



Pre Mastering Advice

In order for us to get the most for you out of your recordings there are a number of things you can do to help optimise the material that you submit.

Please take time to read our mix & submission guidelines thoroughly before submitting any material as these few details can really make the difference between us achieving a good master and an exceptional one. If you are not the final mix engineer then simply print out this document and discuss it with your engineer before they run the final mixes to be sent to us.

If you have any questions about any of the points mentioned please do not hesitate to email us or call for a discussion.

Mix and Submission Guidelines

We do our best to work wonders but at the end of the day we are always at the mercy of the material we receive and therefore the more you can have right at source, unhindered by any potentially inferior processing, the more we can ultimately do for you.

These days there are a whole host of so called 'mastering grade' plugins available and a lot of DAW applications offer their own built in processors intended for the purpose. All of these fall short of the processing quality required to achieve a truly great sounding master without any undesired artefacts. So don't use them on your mix as a prelude to mastering! It will ruin any chance of a great master.

Therefore the most important thing is to try and adopt a less is more approach and only apply mix bus processing you feel is absolutely essential to the sound. In short, try and leave the mastering until the mastering session.

Check your mix carefully for clicks, pops & vocal sibilance, one off loud events such as extra loud crash cymbals; vocals, bass notes or any other dynamically related one-offs. Make sure that you are as satisfied as possible before you submit your work.

Technical considerations such as phase correlation, filtration of unwanted sub frequencies or high frequencies, noise reduction, de-essing and volume automation

STAR DELTA AUDIO MASTERING

T: 01647 253895 e: Info@stardeltamastering.com

Office: Overbrook, Dunsford, Devon, EX6 7AF

U.K. VAT Number 924 3714 30



are all things that should be carried out on individual mix elements and not the whole mix during mastering, whenever possible. We do however have excellent tools for making these adjustments at the mastering stage if there are no other alternatives or the technical fix won't hurt the final sound.

In reality the best mix you can have is one that sounds right with no processing at all and all we need to do is correct any minor equalisation and set the level in the right spot!

General Mix Levels and Processing

Follow these tips and you should give us the best start possible to optimising your music.

Try and keep peaks on the main mix bus between -10 to -4dBfs (Digital Full Scale) but no higher than -3 dBfs. If they are higher we would recommend lowering the individual mix element faders and group faders to reduce the level on the master output bus. You need to leave the master fader at 0 and work the faders and groups within the session (if Mixing in the box)

If mixing on a console please keep the digital capture recording levels conservative (-4dbfs peak) suggested.

The reason to do the above (both in the box and recording the console output) is not to do with headroom for mastering, (mastering is carried out in the analog domain so headroom is irrelevant). It's because of intersample peak distortion which starts to happen as low as 4 db below dfs in some computer workstations. When digital mixes have intersample distortion it becomes very hard to get a good clean result from analog hardware as it responds badly to these peaks that your software meters cannot even detect as they happen between sample cycles. Working natively at higher sample rates does a lot to alleviate this issue but only if the parts in the session were recorded at that sample rate. Do not upsample files under any circumstances. You are better off at 44.1K if that is what your session was originally.

STAR DELTA AUDIO MASTERING

T: 01647 253895 e: Info@stardeltamastering.com

Office: Overbrook, Dunsford, Devon, EX6 7AF

U.K. VAT Number 924 3714 30



Do not normalize files under any circumstances.

No processing on the master bus, e.g. any loudness maximizing processor of any kind. Maybe a little compression from a decent outboard device if mixed on a console for specific effect, but no limiter plug-ins please. EQ on the master bus at our end would often be unnecessary if it were not for needing to undo over compensation by the mix engineer (often due to room deficiencies in the mix environment).

If you wish to give us a processed version that you are reasonably happy with as a reference then that is fine and often a useful tool.

Do not apply any dither or noise shaping to the final mix. Again if this is needed we will apply it in the final stages.

File Formats, Fades, Start/End Points and Submission

Files should always be 24bit or 32bit .wav or .aiff. The sample rate should be the sample rate of the source DAW session. Please do not up or down sample -sample files as this is one of the most harmful things you can do to digital audio. If the sample rate and bit rate need to change during mastering let us do this the correct way, without mangling the digits!!

Make sure all track starts and ends have good bar/few seconds of silence either side and leave topping & tailing until the final master.

If you have clearly defined fades that you want to make sure are incorporated into the final master we suggest you fade the ends of tracks as you would like them to be in the premaster you supply. If you require fades but don't want to print these into your mix file, please supply exact details of the length of fades including start and end times when ordering.

Submit clearly labelled files. Format should always be stereo interleaved .wav or Aiff. And be they on CD, DVD, USB stick or secure server they must be clearly labelled with Track title and version details. E.g.: *My new tune_Vocal Up_Premaster_*

STAR DELTA AUDIO MASTERING

T: 01647 253895 e: Info@stardeltamastering.com

Office: Overbrook, Dunsford, Devon, EX6 7AF

U.K. VAT Number 924 3714 30



Zip Everything!!!

When sending files please add all the files into one folder and Zip the folder before sending. The Zip includes a checksum that allows us to determine that all the bits and bytes you sent are identical to those we have received. The zip acts as a protective device to ensure data integrity.

Ordering mastering:

You will be directed to fill in details on your mastering project that will include all the info we need in one place to ensure everything comes out the other end correctly.

Delivery of finished digital masters:

We can supply your masters back to you as either a DDP image (the industry standard sample accurate data format used by nearly all professional pressing plants), Red Book CD or simply data files sent via our secure server. Please specify your preferred delivery method when confirming your session.

As standard we provide finished digital masters at 16bit 44.1khz but can supply any sample rate or bit depth you require upon request. We need to know this before your session so this info should be provided along with your order.

STAR DELTA AUDIO MASTERING

T: 01647 253895 e: Info@stardeltamastering.com

Office: Overbrook, Dunsford, Devon, EX6 7AF

U.K. VAT Number 924 3714 30



Notes For Vinyl Customers

Due to the degradation of lacquer discs from the moment they are cut, it is crucial that you have a pressing plant booked and ready to receive them as soon as we dispatch them with our courier. If you need any help with this please do not hesitate to call us.

You will also need to have a matrix/catalogue number (for identification purposes) ready to be etched on to the disc before dispatch.

The most frequently given advice here at Stardelta Mastering. Please take heed and make us happy!

- 1) De-ess your vocals. Vinyl masters with sibilant vocals are impossible to cut without severe distortion at the sibilant peaks. As much as 70% of vinyl premasters we receive that contain a vocal are unworkable and have to be returned to the client to be de-essed.
It's sometimes possible for us to do this during mastering dependent on the musical style of the vocal and its level in the mix. If there are also other high frequencies present, it is nearly impossible to de-ess a vocal during mastering by enough to stop the issue without eating something else in the high frequencies of the mix.

The gain reduction on your de-esser should be acting on all the sibilant peaks during the vocal passages and we recommend using as many as 3 de-essers on the same channel in series at differing frequencies to catch all the sibilance. You may find that when you reduce the vocal sibilance to the correct level (hardly any at all please, really, PLEASE) the vocal may need to be raised in the mix by a little as the harsh vocal sibilance normally fools you into thinking the vocal is loud when in fact it is quiet and highly sibilant.

In short, if you have a vocal track that is destined for vinyl and you haven't carefully de-essed it, then assume we will have a problem, as we will, in most cases. This is not optional. It is essential to getting a good result.

STAR DELTA AUDIO MASTERING

T: 01647 253895 e: Info@stardeltamastering.com

Office: Overbrook, Dunsford, Devon, EX6 7AF

U.K. VAT Number 924 3714 30



If you are not confident in getting this right then you can supply the track without the vocals and supply a separate vocal stem, which we will de-ess during mastering. This will incur extra costs but often provides the most expedient solution.

- 2) Check your mix bounces before you send them. Listen all the way through to make sure it all sounds correct.
- 3) Check for clicks and pops. They might be tiny now... But they won't be after mastering. The same applies for distortion; it's going to get amplified along with everything else. It won't be nice so don't let it happen!
- 4) If there is anything that could happen during mastering that you know you would hate and never want to happen to your music please let us know in advance. In general our experience in every genre of music will preclude a mistake like this from happening. Occasionally, however, a client might not let us know something important that sonically they wish to be a certain way. Communication is key. You can provide us with as much info as you want on the sound you are seeking when placing an order. We will always do our best to get you there.
- 5) Turn it up. Before sending your final mix for mastering you should really give it a listen as loud as you can in your listening environment. This will reveal if you have overdone the level or EQ on the midrange and tops. It's surprising how many clients never do this and it leads to over bright or harsh mixes that are difficult to correct during mastering.
- 6) Mixing in headphones? If you are, then please check the mixes on some speakers before sending in for mastering. With the exception of some high-end headphones it's not really possible to hear what you need on headphones alone.

STAR DELTA AUDIO MASTERING

T: 01647 253895 e: Info@stardeltamastering.com

Office: Overbrook, Dunsford, Devon, EX6 7AF

U.K. VAT Number 924 3714 30



A Few Words On Loudness and general audio quality:

For a number of reasons, mainly record labels wanting their record to sound biggest on the radio/TV, there has been a rather sad trend in recent years for ever increasingly 'loud' or crushed/clipped, dynamically devoid masters.

This increase in perceived volume comes at the cost of a loss of clarity, punch and depth as well as poorer stereo imaging and increased distortion. This is particularly problematic with the popular MP3 format due to the nature of the conversion process. MP3 is a terrible sounding format; there is in fact no such thing as a good sounding MP3 due to its conversion/compression losses. It's gradually losing its prominence but its replacements are not up to much either. Really PCM or DSD audio formats represent the best listening experience digitally available but they are still under utilised currently.

It is sad because more and more people are growing up thinking that this is how music is supposed to sound. This lack of quality really affects the emotional connection with the listener and is deeply harmful to the hard work and emotion in the artist's music.

While there is a place for hugely large (Loud) sounding records, to really make it work, it is more often than not a product of quality writing, arranging and mixing and mastering process more than any 'magic bullet' in the mastering studio. Weaker mixes make weak masters and pushing weaker mixes harder during mastering makes them weaker and sound worse. To get the best results from mastering, the mix and production process has to be well crafted. It's well worth spending a good deal of time on the mixes getting them right before spending money on mastering to fix a problem you could have sorted during mixing.

Loudness has become a confusing subject. It's a topic that is not widely understood by the large majority of people involved in music. To simplify, some music sounds great mastered very loud and some sounds terrible. It's important to compare apples with apples and even more important to communicate your desire for loud, dynamic or otherwise when ordering and discussing mastering projects.

STAR DELTA AUDIO MASTERING

T: 01647 253895 e: Info@stardeltamastering.com

Office: Overbrook, Dunsford, Devon, EX6 7AF

U.K. VAT Number 924 3714 30



Different genres of music have differing loudness scales so it's important to discuss this if possible. A loud club record would be different to a loud jazz record for example. Both would be loud in their genre but in no universe should a jazz record be made as loud as a club record. It's important to discuss references of loudness to make sure you end up with what you want.

The other option is to allow the engineer to set the level where they see fit in the given genre.

At Stardelta we always try to put the right music in the perfect sweet spot in terms of loudness relative to quality. It's always fantastic to get some insight into how clients want to receive their loudness or lack of. So please let us know when you order what you like to hear!!

There is some possibility given advances in playback technology that loudness will be an issue of the past in years to come. The emphasis will hopefully switch back to colour and sonic signature and music will sound much more engaging as a result. As it stands, it is the single most consuming topic during conversations with clients. This is a great shame as more attention to quality could be brought into focus with a bit less loudness across the board.

Loud does not automatically equal good, although it can! Confused?

STAR DELTA AUDIO MASTERING

T: 01647 253895 e: Info@stardeltamastering.com

Office: Overbrook, Dunsford, Devon, EX6 7AF

U.K. VAT Number 924 3714 30