix a sound that you like, please send two versions – one with the processing, and one without.

It is important to ensure that you allow your chosen mixing and/or mastering engineer the most amount of freedom to do their job. Excess plugins and processing means that the scope of their abilities is limited because they can no longer employ their versions of processing that has already been encoded into your files. While some of your processing may be important to the character of your mix, or your recordings, it prevents the engineer from using their abilities. Please provide two versions if you are concerned, one without processing, and one with. The version with processing can be used as a reference track (a guide) and can influence the engineers mixing/mastering decisions.

Step 3 – Correct gain staging

For mixing, make sure that all of your individual recordings are hitting a peak audio level of - 10dBFS (decibels full scale – digital reading of audio level), with an average level of - 20dBFS. You don't have to have your audio meet these exact levels, but if you can get your individual track levels within 3dBFS of these requirements no issues should arise.

For mastering, ensure that your mix is no louder than -6dBFS.

Why these levels? These levels allow for enough *headroom* (distance in level between the peak audio level and the audio ceiling). This means your engineer has room to make processing changes that alter the level of your recordings without causing clipping and distortion.

The best way to decrease the audio level of your entire mix is by adjusting your master fader until the peak audio level of your mix is at the desired level. Another method of doing this is by selecting all of your individual tracks and turning them all down slightly until the desired output level is achieved. The latter method can sometimes cause issues if you are using complex routing using auxiliary's (this method when using Pro Tools can cause the auxiliary faders to remain the same, you may need to individually adjust the auxiliary faders by the same amount you adjusted the individual channels.

Step 4 – Consolidate your tracks

Make sure all of your individual recordings are collected together into whole tracks. This means if you have over-dubbed various parts that are disconnected, you need to 'consolidate' them together into 1 file.

In your DAW, highlight all of your tracks from the starting point of the song to roughly 10 seconds after the ending point of the song – then consolidate all of your tracks so that when we open them they will be ordered and will start and finish where you have selected.

How you consolidate your files depends on the DAW that you use. It is best to search online how to conduct this step if you are unsure as there is plenty of information available. Don't be alarmed as this procedure should be fairly simple.

Step 5 – Bounce your files

We recommend bouncing (exporting) your audio files at 48khz sample rate and 24bit, as these are the parameters that we operate with. It doesn't matter if you have not recorded to these parameters, just convert your files during the bounce process to these specs.

Bounce your files to 48khz sample rate and 24bit bit depth.

Step 6 – Rename your files

This step isn't absolutely necessary, but it will drastically help your engineer identify what each of your individual files is. For example, if you name your files based off of your band members names, we don't know what your band members play, and it will become difficult to understand what file is what. To save us the time, we would appreciate if you would take the time to name your files in the following manner:

[Instrument Name] – [Song Title] – [Artist Name]

For naming your finished mixes for mastering:

[Song Title] – [Artist Name] – Mix

At the end of these names you can designate if it includes processing so we can easily determine which files are to be used as references – such as: … - Mix – Processing.

Step 7 – Upload your files

Once you have bounced your finished files, upload them to your desired file sharing website. We use Google Drive for our projects and have had no issues with past projects using this method of file transfer.

Google Drive is easy to use – all you need is a Google account. With a Google account you can open your Google Drive and upload all of your files. Follow these steps:

- Open your Google Drive and upload a folder containing all of your audio files.
- Find this folder and right click it.
- Choose to share the folder and share it with JMHSoundDesign@gmail.com.

Once you have done this, we have the ability to download all of your audio files and begin your project!