

How to prepare a suitable master for vinyl record production

For the best result on vinyl records, you should know the following points before preparing your master tape or CD:

- Try not to exceed the playing length of 18 – 20 min per side on 12" vinyl record at 33 1/3 rpm as longer playing time leads to dramatic decrease of the recording level and dynamism. On the other hand the requirements of extremely high recording level decrease possible playing time (see the table below – for other formats).
- Try to place demanding exposed tracks at the beginning of the side of the vinyl record not at the end. As the conditions for recording and subsequent reading on vinyl records get worse with the decreasing diameter towards the middle of the record.
- Try to avoid using psychoacoustic processors in an excessive degree.
- Check the master by using a correlation measurer (it must not be in the red field or in negative values) and a frequency spectrum analyser. (signal must not contain unreasonably large elements at the bottom and mainly the top end of the zone).
- The lowest frequencies of the acoustic zone which are below 300 Hz have to be in phase.
- Filter away all subacoustic signals below 20 Hz to avoid possible problem during recording and reproduction.
- If your recording substantially differs from natural sounds, which is caused by spreading out the energy in the acoustic zone, there is a risk of occurring audible changes in the sound during the transcription as a result of certain limits following from the principles of the mechanical recording and the reproduction. (for example – singing adjusted by variable processors, electronically generated effects etc.)
- We always try to transcribe the recording in the highest possible level (as loud as possible).
- Try to avoid 7" vinyl record format at 33 1/3 rpm as the possibilities of the recording and reproduction are most limited at this format. If there is no other solution you have to count with a necessary compromise *)
- Remember that good result of reproduction on user's side depends on the quality, technical conditions and correct adjustment of the reproduction facilities! **)
- We need a complete track list with your master containing the names of all tracks (including the hidden and bonus tracks), track timings and their separation into side A and side B, total time of each side!!! Please advice of any special effects anomalies etc. The order without the complete track list will be refused for production.
- Please check carefully if the data on the track list (number of tracks, track order, names and timings on each side) corresponds with the master, the label and cover artwork (and other printed parts – inserts, posters).
- Please keep in mind that the data needs to be readable and understandable.
- Any claims of the final product caused by errors in the production parts supplied by customer can not be accepted!
- If you require additional adjustments or mastering (changes in track order, disregarding some tracks, compilation....) please specify exactly your request on the order form and note what is on the master and what you need to be done for the final product.

Vinyl record playing time		
	mm : ss 33 1/3 rpm	mm : ss 45 rpm
Vinyl record 12"	19 : 20	14 : 20
Vinyl record 10"	13 : 37	10 : 05
Vinyl record 7"	6 : 50	5 : 00

*) low groove speed limits the recording level and causes higher decrease of high frequencies into the middle of the record and higher distortion.

**) quality of reading system, the shape, the level of the attrition and the cleanness of the needle and the adjustment of vertical force and antiskating.