

**Songwriters – Master Your Recordings – We Tell You How!**

# RECORDING

The magazine for the recording musician®

**A New Look At**

**MASTERING  
AUDIO**



**Howie Weinberg  
David Glasser  
Brad Blackwood**

**Sound Advice From The Experts**

**How To Prepare Your Music  
For Mastering**



**11**

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*I asked one of my favorite mastering engineers, two-time Grammy® winner David Glasser of Airshow Mastering, for his advice on your expectations for a mastering session and on how to prepare your tracks. —BK*

**David, thanks for sharing your knowledge with our readers. A lot of my clients ask me why they should bother mastering.**

*David Glasser:* Since it's entirely possible to release a CD or download that has not been formally 'mastered', why go to the trouble and expense? Because it's all too easy to lose sight of the forest for the trees; someone with fresh ears is often helpful.

# Looking Into Mastering

A good mastering engineer who regularly works on many projects can put the project in perspective, and make useful adjustments and changes that you may not have considered. Remember that the goal of mastering is to present the music in the most favorable light.

**In terms of preparing for mastering, what recommendations do you make to your clients?**

Know what you want to achieve in the mastering session: Do you want little more than a faithful transfer of your mixes? Are there specific concerns you want addressed? Do you want to give the mastering engineer free rein to take the mixes in an unexpected direction?

Many engineers routinely provide reference mixes that have been peak-limited or compressed in order to emulate what the level should be after mastering. Provide these reference mixes to the mastering engineer, along with the non-limited files. High-resolution sessions and files—88.2 kHz sample rate and higher—will usually sound better than lower-resolution files. All digital mixes should be 24-bit. Consider other high-resolution mix media, including analog (on a well-maintained and aligned machine) and DSD.

**Do you have any suggestions for how to best make sure your clients will have the best opportunity for taking full advantage of the mastering process?**

Involve the mastering engineer early in the mixing process so you can bounce ideas off each other. Inevitably this results in a better recording and a better final master. Try to make certain decisions prior to the mastering session; not just because you will save time and money, but because you can then focus on the things that you have engaged the mastering for.

Song sequence, spacing and segues can be decided before the mastering session; if you have multiple mixes of



## Q&A With A Master: David Glasser

Interview by Bruce Kaphan



a song, try to decide on the preferred mix, but try to remain flexible enough to change course if needed. Provide the mastering studio with metadata—correct CD Text information, ISRC codes, etc—as early as you can. And please provide printed documentation of all materials, along with production notes for the mastering engineer.

**It never ceases to surprise me how my clients view mastering as an almost magical process. I think the word "mastering" itself conjures up a sense of some sort of untouchable process. What can you say to address the uncertainty with which apparently many people view your craft?**

Music making is a creative process, and requires open and full communication, so don't be shy about articulating your concerns and desires about the mastering. It's always nice when I can create an approved master on the first go-around; but don't get alarmed if you feel that revisions are needed after the mastering session. Remember that you probably didn't record all your parts on the first take either!

**I love your last sentence! I can't imagine a more poetic invitation to your clients to feel free to treat mastering as just another step**

## in the long path toward creating an album. Can you give the readers a quick checklist of the mastering process?

Most mastering sessions include the following steps:

- Discussing the project with the client
- Listening and evaluating the mixes
- Processing the mixes to achieve the desired sonic result
- Editing the material into the final order
- Entering metadata such as CD-Text and ISRC
- Creating reference copies for client evaluation—and, upon approval,
- Creating the final quality-checked master(s).

This task list applies regardless of the release medium: download-only releases deserve the same attention as physical CDs or DVDs.

### You made reference to some technical terms that many have never heard of, terms like metadata, CD text and ISRC codes. Where can our readers go to learn more?

There's actually a document on our website that explains all of these terms in great detail: [www.airshowmastering.com/libfiles/LastWord.pdf](http://www.airshowmastering.com/libfiles/LastWord.pdf). It's a modified version of the article "The Last Word" that our Ann Blonston wrote for *Recording* some years back (June 2006), and is probably more than anyone really needs to know.

### Thanks, David! ➤

*[After David gave me that last link, I checked it out. It's a six-page document that goes into great detail, in very clear and easy-to-understand language. This is a MUST READ!—BK]*

*The Editors would like to thank Bruce Kaphan and David Glasser for their cooperation. David can be reached at [www.airshowmastering.com](http://www.airshowmastering.com) and Bruce can be reached at [www.brucekaphan.com](http://www.brucekaphan.com) or at [kaphan@recordingmag.com](mailto:kaphan@recordingmag.com).*

## Mastering the Artwork

One bit of advice I give my clients that almost always falls on deaf ears has to do with the preparation of album artwork. I don't care if you do your own artwork or you hire someone else to do it. Just like recording itself, it's almost definitely going to take longer than you think, so get on it early! If you want to maximize your album's chances for returning the investment you've made in it, here's a suggested checklist for information to include in your album artwork.—BK

### jacket front panel:

- title
- artist

### rear panel:

- title
- artist
- UPC code
- record company address including mail and web addresses
- circle P, date, record company name, "All Rights Reserved"
- country of manufacture
- record company logo
- track list
- track times

### inner panels:

credits, including:

- producer(s)
- engineer(s)
- mastering engineer(s)
- performer(s)

- studio(s)
- graphic designer(s)
- photographer(s)
- composer(s)/lyricist(s)
- publishing information, including ©, year, publishing company name, PRO (performing rights organization affiliation)

### spine:

- title
- artist
- record company name
- record company catalog number

### on the disc itself:

- title
- circle P, date, record company name, "All Rights Reserved"
- country of manufacture
- "unauthorized duplication is a violation of applicable laws"