



Secrets of the iPod and iTunes Fifth Edition

By Christopher Breen

Publisher: Peachpit Press

Pub Date: December 20, 2004

ISBN: 0-321-30459-4

[Table of Contents](#)

[Pages: 488](#)

• [Index](#)

You tried to resist it, but the palm-size, cotton candycolor iPod Mini proved too alluring to live without! Knowing that you'll want to learn all of its secrets plus those of its big-sibling iPod and the newly updated iTunes 4.7 as well trusted Mac teacher Christopher Breen has thoroughly updated his best-selling guide to the world's most popular digital music player. You'll learn the all-important basics of downloading, storing, and indexing your music plus all that's new in iTunes 4.7: the iMix feature, which lets you upload playlists to the iTunes Music Store (where other users can browse and even rate them); jewel-case printing; additional iTunes Music Store features (such as radio charts and a dedicated music video section); and more. You'll also find guidance for accessorizing and protecting your iPod and iPod Mini, tips for making the most of your storage capabilities, and troubleshooting advice for those moments when the diminutive device is uncooperative.



Secrets of the iPod and iTunes Fifth Edition

By Christopher Breen

Publisher: Peachpit Press

Pub Date: December 20, 2004

ISBN: 0-321-30459-4

[Table of Contents](#)

[Pages: 488](#)

• [Index](#)

[Copyright](#)
[Acknowledgments](#)
[Introduction](#)
[iPod,](#)
[Therefore iAm](#)
[Chapter 1.](#)
[Contents,](#)
[Controls, and](#)
[Interface](#)
[Contents:](#)
[Original iPod](#)
[\(including the](#)
[iPod Special](#)
[Edition: U2\)](#)

Contents: iPod
 mini
 Contents: iPod
 Photo
 Controls
 Interface

Chapter 2.

Managing Music with iTunes

iTunes,
 uTunes, We
 All Croon for
 iTunes
 iTunes
 Requirements
 Ripping a CD
 Songs from
 the Web
 Creating and
 Configuring a
 Playlist
 Moving Music
 to the iPod
 Voice
 Recordings
 and iTunes
 The Get Info
 Window
 Other iTunes
 Tricks

Chapter 3.

Picture Perfect: iPod Photo

A New iPod or
 No?
 Porting
 Pictures
 Viewing
 Pictures
 Slipping into a
 Slideshow

Chapter 4. The iTunes Music Store

The One-stop
 Shop
 Prepare to
 Shop
 Tooling
 Around
 Getting the
 Goods
 Playing with
 Your

Purchases
Beyond The
Store:
Audible.com
Put It on Your
iPod
Troubleshooting
The Store
Chapter 5. Of
iPods and PCs
Configuring
Your PC
iPod for
Windows
Software
Musicmatch
Jukebox
Software
Alternatives
Chapter 6. The
Removable
Drive
FireWire to
Go
The Hidden
Revealed:
Song Storage
on the iPod
Chapter 7.
Making iContact
Getting
Addressed
Working with
Contacts
Beyond
Addresses
Notes
Chapter 8. Make
a Date
Va-va-va-vCal
Working with
Calendars
Chapter 9.
Accessories
The Clip-on
iPod
Adaptive
Technology
Power to the
People
The Ears Have
It
Miscellanea
Chapter 10.

Troubleshooting
Your iPod
Problems and
Solutions
Inside the
First- and
Second-generation
iPods
Opening the
Third-generation
iPod
Opening the
iPod mini
Thank You
Index

Copyright

TechTV Press is published in association with Peachpit, a division of Pearson Technology Group.

Peachpit
1249 Eighth Street
Berkeley, CA 94710
510/524-2178
800/283-9444
510/524-2221 (fax)

Find us on the World Wide Web at: www.peachpit.com and www.g4techtv.com

Copyright © 2005 by Christopher Breen

Credits

Editor: Nancy Peterson

Production Coordinator: Simmy Cover

Copyeditor: Kathy Simpson

Composers: Rick Gordon, Emerald Valley Graphics; Deborah Roberti, Espresso Graphics

Indexer: Joy Dean Lee

Cover Design: Aren Howell

Cover Illustration: Alan Clements

Interior Design: Kim Scott

Notice of Rights

All rights reserved. No part of this book may be reproduced or transmitted in any form by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher. For information on getting permission for reprints and excerpts, contact permissions@peachpit.com.

Notice of Liability

The information in this book is distributed on an "As Is" basis, without warranty. While every precaution has been taken in the preparation of the book, neither the author nor Peachpit Press, shall have any liability to any person or entity with respect to any loss or damage caused or alleged to be caused directly or indirectly by the instructions contained in this book or by the computer software and hardware products described in it.

Trademarks

Apple, iPod, iTunes, and Mac are trademarks of Apple Computer, Inc., registered in the U.S. and other countries. Throughout this book, trademarks are used. Rather than put a trademark symbol in every occurrence of a trademarked name, we state that we are using the names in an editorial fashion only and to the benefit of the trademark owner with no intention of infringement of the trademark. No such use, or the use of any trade name is intended to convey endorsement or other affiliation with this book.

9 8 7 6 5 4 3 2 1

Printed and bound in the United States of America.

Dedication

To my own little iBreen, Addie.

Acknowledgments

This book wouldn't be in your hands if not for the hard work and care of the following individuals.

At Peachpit Press: My editor and pal, Nancy Peterson (who, in addition to making sense of my nonsense, laughs at my goat jokes); Cliff Colby (who edited a fair chunk of the first edition and proffered the original idea for an iPod book); Marjorie Baer (who gave the green light for the first edition); Rebecca Ross (who handled the contract negotiations with such aplomb); Nancy Ruenzel (Peachpit's publisher, who signed off on yet another go-round of this book and was good enough to break her iPod and, thus, provide me with another story to tell in [Chapter 9](#)); Kathy Simpson (who copyedited all five editions of the book and made some brilliant catches); Simmy Cover (who stepped in to coordinate production of the book); Kim Lombardi (who is a book-promoting machine); Kelly Ryer (iPod pioneer who asked all the right questions); and Rick Gordon for his expertise in laying out the book's pages.

At home: My wife, Claire, who once again kept the other parts of our lives together while I applied nose to grindstone in the basement; and the boys of System 9 for being such groovy cats.

Abroad: Useful Apple folks include Stan Ng, the iPod product manager; and Keri Walker, Queen of Review Units, who not only saw to it that I received the iPod test units I needed, but also was very forgiving when, a couple of years ago, I admitted to her that I'd intentionally destroyed one of her beta units. Leo Laporte for helping me shamelessly plug this book on TechTV's now-deceased airwaves. I must also tip my fedora to the

many vendors who supplied the swag...er, test units of the products mentioned in these pages: Altec Lansing, Belkin, Dr. Bott, Future Sonics, Griffin Technology, Now Software, Joe Masters (EphPod), Mediafour, Red Chair Software, SiK Inc., Waterfield Designs, Incase, Design Group, and XtremeMac. Sam Braff for coming through in a pinch. My partners in crime at PlaylistMag.com: Dan Frakes, Jason Snell, and Rick LePage. Finally, of course, the designers behind the iPod and iTunes. They just get better and better!

Introduction

"Secrets? Of the iPod and iTunes!? What secrets could such a simple device and intuitive program possibly harbor? To operate the iPod, you push a button, rotate your thumb around a wheel, and it just works, right? To transfer songs from an audio CD to iTunes, you shove a disc in your computer's media drive and press the Import button. Gee, I can hardly wait to read its companion volume, *Secrets of the Hamilton Beach4-Slice IntelliToast® Toaster!*"

Our focus-group studies indicate that 1 in 14 have this reaction when they pick up a copy of the book you now hold in your hands.

Yet here I am, back with a completely revised fifth edition of this book. What could be so confounding about Apple's diminutive music player and its music-management application that justifies five editions of a book that purports to reveal their hidden depths? Allow me to answer that question by asking a few of my own.

You're not sure whether to purchase an iPod, iPod Photo, or iPod mini. What exactly is the difference between the three, and is it worth paying more money for the iPod Photo?

Your iPod refuses to start up, displaying a folder icon with an exclamation point. How do you fix it?

Your iPod won't hold a charge. Is it broken?

You have an iPod Photo, a digital camera, and a load of photographs. How can you set up your iPod to show those pictures?

You have a Windows iPod that you'd like to use with your Macintosh. Can you?

Your iPod mini holds just 3.7 GB of data, yet your music library exceeds 8 GB. How can you configure iTunes to fit the most (and the best) of your library on your mini?

How do you configure your iPod to boot your Macintosh?

You really like the Party Shuffle playlist you've created in iTunes. How do you move this playlist to your iPod?

You have an iPod sold in Europe, and man, is it quiet. Is there anything you can do to increase its volume?

And speaking of volume, the volume of the tunes on your iPod is all over the map—some loud, the next quiet, the next just right. Is there anything you can do to make volume consistent from one song to the next?

Apple claims that the iPod can play for up to 8, 10, 12, or 15 hours (depending on which model you have), yet yours poops out after playing only Elvis Costello's first four albums. What can you do to increase battery life?

You've purchased an iPod mini, which supposedly holds 4 GB of data, yet yours shows a capacity of 3.7. Where did the other 0.3 GB go?

How can you move contacts and calendar events from your personal information manager to your iPod?

You'd like to suck up to the boss in the hope of sliding into that junior-manager position, and you know that he's addicted to the iTunes Music Store. How do you arrange to give him a gift certificate from The Store?

How would you go about copying songs from your iPod to your computer?

The answers to these questions (and many, many more) are between the covers of this book. Yes, although the iPod and iTunes may be terrifically intuitive creations, they're also far more flexible (and occasionally perplexing) than their mild-mannered interfaces imply. And that, dear 1-in-14 reader, is why I invite you to explore the many secrets of the iPod and iTunes in this fifth edition.

Disregarding the less-obvious features of the iPod for a moment, what makes the iPod, iPod Photo, and iPod mini so worthy of our attention? There are their weight and size, of course; the iPod is 6.2 ounces and less for the newest models, and smaller than a pinochle deck. The iPod Photo is just .06 inches thicker and .2 ounces heavier than the 40 GB fourth-generation iPod. And the iPod mini weighs in at a scant 3.6 ounces and is the size of a business card. Also, the 60 GB iPod Photo holds 15,000 four-minute songs for a continuous playing time of nearly six weeks (or more if you follow the tips in this book).

But most impressive of all is the feature I alluded to earlier: the simplicity of the devices. Like so many Apple products before them, the iPods are most astonishing for their elegant design and ease of use. There just aren't more beautiful or intuitive music players available today.

Best of all, the iPods have wonders to behold other than just their capability to pump out a thousand or more toe-tapping tunes.

In these pages, I'll reveal all the iPod's wonders from managing your music collection to projecting your pictures on a television to keeping your contacts and appointments close at hand. You'll learn about the intimate relationship between the i-siblings iPod and iTunes and how to make the most of that relationship. You'll take a tour of Apple's iTunes Music Store and see how to gain the greatest benefit from the music you purchase online. We'll explore the iPod Photo's picture powers and learn how to synchronize images between your computer and this tuneful slideshow player. I'll examine the iPod as a storage device for your computer and show you how to dress up your iPod with the latest accessories. And when you're finished with the outside, I'll take you on a tour of the iPod's innards, scrutinizing what makes this machine tick (and what can keep it from ticking) and offering troubleshooting tips for those times when the music and pictures inexplicably stop.

In short, this smallish tome will cover the iPod from stem to stern.

iPod, Therefore iAm

Before eyeballing the ins and outs of the iPod, it's worth taking a step back and asking, "Why iPod?"

With all the wondrous devices to which Apple might have devoted its legendary creative power, why create yet another music player? To learn the answer to this question, you must look at a technology that has changed the way we use and share digital media: MP3.

The MP3 Revolution

In 1987, a German company, Fraunhofer IIS-A, began working on a system for creating digital audio files that consumed little storage space while maintaining much of the original file's quality. Among other things, this work was motivated by the fact that one minute of CD-quality stereo music consumed about 10 MB of storage space that at the time was very costly. The eventual result of this work was something called the MPEG Audio Layer-3 compression standard, now commonly known as MP3.

This standard uses perceptual coding techniques to eliminate audio data that the human ear is unlikely to discern. So efficient is MP3 encoding that you can use it to reduce an audio file's size by a factor of 12 yet maintain most of the sound quality of the original file. Thanks to MP3, a four-minute song that normally would devour 40 MB of hard drive space now weighs in at less than 4 MB.

The availability of more-compact and less-expensive storage media—hard drives and media cards—made MP3 an attractive option for use on home computers and, eventually, portable music players. But the fact that such files were easier to store was only one piece of the puzzle. MP3 really came into its own thanks to the widespread dispersal of a seemingly unrelated technology: broadband Internet access.

In the days when much of the world accessed the Internet with slothlike modems, downloading a 4 MB file could be an all-night affair. When that file could be downloaded in a minute, the idea of moving high-quality audio files across the Internet became an extremely attractive proposition—particularly among college students who had both lightning-fast, school-supplied access to the Internet and a keen interest in music.

Given that MP3 was a growing concern among such a significant portion of the population, manufacturers of audio devices predictably began seeking ways to incorporate MP3 technology into future products.

Share and Share Alike

Anyone with the faintest interest in technology has heard of the Napster music-sharing service, through which audio files—largely encoded with MP3—were swapped wholesale across the Internet (much to the chagrin of the recording industry). Music-device manufacturers understood that although those who downloaded MP3 files were pleased enough to play back these files on their computers, many would be even more pleased if they could transport and listen to these files on a portable device.

After the courts determined that such devices were indeed legal—that they were not specifically designed as go-between devices that might aid music piracy, but as a final destination for music files—small MP3 players such as the Rio 600 found their way to market. Regrettably, these players stored less than an hour of music without the addition of expensive media storage cards. (And even with these additional storage cards, such players rarely exceeded two hours' playing time.) Moving MP3 files from the computer to the player over the player's slow serial-port or USB connection could take a long time, and the software required to move files from one device to another was hardly intuitive. Navigating from song to song on these things was a tedious affair, requiring you to page through menu after menu on a tiny screen. Finally, these players cost upward of a couple hundred dollars. Although the technology was interesting, only gearheads with more money than sense were likely to replace their inexpensive portable CD players with one of these devices.

Even with these limitations, portable MP3 players still sold in respectable numbers. But just imagine the kind of sales you could generate if you created a portable music player that successfully worked around the storage, transfer-rate, and navigation problems.

Apple smelled an opportunity.

iPod, Arise!

On October 23, 2001, Apple held a press conference in Cupertino, California, to announce a new product—the first noncomputer product released by Apple since the ill-fated console gaming system, Pippin, and the first such product produced since Apple co-founder Steve Jobs returned to the company. Web-based rumor sites were rife with speculation about the new device. Would it be a revolutionary personal information manager? An advanced console computing system? The ultimate crock pot?

When Mr. Jobs ended the speculation and revealed the iPod at a press conference, some of those in attendance

were disappointed initially. "Sure, it stores a ton of music, offers loads of battery life, transfers files in an instant, and is easy to use (and easy on the eyes). But after all the hype, you've called us here to show off an MP3 player? And you want how much for it!? You must be joking!"

Then Apple did a very smart thing. At the end of the event, each person in attendance was handed an iPod of his or her very own.

Cynics among us might suggest that Apple attempted to curry favor and lessen the shock of the first iPod's \$399 price tag by offering members of the press free swag. Far from it. The folks at Apple understood that to truly appreciate the iPod, you had to hold it in your hand, admire its sleek design, swiftly wheel through its menus, and absorb its rich sound.

The tactic worked. Although nearly every review of the iPod mentioned that \$399 was a lot of money for a music player, few disputed the notion that similar devices were clunky and crude in comparison.

Despite the price and the fact that it worked best only with the assistance of a Macintosh computer, the iPod became the music player to own so much so, in fact, that Apple sold 125,000 of them in the iPod's first 60 days of existence, and people who had never considered owning a Mac bought one simply so they could use it with the iPod.

The iPod expands

In March 2002, Apple released a second iPod model that featured a 10 GB hard drive (versus the original's 5 GB drive). Although many people hoped that subsequent iPod models would be less expensive than the original, this second iteration cost \$499\$100 more. Lessening the sting was the accompanying iPod Software 1.1 Updater, which made the iPod more functional by including such features as the ability to keep contacts on your iPod, music scrubbing (a feature for accurately navigating forward and backward through a song as it plays), on-board equalization (the process of boosting or cutting certain audio frequencies, also known as EQ), and the option to shuffle playback by song or album. Apple also announced that when customers ordered from the online Apple Store, both the 5 and 10 GB models could be engraved with two lines of text (27 characters per line, including spaces and punctuation) for an additional \$49.

iPod: The second generation

On October 17, 2002, a new generation of iPods was announced. This group included the \$299 5 GB model, the \$399 10 GB iPod, and the \$499 20 GB unit. In addition to new prices and a higher-capacity model, the features that distinguished this passel of music players were the capability to keep calendar information on the iPod, a new touch-sensitive scroll wheel (previous models included a wheel that turned, whereas the wheel on the new units didn't turn), redesigned earbuds that fit smaller ear canals more comfortably, support for Audible.com content (Mac version only), a FireWire port cover, and inclusion of a wired remote control and carrying case for the 10 and 20 GB models. Apple also welcomed PC users into the iPod fold by issuing models that were compatible with Windows.

Third time's a charmer

Six months later, Apple unveiled yet another generation of iPods. This group saw the end of the 5 GB model. Instead, Apple maintained the same pricing structure\$299, \$399, and \$499for a 10, 15, and 30 GB lineup.

Whereas the October 2002 iPods were an evolutionary release, these third-generation players were a redefinition of the original. The new iPods were sleeker and lighter. They featured a new front-panel design that placed touch-sensitive (and backlit) navigation buttons above the scroll wheel. Gone was the FireWire connector at the top of the iPod. It was replaced by a proprietary connector at the bottom of the unit that

supported both FireWire and USB 2.0 connections.

Like the previous iterations, the midrange and high-end models included cases and wired remote controls. These two models also came bundled with a docking station, a plastic stand for the iPod that included a connector for charging the iPod, as well as an audio output jack for connecting the iPod to a home stereo.

These iPods incorporated changes within as well as without. Apple dropped the idea of an iPod for Windows and another for Macintosh; the new iPods worked with either platform right out of the box. The software bundled with the new iPods allowed users to customize menus and play two additional games. And these new devices added support for MPEG-4 music encoding, an audio compression scheme that creates files smaller and better-sounding than MP3 files encoded at the same bit rate.

And on the same day, Apple flung open the doors of its online music shop, the iTunes Music Store, to Macintosh users. Music purchased and downloaded from the iTunes Music Store could be stored and played on the Macintosh, burned to CD, and played on a single variety of portable music player: the iPod.

In early September 2003, Apple upgraded the mid- and high-priced iPods to include higher-capacity hard drives, 20 and 40 GB, respectively. Although that upgrade was a nice bump for those who were about to purchase an iPod, the big news didn't come until October 16. On that day, Apple took a couple of giant steps forward.

Opening the door to Windows

To begin with, Apple introduced a software update that, with the assistance of a couple of add-on devices from Belkin, allows third-generation iPods to record audio through a Belkin microphone inserted into the iPod's Headphone jack and remote connector. This same update supports another long-requested feature: the ability to turn the iPod into a storage center for digital photographs. This is accomplished with the help of a Belkin device, the Media Reader for iPod, that lets you transfer data from supported media cards (CompactFlash and SmartMedia, for example) to a third-generation iPod.

More important, October 16, 2003, elevated Windows iPod users from second-class citizens to members in good standing of the iPod community. On that day, Apple opened the iTunes Music Store to Windows users and also issued a version of iTunes that's compatible with PCs running Windows XP or 2000.

No longer do Windows iPod users have to struggle with the capable but convoluted Musicmatch Jukebox application. Like their Mac-using counterparts, Windows users can now record CDs, purchase music (and more!) online, and transfer their music to the iPod within a single application. 'Pod parity has finally come to Windows users, and judging from the fact that they used the Windows version of iTunes to purchase more than a million songs from the iTunes Music Store in the course of the first three days they had access to The Store, they're thrilled.

The Impish iPod

As competition in the online music and digital music player industry began to heat up in the waning months of 2003, it became clear that if Apple wanted to maintain its edge, it had to offer a less expensive iPod to compete with flash-memory-based players. It revealed its intention to do so in January 2004, when it announced the \$249 iPod mini, a smaller version of the iPod that came in five colors (gold, silver, blue, green, and pink), sported a new control wheel, and carried a 4 GB hard drive. In other regards, the iPod mini offered the same capabilities as the original iPod.

As with the original 5 GB iPod, many people were taken aback by the price of the iPod mini. Few considered \$249 to be inexpensive, and if you were going to spend that kind of money, why not pungle up an additional \$50 for an iPod with 3.7 times the storage of the mini? (On the day of the iPod mini announcement, Apple

bumped up the storage capacity of the \$299 iPod to 15 GB.)

Apple countered that while it was happy to sell its customers 15 GB iPods rather than iPod minis, the tinier iPod was intended to compete not with the iPod, but with the flash-memory-based players that cost \$50 to \$100 less than the iPod mini but offered less storage and fewer features.

Taking a Hint from Little Brother

When Apple announced the fourth-generation iPod on July 19, 2004, it could have done so by proclaiming that the "maxi-mini" was born, for the fourth-generation iPod is, in some ways, closer in design to the iPod mini than it is to the previous three generations of white iPods. Available in 20 and 40 GB configurations priced at \$299 and \$399, respectively, the fourth-generation iPod bears the same kind of click-wheel controller used on the mini. And like the mini, it can be charged via USB 2.0.

But the fourth-generation iPod is more than just a bigger mini. Apple mucked with the power management of this model so that it can play up to 12 hours on a single charge. Its menu system differs from that of other models as well offering a Shuffle Songs command on the main screen so you can easily hear a random selection of the iPod's music without digging through its menus. And this is the first model iPod in a long time that doesn't include a free remote control or case. If you check the specs on the third-generation iPod, you'll see that Apple offers more hard drive capacity for less money on these iPods. To help make this possible, Apple made these accessories optional (though a dock is included with the 40 GB fourth-generation iPod).

HP and the iPod

On January 8, 2004, HP announced that it was getting into the iPod business in a serious way. Specifically, the company would sell HP-branded iPods. For months after this announcement, many speculated how the HP iPod would differ from the one offered by Apple. Would it come in HP blue? Would the word "Invent" be etched into the back of every player? Would it play Windows .wma files?

As it turns out, no, no, and, no.

On September 15, 2004, HP released its first iPods and they were very nearly the same 20 and 40 GB fourth-generation iPods offered by Apple. The one difference was that the HP logo appeared on the back of these units.

So why would Apple join forces with HP to sell iPods rather than sell them itself? To put iTunes on the desktop of every HP computer sold.

Microsoft launched its MSN Music Service an online music store that competes with Apple's iTunes Music Store in early September 2004. Like other Microsoft products such as the company's Web browser, Internet Explorer, the MSN Music Service was bundled with every Windows PC. Having the MSN Music Service a click away rather than a download-and-install-and-click-away (as was the case with iTunes) gave Microsoft's product a big advantage. Apple wanted to lessen some of that advantage by placing iTunes on the desktop of computers made by the number 2 provider of PCs (Dell, being the number 1 provider). HP agreed to it for the chance to sell iPods.

U2 Ought to Be in Pictures

Tick forward to San Jose's California Theatre on October 26, 2004. The invitation to the press event held that day read "Steve Jobs, Bono and The Edge invite you to attend a special event." And special it was.

The event began with the unveiling of the iPod Photo, the first iPod to feature a color display capable of showing up to 25,000 pictures stored on the iPod. Bearing either a 40 GB or 60 GB hard drive (priced at \$499 and \$599 respectively), these iPods can be configured to display their pictures on a television with the assistance of an included audio/visual cable or via an S-video cable strung between a television and the iPod's included dock. They also feature greater battery life than previous iPods, letting you play music continuously for over 15 hours on a single battery charge.

And how did U2 figure into all of this? The lads from the Emerald Isle were on hand to help present another iPod model—the iPod Special Edition: U2. Though functionally no different from a 20 GB fourth-generation iPod, this special player is the first "big" iPod to come in color—specifically a black face with red click wheel. Along with a coupon for \$50 off of U2's entire 400+ song catalog from Apple's iTunes Music Store (normally priced at \$149), this special iPod also carries the signatures of the four U2 members etched on the back plate.

The iPod's Future

What's next? More-comprehensive data management? A scheme for storing movies and projecting them on a television? A built-in satellite radio receiver with recording functions? Only Apple can say for sure where the iPod's future lies. But given Apple's inclination for innovation, it's a safe bet that today's iPod is only the beginning.

And what a beginning it's been.

Chapter 1. Contents, Controls, and Interface

I've spent enough time in the bricks-and-mortar Apple Stores to know that many of you pick up this book prior to purchasing an iPod in order to determine whether the iPod Photo, the original white iPod, or its smaller sibling, the iPod mini, are all they're cracked up to be. At the risk of giving away this book's plot, I can state without reservation that, yes, they are. But why take my word for it when a careful reading of this chapter will tell you much of what you need to know in order to charge your iPod, work your way around its controls, and make the best use of the extras Apple places in the iPod box?

Contents: Original iPod (including the iPod Special Edition: U2)

If you can contain your excitement, try to linger over unwrapping the iPod's box. The packaging is as beautifully designed as the iPod itself—from the elegant and understated outer sleeve to the inner box that folds open like a jewelry case.

The CD Package

After you do remove the box's outer sleeve and open the box, you'll find a small white envelope labeled simply "Enjoy." With the release of the fourth generation of iPods, Apple has significantly bulked up the documentation bundled with the iPod. In this envelope, you'll find a 35-page Getting Started guide that shows you how to start playing music on your new toy, a blue piece of paper that screams "FREE MUSIC for Your iPod" (but which is really a come-on for the iTunes Music Store), a copy of the iPod's warranty, and a software license agreement that covers the software included on the CD. This CD also tucked inside the "Enjoy" envelope contains the latest iPod Software Updater for the iPod and iPod mini, tutorials for the iPod

mini and regular iPod in PDF format, and PDF user guides for both varieties of iPod. When you view this CD with a Macintosh, you'll find separate installers for iTunes and QuickTime. The installer file for the PC includes both iTunes and QuickTime.

If you're like most people, you may glance at the Getting Started guide and may fire up the tutorial and user guide to peruse the first couple of pages, but will shove the other paperwork out of the way. Because you won't read the fine print, allow me to draw your attention to the most important points in these documents:

- **Learn more.** The Getting Started guide suggests that if you want to learn more about your iPod than what is presented in this guide, you should spin through the CD, visit www.apple.com/ipod, and choose iPod Help from the iTunes Help menu. These suggestions are worth paying attention to. Although the book you hold in your hands is comprehensive, capabilities may have been added to the iPod and iTunes since this book went to print.
- **One-year warranty.** Those of you who own one of the first-generation iPods are undoubtedly about to put down this book and send me a stern letter that begins: "Listen, Mr. Smartypants Writer, my iPod came with a 90-day warranty. Why intentionally deceive your readers?"

To which I have to answer, "Who, me?" You see, the original iPods did ship with a 90-day warranty. After Apple received a significant amount of flak for offering such a skimpy warranty, however, it ever-so-quietly changed the terms of that warranty to one year on all iPods.

Note, however, that when Apple released the third generation of iPods, it changed the warranty yet again. Yes, your iPod is covered for a period of one year. But if a defect arises after you've owned the thing for 180 days, you must pay a \$30 shipping and handling charge for the return of your iPod. "Shipping and handling" may mean nothing more than an Apple Genius making a round trip to the storeroom to fetch a new iPod in exchange for the funky one you brought in. Regardless of the cost per footfall, that's what you agreed to when you opened the iPod box, and therefore, you must pungle up.

Apple has recently allowed the iPod to be covered by AppleCare \$59 plan that extends your warranty by an additional year. With this plan you'll get free phone support and repair coverage for up to two years. For more details visit

<http://store.apple.com/1-800-MY-APPLE/WebObjects/AppleStore?productLearnMore=M9404LL/A>.

Although I'll cover the matter in greater detail later in the book, I'll mention right at the get-go that if you intend to use your iPod a lot, AppleCare is a sound investment.

- **Permitted uses and restrictions.** By using the iPod and its software, you automatically agree to the software license agreement. When you agree to this thing, you swear that you won't use the software to copy material that you are not legally permitted to reproduce. I'll discuss the ethics of piracy as we proceed, but in the meantime, know that if you use iTunes to copy CDs that you don't own or pack your iPod with music files pirated from the Internet, you are breaking the terms of the agreement and conceivably could be called on the carpet by Apple for doing so.
- **Don't hurt yourself.** The Safety and Cleaning portion of the User's Guide suggests that you avoid performing obviously boneheaded actions with your iPod. Jamming the earbuds into the deepest recesses of your ear canals and cranking the volume could damage your hearing, for example. Operating an automobile while listening to the iPod through the earbuds could make driving less safe. Using the iPod in areas where the temperature exceeds 95 degrees Fahrenheit for long periods could break the iPod (but it likely would break you first). And taking the thing into the bathtub with you isn't such a smooth idea unless running a few thousand volts through your body is your idea of a good time.
- **Don't crack it open.** Apple suggests that you run the risk of electric shock and voiding your warranty by opening your iPod. The company also claims that you will find no user-serviceable parts inside. This is mostly true. Although you're unlikely to shock yourself by opening an iPod that isn't plugged in, these devices are tightly sealed, and when you crack one open, you'll likely leave signs that you've been monkeying about (and sure as shootin', any tech worth his or her salt will deny your warranty

claim upon detecting those signs). As you'll learn in the Troubleshooting section of this book, there are a couple of user-serviceable parts inside (well, user-serviceable to the extent that they can be replaced or used in another iPod). See [Chapter 10](#) for details.

- Finally, Apple thought it important enough to put the following in all capital letters, so I suppose it bears repeating here:

"THE APPLE SOFTWARE IS NOT INTENDED FOR USE IN THE OPERATION OF NUCLEAR FACILITIES, AIRCRAFT NAVIGATION OR COMMUNICATION SYSTEMS, AIR TRAFFIC CONTROL SYSTEMS, LIFE SUPPORT MACHINES OR OTHER EQUIPMENT IN WHICH THE FAILURE OF THE APPLE SOFTWARE COULD LEAD TO DEATH, PERSONAL INJURY, OR SEVERE PHYSICAL OR ENVIRONMENTAL DAMAGE."

So please, when you assemble the backyard nuclear power plant or air-traffic-control system, use software other than iTunes to monitor your reactor or guide your planes. Your neighbors will thank you for it.

The Earbuds

Your iPod comes with a set of headphones that you place inside rather than over your ears ([Figure 1.1](#)). This style of headphones is known as earbuds. Two foam disks fit over the earbuds. (Apple includes two pairs of these foam disks in the box.) These disks not only grip the inside of the ear helping keep the earbuds in place but also make the earbuds more comfortable to wear. The hard plastic surface of the earbuds will begin to hurt after a while. And yes, the disks clearly display detritus picked up inside your ear thus discouraging others from borrowing your headphones.

Figure 1.1. The iPod's earbuds and pads.

Just as you'll find a wide range of foot and head sizes among groups of people, the size of the opening to the ear varies. The earbuds included with the first generation of iPods were a little larger than other earbuds you may have seen. Some people (including your humble author) found these headphones uncomfortable. The latest iPods include smaller earbuds that I find much more comfortable. With the foam disks in place, you shouldn't have trouble keeping the earbuds in place, regardless of how large or small the opening to your ears is. But if you find the earbuds uncomfortable, you can purchase smaller or larger earbuds, or you can opt for a pair of over-the-ear headphones (see [Chapter 8](#)).

If the included earbuds do fit you, you may or may not be pleased with their performance. Apple made great efforts to create the finest music player on the planet, and it didn't skimp on the headphones, but sound is subjective, and you may find that other headphones deliver a more pleasing sound to your ears. If you believe you deserve better sound than your Apple earbuds provide, by all means audition other headphones.

The included earbuds use 18mm drivers with Neodymium transducer magnets and offer a frequency range of

20 to 20,000 Hz. If you're like me, you wouldn't know a Neodymium transducer magnet if it walked up and offered to buy you lunch, but you should know that the frequency range of 20 to 20,000 Hz is what's offered by a good home stereo.

The FireWire Cable, USB 2.0 Cable, and Power Adapter

But waitthere's more. Beneath the "Enjoy" envelope and the cardboard that cradles the iPod, you'll find the iPod's proprietary FireWire and USB 2.0 power and data cables, plus the power adapter. Earlier versions of the iPod box housed a FireWire 6-pin-to-4-pin cable adapter for the benefit of Windows users whose PCs have a 4-pin FireWire port. Now that the iPod supports charging and data transfer via USB 2.0 (and Apple includes a USB 2.0 cable with every iPod), this adapter was deemed to be unnecessary. Reflecting the cohesiveness of the overall design, the FireWire and USB 2.0 cables and power adapter come in white and are stamped with the Apple logo.

The FireWire and USB 2.0 cables included with the latest iPods each carry their namesake connector on one end (a 6-pin FireWire plug on the FireWire cable, a standard rectangular USB connector on the USB cable) and a proprietary connector on the other. Apple had to design a data connector that supported both FireWire and USB 2.0 connectionsthus, the proprietary cable. The cable is also thinner than the cables included with the first two generations of iPods. In this case, less is better. A thinner cable puts less stress on the connector at the bottom of the iPod.

The power adapter sports a single FireWire port at the back and features retractable power prongsa wonderful idea if you don't want whatever you carry the adapter in to be punctured by the prongs. For this reason, Windows users without a FireWire connector (or powered USB 2.0 connector, if they're using a fourth-generation iPod, iPod Photo, or iPod mini) on their PC should retain their FireWire cable for the purpose of charging the iPod.

The power adapter isn't required to charge your iPod. The iPod will charge when it's connected to a Mac or PC outfitted with a 6-pin FireWire connector or, if you have a fourth-generation iPod, iPod Photo, or iPod mini, a USB 2.0 connector (though the computer has to be on and awake; a sleeping computer won't charge your iPod). But the iPod is a portable device, after all, and because it is, you may not have a computer with you when you want to charge it. Simple enoughjust string the included FireWire data/power cable between the adapter and the iPod, and wait as long as four hours for the iPod to charge fully. (It will charge to 80 percent of battery capacity in about two hours.)

Note that the power adapter is capable of handling AC input from 100 to 240 voltsmeaning that with the proper adapter, you can power the iPod in countries that use the 240-volt standard without having to use a power converter . You may need to replace the adapter's plug with a plug appropriate for the country you're visiting.

To make that possible, the power adapter's plug section can be detached and replaced with one of the plugs available in Apple's \$39 World Travel Adapter Kita collection of plugs that work in North America, Japan, China, the United Kingdom, Europe, Korea, Australia, and Hong Kong. These plugs also work with the power adapters for Apple's iBook, PowerBook, and AirPort Express.

Play Time and Battery Life

Apple claims that the fourth-generation iPods can play for 12 hours, the iPod Photo can play music for 15 hours and a slideshow for 5 hours, and the iPod mini can play for more than 8 hours when fully charged. (Previous iPod models could play for 10 hours on a charge.) This is absolutely truegiven the proper conditions.

First, make sure that your iPod is running iPod Software 1.2.6 Updater or later. A bug introduced in an earlier version of the iPod software quickly drained the battery. Second, engage the iPod's Hold switch when you're not using it. It's possible to switch the iPod on accidentally, which drains the battery. When the Hold switch is on, the iPod's controls won't work.

Also, operate the iPod in temperatures between 50 and 95 degrees Fahrenheit. In a cooler environment, an iPod may not wake from sleep. To warm it up, hold your iPod in your hand or tuck it into your armpit for a few minutes. (That should perk you up on a cold morning.)

Apple suggests that you'll squeeze the most life out of an iPod charge by playing files that are smaller than 9 MB, keeping your mitts off the Next Track and Previous Track buttons, turning off backlighting, setting the iPod's equalization settings (the controls for boosting or cutting certain audio frequencies known as EQ) to None, and turning off the Sound Check option.

Files larger than 9 MB cause the iPod to access the hard drive more often and use up the iPod's battery charge more quickly. Pushing the Next Track and Previous Track buttons likewise requires the iPod to access the hard drive more often. Slathering EQ on your tunes or evening out the volume between songs with Sound Check apparently taxes the hard drive as well. And the power necessary to light up your iPod's screen is sure to shorten play time.

Also, you'll significantly shorten the original iPod's charge if, while using a voice recorder attachment, you pause a completed recording rather than end it by saving it. When you pause such a recording, the hard drive continues to spin, draining your battery. A stopped recording allows the hard drive to spin down.

The iPod Dock

At the bottom of the iPod, you'll find the proprietary port that handles power and data connections. Why move this port from the top of the iPod where it resided for the first two generations of the device to the bottom? So that you can use a dock, of course.

That diminutive Dock included with the 40 GB iPod features an audio Line Out port and data connector on the back and mounts the iPod at a slightly rakish angle ([Figure 1.2](#)).

Figure 1.2. The iPod Dock.

You can put this Dock to work in a couple of ways. The first is to string one of the data/power cables bundled with the iPod between the Dock and your computer. If your iPod is configured to update automatically when you connect it to your computer, synchronizing the iPod with your iTunes or, if you prefer, your Musicmatch Jukebox library is as simple as can be. Just plunk the iPod into the Dock. In next to no time, iTunes (or Musicmatch Jukebox, if you've chosen to use it rather than iTunes on your PC) launches and updates the iPod with any tunes you've placed on your computer. And if the Dock is connected to a powered FireWire or USB 2.0 port, just leave the iPod in the Dock to charge it.

The Dock is also useful for plugging your iPod into your home stereo. Just run an audio cable (in all likelihood, a stereo Y cable that features two RCA plugs on one end and a stereo minijack connector on the other) between the Dock and a spare input on your home stereo receiver. Place your iPod in the Dock, and play it just as you would if you were using it with headphones. To charge the iPod at the same time, attach the included FireWire data/power cable to the back of the Dock, and plug the other end (the end that sports the FireWire connector) into the power adapter.

The iPod

And, of course, there's the iPod itself.

Now that you own it, you're welcome to remove the iPod from the box, strip away the protective plastic sheeting, and ignore or admire the admonition printed on the plastic: Don't steal music.

The first thing you'll likely notice is that the iPod is even more lovely than it appears in the magazine ads and on the Web and TV. The second thing is that it's more solidly built than you probably imagined. The 20 GB fourth-generation iPod, at 4.1 inches tall, 2.4 inches wide, and 0.57 inch thick (the 40 GB model is a bit thicker, at 0.69 inch), has a nice feel in your hand at 5.6 ounces (or 6.2 ounces, if you have the 40 GB model).

It's also easier to smudge than you might have guessed. The ultra reflective back plate is a visual delight, but the second you touch your iPod, fingerprints and smudges will mar its surface. If smears and smudges bother you, carry a soft eyeglass cleaning cloth, and buff the back whenever the mood strikes.

Not so obvious are what lurks within the iPod and what the device can do. I'll clear up the mystery in the remaining pages of this book.

Remote Control and Case: Free No More

If you have an older iPod that shipped with Apple's Remote Control and carrying case, you may wonder why I've failed to mention those items here. They've mostly gone the way of the dodo, that's why.

Well, not exactly. The free versions of these doodads have performed this very lifelike imitation of the famed flightless bird, unless you've purchased an iPod Photo. In the case of the picture-perfect iPod, the case is still bundled. However, when Apple released the fourth-generation iPod, it offered the 20 and 40 GB models at \$100 less than third-generation iPods of the same capacity. To help maintain profits, Apple pulled the remote control and case from the box. But it continues to sell each for \$39 a pop.

While there was some griping when people unwrapped the first few new fourth-generation iPods and failed to discover these items, I have to admit that I don't miss them. Although some people find the remote control very handy it is, after all, a nicely designed piece of gear that allows you to command your iPod without removing it from a pocket or case not everyone used it. (I, for

example, have three of the things sealed in their original wrappers.) And as you'll learn in [Chapter 9](#), I'm not terribly impressed with Apple's case. It's stylish but doesn't offer enough protection to suit me; neither does it allow access to the iPod's front controls.

Frankly, I'm thrilled that Apple saved me a hundred smackers by making these items pay-us-if-you-want-them options.

This book went to press before the iPod Special Edition: U2 went on sale in mid-November 2004, so I haven't had a chance to rummage through its box. My best guess is that the contents of the box vary little from what you get in the fourth-generation iPod's box (after all, it really is nothing more than a 20 GB fourth-generation iPod). Perhaps Apple will change the color of the earbuds and cables to match the U2 iPod's basic black and red click-wheel. The one difference I am aware of is the inclusion of a coupon for \$50 off the price of the virtual box set of U2's catalog at the iTunes Music Store. This collection of music includes over 400 U2 tracks and normally sells for \$149. With that coupon you can have the tracks for \$99.

Contents: iPod mini

The contents of the original iPod's box and that of the iPod mini are similar enough that I needn't go over the same ground in these next few pages. Rather, I'll take a moment or two to describe the difference between the contents of the two packages.

The CD Package

The iPod mini's User's Guide is a bit bulkier than the one included with the original iPod. Though not as comprehensive as this book, it's a useful guide for doing the obvious things and performing basic trouble shooting procedures, such as resetting the device.

The CD that accompanies the documentation includes versions of the iPod mini Software Updater, iTunes, and QuickTime for both Macintosh and Windows. Should you lose your documentation, never fear. Copies of the User's Guide can also be found on the disc.

Although the documentation and CD bundled with the mini I purchased a few weeks before writing this edition of the book don't reflect it, Apple should have standardized the documentation and CD that accompany all iPods by the time you read this. Apple's plan seems to be to issue a CD that covers all iPods and a paper User's Guide that outlines the basics of iPodding, leaving the specifics of each model to PDF files on the disc.

Something not mentioned in Apple's documentation but worth noting is that should you purchase a regular iPod or mini from the Apple Store and return it within 10 days, a 10% restocking fee applies (so yes, you can forget about buying one for the prom and returning it for a full refund the next day).

The Cables, Adapters, and Earbuds

Like the original, fourth-generation iPod and the iPod Photo, the iPod mini's box contains both a FireWire cable and a USB 2.0 cable. Each cable carries Apple's proprietary data/power connector on one end. As you might expect, the FireWire cable includes a 6-pin FireWire connector, and the USB 2.0 carries a standard USB 2.0 connector. Regrettably, those Windows users whose PCs sport a 4-pin FireWire connector and lack a USB 2.0 connector will have to seek out a 6-pin-to-4-pin FireWire adapter as one is not included in the box.

The mini's power adapter and earbuds are the same as those that ship with the original iPod.

The Belt Clip

Apple understands that most people would rather not have their \$249 gold, silver, green, blue, or pink investment clatter to the ground. With that in mind, you'll find a spring-loaded, white plastic belt clip in the mini's box ([Figure 1.3](#)). The U-shaped clip wraps around the side of the mini and holds it securely in place. Unlike Apple's \$39 case for the original iPods, this clip offers no protection for the outside of your iPod. For this reason, your second mini-related purchase (after this book) is a case that adequately protects your mini (see [Chapter 8](#) for case recommendations).

Figure 1.3. The mini's included belt clip.

What's Missing

As with the fourth-generation iPod and iPod Photo, you'll find no remote control in the mini's box (and no Dock, either). You can purchase a remote control and Dock separately. Apple's \$39 iPod Remote Control works with both the iPod mini and the original iPod ([Figure 1.4](#)). The fourth-generation iPod and iPod Photo's Dock is too roomy to fit the mini adequately though I've been able to use a mini with the Dock intended for the third-generation iPod. Apple has designed a Dock specifically for the mini. It, too, sells for \$39.

Figure 1.4. The now-optional remote control sports Play, Pause, Fast Forward, Rewind, and Volume controls.

Contents: iPod Photo

The newest additions to the iPod family, both the 40 and 60 GB iPod Photos, come bundled with all the accessories that accompany the fourth-generation iPod's box: FireWire cable, USB 2.0 cable, Apple earbuds, power adapter, documentation, and a CD-ROM disc with software compatible with Windows and the Mac OS as well as a few extras.

The A/V Cable

Not only can you view pictures on the iPod Photo's two-inch display, with the proper cable you can see your pictures on a television. This is that proper cable and Apple included it in the box. Measuring just under five feet long (59 inches from tip to tip, if you must know), the cable bears a three-ring mini-plug on one end and three RCA plugs on the other: one for composite video and the other two for the left and right audio channels (Figure 1.5).

Figure 1.5. The iPod Photo's AV cable with two audio output jacks and a composite video output jack.

To put the cable to best use, you plug the miniplug into the iPod Photo's headphone port and the three RCA plugs into the appropriate jacks on your TV.

iPod Photo Dock