



HOW TO PREPARE A SUITABLE MASTER FOR VINYL

You want to get the best results for your records? Make sure you read our hints and recommendations. Recording on a vinyl requires a different process compare to CD in order to offer the best experience for your listeners.

1. Audio master should be VINYL READY (not CD, Tidal, Soundcloud, etc.) We are not providing audio mastering services. Unprepared audio will cause artifacts and it's necessary to lower the recording output level to avoid them. We only use standard elliptical filter 200-360Hz, HPF 30-40Hz, LPF 16kHz (both 12dB per octave slope) and acceleration limiter (kind of de-esser for protecting cutterhead from damage).

2. Try to respect the maximum playing lengths, watch carefully the table below which will help to clarify your file and determine the lengths per side. Also, in order to choose the best type of cutting, the table will also help you choosing the best cut according to all formats.

3. Not respecting the maximum length will expose your master to a distortion, the general recording will result in bad quality.

4. Try to avoid using psycho-acoustic processors, loudness maximizers and brick-wall limiters to an excessive degree.

5. Following characteristics must to be respected :

- Signal and oversampling peaks must be below -0.1 to -0.5 dBFS.
- Full monofonization below 200-300Hz are highly suggested, everything at lows must be in phase.
- Please also use highpassfilter at 40Hz and lowpass filter at 16kHz.
- Stereo base should be 6-9dB lower than mid information (mid-side coding)

6. We can correct most problematic signals or reduce their negative effects, but in the worst scenario where the signal/music has such critical characteristics that it may damage the cutting head, the supplied audio will be claimed to the customer

7. STANDARD CUT - we choose the highest reasonably possible recording levels in accordance with the character of the supplied recording and with respect to the specific properties of the mechanical recording technology. If it is tolerated by the limit values of the cutting lathe and by the playing time of the supplied audio, then it is possible - at customer's express request (mostly for DJ genres or rock and heavy-metal bands) – to use higher recording levels – LOUD CUT. However, on the side of reproduction it can be to the prejudice of distortion or stability of the tip during playback.

8. Try to avoid 7" vinyl formats at 33 & 1/3 rpm as the possibilities of the recording and reproduction are most limited at this format recording levels and causes a higher decrease of the high frequencies near the middle of the record and can also causes more distortion.

9. Please use a fine turntable to listen to your vinyl. Cheap turntables may induce a decreasing quality in the listening process.

10. We need a complete track list for your audio master containing the names of all tracks (including the hidden and bonus tracks), timings of tracks and pauses, division of tracks between side A and side B, and the time of each side! Please inform us of any special effects or anomalies in the supplied audio and any special requests (endless grooves etc.). Any orders without a complete track list will be refused for production.

11. If you require additional adjustments or pre-mastering changes in track order, disregarding some tracks, creating a compilation from several masters etc., please specify your request exactly on the order form and the track list, and note what is on the master and what needs to be done for the final product.

Why is my record not loud enough?

Generally, there are 3 main reasons:

1. **over compressed material:** that is a real struggle for cutterhead to clear transfer masters when they don't contain dynamics. In some situations, transferring them with '1 to 1' volume can cause noticeable distortion. Please bypass your hardworking compressors/limiters and let the cutting lathe to compress it for his own. More dynamics included in masters = it's easier to transfer it clear and louder.
2. **sibilance:** high frequencies are the easiest to overdrive. De-essers should reduce much harder than in digital medium. The biggest risk is at vocals, trumpets, synths based on saw sine and overheads. Please also be aware of that when it's closer to the label – Loss of high frequencies and risk of sibilance distortion also increases. We hardly suggest putting the most aggressive songs on beginning of side and lower the impact of music towards label.
3. **side length:** If there are no problems mentioned above, you can fit almost everything up to 17-18 min (depends on genre/dynamics). Fitting more material are straightway related with volume loss and lower signal-to-noise floor ratio.

**Recommended lengths of audio recordings for various formats of records
(Informative average values for one side of the record)**

For common music

Typical average values of geometrical parameters of the groove	Size of record	Minutes at 33 $\frac{1}{3}$ rpm	Minutes at 45 rpm
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Basic width of the groove			
Width of the mirror	30cm (12'') record	15-22	12-16
Vertical amplitude	17cm (7'') record	6-8	4-6

For techno, dance, electronic genres

Basic width of the groove			
Width of the mirror	30cm (12'') record	10-16	8-12
Vertical amplitude	17cm (7'') record	4-6	3-4