

Title:

What does an audio engineer do when mastering music?

Word Count:

447

Summary:

So you're a musician that just recorded your first album. You probably went into a recording studio and played all of your parts a couple of times, with the audio engineer handling all of the technical stuff. As far as you know, they should be able to take all the parts they recorded, burn it to a disc, and then it should be ready to press.

Keywords:

cd mastering, audio, digital, album, dvd, music mastering, analog, master, audio engineer, professional mastering, recording, disc, dvd duplication, manufacturing, large runs, cd duplication services

Article Body:

So you're a musician that just recorded your first album. You probably went into a recording studio and played all of your parts a couple of times, with the audio engineer handling all of the technical stuff. As far as you know, they should be able to take all the parts they recorded, burn it to a disc, and then it should be ready to press. While this isn't completely wrong, most professional musicians take their mixed down recording and pass it off to someone else for mastering.

What is mastering?

Mastering is the final step in the production of an album where they add the final "polish" to the recording. This is done by technically enhancing the clarity of the mixes. This makes the compilation of songs sound more coherent, more "together". This also ensures that the mixes sound well on all listening devices.

Well, that's all fine and dandy, but does a professional mastering technician do when mastering a recording?

1. Volume Level Maximization

This is to make sure that all audio is at maximum volume, so that all songs are at the same volume level. Ever watch late night TV, where the volume of the commercials are a couple notches higher than the show you were watching? If a

professional mastering engineer was involved, they would raise the volume of TV show to match the volume of the commercials.

2. Ensuring a Consistent Balance of Frequencies

This ensures that all frequencies are accounted for in the recording; bass, mids, and treble, so that there are no areas where there is no bass/mids/treble.

3. Noise Reduction

This is the process of removing noise from an audio signal. When using analog technology, sound recordings exhibit a type of noise known as tape hiss. This is related to the particle size and texture used in the magnetic emulsion that is sprayed on the recording media, and also to the relative tape velocity across the tape heads.

4. Encoding

A professional mastering lab may also take your recording and encode the UPC (Universal Product Code), ISRC (International Standard Recording Code), CD Text (additional information about the CD, e.g. album name, song name, and artist name) or other PQ information.

5. Error Checking

This ensures the integrity of the data stream during CD duplication / replication at any CD manufacturing plant.

Still confused about what a professional mastering engineer does to your CD audio recording when you hand it off to them? Don't worry, audio mastering is a very complicated process. I just hope that you better understand why professional mastering is an integral part of the whole audio production process. It can make a world of difference!