

Digital Audio Essentials

By Bruce Fries and Marty Fries. April 2005, 357 pages. Sebastopol, CA: O'Reilly Media ([catalog page](#))
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Reviewed by Mike Morris

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This book is eligible for the User Group discount from O'Reilly

Rating: Timberline*

For an old analog guy like me, I found digital audio hardware specs a little bewildering at first. And that is true despite an (old) electrical engineering degree.

I can't (easily) find specs on digital audio hardware like the old specs: frequency response, signal-to-noise ratio, total harmonic distortion, intermodulation distortion Well . . . you get the idea. Instead, I find specs like sample rate, bit rate, etc.

This book, Digital Audio Essentials, is just that: essential for any audiophile/sterophile/surround-soundphile, etc. Please note, however, that the first section of 3 chapters is an excellent introduction to digital audio for the novice computer user.

For me, the heart of the book is Part III (The Nuts and Bolts of Digital Audio) and Part IV (Capturing and Editing Audio).

Chapter 8 (the first Part III chapter), has some very basic information on digitizing audio signals—information that is not new to me. However, what is especially helpful are the specification comparisons (e.g., dynamic range and signal-to-noise ratio) between digital and analog audio. There is also very helpful information on formats and sound quality in chapters 9 and 10.

Part IV starts with chapter 11, Recording and Ripping. There may be a few more people left in the world like me who are not familiar with the terminology. Ripping? Well . . . now I understand the language. Even more important in this chapter is the discussion of file sizes (see p. 192). There are also lots of tips on setting up hardware and software (and on various software application capabilities) in this chapter.

And, for those who are "addicted" to their portable MP3 players, consider this question: What is the best bit rate for the highest sound quality? Check out pages 210 to 211 for the answer.

Do you have old LP's or tapes that you want to convert to CD's or MP3's? If so, chapters 13 (Editing Audio) and 14 (Digitizing Your Records and Tapes) are "must reading" for satisfactory results.

There is more, including a chapter on Setting Up an Internet Radio Station and a chapter on Digital Audio and Copyright Laws (also a "must read" chapter).

This Old Analog Guy (the acronym = OAG and is pronounced "ogre") highly recommends this book

*Ratings Key:

- Sandpit—Avoid
- Small hill—Not recommended
- Foothill—Average
- Timberline—Excellent
- Fourteener—Must have