# HOW TO PREPARE FILES FOR VINYL PRODUCTION

Please. read the following instructions carefully. Before sending audio material, make sure it meets all the technical requirements. The audio we receive goes into the production queue and only when its turn comes, it is checked by our technical department, so you might be notified about any incompatibility with the required criteria even several days after placing an order.

# **Maximum lenght:**

12 inches:

33½ rpm - recommended/optimal 19:30 min per side (max. length: 23:00 min per side)\*

45 rpm - recommended/optimal 12:00 min per side (max length: 14:30 min per side)\*

## 10 inches:

33½ rpm - recommended/optimal 13:30 min per side

45 rpm - recommended/optimal 10:00 min per side

## 7 inches:

33½ rpm - 6:40 min per side\*

45 rpm - 5:00 min per side\*

\* - if the optimal time is exceeded, we reserve the right to refuse a complaint concerning the sound quality

# Maximum level of digital source signal

The maximum level of digital source signal should not exceed 0.0 dB True Peak. The True Peak Level is not Peak Level.

# Approved frequency bandwidth

Both ends of audible bandwidth (below 30 Hz and above 18 KHz) should be kept on a decent level (not exceeding the rest of the audible spectrum). One should also realize the bandwidth of high frequencies is limited toward the end of a disc side. Especially on 7" discs played with 33 1/3 r.p.m. This phenomenon is inevitable and can not be cured by pre-emphasis / de-emphasis means.

## **RECOMMENDATIONS:**

Demanding sound tracks should be placed at the beginning of the side, not at its' end. Playback conditions worsen when closer to the centre of a record. In other words, important works should be positioned closer to the outer edge of the disc. The worst possible format for playback quality is the one of the diameter of 7 inches, recorded at a speed of 33rpm. The playback is worsened as the linear speed of the record decreases as the needle stylus approaches the centre. This affects the sound and worsens high frequencies changing its characteristics. The quality will depend then on technical capabilities of playback devices.



#### **Sibilants**

Too high level of sibilants (like: sss, shhh, zzzz etc) and the upper band contents (like hi-hats) are not suitable for vinyl and could cause cross-modulation effects. It sounds like distortion and unstable stereo image on such signals. It is strongly recommended to keep these sounds on a decent level by using de-essres and other means during pre-mastering process.

#### Phase and correlation

The overall correlation of stereo should not exceed 90%. 0% – means mono, 180% – means anti-phase. The correlation of bandwidth below 200 Hz should be even narrower, and below 100 Hz should be 0% (mono). It is highly probable that additional click, crackles and distortions occur if these specs are overridden.

## **Dynamics and non-linear distortion**

It is strongly recommended not to overdose the usage of maximizers during the pre-mastering process. The loudness level of -10 dB LUSF seams to be enough for a really loud undistorted vinyl.

The process of cutting and vinyl reproduction is analogue by its nature. It brings its own non-linear distortion to reproduced sound. So, all non-linear effects could get its new, sometimes unpredictable flavour on vinyl. It should be taken into account.

# Approved file formats for vinyl (and tracklist for lacquer cutting):

We approve .wav files. Sampling frequencies and bit depths 48 KHz (24 bits). The preferred files for vinyl are 24-bit single wav files for each side (2 files per single double-sided vinyl disc).

If you submit separate files, they should be named in such a way, so the computer browser could line them alphabetically up in a right sequence. For instance: A\_01 A\_02 B\_01 B\_02 C\_01 C\_02 D\_01 D\_02. Thus when you put your files into one folder everybody would know what is the right order and which songs belongs to side A, B, C or D of your album. The names should not contain diacritic characters.

The files should be submitted with a filled-out Vinyl Master Specifications for Lacquer Cutting tracklist document (available in FDF). Such tracklist determines the positioning of VMTs – the Visual Marker Track/ Time – the "visual" breaks between tracks on the record (in the form of a widened groove). By standard, VMTs are placed on every vinyl production. If the customer does not want to place VMTs, it should be marked in the order form.

## NOTE!

Pauses between tracks should be included in the sent files (they should be built into the material). VMTs do not cause any breaks in the audio signal. Uninterrupted music will play over them.

Any interference into the material (including adding pauses, equalizing pauses) must be agreed with Skivtryck/Discrepublic.com. If the order (order comments) does not include any information about the above, the ordered material will be pressed according to the original files submitted by the client.



## **ATTENTION!**

Please thoroughly check and label masters before sending them - the number of tracks, their sequence, titles and times must be the same in description of all components - master, label, printing parts. Folders and files transmitted via the Internet (file upload) must be clearly marked indicating the information regarding the component they are including.. Any claims relating to the final product, caused by errors and defects of source materials will not be considered.

The zip containing audio files with the tracklist should be uploaded on our website:

- 1. https://skivtryck.se/filuppladdning/
- 2. https://discrepublic.com/fileupload/

## **Final notes**

In some cases vinyl change the way your digital pre-master sounds because of its physical nature. Sometimes it is a change for good, sometimes it is a change for strange. In digital realm we can produce sounds vinyl cannot retrieve. If this happens you got two ways to take: love it or produce your sound with the above specs in mind.

The vinyl production has a tolerance of -/+ 5%, ie. you may receive slightly more or slightly less discs (but no more than 5% of the overall quantity).