2. Mastering material requirements and Pressing tools

2.1. Data input format

Limitation of Liability for damages:

In the case the physical data carrier is damaged or lost, we will cover the value of the medium, but not the content.

The physical media must be readable throughout the length of the program. In the event that the supplied medium contains read errors which cannot be corrected, processing of the order(s) will be suspended. The customer will be requested to supply a new data.

Each data carrier must be clearly identifiable in accordance with the supplied documentation and order (part number, customer, etc). The description must also define exactly what is stored on the data carrier (e.g., vinyl master, CD-Audio DDP master or WAV files). The medium needs to be labelled clearly according to the order without preventing an error free reading (self-adhesive labels, labelling the medium with an unsuitable hard tipped pen, etc).

If a single data carrier includes files for more titles, the files must be stored in separate folders and named according to the catalogue number of the title and must match the information contained in the attached documentation and order. We recommend storing the data for each side in separate subfolders.

Recommendation:

Always send a copy of your original master to production. It is advisable to send two identical copies clearly marked as a master and back-up copies. In the event that any problems occur, we will use the back-up copy, thus avoiding potential delays associated with sending new data.

Audio files

Audio files cannot be used as they are supplied for cutting directly. This is why the data is examined to see if they are suitable for vinyl master cutting. According to the documentation supplied, the tracks will be split between sides of the record and, if necessary, corrective actions to improve sound quality will be made.

Recommended formats

- WAV (Windows PCM) - uncompressed audio
- AIF, AIFF (Apple Macintosh) - uncompressed audio
- APE (Monkey's Audio) - lossless compression, including error detection
- FLAC (Free Lossless Audio Codec) - lossless compression, including error detection

Bit resolution: accepted 16, 20, 24 a 32 bits.
Sampling frequency: accepted 44.1, 48, 88.2, 96, 176.4 and 192 kHz.
We generally do not resample files with a sampling frequency higher than 44.1 kHz - only in cases hen all files for 1 side do not have the same sampling frequency. These particular files would be re-sampled in the studio for the highest frequency of all frequencies used. Lower sampling frequencies (for example 22,05 kHz a 32 kHz), are also accepted but we do not recommend them due to the possibility of a lower sound quality standard.

We recommend sending the files in the same quality as what has been recorded or received from the studio that produced, mastered or mixed the recordings. We recommended to contact the studio in advance regarding recommendations mentioned in this section as well as recommendations for the preparation of vinyl masters.

We do not recommend any additional conversion or transfer.

Non-recommended and inappropriate formats:

Lossy compressed audio formats:
- MP3, MP2, MP1 (MPEG-1 Layer 3, 2 and 1)
- MP4, AAC, M4A (MPEG-4, Advanced Audio Coding)
- AC3 (Dolby Digital), DTS (Digital Theatre System Coherent Acoustics)
- WMA (Windows Media Audio, Microsoft), MOV (QuickTime)
- OGG (Ogg Vorbis), MKA (Matroska Audio), RA, RM (Real Audio, Real Media)

Non acceptable formats:

- files with DRM protection to prevent unauthorized playback, for example, files with the extensit m4p (AAC format with DRM protection)

Division of program

We recommend storing all of the music for an entire side in one file - forming a continuous and uninterrupted program, including pauses. We use the supplied track listing with the times and lengths of the songs for orientation in the program. Songs saved in separate folders are not suitable data for production. There is a high risk of error due to:

- Confusion when the name of the subfolders are not labelled correctly
- It is not clearly mentioned whether these folders contain gaps between the tracks or not.

During the compilation of the program, we expect that the files contain gaps in between the tracks. Generally we do not add gaps between the tracks. If the customer requests to have gaps added, it must be clearly mentioned in the supplied track list or production documentation. It is possible to request the length of the gaps according to each song or the same gap length for all songs. Compiling a program from more files with different technical parameters (sample rate, quantization, number of channels, volume, etc) requires additional studio work such as resampling or balancing the levels. If the audio files have been created from an audio CD, it is possible that some data can be lost during the division of the tracks.

Name and location of files

Appropriate file naming and file location helps to locate the supplied data quickly as well as enabling a smoother and hassle-free order process. We recommend choosing a name and the location of the files by following these instructions:

- Use a separate folder for each order using the catalogue number as the file name.
- Save all documentation files (track list, processing requirements, etc) in this file.
- Create a sub-folder for each order names SIDE-A, etc.

- If the program for the entire side is stored in one file, name it according to the number of tracks stored in it such as 01-05.WAV or 06-09.AIFF
- If the compositions are stored in separate files, name all files by track number and song title, such as 01-Song_name.WAV.

Physical audio carrier

Analogue or digital medium containing the continuous recorded information. The division of the program into tracks is defined by the technical conditions of the particular player (ID marks in time sequence) or according to the time mentioned in the supplied documentation.
If one physical medium is to be used for multiple sides, the tracks for each side should be separated by a silent pause which is long enough (at least 3 seconds) and defined by using tags (track number, ID, ...) and track times which are in accordance with the accompanying documentation. The order of the songs on the supplied medium must match the desired order of the final product to avoid having to change the song order (rewind, skip to another track,...). If they are not, the customer must state in written documentation the specific requirements to change the song order.

We accept the following formats:

CD Audio disc
Fully functional pressed or burnt discs in CD Audio format playable on desktop CD players.
We do not accept shaped CDs, business cards CDs, etc.
R-DAT
ABS time (A time) and ID START marks
MiniDisc
Analogue media
1/4" tapes, speed 38, 19 cm/s, EQ CCIR, NAB, Dolby A, Dolby SR
Other media after prior consultation
U-Matic, SACD, DVD-Audio

Complex CD audio master in file form

This data contains all data in a format which is used exactly how it is supplied for mastering without making any unnecessary changes. The studio will only check the supplied files and, in case and if necessary or suitable, the studio will correct the master according to Phillips/Sony CD Audio format standards.

DDP (Disk Description Protocol) format

The global standard for transmitting data for production of optical disks supported by all manufacturers of equipment for mastering CDs and manufacturers of professional workstations for audio processing. Recommended version: 1.00. Version 2.00 also accepted.
Select the setting option for storage of audio tracks in one file if your authoring software supports it.

CMF (Cutting Master Format)

Similar to DDP and is transferable to DDP. If your workstation supports both DDP and CMF, select DDP.

Image data (ISO image) CD Audio

Files that can be used without any adjustments to burn a CD Audio master.

Recommended formats:
- NRG (Nero)
- BIN+CUE (CDRWin, ImgBurn, Toast, etc.)

Accepted formats:
- CDI (DiscJuggler)
- C2D (WinOnCD), CIF (Easy CD Creator)
- CCD+IMG (Clone CD), MDF+MDS (Alcohol 120%)
- IBP+IBQ (IsoBuster), UIF (MagicISO)
- BWT+BWI, B5T+B5I, B6T+B6I (BlindWrite)
- TOAST, CDR (Toast, Apple Disk Utilities)

Data carriers

Data carriers can be used to send audio files or disk images to burn a CD-Audio format (DDP, NRG, CUE + BIN, etc.) Accompanying documentation can also be supplied in electronic format on the same disk. One data storage medium can contain documentation for several titles.

Optical discs CD-R(W), DVD-R(W), DVD+R(W) containing data

Discs in CD-ROM or DVD-ROM format. Discs must contain a compatible file system (ISO9660, Joliet, or UDF).

Hard drive

We accept all sizes of hard drives: (3.5", 2.5", etc) and all connection methods (IDE, SCSI, SATA, eSATA, USB, Firewire, LAN) .
We recommend using external drives, but we also accept the internal disc formats:
- NTFS (Windows 2000, XP, Vista) – recommended
- FAT32 (Windows 9X) (max. file size is 4294967294 bytes)
- EXT2, EXT3 (Linux)
- HFS (Apple)

Storage media

Accepted memory cards: SD, SDHC, XD, MMC, Compact Flash, Memory Stick and storage media USB Flash disk. Each storage medium can contain data for more than 1 title.

2.2. Sending data electronically

Materials submitted for production must be accompanied by control elements for verifying the data integrity prior to production. Without these control elements, it is not possible to verify if the customer supplied files are the exact same files which the manufacturer has received. Orders which do not contain the necessary control elements will be blocked until the data is resent in an acceptable format. If the customer insists on the usage of non secure data, they must assume all risks associated with possible changes to the data during transmission. Control elements can be supplied in one of the following ways:

- **Archived materials**

Files which represent the disk image, DDP, CMF or individual audio files containing control elements (e.g. WAV), must be packed in one single file which can also contain documents. Accepted formats of archive files: ZIP, RAR, SIT, 7Z, ARJ, ACE, others on request.

- **Using formats with built in control elements**

APE, FLAC - compressed audio formats with control elements
UIF - a compressed video format audio CD with the control elements

- **Check code supplied**

In order to control and verify that the data has not been corrupted or tampered with, a control element will need to be provided for all data that is not sent in an archived file format.
Accepted codes: MD5, CRC32 and SHA1. Each file must be calculated separately along with documentation of the checksum code for each file.
Control codes can be generated using free software such as HashCalc.

2.3. Location and identification of data and audio files

Data supplied on physical media or electronically must include clearly labelled file names and folders which are organized in a clear and concise manner, conforming to the documentation accompanying the order.
Following these guidelines and recommendations will speed up the order process and reduce the risk of production delays and/or any confusion.
Guidelines for the names and locations of files:

- **File locations**

Documents or data uploaded must be in a clearly labelled folder with a folder name that clearly identifies and corresponds with the catalogue number of the production. Files, directories and/or archives may not contain characters which are not allowed on PC or Mac operating systems (for example, : / \ > < : * ? |).
If each single track is saved in a separate file, please create a subfolder for each side with the name SIDE_A, SIDE_B, etc. and place the data into this folder.

- **Naming files**

If the data for the entire side is stored in 1 file, name it according to the tracks that it contains, for example: „A_01-05.WAV or „B_06-09.AIFF".
If the data is stored in separate tracks, name it according to the track number and name, for example: „A_01-Song_name.WAV".
Archived files and disc images should be named according to the catalogue number and nothing else.

2.4. Documentation

The supplied documentation must be clear and match the supplied data exactly in order to determine the accuracy of the data. In particular, any unusual features and/or anomalies need to be speciály mentioned, otherwise these features may be tolerated as a defect or non-musical sounds. Processing of orders (titles) without the required documentation will be suspended until the customer provides evidence and documentation in accordance with the specifications. If the customer insists on beginning the production without the documentation supplied, they will assume all risks associated with it.
There is a large risk of the track listing not being followed in the desired order.
The documentation must include the following information:

- **Identification information**

Catalogue number, customer name, song titles and artist, etc

- **Information on supplied data**

- Type of supplied data
 - Document format (CD Audio Master, DDP, ISO image, individual files)

Description of the final product

Required format

Size of record and speed; or speed of each side (if they are different).

Track Division

Track list

A track list must accompany all orders including the names and running times of all tracks as well as which side of the vinyl they should appear on. We also recommend specifying the lengths of the pauses between tracks.

Special requirements

Any special requirements (closing recording in the groove, endless loop, etc) need to be clearly specified and agreed upon in advance.

2.5. Pressing tools

Metal works for vinyl pressings are produced using DMM technology. On special request, we can make the processing of lacquer cuts.

Supplied pressings instruments

We can press using customer supplied material. We accept lacquers or nickel metal works called father or mother or stampers. Metal works must be without any visible damage, cannot be soiled (stain on nickel metal works, etc) or showing signs of corrosion. We recommend that all supplied metal works, especially lacquers (which are very sensitive) are packed carefully to avoid any damage during transport to us. Stampers have to be supplied as unprocessed originals and not bevelled. We are not responsible for the quality of records produced from customer supplied materials. Sound defects such as distortion, noise, etc. and defects caused by incorrect cuts (grooves) will not be accepted and all claims rejected.