

# **WAVs, MIDIs, & RealAudio®**

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*Enjoying Sound On Your Computer*

*Judi N. Fernandez*



**IDG Books Worldwide, Inc.**

An International Data Group Company

Foster City, CA ■ Chicago, IL ■ Indianapolis, IN ■ New York, NY

## WAVs, MIDIs, & RealAudio®

Published by  
IDG Books Worldwide, Inc.  
An International Data Group Company  
919 E. Hillsdale Blvd., Suite 400  
Foster City, CA 94404  
www.idgbooks.com (IDG Books Worldwide Web site)

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Library of Congress Catalog Card Number: XX-XXXXX

ISBN: 0-7645-7507-4

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

XX/XX/XX/XX/XX

Distributed in the United States by IDG Books Worldwide, Inc.

Distributed by Macmillan Canada for Canada; by Transworld Publishers Limited in the United Kingdom; by IDG Norge Books for Norway; by IDG Sweden Books for Sweden; by Woodslane Pty. Ltd. for Australia; by Woodslane (NZ) Ltd. for New Zealand; by Addison Wesley Longman Singapore Pte Ltd. for Singapore, Malaysia, Thailand, Indonesia, and Korea; by Norma Comunicaciones S.A. for Colombia; by Intersoft for South Africa; by International Thomson Publishing for Germany, Austria, and Switzerland; by Toppan Company Ltd. for Japan; by Distribuidora Cuspide for Argentina; by Livraria Cultura for Brazil; by Ediciencia S.A. for Ecuador; by Ediciones ZETA S.C.R. Ltda. for Peru; by WS Computer Publishing Corporation, Inc., for the Philippines; by Unalis Corporation for Taiwan; by Contemporanea de Ediciones for Venezuela; by Computer Book & Magazine Store for Puerto Rico; by Express Computer Distributors for the Caribbean and West Indies. Authorized Sales Agent: Anthony Rudkin Associates for the Middle East and North Africa.

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## About the Author

Judi N. Fernandez is one of the most popular and prolific computer book authors today. She has written more than 40 titles, including a nominee for the Best Introductory Computer Book of the Year.

*This book is fondly dedicated to a wonderful group of people who love playing with Internet sound, graphics, and scripts, the Newsplay newsgroup. They often served as both inspiration and motivation as I worked on this book. If you're a member of The Microsoft Network, you'll find the Newsplay newsgroup at `msn.forums.survivors.newsplay` on the `msnnews.msn.com` server.*



# Preface

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*WAVs, MIDI, & RealAudio* helps users identify, access, download, upload, and transmit various sound files (WAVs, MIDI, and AU, to name a few) on the Internet. This book shows you how you can share sounds with all your friends, whether they have a PC, a Mac, a UNIX, a Sun workstation, or some other kind of computer. You find out what to do with the sounds they send you that your computer doesn't recognize. Especially important for people who like to chat on the Internet, *WAVs, MIDI, & RealAudio* shows you how to convert Windows WAV files to Macintosh System 7 files and vice versa. You'll also find lots of references to great sound sites on the Web, where you can learn how to download sound files from a Web page and how to identify sound formats by looking at them with a plain text editor such as Windows Notepad.

“WAVs” in the book's title represents any kind of sampled recordings. “MIDI” in the title refers to files containing instructions for an electronic synthesizer. You'll also learn about two other emerging synthesizer formats—MOD and Karaoke. The book's CD-ROM includes some advanced players so you can build collections of WAVs, MIDI, and other sound files and play them like CD albums.

## The Audience for This Book

This book is for almost anyone who wants to learn more about sound on their computer and on the Internet. I say *almost* because if

you are already an audiophile searching for advanced technical details, this is not the book for you. But if you're wondering why you can't hear the chat room sounds on AOL, or why MIDI's sound better on your friend's computer than on yours, or how to add some background music to your Web site, this is definitely the book for you.

## How This Book Is Organized

Each chapter begins with a detailed list of the topics covered, giving you a chance to decide quickly whether you need to read that chapter.

**Chapters 1 through 3** explain the differences between WAV and MIDI sound formats and why you can't convert one to the other. Other sampled sound formats you learn about are Macintosh System 7 snd resources, SND, AU, AIFF, MP3, and even a few less common ones.

If you use Windows 95 or 98, **Chapter 4** is stuffed with information on how to use sounds with your system. You learn all about Windows sound events, where you can find them, and how you can change them. You learn to use sound schemes and Microsoft Plus! themes. You even learn how create your own sound events.

Have you ever noticed that speaker icon in your system tray? That's your Windows Volume Control, and Chapter 4 shows you how to use it. It even shows you how to get rid of it to free up some room in your system tray. You also learn other ways to configure your sound devices.

No, I haven't left out Macintosh users. **Chapter 5** is the Mac version of Chapter 4. Here you learn how to select an alert sound, create your own alert sounds, and set up and use talking alerts. You see how to select sound devices and control their volume. If you have installed PlainTalk, you see how to make SimpleText read documents out loud, as well as how to record and play back voice annotations in SimpleText documents. Chapter 5 also shows you how to

access and change a program's sound resources. (You too can have spooky Halloween sounds on AOL.) And last but not least, you learn what sound suitcases are and how to create and manage them.

Speaking of America Online (AOL), **Chapter 6** shows you how to use sounds with each of the major online services—AOL, CompuServe, The Microsoft Network (MSN), and mIRC (even though it's not an online service). You see how to change their basic event sounds such as the welcome and new mail sounds. Then you learn how to play and exchange sounds while chatting—including using PowerTools on AOL and WaVGeT on mIRC. And because you be needing a lot more sounds, the chapter shows you how to find and use their sound libraries.

The third type of audio mentioned in the title, “RealAudio,” refers to streaming sound, whether stored in files or broadcast live. **Chapter 7** explains RealAudio plus several other popular streaming applications, such as Macromedia Shockwave, Xing StreamWorks, and Microsoft NetShow. The book's CD-ROM includes a variety of browser plug-ins and standalone players so you can listen to and enjoy all these sound formats, on the Internet or offline.

Speaking of plug-ins, you'll learn the difference between plug-in and helper applications in **Chapter 8**. You find out which plug-ins and helper applications you have installed, how to select the ones you actually want to use, and how to get rid of the others. All the major audio plug-ins are reviewed in the chapter, and many of them are included on the book's disk.

Did you ever browse to a MIDI Web site and want to save some of its music for offline listening? **Chapter 9** shows you how to capture music and other sounds from the Internet—Web sites, FTP sites, and newsgroups. You learn how to download sounds with both Netscape Navigator and Microsoft Internet Explorer. For newsgroups, you see how to use Netscape's newsreader, CompuServe's newsreader, and Microsoft Outlook Express. Chapter 9 also explains how to upload sounds to newsgroups, one way of sharing your favorite sound files with your friends.

Another way to share sounds with your friends is e-mail. **Chapter 10** describes how to send and receive sound files in e-mail. Several popular mailers are covered: America Online, CompuServe, Outlook Express, and Netscape. For the last two, you also see how to embed sound in a letter so that it plays as soon as someone opens the letter, as well as how to extract an embedded sound from a letter.

In **Chapters 11 and 12**, you learn how to record and edit your own sound files. I have included a couple of editors on the book's CD-ROM, one for Mac OS and one for Windows. These two chapters show you how to use the editors. And because you may want to add your new recordings to your own Web site, **Appendix D** explains how to do that.

I've mentioned a few of the programs included on the book's CD-ROM. In all, there are more than 20 audio-related programs on the CD-ROM. Most of them are useful, but a few are included just for fun. You find the complete list in **Appendix A**.

In **Appendix B** you find two tables showing 128 instruments of the General MIDI patch map and 48 percussion instruments of the General MIDI percussion key map.

I have coached so many beginning PC users who didn't know that they could listen to audio CDs on their computers. I couldn't write a book on computer sound without spending a chapter on how to play and control audio CDs. **Appendix C** shows you how to use the players that come with Windows and Mac OS.

## Conventions Used in This Book

To help you identify recommended, noteworthy, or cautionary text, look for the following margin icons:



### Tip

---

The Tip icon offers basic tips and recommended settings to save you time and help you work more efficiently.

**Note**

---

The Note icon indicates a special point or offers supplementary information that is not crucial for understanding the concepts covered in the book.

**Caution**

---

The Caution icon signals things or procedures you need to know to discourage you from “messing up” your system.

The following formatting conventions are used throughout the book:

Menu commands are shown in chronological order by using this command arrow: File ⇨ Open.

URLs and code appear in monospace font.

# Acknowledgments

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So many people helped me write this book, it's impossible to thank them all individually. But I would like to say thank you to my family and all my friends who provided so much support. They put up with me and encouraged me even when I didn't have the time or energy to be a good wife, mother, sister, friend, and online buddy. There are times when I wish I were a poet instead of a technical writer, so I could put into words how much I appreciate their love and friendship.

I also want to thank several people who contributed directly to this book. Peter D. Hipson reviewed the entire manuscript and provided many witty and wise technical comments and corrections. Gus Hallgren made some extremely helpful suggestions for the sections on Outlook Express. But most of all, I'd like to thank Carolyn Welch, my development editor, for all her editorial accomplishments, organization, encouragement, prodding, understanding, and laughter.

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## Introduction

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When I was in college, my dorm mates hung a sign on my door that said, “Judi is in love with an IBM 650 with curly blond control wires and baby blue panel lights.” It was true. My love affair with computers and technology continues unabated. Nowadays, I’m in love with, first and foremost, my husband Paul, whom I met in an online chat room. He shares my love of computers, and since you can never completely catch up with all there is to know about computers and “cyberia,” I’m sure we’ll have plenty to talk about and to work towards for the rest of our days.

When I entered the world of computers, I quickly discovered that my niche was writing manuals, online help, self-study guides, multimedia courses, and other learning materials to help people use these wonderful tools. I have now published more than 40 how-to books like this one. Some have won awards for technical communication; a few have even hit the computer best-seller list — which isn’t the same as *The New York Times* best-seller list, but it makes me (and my publisher) happy. My specialty is explaining complex topics in language that my 12-year-old daughter can understand. (She’s a grown-up now, and a computer professional herself, but I still try to explain things to that 12-year-old she used to be.)

By the way, that sign was hung on my door in 1959, when I was 18 years old. I first fell in love with computers when I was 16 and took a programming course at IBM. I’ve been working with and studying computers ever since. I used to claim that I was the first teenage computer nerd, but I recently received a letter from a reader who started working with computer-operated radar systems right after World War II, when he was 19 years old. I’m not sure that counts as a computer nerd by today’s standards, but I’ll change my claim to this: I believe I was the first *high school* computer nerd. If

you know of a high school teenager who fell in love with and started working with computers earlier than 1957, please let me know. I'll be glad to revise my claim once again.

## My Web Site

I maintain a Web site just for my readers. You'll find it at <http://members.aol.com/jnfbbooks>. It includes a page for each of my books, with corrections and errata if necessary (sigh), color versions of some of the images in this book, additional information on certain topics, Internet links, and any other information I find useful. The pages grow as I hear from my readers, so be sure to check it often.

## My E-mail Address

Just because we haven't met doesn't mean I don't want to hear from you. I'm on America Online much of the time as *JudiNorth*. If you're on AOL, too, and want to say hi or ask a question, please feel free to send me an Instant Message (IM). I've become good friends with some readers who caught up with me that way. But if you can't catch me online, write me. I love getting letters from my readers! My Internet address is [judinorth@aol.com](mailto:judinorth@aol.com).