How to prepare a suitable CD master

„CD master" contains all data in the format, which is directly usable for the production by pressing without necessity of carrying out any changes or adjustments. The studio will carry out only the check of the supplied master, and if required or suitable, the studio will carry out the adjustment of master so that it would meet the standards and recommendations of Philips/Sony.

The particular carriers must be unambiguously identifiable in accordance with the supplied documentation and order (catalogue number, customer). The description must also contain the format of data, which are stored on the carrier (for example CD Audio master, DDP master or WAV files). The description must appear both on the cover and on the medium itself. However, it must not prevent its error-free reading (self-adhesive labels and stickers, description of CD media using a hard-core pens, etc.).

If one data carrier contains the files for more titles, the files must be stored in a separate folder named according to the catalogue number, in accordance with the supplied documentation and order.

Recommendation: For the production, please send always a copy of your original master. We recommend sending 2 identical copies clearly identified as master and backup copy. We will use the backup copy in order to minimise the risk of delays that could occur in case of master readability failure, in which case the material would need to be sent again.

➢ Formats of input source media

Pressed or burnt optical disk: Fully functional pressed or burnt disk in the required CD format. We do not accept the shaped CDs, business cards, etc.

Methods of recording on CD-R(W):
- singlesession (DAO - Disk At Once) – RECOMMENDED
- multisession (SAO - Session At Once) – acceptable
- recording by tracks (TAO - Track At Once) – NOT recommended, such a burnt disk can not be used directly for production without additional adjustments.

Format of data tracks on CD master:
- Mode 1 – RECOMMENDED
- Mode 2 form 1 – acceptable
- Mode 2 form 2 - NOT recommended! Only for Video CD tracks! Such a prepared disk does not contain the data for possible correction of errors on the physical carrier (scratched disc, etc.).

Instructions for burning the CD-R(W):
- Use only high quality media from a major brand, preferably the higher versions from the relevant manufacturer.
- Use lower recording speeds, maximally 16x (according to the possibilities of the driving mechanism). At higher recording speeds there will occur the step change of burning speed and operation of laser (zone burning). Thereby the readability of disk is worsened.
- Supply a PQ list and the error checking protocol for CD-R(W), if it is available.

- Not cover the CD with paper tapes or other self-adhesive tapes; however it is possible to use the technologies for burning of graphic information on the side of disk labelling (LightScribe, etc.).
- Describe the medium only on the labelling side, and only with a felt tip marker intended for that use. Common felt tip markers are not suitable. Using hard-core pencils and ballpoints will damage the medium.
- We recommend test-listening of the recording in the desk player prior to sending it to the production, and also checking the correct display of CD–Text, if required.

DDP (Disk Description Protocol) format: Worldwide standard for handing-over the source data for production of optical disks supported by all manufacturers of equipment for CD and DVD mastering, as well as by manufacturers of professional workstations for processing of audio or DVD authoring.

For CD formats (except CD-Extra and Enhanced CD) we recommend the version 1.00. We also accept the version 2.00. If your authoring software supports it, choose in the setting-up the option for storage of audio tracks in one file.

CMF (Cutting Master Format):It is similar to DDP. CMF is transferable to DDP. If your workstation supports both DDP and CMF, select the option DDP.

Files with CD image: Files, which can be used without any adjustments for the CD master burning.

Recommended formats:
- NRG (Nero)
- BIN/CUE/CDT (CDRWin, Toast, etc.)
- ISO, IMG – images for CD-ROM and DVD masters only (user data in sectors of 2048 bytes)
- DMG (Apple Macintosh) - image of data disk for Apple Macintosh

Acceptable formats:
- C2D (WinOnCD)
- CIF (Easy CD Creator)
- CCD/IMG/SUB (Clone CD)
- CDI (DiscJuggler)
- IBP/IBQ (IsoBuster)
- MDF/MDS (Alcohol 120%)
- BWT/BWI, B5T/B5I, B6T/B6I (BlindWrite)
- TOAST, CDR (Toast, Apple Disk Utils)
- ISZ (UltraISO) - images for CD-ROM and DVD masters only
- UIF (MagicISO)

➢ Recommendation for preparing of CD-ROM master or data sessions/tracks

- Location of the file on disc

Place the frequently used and short files (index files, database files, program files, .) (if the burning software so allows) at the beginning of CD, where the access time is shorter. Place the long files, such as audio and video clips, at the end of the CD. When reading

these files, the access time is not decisive, but the transfer rate, which is higher at the edge of the disc in most of advanced mechanisms.

- **Check of content**

Check the content of prepared master by an antivirus program with the updated virus database. Furthermore compare the bit conformity, as well as the number and sizes of files and directories of the resulting master with the original source data.

- **Check of functionality**

Test the functionality of Autorun and all executable applications even on other computers or operating systems, which are different from those computers and operating systems, on which the applications were developed. That is to say the end user might not have the same standard software installed, which was used or presumed when developing the application (decoders of image and sound, media players, etc.).

- **Check of data integrity**

Check the data integrity by means of copying all files from the prepared master to another medium, for example hard disk.

➢ Documentation

The documentation must unambiguously and undoubtedly identify the supplied source data so that it would enable making a decision about the accuracy of data during the input check and subsequent processing. It is necessary to specify mainly all non-standard elements and abnormalities, such as hidden track, errors allowed within the recording, intentional exceptions to the specification, required protections against copying, etc.

The processing of orders (titles) without the required documentation is suspended until the customer supplies the source data and documentation conforming to the technical conditions. If the customer insists on the production without the documentation supplied, he will assume all risks related mainly to the mistake of titles or mistake of compositions.

The documentation must contain the following information:

- **Identification information:**

Catalogue number, name of customer, name of title and interpreter, etc

- **Information about source data supplied:**
- Type of source data supplied
- Location of source data on FTP server: directory and name of file
- Format of source data (e.g. CD Audio master, DDP, disk image, individual files, ...)

- **Description of the resulting product:**

- for CD Audio master or audio sessions/tracks:

Tracklist - must contain the order, names and times of the individual audio tracks and total playing times. We also recommend specifying the lengths of gaps between the tracks. Should the CD contain text information, this fact must be stated in the documentation (CD-Text see below, ISRC code for the correspondent track, UPC/EAN disc code, CD+Graphics or Karaoke lyrics ...).

Hidden and bonus tracks - the requirement for a non-standard bonus track (a song or spoken commentary) hidden in the gap before the first track must be specified in the order and tracklist (including the length of bonus).

Should the last track contain a long section of silence and/or another bonus track, it is necessary to specify this fact in the tracklist. It is also necessary to specify the length of gap and the length of bonus track and whether it has to be coded as a separate track or it has to be a part of the previous track.

CD-Text

The CD-Text information may be saved in the source data already supplied (on a functional CD Audio master, in DDP data, in CD image) or may be supplied in a text file. Absolutely exceptionally, if no other possibility exists, as a hard copy. They enable displaying the additional information such as the name of composition, interpreter, author of music, author of text, etc., on the displays of compatible desk or software playback devices.

- for CD-ROM master or data sessions/tracks:

Name of disk - as displayed in the computer

Number of files, folders and total capacity of user data - this combination is so unique for each data disk that it will enable the identification of disk. It is possible to obtain this information from the files' explorer by marking all files and folders of the root directory of disk, and by subsequent selection of "Properties".

Autorun - if the CD contains the function of autorun in Windows, we recommend describing its function, for example: "the presentation of company will start up – START.EXE"

Target operating systém - we recommend identifying the operating system, for which the disk is destined, possibly the file systems contained in the master, too. This information will prevent any claims on the ground of malfunctioning on the unsupported configuration of computer. We do not carry out on a regular basis the testing of master functionality in older operating systems (Windows 3.xx, 95, 98, ME, 2000, MS-DOS, etc.)!