

## What is mastering? A perspective.



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*"What is Mastering?"* This is a question you find everywhere. The most common reply I encounter is "mastering is the last creative step in the recording process", but what does this really tell you?

If you were to ask me what mastering is in today's world, I'd say that mastering is really about one thing: quality, and how this translates to real-world results is through a series of processes, which I'll outline here:

- **Establishing Goals**
- **Analysis**
- **Execution**
- **Feedback**
- **Media Creation**
- **Analysis**
- **Delivery**
- **Archival**

### **Establishing Goals:**

Discussion between the artist/label and mastering engineer should occur before booking a session. Goals should be determined (eg: How "LOUD" the resulting CD needs to be, correct eq, analog vs. digital approaches, etc...), and information about the source material (where & how it was recorded, what formats were used to mix to, effects/processors used at the time of mixing, etc...) should be discussed to assist in determining the best approach with which to master the material.

### **Analysis:**

Once the source material is delivered to the mastering engineer, it should be analyzed for quality and errors (both the physical media and then the audio itself within the mastering host application). Once the media & audio data has been approved by the mastering house, a session within the mastering host application is created.

**Execution:**

Here is the "creative step" of the mastering process. Audio processes such as EQ, Compression, Harmonic Enhancement, Limiting, De-Essing, etc.. occur during this phase.

The goal of the mastering engineer here is to take your material to the "next step"; a notch of quality above and beyond that of the final mixes. This is also the "corrective" stage, eg: if you have pops/clicks/etc... that need removal, or if some tracks do not "sit" well next to others and need more tailoring/sculpting to fit well with all the other tracks on a disc (a compilation CD is a great example).

Put simply, here is where the "magic" happens.

**Feedback:**

If you are attending the mastering session, then feedback about the audible results (effects of mastering) happen in real-time, however if you are not attending your session then an "approval" CD should be sent from the mastering engineer to you. The purpose of the approval CD is to give you, the artist/label, the opportunity to audition the results of the mastering processes used on the material, based-on your discussions with the mastering engineer. After an auditioning period, you inform the mastering engineer one of two options:

- 1) provide the mastering engineer with feedback that the approval is accepted, and to proceed with the final master, or
- 2) provide the mastering engineer with feedback regarding additional changes that are necessary.

While it's theoretical that the Execution/Feedback phases could go on for a number of iterations, it is typical that there is only 1 iteration, 2 at most.

**Media Creation:**

Once the audio results of the mastering have been approved, the final media creation takes place. This can be any number of final delivery formats such as a PMCD (CDDA), a binary "image" of the completed CD via the DDP protocol on CD-R, DVD-/+R, or Excabyte tape, etc...

**Analysis:**

Another analysis stage must occur, this time on the final media that has been created for the replication or duplication plant. A series of tests are performed on the final media (tests vary based-on media type) to ensure the plant will not encounter problems with the media or its contents. Once a master has passed these tests it is ready for delivery.

**Delivery:**

Once the masters have passed final analysis, they are then delivered to you, or the plant (depending on your preference). If you are attending the session, delivery can be as simple as handing the final package to you directly. If the session was remote, then the final media is packaged and delivery is arranged. At this point, it's "off to the plant" time for your masters!

**Archival:**

The last and final stage of the mastering process takes place after your session, this is archival of your source and master material, session settings & notes, and a duplicate safety backup.

Archivals are stored with the mastering house.

I hope this breakdown of the old question "What is Mastering?" has helped you in your understanding of mastering process, and also helped you in finding the right engineer for your job. If you have any questions or comments, please get in touch.

Thanks, Mike Wells