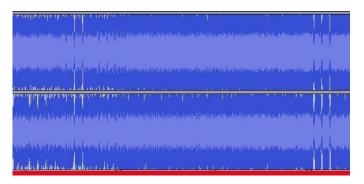


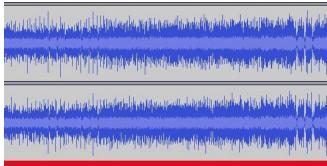
## **neophon** - finest record media productions

## Audio specifications & adjustments for audio cassettes

## Adjusting your audio material!

The key thing to note in adjustiong your audio: do not use compression! Unlike a CD, Audio Cassette is an analogue format with very different needs.





The above waveforms show the same track compressed for CD, and correctly prepared for Audio Cassette. If you used the CD Master to produce a cassette the magnetic tape would be saturated. This will cause the bass to cut out the HF audio and clipping will distort the audio reproduction.

The cassette audio has no compression and more dynamic range. It will be great for tape. It has what is called headroom. Please check your audio and make sure it looks like the Audio Cassette example.

## Please use the following spec for adjusting audio for tape:

- 44.1 kHz PCM (Pulse Code Modulation format) signed 16 bit: This is the lossless codec for input into the duplication system.
- Side A and side B can be split by tracks or one long track per side. Cassette time (C) is equal to longest side x 2.
- Try to make the side splits as equal as possible and side A longer than side B.
- A PQ sheet is helpful if pauses between the tracks need to be added, otherwise it is assumed that pauses between the tracks have already been added to the audio.
- Avoid Clipping! Produce audio with plenty of Headroom. Due to the cassette tapes we use, please use the following dB levels:-

Up to C70, ensure your audio has a Peak Amplitude no louder than -5.50dB Above C70, ensure your audio has a Peak Amplitude no louder than -7.20dB

Cassettes love midrange audio - LF below 30Hz may inihibit the cue tone signal. HF exceeding 12kHz will begin to degrade, 16kHz is pushing the limit.

• If in doubt - ask for a sample tape of your audio - this can be produced quickly and at a low cost!