

## Vinyl Records Specifications and Information

### Maximum recommended playing time per side:

7"	45 rpm	04:30 mins.	
7"	33 rpm	06:00 mins.	
10"	45 rpm	08:00 mins.	(DJ use: 05:00 mins.)
10"	33 rpm	14:00 mins.	(DJ use: 09:00 mins.)
12"	45 rpm	14:00 mins.	(DJ use: 09:00 mins.)
12"	33 rpm	24:00 mins.	(DJ use: 15:00 mins.)

## Audio characteristics of the master / recording

### Recommendations and notes:

Since your audio document is transferred to the record as true to the original as possible, the master delivered for the cut should comply with your expectations in terms of the musical tone.

Digital audio files should be levelled to a maximum of -0.3 dbfs (the headroom should be at least 0.3 db).

The play times depend upon the recording and, where possible, should not be exceeded, depending on the target group and format of the record. Play times which are longer than normal may lead to a loss in quality. In the case of a stereo audio production on a record, restrictions apply mainly in the high frequency range and in the case of differences between the channels.

Intensive high tones such as S and F vocal sounds in singing, high tone instruments, synthetic sounds or squeaking and peeping noises may sound distorted in the playback and also cause problems during the cut.

In the case of low frequencies, no signals below 15 Hz may be used, since these cause problems during the playback. As far as the acoustics are concerned, a range below 20 Hz is not recommended in any event.

If the differences between the channels are too large, this may also result in distortions. In the same way, restrictions apply in regard to the cut: more space is required, and this may result in less play time and/or in a lower cutting level.

*Identification grooves:* larger distance between the grooves for the visible identification of the beginning of the titles. The identification groove has no influence on the playback result and does not create any pauses (adjacent titles). In the absence of special instructions, an identification groove will be assigned to each title.

*Loop (locked groove):* In the case of a cut of 33 rpm, a loop must have a length of exactly 1.8 seconds and in the case 45 rpm of exactly 1 1/3 seconds (one rotation)! The sequence which is to be repeated in the loop must be arranged in the master at least five times in succession, just as it should be heard in the playback.

In order not to increase the wear caused by the constantly repeated playback of the endless groove, the original should be mono if possible and should not contain any intense high frequencies.

## Delivery of masters

### Precautionary measures

- **Please thoroughly check, listen to and label each master before delivery (company, order number and title).**
- **The following details and information must be enclosed with the master:**  
**Track list (list of titles) with the individual play times, total play time, side separation (clear assignment of the titles -A/B side-) and speed 45 or 33 rpm.**
- **Requests in regard to technical / sound processing must be clearly indicated.**

**Important: The contents of the master will – unless otherwise stated – be cut 1:1.**

**We do not assume any liability for loss or damage of the master or for any optical or acoustic defects contained in the master or any interferences arising therefrom.**

**The master cut [mastering] is always - if not otherwise ordered - made on a lacquer.**

**Note: Without a detailed track list / label copy, no order can be placed with the cutting studio. We accept no liability for any postponements that may occur due to incomplete, incorrect or completely missing documents.**

## **Formats for the delivery of the master**

### **1. Transmission by Internet / FTP Server**

These formats are possible:

- DDP 2.0 image files
- the file types .wav and .aif

Sampling rate and resolution up to 192 kHz at up to 24 bit / 32 bit floating point. Within these limits, the selected sampling rate must be maintained when preparing the master.

### **2. Data CD / Data DVD**

Capacity of the blank CD used max. 700 MB!

Capacity of the blank DVD used max. 4.7 GB!

These formats are possible:

- DDP 2.0 image files
- the file types .wav and .aif

Sampling rate and resolution up to 192 kHz at up to 24 bit / 32 bit floating point. Within these limits, the selected sampling rate must be maintained when preparing the master.

Please ensure that your burning programme records the file names in their full length; this applies in particular for the file extensions such as .wav or .aif.

A cut from MP3 files is possible, but is not recommended. The high data compression results in a change of the sound quality. An approval by the customer is required.

### **3. Audio CD**

The audio CD must comply with the Red Book Standard.

Capacity of the blank used max. 700 MB!

The title sequence and pauses must be arranged as desired on the record.

### **4. Tape** (Please note: We will charge additional costs for the cut due to the extra effort acc. to the time needed.)

recorded in mono full track or stereo with two half tracks

¼" / 6.3 mm, Tape speed 19, 38 or 76 cm/s; NAB or CCIR equalisation

½" / 12,7 mm, Tape speed 38 cm/s; NAB or CCIR equalisation or

Tape speed 76 cm/s; AES/IEC2 equalisation

Noise suppression systems: Dolby A, Dolby SR and Telcom.

The following information should precede the audio material to be cut: (the same in both channels/mono)

A 1 kHz sine tone at full scale level (corresponding to the highest modulation peaks), a 10 kHz sine tone at 20 dB below full scale for magnetic head gap alignment, and a 40 or 50 kHz sine tone also at 20 dB below full scale.

**Important: The specific test tone used for the noise suppression (e.g. "Dolby Tone").**

The title sequence must be arranged as desired on the record.

It is essential that you quote the following details on the tape box or sheet attached:

Company, catalogue number, equalisation, tape speed, noise suppression, test tones (frequency and sound level, related to maximum level), all titles with their individual play times and their position on the record (A1, A2 ..., B1, B2 ...).

The audio material must also be provided in digital format (e.g., WAV or MP3 files – low resolution is sufficient). This is used to pre-analyze the dynamic range in order to efficiently and accurately calibrate the cutting process.

### **5. DAT tape / Minidisc**

This can be delivered only on inquiry.

## Delivery of master discs and mother plates

The following items may be delivered to us: lacquers // DMM // mother matrices // **NO stampers (press matrices)**

A check will be carried out on receipt of the items delivered.

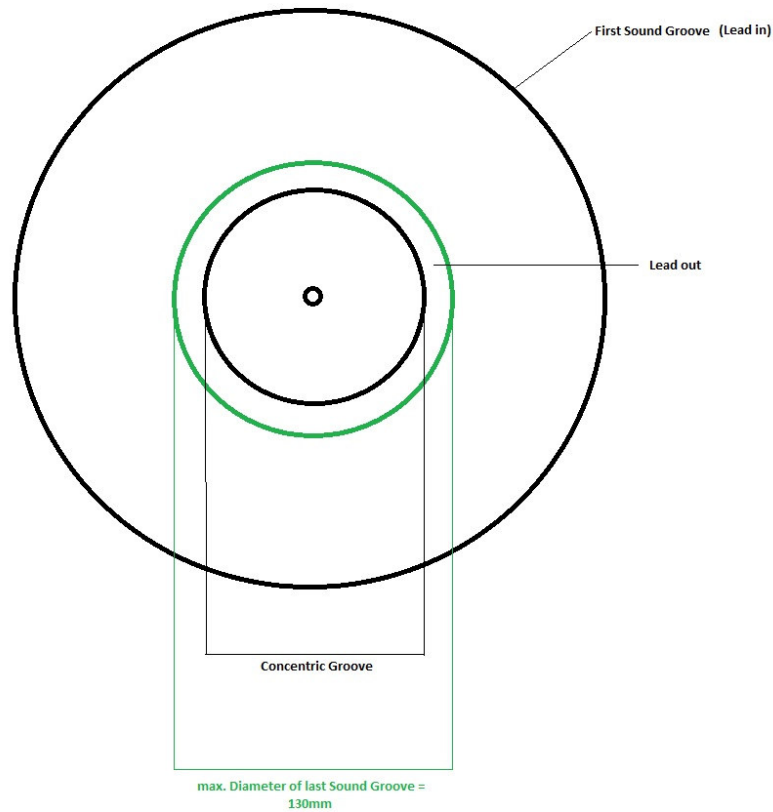
If the engraving needs to be reworked, this will be done by prior arrangement.

CHARGE according to time expended.

**Cut of master disc for Picture Disc** → It is essential that the following points are observed:

Where these stipulations are not observed, the labels may tear and/or the record may not be pressed out correctly (tensions in the material)!

In each case per side	10" Picture Disc	12" Picture Disc
Ø of the first groove with music/sound	$\geq 238.0 \text{ mm} / \leq 241.8 \text{ mm}$	$\geq 288.0 \text{ mm} / \leq 292.6 \text{ mm}$
Ø of the last groove with music/sound	$\leq 130.0 \text{ mm}$	$\leq 130.0 \text{ mm}$
Ø of the final groove	$106.4 \text{ mm} \pm 0.8 \text{ mm}$	$106.4 \text{ mm} \pm 0.8 \text{ mm}$



Note:

We need as small a run out groove region as possible (93 % or greater available disc space used on a 12" record). Where the play time of a title is not long enough to reach the maximum diameter allowed for the last modulated groove, an empty groove per side with normal pitch (groove feed) - as a modulated groove - must be added. Both sides (A + B) must contain a modulated groove or an empty groove! (It is not possible to press a picture disc with one "blank" side.)

## Galvanic Processing

### Lacquers

Complete galvanic full processing, i.e. father matrix / mother matrix / stamper (press matrix)

## DMM

Here, a direct plating of the stamper (press matrix) takes place.  
Complete galvanic development is only done on request and against payment.

## Mother plate

In this case, the stamper is processed directly from the mother plate.  
Complete galvanic development is only done on request and against payment.

## Important!

**We accept no liability for damage to the DMM / master matrices in the event of any necessary multiple platings!**

## Record Pressing

### Test pressing

With a test pressing a record can be listened to before the actual order run is pressed.  
Test pressings are made exclusively with black vinyl in the 12" format with 180 g (for all types of 10" and 12" records) or as 7" records with small centre hole.  
First pressing runs < 500 units: WITHOUT test pressing (with test pressing = only at an extra charge)  
First pressing runs ≥ 500 units: WITH test pressing - 3 TPs inclusive -

## Important!

**For pressings which are made without a test pressing, it is essential that the recording and cut are both flawless. We assume no liability for any mistakes made by third parties and for problems that could have been avoided by prelistening to test pressings!**

### Weights / vinyl colour (standard = black)

Format	Standard weight approx.	Special weight approx.	Coloured Vinyl	Picture Disc	Split-Colour + Splatter Vinyl
7" Single / EP	40 g	NO	YES	NO	NO
10" record	80 g	NO	YES	YES	YES (approx. 80 g)
12" LP / Maxi	140 g	180 g	YES	YES	YES (140 - 160 g)

### Tolerances

Weights: up to +/- 10%!  
Colour vinyl: Slight discrepancies in colour must be accepted. Colour samples upon request.

## Labels

### Wastage

For technical reasons, approximately 20 % wastage of labels arises during the pressing for all formats.

When pressing a title in different vinyl colours, the label consumption increases due to multiple set-ups. If three or more different colours are pressed we automatically order more labels. This increased quantity of labels will be invoiced.

Please take this into account when placing your order and delivering the labels.

### Picture Disc labels

For technical reasons, small stress cracks in the label and slight blistering of the covering foil may arise in the area around the centre hole during pressing.

### Pressing without labels

For technical reasons, this is NOT possible!  
(Centre hole will not be centrically aligned / will shear. Record will become deformed.)

### Neutral labels

For legal reasons, NO pressing may be made with neutral labels.  
For white labels or promotion pressings, labels will be used which are printed with the wording "Only for Promotion".  
Should you insist on neutral labels, we need confirmation prior to the pressing that these will be printed afterwards!

### Deviations in colour

Due to the drying of the labels deviations in colour are possible.