

Chapter 1

Firing Up Your iPod and iPhone

In This Chapter

- ▶ Comparing iPod and iPhone models
- ▶ Powering up your iPod or iPhone
- ▶ Using and recharging your battery
- ▶ Scrolling through the iPod and iPhone menus

The B-52's sing, "Roam if you want to, roam around the world" through your headphones as you take off. The flight is just long enough to watch Tom Cruise in the movie *Vanilla Sky* and the "Mr. Monk and the Airplane" episode from the first season of the *Monk* TV show, as well as catch up on the latest episodes of *The Daily Show with Jon Stewart* and *The Colbert Report*. It's so easy to hold and watch your iPod or iPhone that you don't have to put it away when your flight dinner arrives. You even have time to listen to the *NFL Rants and Raves* podcast to catch up on American football.

As the plane lands, you momentarily forget where you're going, so you read your destination information on your iPod or iPhone without even pausing the podcast and you queue up a playlist of songs to get you through the terminal. If Chicago is your kind of town, you might choose Frank Sinatra. If you're in San Francisco, you might choose anything from Tony Bennett to the Grateful Dead. You have so much content on your iPod or iPhone (that you can select and play so easily) that you probably could land anywhere in the world with appropriate music in your ear and convenient eye candy in your hand.

iPods changed the way people play music on-the-run. Now, they're changing the way people play TV shows and videos. An iPod or iPhone holds so much music that no matter how large your music collection is, you'll seriously consider putting all your music into digital format on your computer, transferring portions of it to an iPod (and an iPhone, if you're like me), and playing music from both your computer at home and on your iPod or iPhone on the road. And there's no need to wait for the best episodes of your favorite TV shows to be broadcast, because you can download the shows anytime you want and play them on an iPod classic, iPod nano, iPod touch, or iPhone anywhere you want. Albums, music videos, TV shows, and movies — you might never stop buying CDs and DVDs, but you won't have to buy *all* your content that way. And you'll never again need to replace the content that you already own.

As an iPod or iPhone owner, you're on the cutting edge of entertainment technology. This chapter introduces iPods and iPhones and tells you what to expect when you open the box. I describe how to power up your iPod or iPhone and connect it to your computer, both of which are essential tasks that you need to know how to do — your iPod or iPhone needs power, and it needs audio and video, which it gets from your computer.

Introducing the iPod and iPhone

An iPod is, essentially, a hard drive or flash memory drive as well as a digital music and video player in one device. An iPod is such a thing of beauty and style — and so highly recognizable by now — that all Apple needs to do in an advertisement is show one all by itself. The iPhone is everything an iPod is, plus a cell phone!

The convenience of carrying music on an iPod or iPhone is phenomenal. For example, the 120GB iPod classic can hold around 30,000 songs. That's more than six weeks of nonstop music played around the clock — or about two new songs per day for the next 41 years. And with built-in skip protection in every model, you won't miss a beat as you jog through the park or when your car hits a pothole.

A common misconception is that your iPod or iPhone becomes your music and video library. Actually, your iPod or iPhone is simply another *player* for your content library, which is safely stored on your computer. One considerable benefit of using your computer to organize your content is that you can make perfect-quality copies of music, videos, movies, podcasts, and audio books. You can then copy as much of the content as you want, in a more compressed format, onto your iPod or iPhone and take it on the road. Meanwhile, your perfect copies are stored safely on your computer. Your favorite albums, audio books, TV shows, movies, and podcast episodes can be copied over and over forever, just like the rest of your information, and they never lose their quality. If you save your content in digital format, you'll never see your songs or videos degrade, and you'll never have to buy the content again.

The iPod and iPhone experience includes *iTunes* (for Mac or Windows), which lets you synchronize content with your iPod and other devices, such as the Apple TV player for your home TV and stereo. You also use iTunes to organize your content, make copies, burn CDs, and play disc jockey without discs. I introduce iTunes in Chapter 2.

An iPod is also a *data player*, and in the case of the iPod touch and iPhone, a complete *personal digital assistant* that lets you enter data as well as play it. With an iPod touch or iPhone you can check and send e-mail, visit your favorite Web sites, get maps, obtain driving directions, check the current weather, and even check your stock portfolio, to name a just a few things. You can transfer your

calendar and address book to an iPod or iPhone, and you can keep your calendar and address book automatically synchronized to your computer, no matter which device you use to add and edit information (as I describe in Chapter 19).

Comparing iPod Models

Introduced way back in the Stone Age of digital music (2001), the iPod family has grown by six generations as of this writing, with custom versions for the band U2 and offshoots such as the popular iPod nano as well as the tiny iPod shuffle that lets you wear up to 500 songs on your sleeve. Even from the beginning, iPod models were truly innovative for their times. With the MP3 music players of 2001, you could carry about 20 typical songs (or a single live Phish set) with you, but the first iPods could hold more than 1,000 typical songs (or a 50-hour Phish concert).

Earlier-generation iPods

Today's iPod models and iPhone work with iTunes on either Windows computers or Macs, but that wasn't always the case. The first-generation iPods worked only with Macs. In 2002, Apple introduced the second generation — one version for Windows and another for the Mac, using the same design for both. For the third generation (2003), Apple changed the design once again.

Third-, fourth-, fifth-, and sixth-generation iPods as well as offshoots, such as iPod mini, iPod nano, and iPod shuffle — work with either Windows or Mac and come in a variety of hard drive or flash memory sizes. By design, you can hold an iPod in your hand while you thumb the *scroll wheel* (my generic term for scroll wheel, scroll pad, touch wheel, or click wheel). The LCD screen on full-size models offers backlighting so that you can see it in the dark. The iPhone and iPod touch let you tap the sensitive display with your finger to select items and functions, and flick with your finger to scroll or move the display.



To find out more about previous generations of iPods, including detailed information about cables and connections, visit this book's companion Web site. For a nifty chart that shows the differences between iPod models, see the Identifying Different iPod Models page on the Apple iPod Web site (<http://support.apple.com/kb/HT1353>).

Sixth-generation iPods

Apple shook the world once again in late 2007 by introducing a new generation of iPod models with attractive enclosures and easier-to-use controls and then revised these models in 2008. (See Figure 1-1.)

Figure 1-1: Sixth-generation iPods include (left to right) the iPod touch, iPod classic, iPod nano, and iPod shuffle.



The sixth-generation iPod models include

- ✔ **The iPod touch:** The new, slimmer iPod touch shares the design characteristics and many of the features of the iPhone and now has a built-in speaker and volume controls on the left side. It offers a touch-sensitive display and Wi-Fi Internet connectivity so that you can purchase music and applications wirelessly from your iPod and surf the Web. (Wi-Fi, which is short for *wireless fidelity*, is a popular connection method for local area networks; you can set up your home or office with Wi-Fi using an inexpensive Wi-Fi hub, such as Apple's AirPort Extreme.)
- ✔ **The iPod classic:** The original iPod design is slimmer and offers higher capacity (120GB) than other current models.
- ✔ **The iPod nano:** The new slimmer iPod nano now comes in a variety of colors and includes the same motion sensor as the iPhone and iPod touch; you can shake the iPod nano to shuffle your songs!
- ✔ **The iPod shuffle:** The tiniest iPod comes in a variety of colors.

You can put audio books, podcasts, and videos on your iPhone, iPod touch, iPod classic, or iPod nano models using iTunes. You can even get some of your favorite TV shows, plus music videos and full-length movies, directly from the iTunes Store.

Like third-, fourth-, and fifth-generation iPods, the sixth generation also uses a dock adapter cable to connect the iPod or iPhone to a computer or power supply. You can also use an Apple or third-party dock with your iPod or iPhone, and use the dock adapter cable to connect the dock to your computer or power supply. The dock keeps your iPod or iPhone in an upright position while connected and lets you connect a home stereo or headphones. This makes the dock convenient as a base station when you're not traveling

with your iPod or iPhone, because you can slip it into the dock without connecting cables. You can pick one up at an Apple Store or order one online, or take advantage of third-party dock offerings.

Fingering the iPod touch

The iPod touch, like the iPhone, lets you access the Web over a Wi-Fi Internet connection. You can use the built-in Safari Web browser to interact with Web services and applications, and the YouTube application to play YouTube videos on the Web. The iPod touch offers an on-screen keyboard for typing login entries, passwords, and text of any kind, including numbers and punctuation symbols. The innovative touch-sensitive display provides a rich set of navigation controls and menus controlled by software. You can use the cover browser with your finger to browse your music and video collection. You can even access Apple's iTunes Store and App Store directly from your iPod touch and purchase content, as I describe in Chapter 4.

Less than a third of an inch thick and weighing only 4 ounces, the iPod touch is slightly smaller than an iPhone and offers the same single menu button on the front. Apple offers 8GB, 16GB, and 32GB models as of this writing. The 8GB model holds about 1,750 songs, 10,000 photos, or about 10 hours of video. The 16GB model holds about 3,500 songs, 20,000 photos, or about 20 hours of video. The 32GB model holds about 7,000 songs, 25,000 photos, or about 40 hours of video. All three models use the same battery that offers up to 36 hours of music playback, or 6 hours of video playback.

Twirling the iPod classic

The sixth-generation iPod classic model uses the same click wheel and buttons as the fifth-generation models, combining the scroll wheel with pressure-sensitive buttons underneath the top, bottom, left, and right areas of the circular pad of the wheel. As of this writing, Apple provides a slim, 4.9-ounce 120GB model.

The 120GB model holds about 30,000 songs, 25,000 photos, or about 150 hours of video, and its battery offers up to 36 hours of music playback, or 6 hours of video playback.

Mano a mano with iPod nano

The new iPod nano, pencil thin and only one-and-a-half inches wide by three-and-a-half inches high, weighs only 1.3 ounces but packs a punch: video. This mini marvel (see Figure 1-2) offers a 2-inch color LCD display that crisply

displays video, iPod menus, and album artwork. Apple offers an 8GB model that holds about 2,000 songs or up to 8 hours of video (or 7,000 photos), and a 16GB model that holds about 4,000 songs or up to 16 hours of video (or 14,000 photos).

Each model offers a battery that can play up to 24 hours of music — all day and all night — or 4 hours of video.

The iPod nano is the smallest iPod that can serve up videos, podcasts, photos, and musical slide shows as well as your personal calendar and contacts. Unlike the smaller iPod shuffle, iPod nano is a full-featured iPod with loads of accessories tailored specifically for it.

iPod nano uses the same style of click wheel and buttons as the sixth-generation iPod classic models. Like other sixth-generation iPods, iPod nano uses a dock adapter cable to connect to a computer or power supply. A variety of docks for the iPod nano are available from Apple and other companies.

Figure 1-2:
iPod nano is
the smallest
iPod that
can display
video.



Doing the iPod shuffle

If the regular iPod models aren't small enough to fit into your lifestyle, try iPod shuffle — either the 1GB or 2GB model. The 0.55-ounce iPod shuffle, as shown in Figure 1-3, is shaped like a money clip and is about the same size — 1.07 x 1.62 inches with a depth of 0.41 inch. In several different flashy colors and convenient for clipping to just about anything, the iPod shuffle is fast becoming a fashion statement.

iPod shuffle models have no display, but that's actually a good thing because this design keeps the size and weight down to a minimum, and you don't need a display to play a couple hundred songs in random or sequential order. You can also use your iPod shuffle to hold data files, just like an external flash memory drive.

The 1GB iPod shuffle holds about 240 songs, and the 2GB shuffle holds about 500 songs, assuming an average of 4 minutes per song, using the AAC format at the High Quality setting for adding music (as described in Chapter 5). Remember, iPod shuffle is not meant to store music permanently. Instead, you use it just to play selections from your iTunes library on your computer.



Figure 1-3:
An iPod shuffle weighs less than an ounce and offers skip-free playback.

With skip-free playback, lightweight design, and no need for a display, you can easily use it while skiing, snowboarding, or even skydiving. That's because it uses flash memory rather than a hard drive: You can shake it as hard as you want without a glitch. An iPod shuffle battery offers up to 12 hours of power between charges.



Unlike other iPods, iPod shuffle can't play tunes in the highest-quality Audio Interchange File Format (AIFF) or Apple Lossless formats, which consume a lot of storage space. See Chapter 5 for details on adding music to your iTunes library.



To find out more about audio encoding formats, and about converting music from one format to another, visit this book's companion Web site.

The current iPod shuffle models built to resemble a money clip connect to power and to your computer by using a special mini-dock supplied in the box. The mini-dock includes a cable that links your iPod shuffle to a computer or to an optional power supply and supplies power for recharging its battery. You don't need a separate cable. iPod shuffle charges its battery from your computer, so you don't need the optional power supply. You can also get the optional \$29 iPod shuffle External Battery Pack, which provides 20 additional hours of playtime with two AAA batteries.

The Innovative iPhone

When Apple made the first iPhone available on June 29, 2007, lines formed around the block at the Apple stores as eager early adopters bought out all inventories. The iPhone was the first device to incorporate Apple's innovative touch-sensitive display, and formed the basis for the design of the iPod touch. The touch-sensitive display provides a rich set of navigation controls and menus controlled by software — including a full on-screen keyboard for entering text, numbers, and special symbols. (See Figure 1-4.) The iPhone, which includes all the features of an iPod touch, can not only phone home but also monitor all your e-mail and browse the Internet with full page display, using a Wi-Fi network when it senses one.

The iPhone 3G, introduced in July of 2008, is slimmer and more powerful than the original iPhone, adding fast 3G wireless technology, GPS mapping, and the capability for enterprises to push virtual private network (VPN) and Wi-Fi configurations out to all their iPhones in the field. It comes in 8GB (\$199) or 16GB (\$299) models and incorporates flash memory just like an iPod touch, iPod shuffle or iPod nano. Its 3.5-inch, widescreen, multi-touch display offers 480-x-320-pixel resolution at 160 dots per inch for crisp video pictures, and it can display multiple languages and characters simultaneously.

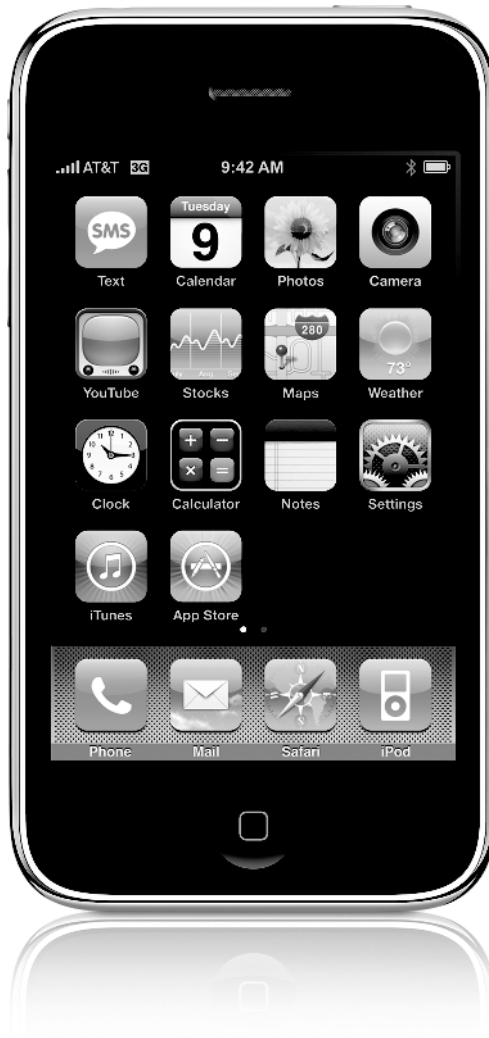


Figure 1-4: The iPhone 3G offers a touch-sensitive display with rich menus and navigational controls.

The iPhone's built-in rechargeable lithium-ion battery offers up to 10 hours of talk time using 2G or 5 hours using 3G (with 300 hours on standby), up to 6 hours browsing the Internet on Wi-Fi or 5 hours using 3G, and up to 7 hours playing video, and up to 24 hours playing music. It also offers Bluetooth for using wireless headphones and microphones. And the iPhone is no slouch when it comes to acting like an iPod: It can play music, audio books, videos (such as TV shows, music videos, and even feature-length movies), and even podcasts. You can also display photos and slide shows set to music.

Thinking Inside the Box

Don't destroy the elegantly designed box while opening it; you might want to place it prominently in your collection of Technology That Ushered in the 21st Century. Before going any further, check the box and make sure that all the correct parts came with your iPod or iPhone. Keep the box in case, heaven forbid, you need to return the iPod or iPhone to Apple — the box ensures that you can safely return it for a new battery or replacement.

The iPod touch, iPod classic, iPod nano, and iPhone are each supplied with a stereo headset (earphones), a cable to connect your iPod or iPhone or its dock to a computer for power supply, and a dock adapter fitted for that use with Apple's Universal Dock. The iPod shuffle comes with earphones and a special smaller dock to connect to a power adapter or your computer.

The iPhone also comes with a power adapter for recharging the battery. You will want to get a power adapter for your iPod (not in the box but available from the Apple Store) if you want to use AC power, rather than your computer, to supply power to recharge your iPod.



You can get accessories, including Apple's Universal Dock and an AC power adapter, separately, from the Apple Store (physical or online). For example, the iPod AV Connection Kit offers the adapter, AV cables, Apple Remote, and the Universal Dock with adapters for all models.

The accessories don't stop there. Docks of various sizes, shapes, and functions are available from vendors, such as Belkin, Monster, and Griffin. Some docks are combined with home speaker systems. You might also want a carrying case and some other goodies, many of which are described in this book. They're available at the online Apple Store (www.apple.com/store) or the physical Apple Store or other consumer electronics stores.

You also need a few things that don't come with the iPod or iPhone:

- ✔ **A PC or Mac to run iTunes:** On a PC, iTunes version 8 requires Windows XP (with Service Pack 2), or either 32-bit or 64-bit editions of Windows Vista, running on a 1GHz Intel or AMD processor with a QuickTime-compatible audio card, and a minimum of 512MB of RAM; 1GB is required to play HD-quality videos. You need a DirectX 9.0-compatible video card with 32MB of video RAM (64MB recommended) to watch video, and you need a 2GHz Intel Core Duo or faster processor to play HD-quality videos from the iTunes Store.

With a Mac, iTunes version 8 runs on all versions of Mac OS X (Leopard) and on the older Mac OS X (Tiger) version 10.4.9. (Version 10.4.10 or newer is required for the iPhone.) You need a 500 MHz processor or better (Intel or PowerPC) and at least 512MB of RAM; 1GB of RAM is



required to play HD-quality videos. You also need an Intel, Power PC G5 or 1GHz Power PC or faster processor; you need 16MB of video RAM, to watch video, and a 2GHz Intel Core 2 Duo or faster processor to play HD-quality videos from the iTunes Store.

- ✓ **USB connection:** You need support for USB 2.0 (also called a *high-powered USB*) for iPod classic, iPod nano, iPod shuffle, and fifth-generation iPods. However, you can use FireWire (IEEE 1394) with older iPod models. All current-model Macs and many PCs provide USB 2.0, and many Macs provide FireWire.

For details about using USB or FireWire cables, visit this book's companion Web site.

- ✓ **Internet connection:** Apple recommends a broadband Internet connection to buy content and stream previews from the iTunes Store, although it is possible with a dialup connection. At a minimum, you need some kind of Internet connection to download iTunes itself.
- ✓ **CD-R or DVD-R drive:** Without a disc burner, you can't burn your own discs. On a PC, you need a CD-R or DVD-R drive. On a Mac, you need a Combo or Super Drive to burn your own discs.
- ✓ **iTunes:** Make sure you have the current version of iTunes — use the automatic update feature, which I describe in Chapter 2, to keep your iTunes software up to date. You can also download iTunes for Windows or the Mac from the Apple site (www.apple.com/itunes/download); it's free. See Chapter 2 for instructions.

Older iPod models, still available in stores and online, might include versions of iTunes on CD-ROM as old as version 4.5, which is fine because version 4.5 works. (It just doesn't have all the features of the current version.) You can download a newer version at any time to replace it.

- ✓ **QuickTime:** QuickTime (required for video) comes with iTunes. The iTunes installer for the PC installs the newest version of QuickTime for Windows (version 7.5.5 as of this writing), replacing any older version you might have. Macs have QuickTime preinstalled (version 7.5.5 as of this writing), and Mac OS X automatically updates QuickTime if you use the Software Update feature of System Preferences in the Apple menu.

Powering Up Your iPod and iPhone

All iPod and iPhone models come with essentially the same requirement: power. Fortunately, each iPod and iPhone model also comes with a battery and a way of charging it, either directly from your computer or by using a cable and an AC power adapter that works with voltages in North America and many parts of Europe and Asia. (See Chapter 17 for information about plugging into power in other countries.)

Current models (iPod classic, iPod nano, iPod touch, iPod shuffle, and iPhone) — as well as the older iPod mini and third-, fourth-, and fifth-generation iPods — offer a dock connection. You can connect these models to a dock that offers USB 2.0 connections for power and synchronizing (or FireWire for third-generation models). Docks for full-size iPods can also connect to your home stereo through a line-out connection.



To find out more about previous generations of iPods, including detailed information about power cables and connections, visit this book's companion Web site.

The supplied USB-dock cable has a USB connector on one end and a flat dock connector on the other end to connect to a dock or directly to an iPod or iPhone. You can connect the USB end to either the Apple (or third-party USB) power supply or the computer's USB 2.0 port.

The connection on the iPod or iPhone is the same as the connection on the back of the dock. To connect your iPod or iPhone to your computer, plug the flat connector of the cable into the device or dock and then plug the USB connector on the other end into the USB port on your computer. (Press the same buttons on both sides of the flat connector to disconnect it.)

Most PCs and all current Macs already have USB 2.0, which is all you need to provide power and synchronize an iPod or iPhone with your computer. A USB 2.0 connection to a Mac provides power to an iPod or iPhone and recharges the battery as long as the Mac isn't in sleep mode.

Although you can use a low-powered USB 1.0 or 1.1 connection, it doesn't supply power to most iPod or iPhone models. iPod classic and older models can use FireWire connections to charge their batteries but not for synchronizing with a computer.

The iPod shuffle is supplied with a mini-dock with a USB cable attached and draws power from the USB port on the computer or from a USB power adapter.



An older USB 1.0 or 1.1 port works for synchronizing an iPod nano or iPod classic or some older iPod models but it doesn't provide power. If all you have is an older USB port, you can use it to synchronize an iPod and then use a FireWire cable (available from the Apple Store) to provide power by connecting it to a FireWire-compatible AC power adapter.



Don't use another USB device in a chain and don't use a USB 2.0 hub to connect your iPod or iPhone unless the hub is a powered hub. Note that a USB keyboard typically acts like a USB 1.1 hub, but it's not powered, so it can't provide power to the iPod or iPhone and might slow down performance.



If your iPod shows a display but doesn't respond to your touch, don't panic. Just check the Hold switch on top or bottom of the unit and make sure that it's set to one side so that the orange bar disappears (the normal position). You use the Hold switch for locking the buttons, which prevents accidental activation.

You might notice that an iPod classic or iPod nano display turns iridescent when it gets too hot or too cold, but this effect disappears when its temperature returns to normal. iPods can function in temperatures as cold as 50 degrees and as warm as 95° F (Fahrenheit), but they work best at room temperature (closer to 68° F).

If you leave your iPod or iPhone out in the cold all night, it might have trouble waking from sleep mode, and it might even display a low-battery message. Plug the iPod or iPhone into a power source, wait until it warms up, and try it again. If it still doesn't wake up or respond properly, try resetting the iPod or iPhone as I describe in Chapter 20.

Facing Charges of Battery

You can take a six-hour flight from New York City to California and listen to your iPod the entire time — and with some models, listen all the way back on the return flight — without recharging. All iPod models use the same type of built-in, rechargeable lithium-ion (Li-Ion) battery with the following power specs:

- ✓ The first-, second-, and third-generation iPod models offer up to 8 hours of battery power.
- ✓ The fourth-generation models and the iPod shuffle offer up to 12 hours.
- ✓ The iPod mini offers up to 18 hours.
- ✓ The color-display fourth-generation models offer 15 hours of music playing time or 5 hours of photo display with music.
- ✓ The fifth-generation iPod models offer between 14 and 20 hours of music playing time, between 3 and 6 hours of video playing time, or between 4 and 6 hours of photo display with music.
- ✓ The iPod nano offers 24 hours of music playing time or 4 hours of video or photo display with music.
- ✓ The sixth-generation iPod classic 120GB model offers 36 hours of music playback or 6 hours of video or photo display with music.
- ✓ The iPod touch offers 36 hours of music playing time or 6 hours of video, browsing the Internet, or displaying photo slideshows with music.

- ✓ The iPhone models offer up to 24 hours of music playing time, 7 hours of video playing time, or between 4 and 6 hours of photo display with music. They offer up to 10 hours of talk time using 2G or 5 hours using 3G (with 300 hours on standby) and up to 6 hours browsing the Internet on Wi-Fi or 5 hours using 3G.

However, keep in mind that playback battery time varies with the type of encoder you use when you add music to your iTunes library, as I describe in Chapter 5. It also varies depending on how you use your iPod or iPhone controls and settings.

The iPod or iPhone battery recharges automatically when you connect it to a power source. For example, it starts charging immediately when you insert it into a dock that's connected to a power source (or to a computer with a powered USB connection). It takes only four hours to recharge the battery fully for all models, and only three hours for an iPod nano.



TIP

Need power when you're on the run? Look for a power outlet in the airport terminal or hotel lobby and plug in your iPod with your AC power adapter — the battery fast-charges to 80 percent capacity in 1.5 hours. After the first hour and a half, the battery receives a trickle charge for the next hour and a half, until fully charged.



WARNING!

Don't fry your iPod or iPhone with some generic power adapter. Use *only* the power adapter from Apple or a certified iPod adapter, such as the power accessories from Belkin, Griffin, Monster, XtremeMac, and other vendors.

A battery icon with a progress bar in the top-right corner of the iPod or iPhone display indicates how much power is left. When you charge the battery, the battery icon displays a lightning bolt. If the icon doesn't animate, the battery is fully charged. You can also use your iPod or iPhone while the battery is charging, or you can disconnect it and use it before the battery is fully charged.

To check the battery status of an iPod shuffle, slide the Off switch to the on position. If the battery status light is

- ✓ **Green:** The iPod shuffle is fully charged.
- ✓ **Yellow:** The charge is low.
- ✓ **Red:** Very little charge is left, and you need to recharge it.

If no light is visible, the iPod shuffle is completely out of power, and you need to recharge it to use it.

Maintaining battery life



The iPod or iPhone built-in, rechargeable battery is, essentially, a life-or-death proposition. After it's dead, it can be replaced, but Apple charges a replacement fee plus shipping. If your warranty is still active, you should have Apple replace it under the warranty program (which may cost nothing except perhaps shipping). Don't try to replace it yourself because opening your iPod or iPhone invalidates the warranty. If your warranty is no longer active, compare Apple's prices and service to others. Some services may charge less than Apple, especially for older iPod models. For what it's worth, I've had very good (if more expensive) experiences with Apple's services.

Fortunately, the battery is easy to maintain. I recommend *calibrating* the battery once soon after you get your iPod or iPhone; that is, run it all the way down (a full discharge) and then charge it all the way up (which takes four hours). Although this doesn't actually change battery performance, it does improve the battery gauge so that the gauge displays a more accurate reading.

Unlike nickel-based batteries that require you to fully discharge and then recharge in order to get a fuller capacity, an iPod or iPhone battery prefers a partial rather than a full discharge, so avoid frequent full discharges after the initial calibration. (Frequent full discharges can lower battery life.)

Lithium-ion batteries typically last three years or more and are vulnerable to high temperatures, which decrease their life spans considerably. Don't leave your iPod or iPhone in a hot place, such as on a sunny car dashboard, for very long.



For a complete description of how Apple's batteries work, see the Apple Lithium-ion Batteries page at www.apple.com/batteries.

The bottom of an iPod warms up when it's powered on. The bottom functions as a cooling surface that transfers heat from inside the unit to the cooler air outside. A carrying case acts as an insulator, so be sure to remove the iPod or iPhone from a carrying case before you recharge it.



Keeping an iPod or iPhone in a snug carrying case when charging is tempting but also potentially disastrous. An iPod or iPhone needs to dissipate its heat, and you could damage the unit by overheating it and frying its circuits, rendering it as useful as a paperweight. To get around this problem, you can purchase one of the heat-dissipating carrying cases available in the Apple Store. Alternatively, MARWARE (www.marware.com) offers a variety of sporty cases for about \$30 to \$40. See Chapter 17 for more on accessories.



Even when not in use, your iPod or iPhone drinks the juice. If your iPod or iPhone is inactive for 14 days, you must recharge its battery. Perhaps it gets depressed from being left alone too long; not even an iPhone can phone home by itself.

If your iPod or iPhone isn't responding after a reset, follow the troubleshooting steps in Chapter 20. If these steps don't restore your iPod or iPhone to working condition, you might have a battery problem. Go to the Apple support page for the iPod (www.apple.com/support/ipod) or the iPhone (www.apple.com/support/iphone) and click the Service FAQ link to read frequently asked questions and answers about support. Then click the Battery Service Request Form link on the support page and follow the instructions to request service and return your iPod or iPhone for a replacement.

Saving power

The iPod classic and older models include a hard drive, and whatever causes the hard drive to spin causes a drain on power. iPod nano, iPod shuffle, iPod touch, and iPhone models use a flash drive, which uses less power but still uses power when playing content. The iPod touch and iPhone also use power accessing the Internet, running applications, and in the case of the iPhone, making and receiving calls and using Bluetooth devices. Keeping these activities to a minimum can help you save power. One particularly power-hungry activity is restarting your iPod touch or iPhone from a power-off condition — it is better to use sleep mode to turn it on and off.



If you use the AIFF or WAV formats for adding music to your iTunes library, don't use them with your iPod or iPhone. AIFF and WAV take up way too much space on the iPod or iPhone and fill up the cache too quickly, causing skips when you play them and using too much battery power because the hard drive or flash drive is accessed more often. (See Chapter 5 for details on adding music.)



To find out more about audio encoding formats and about converting music from one format to another, visit this book's companion Web site.



The following are tips on saving power while using your iPod or iPhone:

- ✓ **Pause.** Pause playback when you're not listening. Pausing (stopping) playback is the easiest way to conserve power.
- ✓ **Lock it.** Press the Sleep/Wake button on top of the iPod touch or iPhone to immediately put it to sleep and lock its controls to save battery power. You can set your iPod touch or iPhone to automatically go to sleep by choosing Settings⇨General⇨Auto-Lock from the Home menu, and choosing 1 Minute, 2 Minutes, 3 Minutes, 4 Minutes, or 5 Minutes (or Never, to prevent automatic sleep).
- ✓ **Back away from the light.** Turn down the brightness on an iPod touch or iPhone by choosing Settings⇨Brightness and dragging the brightness slider to the left. Use the backlight sparingly in iPod classic and iPod nano models. Select Backlight Timer from the iPod Settings menu to limit backlighting to a number of seconds, or to Off, in the iPod's Settings menu. (Choose Settings from the main menu.) Don't use the backlight in daylight if you don't need it.

- ✔ **Stop communicating (with the iPhone or iPod touch).** Turn off Wi-Fi (choose Settings⇨Wi-Fi and touch the On button to turn it off) when not browsing the Internet. Check e-mail less frequently. (See Chapter 16 for details.) On an iPhone, turn off Bluetooth (choose Settings⇨General⇨Bluetooth and touch the On button to turn it off) if you're not using a Bluetooth device.
- ✔ **Hold it (with the iPod classic or iPod nano).** Flip the Hold switch on iPod classic and iPod nano models to the locked position (with the orange bar showing) to make sure that controls aren't accidentally activated. You don't want your iPod playing music in your pocket and draining the battery when you're not listening.
- ✔ **You may continue.** Play songs continuously without using the iPod or iPhone controls. Selecting songs and using Previous/Rewind and Next/Fast-Forward require more energy. Not only that, but the hard drive has to spin more often when searching for songs, using more power than during continuous playback.

Always use the latest iPod and iPhone software and update your software when updates come out. Apple constantly tries to improve how your iPod and iPhone models work, and many of these advancements relate to power usage.

Thumbing Through the iPod and iPhone Menus

After you bring content into iTunes and synchronize your iPod or iPhone, you're ready to play. The design of the iPod classic and iPod nano lets you hold the iPod in one hand and perform simple operations by thumb. Even if you're all thumbs when pressing small buttons on tiny devices, you can still thumb your way to iPod heaven.

The iPod touch, like the iPhone, offers a multi-touch interface that lets you tap your way into iPod heaven even faster. With an iPod touch, your fingers do the walking. You can make gestures, such as flicking a finger to scroll a list quickly, sliding your finger to scroll slowly or drag a slider (such as the volume slider), pinching with two fingers to zoom out of a Web page in Safari, or pulling apart with two fingers (also known as *un-pinching*) to zoom in to the page to see it more clearly.

Touching iPod touch and iPhone displays

The first message you see on an iPod touch or iPhone display (besides the time of day and the date) is "Slide to unlock" — slide your finger across this message to unlock your iPod touch or iPhone.

Your content is now immediately available at the touch of a finger. On an iPhone (refer to Figure 1-4),

- ✔ Use the iPod button in the lower-right corner of the Home menu to play your music and videos.
- ✔ Use the Photos button in the top row to view your photos.
- ✔ Use the iTunes button in the fourth row on the left side to access the iTunes store.

On an iPod touch (refer to Figure 1-5),

- ✔ Use the Music button on the far-left side of the bottom row of the Home menu to play your music.
- ✔ Use the Videos button next to the Music button in the bottom row to play your videos.
- ✔ Use the Photos button on the right side of the bottom row to view your photos.
- ✔ Use the iTunes button on the far-right side of the bottom row to access the iTunes store.

After touching a button on the iPod touch or iPhone display, a new page appears with more selections you can touch. In fact, you can touch every menu or button you see on the display. The iPod touch and iPhone run applications (Safari, Contacts, Calendar, YouTube, and so on), and the multi-touch interface changes for each application.

For example, touch the Music button on an iPod touch to view a list of artists. After touching Music, buttons appear along the bottom of the display that you can touch to view a list of playlists, artists, songs, albums, and more. With a flick of your finger, you can scroll the list and touch selections to view the albums of an artist or the contents of an album or playlist. Touch any song to start playing it, and control buttons appear to control playback: Previous/Rewind, Play/Pause, Next/Fast-Forward, and a volume slider. The physical button on the front of the iPod touch or iPhone returns you to the Home menu.

The iPod touch and iPhone applications respond to gestures you make with your fingers. For example, you make the following gestures to perform the following functions:

- ✔ Drag with finger: Scroll up or down lists slowly.
- ✔ Flick: Quickly scroll up or down lists.
- ✔ Touch and hold: While scrolling, touch and hold to stop the moving list.

- ✔ Flick from left to right or right to left (swipe): Change screens or application panes on the iPhone or iPod touch (Home menu, Weather, iPod Cover Flow view).
- ✔ Single tap: Select an item.
- ✔ Double tap: Zoom in or out with Safari, Maps, and other applications.
- ✔ Two-finger single tap: Zoom out.
- ✔ Pinch: Zoom out.
- ✔ Un-pinch: Zoom in.



Figure 1-5:
Touch buttons on the iPod touch main menu.

The iPod touch menu (refer to Figure 1-5) offers the following selections:

- ✔ **Safari:** Use the Safari Web browser.
- ✔ **Calendar:** View your calendar.
- ✔ **Mail:** Check and send e-mail.
- ✔ **Contacts:** View your contacts.
- ✔ **YouTube:** List and select videos from YouTube.
- ✔ **Stocks:** Check the prices for financial stocks, bonds, and funds.
- ✔ **Maps:** View maps and get driving directions.
- ✔ **Weather:** View the weather in multiple cities.
- ✔ **Clock:** View multiple clocks and use the alarm clock, timer, and stopwatch.
- ✔ **Calculator:** A simple calculator for adding, subtracting, multiplying, dividing, and so on.
- ✔ **Notes:** Add text notes.
- ✔ **Settings:** Adjust settings for Wi-Fi, sounds, brightness, and Safari usage, as well as other settings for the device.
- ✔ **App Store:** Go to Apple's online App Store to download other Apple and third-party applications for your iPod touch or iPhone.
- ✔ **Music:** Select music playlists, artists, songs, albums, and more (including podcasts, genres, composers, audio books, and compilations). The Music button also offers Cover Flow browsing, as I describe in Chapter 14.
- ✔ **Videos:** Select videos by type (movies, music videos, TV shows, or video podcasts).
- ✔ **Photos:** Select photos by photo album or select individual photos in the Photo Library.
- ✔ **iTunes:** Go to the iTunes online store to purchase content.

Tapping keys on the iPod touch or iPhone on-screen keyboard

One sure feature to amaze your friends is the ability to whip out your iPod touch or iPhone and type notes, contact information, calendar entries, map locations, stock symbols, and even the addresses for Web sites, and make selections for pop-up menus. You can do all this with your iPod touch or iPhone on-screen keyboard, shown in Figure 1-6.



Figure 1-6:
The on-screen keyboard for entering information.

You may want to start with just one finger, and as you get used to it, try also using your thumb. Touch a text entry field, such as the URL field for a Web page in Safari (as I describe in Chapter 15), or a new contact or calendar entry or e-mail message (as I describe in Chapter 16), and the on-screen keyboard appears. Tap the keys, and as you type, each letter appears above your thumb or finger. If you touch the wrong key, slide your finger to the correct key. The letter is not entered until you release your finger from the key.

To type an uppercase letter, touch the Shift key first. To quickly type a period and a space, double-tap the spacebar. To enter numbers, symbols, or punctuation, touch the Number key, and touch the Symbol key for additional symbols.

To enable caps lock, choose Settings → General → Keyboards, and touch the Off button next to Enable Caps Lock to turn it on (touch it again to turn it off). You can then double-tap the Shift key to turn on lock caps (uppercase letters). The Shift key turns blue, and all letters you type are uppercase. Tap the Shift key again to turn caps lock off.

To edit text in an entry field, touch and hold to see a magnified view; then drag to position the insertion point. You can then tap keys to insert text, or use the backspace key to remove text.

The intelligent keyboard automatically suggests corrections as you type (some languages only). You don't need to accept the suggested word — just continue typing if you don't, but if you do want to accept it, tap the spacebar, a punctuation mark, or the Return key. To reject the suggested word,

finish typing the word as you want it; then tap the *x* to dismiss the suggestion before typing anything else. Each time you reject a suggestion for the same word, your iPod touch or iPhone keeps track and eventually adds your word to its dictionary. The iPod touch and iPhone include dictionaries for English, English (UK), French, French (Canada), German, Japanese, Spanish, Italian, and Dutch. The appropriate dictionary is activated automatically when you select an international keyboard.

The keyboard supports multiple languages, and you can even change the standard U.S. key arrangement of QWERTY to QWERTZ, AZERTY, QZERTY, or Japanese IME — choose Settings⇨General⇨Keyboards⇨International Keyboards, and turn on the keyboards you need. You can then switch keyboards while typing information by tapping the globe icon that appears to the right of the “.?!23” button when more than one international keyboard is turned on.

Scrolling iPod classic and nano wheels

The circular scroll wheel on iPod classic and iPod nano models makes scrolling through an entire music collection quick and easy. With your finger or thumb, scroll clockwise on the wheel to scroll down a list or counterclockwise to scroll up. As you scroll, options on the menu are highlighted. Use the Select button at the center of the scroll wheel to select whatever is highlighted in the menu display.

In full-size, third-generation models, the touch-sensitive buttons above the scroll wheel perform simple functions when you touch them. (First- and second-generation models aren't touch sensitive, so you need to press them.)

Fifth-generation iPods and sixth-generation iPod classic models, iPod nano, iPod mini, and fourth-generation iPods (including color-display models) provide a click wheel that offers the same functions as the scroll wheel *and* the clickable buttons. The click wheel has pressure-sensitive buttons underneath the top, bottom, left, and right areas of the circular pad of the wheel. These areas tilt as you press them, activating the buttons.

The iPod main menu for sixth-generation iPod classic and iPod nano models offers the following selections:

- ✓ **Music:** Select music playlists, artists, albums, songs, genres, or composers; or select an audio book. You can also select Cover Flow to browse by cover art, or Search to search for a song or album title or artist (as I describe in Chapter 14).
- ✓ **Videos:** Select videos by video playlist or by type (movies, music videos, or TV shows).
- ✓ **Photos:** Select photos by photo album or select all photos in the photo library.

- ✔ **Podcasts:** Select podcasts by title and then select podcast episodes.
- ✔ **Extras:** View the clock, set clocks for time zones, set alarms and the sleep timer, use the stopwatch, view contacts, view your calendar, view notes, and play games.
- ✔ **Settings:** Adjust menu settings, the backlight timer, the clicker, the iPod's EQ, the date and time, and so on.
- ✔ **Shuffle Songs:** Play songs from your music library in random order.
- ✔ **Now Playing:** This selection appears only when a song is playing — it takes you to the Now Playing display.

The iPod main menu for fifth-generation models offers the following selections:

- ✔ **Music:** Select music playlists, artists, albums, songs, podcasts, genres, or composers; or select an audio book.
- ✔ **Photos:** Select photos by photo album or select individual photos in the photo library. This selection appears only on color-display models.
- ✔ **Videos:** Select videos by playlist or by type (movies, music videos, TV shows, or video podcasts). This selection appears only on fifth-generation models.
- ✔ **Extras:** View and set the clock and alarm clock, view contacts, view your calendar, view notes, and play games.
- ✔ **Settings:** Adjust display settings, menu settings, the backlight timer, the clicker, and the date and time.
- ✔ **Shuffle Songs:** Play songs from your music library in random order.
- ✔ **Now Playing:** This selection appears only when a song is playing — it takes you to the Now Playing display.

The iPod main menu for fourth-generation models and iPod nano is the same as fifth-generation models but without the Videos selection.

Activating iPod Playback Functions

The touch buttons on iPod touch and iPhone models do various tasks for playing content items such as songs, audio books, podcasts, and videos:

- ✔ **Previous/Rewind:** Tap once to start an item over. Tap twice to skip to the previous item (such as the previous song in an album). Touch and hold to rewind.
- ✔ **Play/Pause:** Tap to play the selected item. Tap Play/Pause when an item is playing to pause the playback.

- ✔ **Next/Fast-Forward:** Tap once to skip to the next item (such as the next song in an album). Touch and hold Next/Fast-Forward to fast-forward play.
- ✔ **Left-arrow button:** Tap to go back to the previous menu.
- ✔ **Bullet-list button (playing music):** Tap to view the contents of the album containing the song.
- ✔ **Menu button on front:** Press once to go back to the main menu.

The buttons on full-size iPod models do various tasks for song, podcast, audio book, and video playback:

- ✔ **Previous/Rewind:** Press once to start an item over. Press twice to skip to the previous item (such as a song in an album). Press and hold to rewind.
- ✔ **Menu:** Press once to go back to the previous menu. Each time you press, you go back to a previous menu until you reach the main menu.
- ✔ **Play/Pause:** Press to play the selected item. Press Play/Pause when the item is playing to pause the playback.
- ✔ **Next/Fast-Forward:** Press once to skip to the next item. Press and hold Next/Fast-Forward to fast-forward.

The buttons and scroll wheel on full-size iPods can do more complex functions when used in combination:

- ✔ **Turn on the iPod.** Press any button.
- ✔ **Turn off the iPod.** Press and hold the Play/Pause button.
- ✔ **Disable the iPod buttons.** To keep from accidentally pressing the buttons, push the Hold switch to the other side so that an orange bar appears (the locked position). To reactivate the iPod buttons, push the Hold switch back to the other side so that the orange bar disappears (the normal position).
- ✔ **Reset the iPod.** You can reset the iPod if it gets hung up for some reason. (For example, it might get confused if you press the buttons too quickly.) See Chapter 20 for instructions on how to reset your iPod.
- ✔ **Change the volume.** While playing a song (the display reads *Now Playing*), adjust the volume with the scroll wheel. Clockwise turns the volume up; counterclockwise turns the volume down. A volume slider appears on the iPod display, indicating the volume level as you scroll.
- ✔ **Skip to any point in a song, video, audio book or podcast.** While playing an item (the display reads *Now Playing*), press and hold the Select button until the progress bar appears to indicate where you are, and then use the scroll wheel to scroll to any point in the song. Scroll clockwise to move forward and counterclockwise to move backward.

Setting the Language

Wiedergabelisten? Übersicht? (Playlists? Browse?) If your iPod classic or iPod nano is speaking in a foreign tongue, don't panic — you're not in the wrong country. You might have purchased one that's set to a foreign language. More likely, someone set it to a different language accidentally or on purpose (as a practical joke). Fortunately, you can change the setting without having to know the language that it's set to.

To set the language, no matter what language the menu is using, follow these steps:

- 1. Press the Menu button repeatedly until pressing it doesn't change the words on the display or until you see the word *iPod* at the top.**

If pressing the Menu button no longer changes the display, you're at the main menu. With fourth-, fifth-, and sixth-generation models and iPod nano, the menu displays the word *iPod* no matter what language is selected — and you know you're at the main menu.

- 2. Choose the sixth option from the top on sixth-generation iPods and the iPod nano, or the fifth option on fifth-generation iPods, or the fourth option on fourth-generation iPods, iPod mini, and the older iPod nano. Choose the third option from the top on third-, second-, and first-generation models. (In English, this is the Settings option.)**

Scroll clockwise until the item is highlighted, and then press the Select button. The Settings menu appears.

- 3. Choose the third option from the bottom of the Settings menu (which, in English, is the Language option).**

The Language menu appears.

- 4. Choose the language that you want to use. (English is at the top of the list.)**

If these steps don't do the trick, the menu may have been customized. Someone could have customized it previously, or perhaps you accidentally pressed buttons that customized the menu.



To learn about advanced iPod and iPhone techniques such as customizing your menus, visit this book's companion Web site.

To get around this problem, you can *reset all the iPod settings* back to the defaults (which is not the same as simply resetting your iPod, as described in Chapter 20). Unfortunately, resetting your iPod's *settings* wipes out any customizations that you've made. You have to redo any repeat/shuffle settings, alarms, backlight timer settings, and so on.

Follow these steps to reset all your settings, no matter what language displays:

- 1. Press the Menu button repeatedly until pressing it doesn't change the words on the display or until you see the word *iPod* at the top.**

If pressing the Menu button no longer changes the display, you're at the main menu. With fourth-, fifth-, and sixth-generation models and iPod nano, the menu displays the word *iPod* no matter what language is selected — and you know you're at the main menu.

- 2. Choose the sixth option from the top on sixth-generation iPods and the iPod nano, or the fifth option on fifth-generation iPods, or the fourth option on fourth-generation iPods, iPod mini, and the older iPod nano. Choose the third option from the top on third-, second-, and first-generation models. (In English, this is the Settings option.)**
- 3. Choose the option at the bottom of the menu (in English, the Reset All Settings option).**

The Reset All Settings menu appears.

- 4. Choose the second menu option (in English, the Reset option; the first menu option is Cancel).**

The Language menu appears after choosing to reset all settings (because language is one of the settings). The first choice you have to make after resetting all settings is to choose a language, so you're back in business.

- 5. Choose the language you want to use. (English is at the top of the list.)**

The language you choose now applies to all the iPod menus. But don't pull that practical joke on someone else!