

CD Mastering Technical Factfile

So you've recorded all your material and mixed it down to a two track format (DAT, CDr, WAV, 1/2" tape etc.) and you want to release it as a CD. Before this can happen you will need to have your audio properly mastered.

What Is Mastering?

The process of mastering involves performing any final edits to the audio, checking for anomalies such as clicks, pops and extraneous noises, topping and tailing tracks and processing them with the use of equalisation, compression and limiting. All this is performed in order to give you a final release you can be proud of and that will stand up alongside any commercially available CD.

What will Hilonggrove do for my master?

The audio may be put through a parametric equaliser in order to alter the sound, sweetening the high end, adding definition to the bass, or reducing boxiness in a recording. Sometimes a very subtle use of EQ can yield extraordinary results.

We utilise multiband compression to allow us to add any necessary processing in differing amounts across the audio spectrum. This means if we compress the bass fairly hard, it won't trigger the compressor over the mid and high bands and cause ducking.

For noisy or vintage recordings we offer Cedar technology in the shape of high-end de-clicker and de-crackler – processors. In addition we have on the TC System 6000 the backdrop algorithm which allows us to remove hiss and hum from recordings. De-hissers are also available for reducing sibilance on vocals.

We can also time-stretch audio, speeding it up or slowing it down whilst retaining the original pitch if necessary.

Once you are happy, we run a DDP master which is sent to the plant for replication.

How best can I prepare for my session

- i. Always bring two copies of your audio to the session.
- ii. Do not use a compressor, limiter or spatial enhancer for the stereo mix – this makes our job very difficult.
- iii. If using DAT, ensure tracks have ID points and the tape has timecode.
- iv. If using 1/4" or 1/2" tape, please let us know before hand. Also ensure there are 100Hz, 1kHz and 10kHz tones for calibration. Make a note of the tape speed and whether a Dolby process was used.
- V. Be Prepared. Know which tracks you wish to use and where on the tapes they are. No-one wants to have the clock ticking trying to find that elusive "vox-up" mix. If you wish to make any edits, know which sections are being edited together. Have an idea how you wish your material to sound - the engineer may disagree but it is useful for him to know the direction in which you wish to go.

If you have any questions regarding your session, please contact one of our experienced engineers. We aim to make the process as pleasurable as possible - when you hear the final results you will see how the added expense of professional mastering was money well spent.

Studio Equipment (Studios 1 & 5)

- **Large, acoustically designed day lit studios**
- **TC Electronic System 6000** - high resolution digital audio mainframe providing EQ, compression, limiting, noise abatement and surround sound processing.
- **Green Room Stereo EQ** - Custom analogue four band parametric equaliser.
- **B&W 801 Nautilus monitors** - offering 20Hz – 20kHz monitoring.
- **Chiswick Reach Stereo Compressor** – Vintage valve compression
- **Lucid and Audio Design digital convertors.**
- **SADiE Hard Disk Editor** - Industry standard audio editor.