

**Take Control of** 

vI.

# Media on Your Deff Carlson

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### Read Me First

Welcome to *Take Control of Media on Your iPad*, version 1.1, published in July 2010 by TidBITS Publishing Inc. This book was written by Jeff Carlson and edited by Tonya Engst.

This book delves deep into an area where the iPad excels: playing media of all types, from movies, music, and photos to ebooks and up-to-the-minute news sources.

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Discounted classroom and Mac user group copies are also available.

#### **UPDATES AND MORE**

You can access extras related to this book on the Web (use the link in Ebook Extras, near the end of the book; it's available only to purchasers). On the ebook's Take Control Extras page, you can:

- Download any available new version of the ebook for free, or purchase any subsequent edition at a discount.
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- Read postings to the ebook's blog. These may include new information and tips, as well as links to author interviews. At the top of the blog, you can also see any update plans for the ebook.
- Get a discount when you order a print copy of the ebook.

#### TAKE CONTROL OF IPAD BASICS

This ebook focuses on using your iPad for reading ebooks, listening to music, watching videos, and other media-related activities. It assumes that you know the basics of iPad use. These basics are covered in another ebook: the free *Take Control of iPad Basics*. If you or someone you know needs help with topics like those listed below, download the ebook—after all, it's free! Here are highlights of what it covers:

- The iPad's physical buttons and ports
- Why and how you might connect your iPad to a computer
- Tips for battery preservation
- Common gestures for interacting with the iPad's touchscreen
- Connecting Bluetooth devices—such as stereo speakers and headsets—to your iPad
- Connecting your iPad to the Internet
- Transferring apps, data, media, and files to and from the iPad
- Using a basic passcode lock to foil thieves and snoops
- Suggestions about how to give a great iPad demo

#### **BASICS**

To be sure we're all on the same page regarding basic iPad terminology, here are a few terms and conventions that I use:

- **Home screen:** Where I describe going to the Home screen, I'm referring to the environment used to launch apps, accessed by pressing the round Home button on the edge of the iPad. The Home screen can include several pages worth of app icons. (To reach the first page from any other page, press the Home button again.)
- **Finding the Settings app on the iPad:** I sometimes tell you to adjust options in the iPad's Settings app. By default, this app appears on the first page of the Home screen.

- **Tapping and touching:** I often mention tapping an item on the iPad screen, such as "tap the Join button." To *tap*, quickly put your finger on the button and then release your finger. Occasionally, you may need to double tap, or even touch. *Touching* means putting your finger on the screen and keeping it there until something happens. You may also *swipe* or *drag* your finger across the screen.
- iPad navigation: To describe moving around in the iPad's interface, I sometimes use a shortcut. For example, if I wanted to tell you to open the Settings app, tap the Photos option at the left, and then—in the Photos pane—tap Play Each Slide For, I might instead tell you to "tap Settings > Photos > Play Each Slide For."
- **Rotate:** Rotating involves turning the entire iPad 90 degrees, which shifts the onscreen display between the portrait (tall) and the landscape (wide) orientation.
- Using an external, physical keyboard with an iPad: Most directions in this book assume you are using the iPad's onscreen keyboard. If you are using a physical keyboard, you may need to press the Return or Enter key to enter certain information, instead of tapping the Join or Search button that would otherwise appear on the onscreen virtual keyboard.

#### **WHAT'S NEW IN VERSION 1.1**

As promised in version 1.0, which was released early, this version 1.1 adds two important sections: Watch Video (p. 63) and View Photos (p. 90). Other important changes include these:

- The Read Books and Other Text section (p. 16) now discusses reading news, magazines, and comics on the iPad, and it details the many changes in iBooks 1.1, which was released after the initial edition of this book.
- References to iPhone OS 4 are updated as needed to iOS 4 throughout.

## Introduction

One early criticism of the iPad—before the tablet had even been released—was that it seemed to be a decent media player, a "big iPod touch"... but not much else. It played movies and photo slideshows, let you buy and read electronic books, and played music (oh, and managed your email, browsed the Web, organized your calendars and contacts, and did "real work" with Apple's iWork apps for iPad, but those examples were usually glossed over because they didn't fit the big-iPod narrative).

Of course, there's more to the iPad than that, as you know if you own or have used one. The iPad is a bold step forward in terms of how we interact with computers and our important digital information. But you know what? It's also a pretty darn good media player. The large and incredibly responsive touchscreen makes a huge difference in how you consume digital entertainment—it's literally there at your fingertips, not once removed by a mouse, trackpad, or keyboard. The compact size makes it possible to watch a movie on an airplane without worrying if the person in the seat in front of you will lean back and crush your laptop. And the 8–10 hour battery life means you won't be frantic to find a power outlet as you near the end of your book or film.

As you might expect, Apple has done a great job of making the iPad friendly to everyone without requiring a lot of technical knowledge to operate. But in the realm of handling media, you may find yourself in nooks where the right approach isn't obvious. How can you put your DVD movies on the iPad? What if you want to include your own home movies? What's the best way to read magazines, newspapers, and other newsy content? How can you import digital photos and upload them to a photo-sharing site without making a trip to a desktop computer? What's the optimal way to get the most media onto a 16 GB iPad?

This book answers all these questions and much more, and it helps you get the most out of your media.

#### iOS 4 Coming in Late 2010

Apple has announced that iOS 4 (formerly called iPhone OS 4) will be available for the iPad later in 2010. I plan to update the book as needed when the time comes, but for now, you can read more details in "Apple Previews Major New Features in iPhone OS 4" at <a href="http://db.tidbits.com/article/11176">http://db.tidbits.com/article/11176</a>. Where appropriate, I've added notes in the book about features that will be impacted by the new version when it arrives.

Complete your library: If you haven't yet picked up the free Take Control of iPad Basics, go download it now to ensure you have essential iPad information at hand. Also consider purchasing Joe Kissell's Take Control of Working with Your iPad and Take Control of Mail on the iPad, iPhone, and iPod touch, and Glenn Fleishman's Take Control of iPad Networking & Security.

# Quick Start to Media on Your iPad

"Media" encompasses a lot of different materials, so don't feel as though you need to read the book from front to back if, for example, you're initially interested in making musical playlists on your iPad. Come back here (or visit the bookmarks list or table of contents) to jump to any topic.

#### Mind your media:

- Learn the main routes for getting media onto your iPad: Transfer in iTunes (p. 11) and Move Media Wirelessly (p. 13).
- Take steps to fit more media files onto smaller-capacity iPad models and Give Your Media Room to Stretch Out (p. 15).

#### Read electronic books:

- Download the free iBooks app and then Download Books from the iBookstore (p. 17).
- If you're on a budget or just want to give iBooks a try without spending money at first, Find and Download Free Books (p. 19).
- Learn how to Add Your Own Books (p. 21), plus how to manage and Organize Your Library (p. 24), and then crack that virtual spine and Read a Book (p. 26).
- There are more apps for reading than just iBooks. Find out about More Reading Options (p. 39).

#### Listen to audio:

- Is the iPad just a big iPod touch? In one respect, yes: playing music and other audio. First, learn how to Put Audio on the iPad (p. 46).
- Next, understand the playback controls used to Control Audio Playback (p. 54), and the (many) steps required to create a Regular Playlist (p. 58) and a Genius Playlist (p. 61).

• Stream Audio (p. 62) over the Internet to the iPad, no sync cable required.

#### Watch movies, TV shows, and other video:

- Fill the device with video, whether you Rent or Buy on the iPad from Apple (p. 64) or Sync Videos from iTunes (p. 67).
- Already own a library of movies or TV shows? Encode Videos from Your DVDs (p. 70).
- Use the Videos App (p. 79) to watch your flicks, or Stream Video over the air with apps such as Air Video, YouTube, Netflix, and Safari (p. 84).

#### View photos and slideshows:

- Learn about the many ways to Put Photos on the iPad (p. 90)—
  including directly from a digital camera or memory card.
- View Photos and Videos (p. 98) in albums or as slideshows, and even Use the iPad as a Photo Frame (p. 105).
- Photos deserve to be seen, so don't forget to Share Photos and Videos (p. 106). Also learn the workarounds to Share Better-Quality Photos and Videos (p. 108).

#### Control media playback from the iPad:

- Use Your iPad as a Remote (p. 110) to control iTunes media playback on a computer, or control an Apple TV, using the free Remote app from Apple.
- Learn about Other Remote Apps (p. 117) that let you control other devices, including ones that use infrared (IR) receivers.

# Mind Your Media

We're surrounded by media, so it's not surprising that media for your iPad comes from many different sources and in different formats. An ebook, for example, may be simultaneously available from the iBookstore (as an EPUB-formatted file), from Amazon.com (as a protected Kindle file), from the Safari Books Online service (viewed within a Web browser), or other sources.

But don't worry, the situation doesn't need to be complicated.

In this section, I discuss two general strategies for putting media on the iPad: transferring it from iTunes via a USB cable or downloading it wirelessly from the Internet.

You can read this section first to get an idea of what your options are, or you can come back to it later if you have questions. I cover media-specific options later in this book.

**Sync refresher:** If you know nothing about moving content to the iPad (or some other Apple device, such as an iPod), or if you want to learn about syncing more than just media, be sure to read the section "Move Files between the iPad and Your Computer" in the free ebook Take Control of iPad Basics.

#### TRANSFER IN ITUNES

With a single computer running iTunes at the center of your media hub, you can, in general, sync media in the iTunes library with multiple iPads, iPhones, iPods, and Apple TVs. I say "in general" because some items don't transfer cleanly across all devices. For example, a video made for the iPad or Apple TV won't play on an iPhone; in fact, video in general is a nest of formats and restrictions, especially when it comes to rentals from the iTunes Store (see Rent or Buy?).

When it comes to iTunes media syncing, syncing from a *single* computer to your iPad is the most straightforward option. (It is possible to sync one iPad to multiple computers, but I don't cover the ins and

outs and caveats in this ebook). However, if you own more than one computer and want your media available on each one, you can share items using the Home Sharing feature of iTunes. My wife and I have our own laptops and iTunes Store accounts, and I often want to put a new album or video I purchased onto her computer (where she can sync it to her iPad if she chooses).

#### Here's how to do it:

- 1. In iTunes on both computers, choose Advanced > Turn On Home Sharing.
- 2. Enter one account holder's iTunes account information on both computers, and click the Create Home Share button.

If iTunes asks to authorize the computer, click Yes and enter your account password.

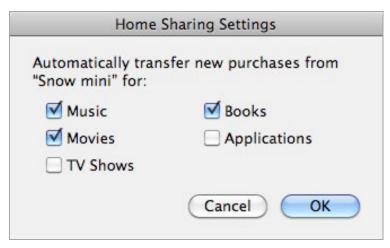
**Dastardly DRM:** Many items you purchase or rent from the iTunes Store won't play unless that copy of iTunes is authorized with your account name and password. This applies to music purchased before 2009, all video purchases or rentals, and iBookstore purchases. You can authorize up to five computers.

- 3. Select the shared volume in the sidebar to view its media.
- 4. To transfer an item, drag it from the list to the Library heading at the top of the sidebar.

**Note:** You can copy media only *from* a shared computer. If I want to send a song from my computer to my wife's, I can't simply drag it from my library to the name of her shared library. Instead, I need to go to her computer, select my shared library in the iTunes sidebar, and drag the song to the Library section of her sidebar. It's a silly limitation.

With the media in the other computer's iTunes library, it can then be synced to the iPad normally.

You can also optionally set up Home Sharing so anything you buy from the iTunes Store is copies automatically to the other library. With the Shared library selected in the iTunes sidebar, click the Settings button at the lower right, and then choose which media types to automatically copy (**Figure 1**). This feature applies only to item bought through the iTunes Store.



**Figure 1:** Automatically copy new media to another shared computer on your network.

#### A GoodReader Trick

Here's a nice way to copy media from an alternate computer to your iPad: With the versatile GoodReader for iPad app by Good.iWare (http://www.goodiware.com/) installed, connect the iPad to any computer running iTunes, and click No if you are asked if you want to sync the device. Select the iPad in the sidebar, go to the Apps tab, and select GoodReader in the File Sharing area. Now, drag any compatible movie or audio file to the Documents pane; the file is copied immediately, without requiring a sync. You can then play the item on the iPad within the GoodReader app.

#### **MOVE MEDIA WIRELESSLY**

In one respect, the iPad very much resembles a big iPod—to sync media between the iPad and your iTunes library you must physically connect the iPad to the computer using the Dock connector cable. That seems like a quaint method of file transfer for a handheld device that connects to the network wirelessly. Fortunately, that's just one approach. You can copy content directly from the Internet to an app on the iPad, or you can *stream* media to your iPad, thus playing it directly from some other computer without copying it to the iPad's memory.

#### **Download to Memory**

Some media is available for download directly to the iPad without requiring iTunes on a computer. When you purchase a song or movie using the iTunes app, the item is downloaded to the iPad's internal memory as a file that you can access later. The advantage of this approach is that you don't need to wait until the next time you're sitting in front of your computer to buy an album you heard or rent a movie a friend recommended at lunch. Having the file in memory also means you can play it at any time, even if you're not connected to the Internet.

When you eventually end up syncing the iPad to the computer, your purchases are transferred to your iTunes library. Books purchased from the iBookstore are also downloaded as files and stored in iTunes on the computer, but are a special case because the iBooks app is the only outlet for buying books—you can't buy them on your computer.

In contrast, Amazon's Kindle app downloads and stores book files on the iPad, but without an integrated bookstore. Visit <a href="http://www.amazon.com/">http://www.amazon.com/</a> in any Web browser (or tap "Shop in Kindle Store" at the upper right of the Kindle app's Home screen), and purchase the Kindle version of a book. You're asked to specify a device on which you want the file to appear. When you next launch the app, it syncs with Amazon and downloads the file automatically.

Other examples of media saved to memory include files you receive as email attachments, as well as files received by direct wireless transfer. For an example of the latter, GoodReader for iPad includes a Wi-Fi transfer mode that turns the iPad into a local Web server; in a Web browser on a computer, enter the URL provided by GoodReader to browse the app's directory and transfer files. (See Side-Load Videos into GoodReader for more information.)

#### **Stream**

Many apps, such as Pandora Radio and NPR for iPad, play audio over the Internet (see Stream Audio); apps like Netflix and ABC Player play video over the Internet (including a 3G cellular connection), while Air Video streams video to the iPad from computers on your network (see From a Computer for more information).

Each method has its advantages. Streaming is preferred when you don't have much storage to spare on the iPad, or when you're looking

for something new to hear or watch. However, you need a persistent network connection, and the app needs to stay open or the stream is broken. In contrast, media copied to the iPad is always there, whether you're on a network or not, and audio can play in the background while you perform other tasks.

**Coming in iOS 4:** Apps such as Pandora will be able to play audio in the background, the way the iPod app does now under iPhone OS 3.2.

#### **GIVE YOUR MEDIA ROOM TO STRETCH OUT**

If you haven't yet purchased an iPad, I strongly urge you to consider getting the highest-capacity model you can afford.

I needed to have an iPad the first day it was available, so I ordered two: a 16 GB iPad Wi-Fi model for early testing and a 32 GB iPad Wi-Fi+3G model that would become the one I use. After running into space limits when syncing the Wi-Fi model, I changed my order for the 3G model (which wouldn't arrive for another month) to the 64 GB model. Now I can sync my entire music library, several movies, dozens of applications, and additional media without hitting a memory ceiling.

That said, a number of options can help you keep an iPad lean:

- Choose to resample songs to 128K AAC format before syncing them; see Sync Your Audio.
- Transfer standard-definition (SD) videos instead of high-definition (HD) versions; see High Definition vs. Standard Definition.
- Watch video over your network instead of storing it on the iPad; see Stream Video.
- Also speaking of video (since it occupies so much storage space), if you own the iPad Camera Connection Kit, you can Copy Videos from an SD Card.
- Limit which songs and photos transfer during the sync process. Better yet, also create smart playlists in iTunes or smart albums in iPhoto or Aperture; see Sync Your Audio.

# Read Books and Other Text

My mind jumps to video and audio when I hear "media," but let's go back further—a few centuries, in fact—and look at how the printed word is making the jump to the iPad's screen. You'll find plenty of video playback devices, but if you really want to test the mettle of the iPad or a competitor, see how people react to electronic books. Reading a book taps into passion for the written word.

Apple's iBooks app—and third-party apps, such as Amazon's Kindle for iPad and comic-reading apps from Comixology—fulfills the needs of people who read frequently and will likely amass a sizeable book library on their iPads. Words don't belong solely to books, of course. Many of us get our news online, and although the iPad includes Safari for Web browsing, many apps bring the news to you.

The first few topics in this section look at iBooks, since it is such a big deal on the iPad. After that, I help you to Discover Other Text Readers (p. 39), discuss using apps to Stay Current with News (p. 41) and Read Magazines (p. 41), and point you in the right direction if you want to Read Comics (p. 44).

#### **USE iBOOKS**

The iBooks app is one of the most advertised features of the iPad, but it's not actually included with the device. Apple instead offers iBooks as a free download from the App Store—which also includes a free copy of A. A. Milne's *Winnie-the-Pooh*.

Has Pooh gone missing? If you downloaded iBooks and later had to restore your iPad from backup, the Winnie-the-Pooh book may no longer appear in iBooks. No need to scour the Hundred Acre Wood, however: re-download iBooks from the App Store, and then locate and re-download the Winnie-the-Pooh book for free. See Download Books from the iBookstore.

In the pages ahead, I explain how to download ebooks from the iBookstore, how to add ebooks from other sources into iBooks, and how to actually read a book in iBooks.

**Tip:** iBooks 1.1 introduced major new features, including PDF support and syncing among multiple devices. If you're still running version 1.0, it's time for an update.

#### **Put Books in iBooks**

iBooks reads two kinds of files, EPUBs and PDFs, which each have their own strengths. The main characteristic of EPUBs is that they are *reflowable*, so the text can shift and accommodate changes in font size or changing the screen orientation. As a result, EPUBs typically have simple visual layouts or may look a bit odd, since it's difficult to create a complex visual layout that looks great regardless of where the page breaks fall or what font and size is being used. PDFs reproduce the original document's layout and aren't designed to reflow at all.

One way to get ebooks into iBooks is by purchasing them at Apple's iBookstore, but you can also transfer EPUB and PDF files to iBooks on a computer through iTunes or other means. I talk much more about all these options ahead.

#### **Download Books from the iBookstore**

Being able to carry an entire book library and read a title from it wherever you happen to be is a reader's dream. But if you ever find yourself stranded at an airport late at night, or waylaid on a trip due to bad weather, the dream can become a nightmare if you're unable to procure new books.

The iBookstore is a virtual storefront, similar to the iTunes Store or the App Store, where you can buy books in EPUB format and download them to the iPad. In a twist, however, the iBookstore is accessible only from within iBooks—it doesn't appear in iTunes on a computer nor in a separate app, such as the iTunes app or the App Store app.

To access the iBookstore, tap the Store button at the top left of the iBooks library screen. Like Apple's other online stores, you can browse featured titles, search for a book using the Search field, or tap the Categories button to browse deeper into the catalog by genres. Tap a book to view more information about it (**Figure 2**).

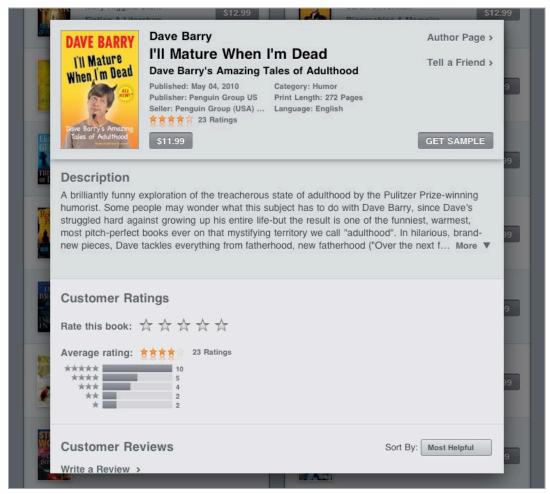


Figure 2: Tap a book title to view more information about it.

**Tip:** Want to get a taste of iBooks but aren't ready to spend money? See Find and Download Free Books, slightly ahead.

When you find a book you're interested in, do one of the following:

• **Download a free sample:** When you're viewing information about a book, tap the Get Sample button to add an excerpt from the book to your library. The title is added to your library immediately, and it appears with a red Sample label.

**Samples not backed up:** When you sync the iPad, books you've purchased are copied to your iTunes library. However, that doesn't apply to book samples, which reside only on the iPad.

• **Buy a book:** If the book's information swayed you right away, tap the button that contains the purchase price, which turns into a Buy

Book button. Tap that button and enter your iTunes account password to purchase and download the book.

• **Buy a book from a sample:** You can also purchase a full book from within a sample without returning to the iBookstore and hunting it down. Tap the Buy button that appears in the upper-left corner of the page (or just the left page if you're viewing the two-page landscape orientation) and enter your iTunes password. The book's price button also appears on the last page of the sample.

#### **Another Use for Book Samples**

I've traditionally kept (and frequently misplaced) notes with the names of books that friends have recommended or that I've heard about in the news. Instead of tracking down those bits of paper, or finding electronic notes on my computer or iPad, I just download samples of the titles (if they're available). When it's time to buy a new book, I have the samples in my library, conveniently labeled with a red Sample banner, ready for perusal and purchase.

#### Find and Download Free Books

The iBookstore, not surprisingly, is designed to encourage you to spend money on books, but plenty of free books are available for download. Thousands of public-domain books from Project Gutenberg (an organization that is digitizing books) are all free, and many publishers offer free books to entice readers to discover new writers. You must still go through the purchase process described above, but the price button reads Free, and after you tap that, the button reads Get Book.

Look for free books in the following locations:

- In the Featured screen of the iBookstore, scroll to the bottom and tap Free Books in the Quick Links section.
- Tap the Charts button in the tab bar at the bottom of any iBookstore page to view the Top Charts screen. The list of Top Free Books appears in the right-hand column.

**Tip:** In the Top Charts screen, tap Categories to view the top paid and free titles in a category. This can be a great way to discover new writers that publishers are trying to promote. For example, as I was researching this topic, the Mysteries & Thrillers chart for free downloads include no Project Gutenberg titles in the top ten.

**Sometimes a rough conversion:** The Project Gutenberg titles are formatted as EPUB files for readability, not for appearing well in iBooks. Tables can get messed up, and long sidebars are certain to break awkwardly across pages. Still: the books are free. Catch up on all that reading you didn't finish in school.

#### Re-download Deleted Books

The iBookstore keeps track of which books you've downloaded through your iTunes Store account, whether to your iPad or to another Apple device. If for some reason you don't have a book on your iPad—maybe you deleted it to save storage space, or you had to replace your iPad, or you first downloaded it to your iPhone—you can get a new copy:

1. In the iBookstore, tap the Purchases button on the tab bar at the bottom of the screen.

A list of your purchased (including free) books appears. If you don't see the list, make sure you've logged in using your iTunes account; tap the Sign In button and enter your email address and password.

2. Tap the Redownload button for any books that are not currently stored on the iPad (**Figure 3**).



**Figure 3:** Here's a feature I wish applied to the physical world. If you no longer have the copy of a book, you can re-download a new one.

The book appears in your library.

**Tip:** iBooks stores your location in a book and any bookmarks you made, even for books you've deleted. When you re-download a book, the page you last read and your bookmarks are all retained.

#### **Add Your Own Books**

So far, I've focused on getting books from the iBookstore because it's convenient. However, it's not the only shop in town. iBooks can read any unprotected EPUB-formatted book, which includes titles from other vendors or publishers, as well as books you create. As of iBooks 1.1, the app can also display PDF files that you add to it, though not all iBooks features (such as adjusting fonts) work with PDFs.

To add an unprotected EPUB or PDF to iBooks, you can use an iTunes sync to reliably make the transfer. You may also be able to put the file on your iPad wirelessly and then use the iPad's cross-app transfer option (Document Support) to move it to iBooks.

To add an unprotected EPUB or PDF file to iBooks:

- 1. Add the file (or files) to your iTunes library on your computer using one of the following methods:
  - In iTunes, choose File > Add to Library and open the file.
  - Drag the file from the Finder (Mac) or Windows Explorer (Windows) to the Library area of the iTunes sidebar (**Figure 4**).



**Figure 4:** Drag an EPUB file (shown) or PDF to iTunes to read it in iBooks.

The book appears in the Books category in iTunes, and it can be copied to the iPad the next time you sync.

2. With your iPad selected in the iTunes sidebar, click the Books tab. Make sure Sync Books in enabled at the top of the tab, and then in the Books pane below, mark the checkboxes for items you want to transfer.

After syncing, when you open the iBooks app, the book appears in your library. If it is a PDF, tap the PDF button at the top of the iBooks screen to view it.

#### **Sources of EPUB Books**

A good place to start is epubBooks (http://www.epubbooks.com/). It offers free titles as well as links to paid content. Feedbooks (http://www.feedbooks.com/) features public domain titles and original books from contemporary authors.

Also, note that you can learn about accessing the EPUB version of this book in Ebook Extras, near the end of the book.

iBooks makes itself available as a PDF reader to other apps on the iPad, which allows you to store a PDF in iBooks using the Open In command. Here are two examples:

If you receive a PDF as a mail attachment, do the following:

- 1. In the Mail app, touch the PDF attachment until a popover appears.
- 2. Tap Open In > iBooks.

If you use the popular Dropbox file-sharing system (as a representative example) and have already copied a PDF into your Dropbox folder:

- 1. In the Dropbox app, open the PDF that you want to copy into iBooks.
- 2. Tap the Share dibutton, and then tap iBooks.

In either case, the PDF is copied to iBooks and appears on the PDF bookshelf.

**Tip:** In any other third-party app that can display a PDF, look for a button similar to the one shown in Step 2, above.

#### Make Your Own EPUBs and PDFs

This isn't a book about formatting documents for iBooks, but it's likely you have some piece of lengthy text (perhaps your own novel or a lengthy report) that would be convenient to review on the iPad.

Here's a sampling of tools to create EPUB files that can be read in iBooks or other compatible readers:

- Calibre: An application for Mac OS X, Windows, and Linux, Calibre converts several text formats (as well as PDF files) and outputs EPUB files (http://www.calibre-ebook.com/).
- **Adobe InDesign CS5:** This professional authoring tool for EPUBs includes a command for creating Adobe Digital Editions as EPUB files (http://www.adobe.com/products/indesign/).
- **Stanza Desktop:** This application was designed for creating EPUB files for the Stanza app, but the files also work in iBooks (http://www.lexcycle.com/).
- **Storyist:** The developers of this writing program for Mac OS X smartly added the capability to output EPUB files, with support for including images, too. If you're already using Storyist for writing, it's easy to create an iBooks edition (http://www.storyist.com/).

On the Mac, you can create a PDF from any program:

- 1. In your application, choose File > Print.
- 2. At the bottom of the Print dialog that appears, click the PDF button, which becomes a pop-up menu.
- 3. Choose Save As PDF.
- 4. Give the document a name and choose a location for the saved file.
- 5. Click the Save button.

In Windows, here are a few options:

• If you are running Microsoft Office 2007, download and install Microsoft's Save as PDF or XPS add-in (http://www.microsoft.com/downloads/details.aspx?FamilyId=4D951911-3E7E-4AE6-B059-A2E79ED87041).

- In Microsoft Office 2010, a Save as PDF feature is built in; choose File > Share > Create PDF/XPS.
- Try the free third-party cutePDF Writer utility (http://www.cutepdf.com/Products/CutePDF/writer.asp).

#### **Organize Your Library**

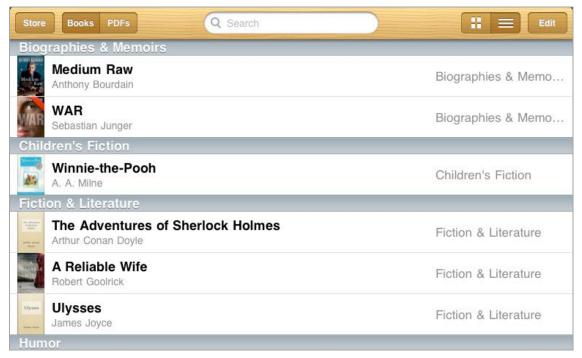
In the iBooks app, titles appear on a virtual bookshelf, covers facing out (**Figure 5**). As you add more titles to your library, scroll down to view them.



**Figure 5:** The Bookshelf view lets you imagine you have endless square feet of shelf space in your home.

**Hidden in the stacks:** Drag from top to bottom when viewing the bookshelves to reveal a little surprise on the shelf's back panel.

Your library can also be viewed as a list, which is helpful when the number of titles increases and you want more options for sorting them (**Figure 6**). Tap the List view button and then tap a sorting button from the tab bar at the bottom of the screen to view the list by Titles, Authors, or Categories, or in the Bookshelf order that matches the Bookshelf screen.



**Figure 6:** The list view, here sorted by category, is more useful when your library grows beyond one or two screens' worth of books.

#### **Re-order Titles in the Bookshelf Views**

In the Bookshelf view, or in the Bookshelf list view, books most recently added to the library appear at the top. You can put them into any order you choose. In either view, tap the Edit button and then do one of the following:

- In Bookshelf view, touch and hold a book cover until it's "lifted," the same way you'd rearrange an app on the Home screen. Drag it to a new position on the shelves.
- In Bookshelf list view, drag a title's Move = button to re-order it in the list.

Tap the Done button when you're finished.

#### **Remove a Book from the Library**

An electronic book doesn't occupy much space on the iPad—*Winnie-the-Pooh* is roughly 10 MB, due to its illustrations; James Joyce's *Ulysses* is 692 K. So you can keep your growing library on the iPad if you want.

But, if your iPad is starting to fill up, or you downloaded a stinker and want to purge its offending pixels, tap the Edit button and then do one of the following:

- In Bookshelf view, tap the X button that appears at the upper-left of a book's cover. When asked to confirm your action, tap the Delete button.
- In list view, tap the minus button to the left of a title's icon, and then tap the Delete button that appears at the far right of the screen.

If you later want to retrieve the book, you can do so. See Re-download Deleted Books.

**Tip:** In list view, you can skip tapping the Edit button by swiping across the book's title. Then, tap the Delete button that appears.

#### Read a Book

It's funny to think that I'm telling you how to read a book, especially since Apple went out of its way to make iBooks resemble a physical book. But this is the iPad, where there are more (welcome) options for reading an ebook.

Can't see the controls? If you don't see the controls I mention in this topic, tap once on the center of the screen to make them appear. Tap again to hide them.

#### **Change the Screen Brightness**

Truly, one of the best features of iBooks is the capability to change the screen brightness within the app. As you may have noticed, the iPad can output quite a bit of light—which may not be appreciated by a partner who's trying to get some sleep next to you in bed. Although the iPad's light sensor adjusts the screen brightness to suitable levels based on the ambient light in the room, that's still often too bright, especially at night.

Tap the Brightness button and then drag the slider that appears to adjust the screen's brightness level.

**Brightness is semi-sticky:** Apple's iPad User Guide states that the Brightness setting applies only within iBooks, but it appears to affect overall brightness on the iPad after you exit the iBooks app, even with the Auto-Brightness option in Settings > Brightness & Wallpaper off. Not uniformly, though: I set the iBooks brightness to its dimmest setting and then went to the Home screen, which was not as bright as I had left it before opening iBooks.

When I returned to iBooks, the brightness dipped back down to the level I had set. But going to the Settings app, I discovered that the Brightness slider had not changed; tapping it once without adjusting the setting brought the screen back to its former bright illumination—which remained at the same level when I returned to iBooks.

**Tip:** See Read on an iPad Outside, a few pages ahead, for advice on reading in the great outdoors.

#### **Turn the Pages**

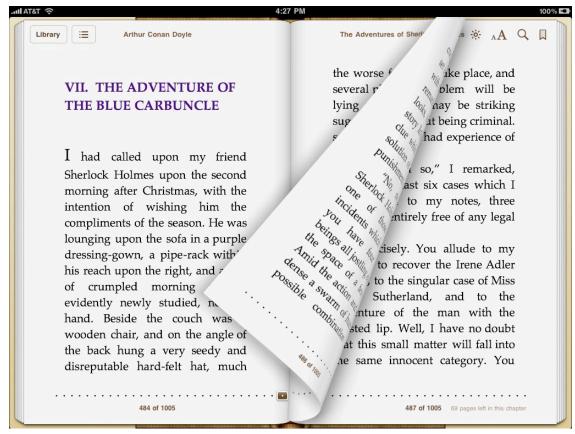
Turn the next page by dragging your finger right to left. Turn to the previous page by dragging left to right. Instead of dragging, you can simply tap the left or right edge of the screen to go to the previous (left) or next (right) page.

#### **Change Left Margin Tap Behavior**

When reading a novel it may be more comfortable to hold the iPad with your left hand and tap the screen with your left thumb to turn pages. In that case, you can change the iBooks behavior so that tapping the left edge also goes to the next page. Go to Settings > iBooks > Tap Left Margin, and tap the Next Page option. As you read with this option enabled, you can still go to a previous page by swiping left to right.

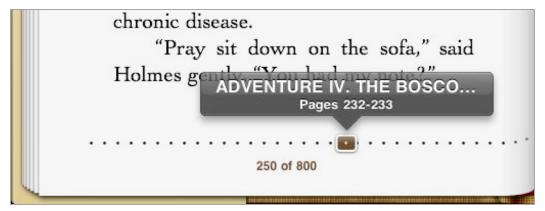
Or, for fun, slowly drag from the right edge to control the page curl effect: in portrait mode, you can see ghosted letters from the current page, as if the paper is thin; in landscape mode, you see the content of the next page (**Figure 7**).

**No page curl?** Although most of this "Read a Book" topic applies to PDFs, some does not. For example, the page curl does not work with PDFs. For details about PDFs, skip ahead to More about PDFs.



**Figure 7:** The next page's text appears when you slowly turn a page in the landscape mode.

To move quickly through the book, drag the page navigator control at the bottom of the screen (**Figure 8**).

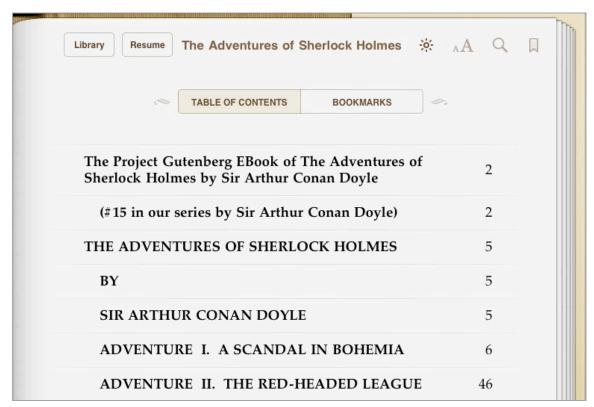


**Figure 8:** Drag the page navigator left or right to scan through the book's sections and jump to another position in the book.

**Tip:** Do you read in bed or somewhere else in a reclined position? Flip the Rotation Lock switch on the side of the iPad's case to prevent the screen from changing orientation.

#### **View the Table of Contents**

Although most ebooks include their own formatted, and linked, list of chapters, iBooks additionally offers a Table of Contents screen. This feature makes it easy to jump to the contents with one tap, instead of having to flip through a book's opening pages to locate the publisher's version. (It's also the gateway for viewing bookmarks, as I describe shortly in Bookmark a Page.) Tap the Table of Contents button, located next to the Library button, to view a specially formatted list of chapters (**Figure 9**).



**Figure 9:** The table of contents is built by the iBooks app so you can jump to sections with a single tap. Note that the page numbers depend on screen orientation: the numbers are different when viewed in the landscape view, because that orientation shows two shorter pages.

Tap a chapter name to go to it. For a table of contents that runs longer than the page, scroll it with a flick of your finger. Turning the page won't show you more of the table of contents, one of the few breaks from the illusion that you're reading a physical book.

Tap the Resume button to go back to your previous location within the book.

#### **Search the Text**

When you're looking for something specific within a book—or you're trying to settle a bar bet—take advantage of the speedy search feature in iBooks.

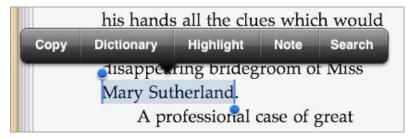
You can tap or type to begin searching:

• **Type:** Tap the Search Q button, and in the popover that appears, type your search term in the field provided. iBooks begins searching as you type (**Figure 10**).



**Figure 10:** One way to find any instance of text within the book is to enter the text yourself into the Search field.

• **Tap:** Wondering if a character will return in the third act of a novel? Instead of tapping the Search button and typing into the field, double-tap the character's name (or any text), expand your selection if desired, and then tap Search from the options that appear (**Figure 11**).



**Figure 11:** Don't feel like typing in the Search field? Double-tap a term (drag to expand your selection, if needed) and then tap Search.

Tap a result to jump to that page, where the term is highlighted. To expand your search, tap the Search Google or Search Wikipedia button. The iPad opens Safari and performs the search via the Web (provided you have an active Internet connection, of course).

#### **Selecting and Copying Text in iBooks**

Notice that in **Figure 11**, just previously, the options above the selected text include a Copy button. If you select text in a title you bought from the iBookstore (including *Winnie-the-Pooh*), the Copy button is not available. Thank a paranoid and no doubt expensive lawyer for the trouble. Books bought from Apple may be encumbered by digital rights management (DRM) that prohibits copying text—including short fair-use snippets. The restriction does not apply to free books from the Project Gutenberg library, which are also available from the iBookstore.

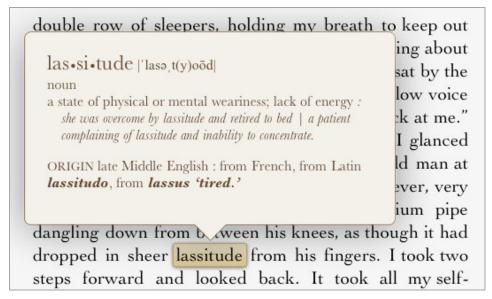
If you're not sure which category a particular file falls under, iTunes (on your computer) can help:

- 1. In the iTunes sidebar, under Library, select Books.
- 2. Select a book title and then choose File > Get Info.
- 3. Click the Summary button (if the pane is not already active).
- 4. Below the book's cover image, note the Kind description, which indicates the type of DRM applied:
  - Book: A book you added to the library, with no DRM applied.
  - Purchased Book: A DRM-free book downloaded from the iBookstore.
  - Protected Book: A book bought from the iBookstore that has Apple's FairPlay copy-protection scheme applied.

#### **Look Up a Definition**

When you run across an unfamiliar word in an EPUB, take advantage of the iPad's internal dictionary and look up its definition.

Double-tap a word to select it, and then tap the Dictionary button from the options that appear above the text. If a definition is available, it replaces the option buttons (**Figure 12**).



**Figure 12:** Instead of asking anyone in the room if they know a word, look it up with a few taps.

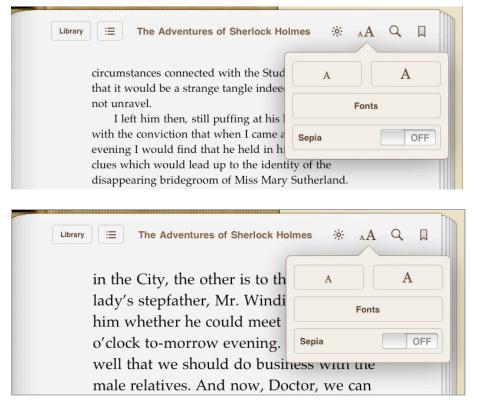
#### **Adjust EPUB Reading Preferences**

Reading a book requires time and attention, so fortunately iBooks offers some options for making the experience more comfortable for your eyes.

#### Text Size and Font

iBooks displays a book's text in one of nine sizes. To find a size you're most comfortable with, do the following:

- 1. Tap the Text Size A button.
- 2. In the popover that appears, tap the left button to make the text smaller, or tap the right button to make the text larger (**Figure 13**).
- 3. Tap outside the popover to dismiss it.



**Figure 13:** Tap the left "A" button to make the text smaller (top), or tap the right button to make it larger (bottom).

While you're contemplating the size of the text, consider changing the typeface from the same popover: tap the Fonts button to display the options, and then tap a font name to make the change (**Figure 14**).



Figure 14: Tap a font name to apply it to the book's text.

#### Sepia

Pages are white by default, which can be too bright for some eyes. Tap the Sepia button to make the page a soft tan color.

#### Justification

In the 1.0 version of iBooks, all text was *full-justified*, which means the text was spaced so that it created a solid right edge. Most newspapers and printed books are laid out this way, because it helps readability when the type is small. But full justification doesn't work well where there is no hyphenation or other special features for fitting type on a line, but where the user can change the font and size of the text. When you start increasing the size of the text, you end up with more awkward space between words to accommodate that tight right edge.

iBooks 1.1 added a preference to turn full justification off. Go to Settings > iBooks and switch the Full Justification option to Off. The text is set *ragged-right*, which improves readability, especially at larger type sizes (**Figure 15**).

those letters Bohemia and of the Irene answers to come, so we may put our Adler photograph; but when little problem upon the shelf I looked back to the weird for the interim." business of the Sign of Four, I had had so many the extraordinary and reasons to believe in my circumstances connected friend's subtle powers of with the Study in Scarlet, I

answers to those letters

come, so we may put our

little problem upon the shelf
for the interim."

I had had so many
reasons to believe in my

friend's subtle powers of

Bohemia and of the Irene

Adler photograph; but when

I looked back to the weird

business of the Sign of Four,

and the extraordinary

circumstances connected

with the Study in Scarlet, I

**Figure 15:** The spacing of full-justified text (top) can be ugly—see the phrase "and the extraordinary circumstances connected". With full justification turned off (bottom), the text is more readable.

#### iBooks and Typography

Given Apple's heritage and fondness for design, you'd think iBooks would feature stellar typography. Book printers have been working on the type legibility of type since shortly after Gutenberg started his press hundreds of years ago. Surprisingly, iBooks offers only a few type options. I recommend reading "What the iPad Is Missing (No, It's Not a Camera)," by Stephen Coles in *Fast Company*, for details on omissions, better font faces, and more (http://www.fastcompany.com/1616121/what-the-ipad-is-missing-no-it-s-not-a-camera). A few solutions have changed since the article was published, such as the option to turn off full justification, but it's still relevant for the rest of the iPad interface.

#### **Add Bookmarks and Notes**

I know people for whom a book isn't a book until they've highlighted and annotated it to the point where you can't easily read the original text. iBooks offers the capability to bookmark any page, highlight passages, write your own notes in books, and then return to any of those items later.

As of iBooks 1.1, the app is also available for the iPhone and iPod touch. You can sync iBookstore purchases from iTunes to all your devices and, thanks to a new app preference, maintain the same bookmarks, notes, highlights, and positions automatically among them. Go to Settings > iBooks and turn the Sync Bookmarks option on. (This works with any book in iBooks, not just titles from the iBookstore.)

#### **Bookmark a Page**

To quickly add a bookmark to a page, tap the Bookmark button at the top-right corner of the screen.

**No Bookmark button?** This bookmark feature was added in the 1.1 update to iBooks. If you don't see the button, make sure you've downloaded the latest version of the app (go to the App Store app and tap the Updates button at the bottom of the screen).

#### **Highlight a Passage**

Do the following to call out text in an EPUB by highlighting it:

- 1. Select a range of text you wish to highlight. (I find it easiest to double-tap a word and then, with my finger still touching the screen, drag to make the selection.)
- 2. From the options that appear, tap Highlight (Figure 16).

The text appears highlighted—in fact, it has the irregular shape and translucence of a real highlighter pen.

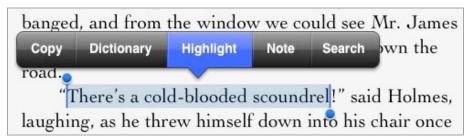
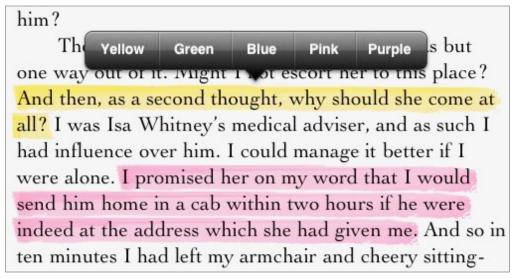


Figure 16: Tap the Highlight button to highlight the selected text.

To find highlighted text later, tap the Table of Contents button, and then tap the Bookmarks button.

To clear highlighting, tap the text and choose Remove Highlight.

Tapping an existing highlighted passage reveals the option to change the highlight color—tap the Colors button, and then tap a color (**Figure 17**).



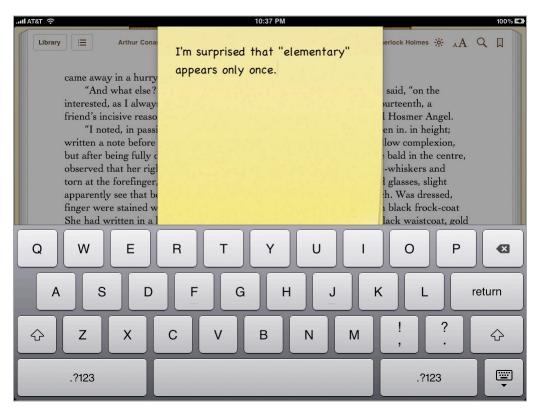
**Figure 17:** Tapping a highlighted section gives you the option to remove the highlighting or change the color.

That may seem frivolous, but as someone who often organizes information by color, I like making up my own scheme. Changing a color applies only to the selected highlighted section.

#### Add a Note

To include your own thoughts about a section in an EPUB, add a note:

- 1. Select a range of text.
- 2. From the options that appear, tap the Note button. An empty "stickie note" appears.
- 3. Type your note (**Figure 18**).



**Figure 18:** Write annotations that are saved for later and synchronized among your devices.

4. Tap the Done button to save the note, which appears at the edge of the screen.

If you want to read or edit your note, tap it.

**Tip:** If Sync Bookmarks is enabled in the iBooks settings, notes automatically appear in the book when you view it in iBooks on other devices.

## More about PDFs

iBooks is primarily an EPUB reader, but with iBooks 1.1 Apple added the capability to view PDF files as well. Although it's not the best PDF reader out there (I like GoodReader for that), it is a good, streamlined option.

To view PDFs in your library, tap the PDFs button in the upper-left corner of the bookshelf (**Figure 19**). You can also identify a PDF easily by the appearance of a plastic binding along the left edge of its cover icon. (For a refresher on how to get PDFs into iBooks, see Add Your Own Books, earlier.)



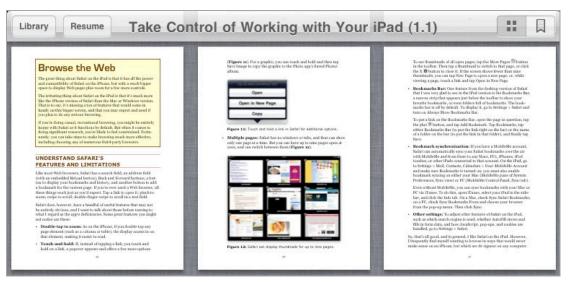
**Figure 19:** iBooks can now read PDF files, like these attractive and useful books.

Most of the same controls appear when reading PDFs as when reading EPUB books. Swipe or tap the left and right edges of the screen to go to the previous or next pages. (This can seem odd if you're viewing a tall document in the iPad's landscape orientation—you must tap the edges of the *screen*, not the page itself, to switch pages.)

A few other differences are worth noting:

- Instead of a dotted line at the bottom of the screen, the page navigator displays thumbnails of the pages in the document. Slide your finger or tap an icon to quickly jump to that page.
- You can't create notes, look up definitions, or highlight text in a PDF.

• Tapping the Table of Contents button fills the screen with large thumbnails of the PDFs pages for easier scanning (**Figure 20**). Tap one to go to that page, or tap the Resume button to go back to your previous place in the document.



**Figure 20:** The table of contents in a PDF is a collection of large previews of each page in the document.

**Link bug!** When viewing a PDF in the iPad's portrait (tall) orientation, links in the file don't work. In landscape (wide) mode, however, they work fine.

# **MORE READING OPTIONS**

I've focused primarily on iBooks so far because it's Apple's reader, which means more people are likely to use it. iBooks isn't the only way to read text content, however. In addition to reading books with other ebook apps, you can use your iPad to Stay Current with News, Read Magazines, and Read Comics like you did when you were 10 years old (or 40 years old).

## **Discover Other Text Readers**

With iBooks available, you'd think other publishers wouldn't bother releasing their own ebook reader apps, but the field is quite vibrant.

#### **Kindle**

Wait, isn't the iPad supposed to be the mortal enemy of Amazon's Kindle ebook reader? On the hardware side, each device has its own

advantages, but Amazon is smart—the company doesn't need to sell you a device if it can sell you the books you want to read. Amazon's catalog of Kindle-formatted books currently far outnumbers Apple's offerings, so if you have a particular book in mind, iBooks may not be an option.

The free Kindle app offers a cleaner interface than iBooks, employing a page curl effect when turning pages to keep that sense of reading a physical book (the page curl can be turned off if you prefer), but otherwise using the full screen space for the page you're reading.

Your account at Amazon.com tracks the Kindle titles that you've purchased. If you log in to your account and visit the Manage Your Kindle page, you can connect your account to a variety of devices. (My editor reports that her Amazon account is linked to two Kindles, two iPhones, one iPod touch, one iPad, and the Kindle for Mac desktop application, meaning she can load ebooks purchased from her account on any of these various devices.) What's more, if you purchase a book on one device, it's automatically added to the others when they sync with Amazon's servers; with iBooks, by comparison, you need to redownload a title on a different device (for free, thankfully), or make a point of synchronizing it through iTunes.

#### **Barnes & Noble**

Barnes & Noble's free ebook app, called BN eReader for iPad, is linked directly to its own stores. It also features LendMe, a way to loan ebooks to other BN customers; you can lend a book just once, and only for 14 days, so it's not exactly like passing along a paperback you've already read, but I can see how LendMe would be good for friends who are voracious readers.

#### Stanza

Lexcycle's Stanza was my favorite ebook app on the iPhone, but after Amazon bought the company, I figured an iPad version would never appear. And yet, as soon as I finished the 1.0 version of this book, Stanza was updated to run on the iPad.

Stanza goes out of its way to improve the reading experience, with controls for adjusting margins, line spacing, paragraph spacing, alignment (not just choosing between full or left justified), and even different hyphenation systems. (There are also several themes you can

apply to the interface, which, as is so often the case with custom themes, can make readability nearly impossible.)

Stanza also ties into several online publishing outlets within the app, giving you many more options for finding new titles.

#### **GoodReader**

A lot of people at TidBITS Publishing adore the GoodReader for iPad app, which, among other things, works well as a PDF reader. You can learn more about it in these *TidBITS* articles:

- "Reading Take Control Ebooks on an iPad (or iPhone or iPod touch)," at http://db.tidbits.com/article/11169
- "Reading Books on the iPad: iBooks, Kindle, and GoodReader," at http://db.tidbits.com/article/11150

# **Stay Current with News**

Long before the iPad or iPhone, I stopped subscribing to a printed newspaper because I didn't have time to go through it all. Despite my best intentions, I ended up recycling a lot of paper that I never read. It was easier to get news on the Web.

For a while, I was confined to reading the news on my computer, and even with a laptop, that wasn't ideal. One of the great things about newspapers is their portability. Newspapers and other media outlets benefit by making their content available for the iPad, because the screen is large enough that someone can read it like a newspaper or magazine, riding a bus or train or reclined in a favorite chair. Many publishers have created their own iPad apps to exert greater control over the reading experience and, in some cases, experiment with interactive possibilities.

# **Newspapers**

An example of an app from a newspaper is NYT Editors' Choice. It doesn't provide the full contents of the *New York Times*, but it gives you important articles in several categories, as well as a video category. It might be a precursor to the New York Times charging for content—but what's there resembles a newspaper experience, with multiple columns and a newspaper-style layout.

Similar apps include Financial Times iPad Edition, the Wall Street Journal, and, combining print and interactive content (such as a live radio feed) BBC News.

#### **RSS Newsreaders**

RSS, or Really Simple Syndication, is a Web protocol for subscribing to the latest news from a variety of sources. In ye olden days, I'd visit a couple dozen Web sites—each in their own window—to catch up on the latest articles. RSS provides the same service, but without all the clutter. Now, I use an RSS reader app that presents the latest news in easily-skimmed portions. I can get the gist of what's going on quickly, or visit a Web site to get more detail.

My current favorite RSS newsreader is Reeder for iPad (Silvio Rizzi, \$4.99) (**Figure 21**). Also worth checking out are NewsRack (omz:software, \$4.99) and NetNewsWire for iPad (NewsGator Technologies, \$9.99).

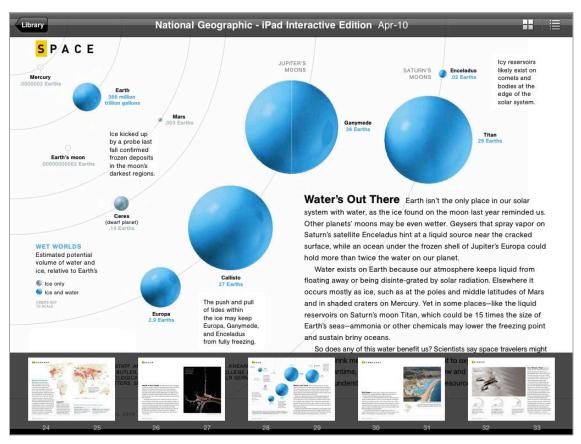


**Figure 21:** Stay abreast of recent articles published on the Web using an RSS reader like Reeder for iPad.

# **Read Magazines**

Many magazines are available on the iPad. *Wired* has caught my eye with its experimental tablet version. It's mostly a replica of the print edition (including ads), but it has novel navigation features and interactive diagrams (and ads). At \$3.99 for each issue, WIRED Magazine isn't cheap; I'm hoping the experiment gets less expensive over time. Another example in this vein is the free TIME Magazine app, which offers issues as in-app purchases at \$4.99 per issue. Again, that's pretty steep, especially for a weekly newsmagazine, so we'll see how the business model shakes out.

If you're more comfortable with the magazine rates for printed subscriptions, and don't demand interactivity, look to the free Zinio Magazine Newsstand & Reader. Zinio is essentially a container that lets you subscribe to digital editions of many magazines. In most cases you're viewing what amounts to a PDF reproduction of the magazine (**Figure 22**), but some articles are also available in a text-only view, which can be more readable.



**Figure 22:** Zinio offers the paper version of a magazine, without the paper.

## **Read Comics**

If you're a fan of comic books, you'll love the iPad and one of the many available comic readers. The heavy hitters, Marvel Comics and DC Comics offer free readers that can be used to buy issues (sadly, not many current ones yet). These two apps are created by Comixology, so you get the same features: full-page viewing (**Figure 23**) as well as an interactive, panel-by-panel mode that moves you through the story. Many independent publishers are also making their wares available, such as Panelfly Comics and iVerse Comics.



Figure 23: The iPad's large screen is ideal for full-color comics.

I haven't seriously read comics since I was a kid, but the iPad makes me want to get back into them. For a great survey of comic-book reading options on the iPad, see Jason Snell's *Macworld* article "The iPad as a comic-book reader," at http://www.macworld.com/article/151291/.

## Read on an iPad Outside

People who prefer to read ebooks on Amazon's Kindle devices like to ask about how well the iPad would perform while reading at the beach. You'd think everyone heads for the sand on their vacations (I'm drawn more to forests, myself), but the Kindle owners have a point: The iPad's glossy, reflective screen doesn't hold up well outside in direct sunlight.

The Kindle's e-ink screen works exceptionally well in sunlight, because it essentially freezes its pixels until the page is next refreshed. However, the screen has no backlight—so, unlike the iPad, you can't read in the dark with no other light on. Personally, I find the screen too gray and lacking contrast in most lighting situations.

Here are a few commonsense suggestions for improving an iPad's readability outside:

- Increase the screen brightness to its highest setting. Yes, that reduces the iPad's battery life, but you'd probably get sunburned if you spend that much time outside in the sun.
- Try to position yourself so the elements behind you (which will be reflected in the screen) are not distracting.
- If you own Apple's iPad case, or a similar folio-style case, put the iPad into its landscape orientation and use the front flap as a visor or umbrella.
- Try reversing the text and screen colors so the words appear white on a black background. Go to Settings > General > Accessibility and activate the White on Black option. That's a system-wide preference, not one specific to the iBooks app.
- Did the screen suddenly go blank? If you're wearing polarized sunglasses and you rotate the iPad, the angle of the polarized lenses cancels the light emitted from the screen, which is also polarized.

# Listen to Audio

It's almost hard to believe now that the first iPod in 2001 did nothing but play digital music and other audio. On the iPad, "iPod" is an app, which you use primarily to play music, but also to listen to podcasts, audiobooks, and iTunes University courses. Unlike the iPod app found on the iPhone and iPod touch, the iPad version of the app focuses almost exclusively on audio (but some video content may show up there as well).

This section mostly covers audio in iTunes and the iPod app, but at the end it notes a few audio apps that Stream Audio (p. 62).

# **PUT AUDIO ON THE iPAD**

As with most media, there are two main routes for transferring audio files to the iPad:

- Sync items in the iTunes library on your computer.
- Download them from the iTunes Store using the iTunes app on the iPad.

# **Sync Your Audio**

Let's look briefly at the basics of syncing audio to your iPad, with an emphasis on how to control what gets copied. When you connect the iPad to your computer, it appears in the iTunes sidebar under Devices; click the iPad's name to view sync options at the right (**Figure 24**).

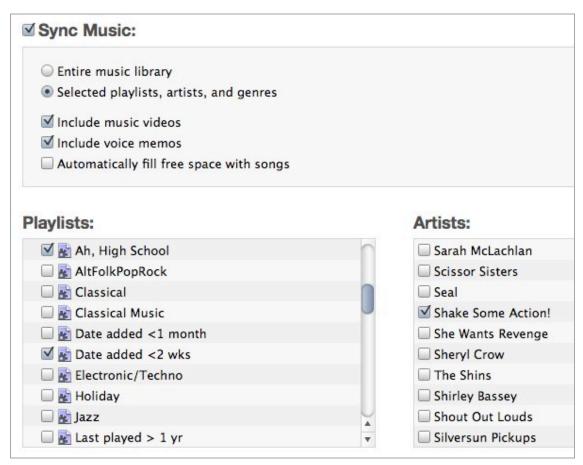


Figure 24: Select a device to view its sync settings.

Clicking a category tab exposes its sync controls. Except for Apps, each category has the option to sync all media—for example, under Music you'll find a radio button to sync the "Entire music library." However, even the highest-capacity device may not be able to store all your media, which is why it's worth being selective about what's copied.

#### Music

In the Music tab, enable the Sync Music checkbox and then select the "Selected playlists, artists, and genres" radio button. From there, mark the items below that you want to sync (**Figure 25**). When you click the Apply button, the relevant items are copied to the iPad.



**Figure 25:** The Artists pane at the right lets you make sure that your favorite bands are always on your iPad, even if their songs aren't included in a playlist or smart playlist.

**Tip:** Can't bear to think of your iPad's valuable memory going unused? In the Music tab, enable "Automatically fill free space with songs." iTunes randomly grabs music from your Library to occupy as much memory as it can.

#### **Podcasts**

Syncing podcasts works in a similar fashion to syncing music, but because podcasts are episodic, there are additional controls for specifying which episodes are transferred. Click the Podcasts tab to reveal them (**Figure 26**).

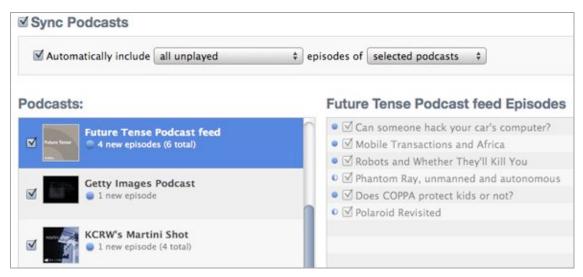


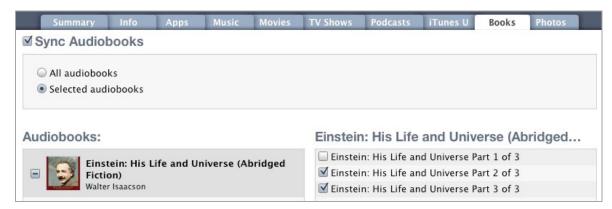
Figure 26: Selecting a podcast name reveals its episodes at right.

When the "Automatically include" checkbox is enabled, the pop-up menus provide selections based on newness and whether the episodes have been played yet. So, for example, you could opt to "Automatically include [10 most recent unplayed] episodes of [selected podcasts]." For manual control over what's copied, disable the "Automatically include" checkbox and choose items in the Podcasts and Episodes panes. A third option, Include Episodes from Playlists, picks up episodes that may be collected by selected smart playlists.

Subscribe to podcasts on the computer only: Unfortunately, you can't subscribe to podcasts from the iPad; you can only download individual episodes within the iTunes app. If you liked the installments of a podcast and want to automatically receive new episodes as they are made available, sync the iPad and go to the Podcasts category in the iTunes sidebar. Locate the podcast's name in the list and then click the Subscribe button.

#### **Audiobooks**

The process of syncing audiobooks is similar to podcasts, although you'll find the controls in the Books tab beneath the Sync Books options. If an audiobook is split into several sections, you can choose which parts to sync by enabling them in the Parts pane at right (which is named according to whichever title is selected in the Audiobooks pane) (**Figure 27**).



**Figure 27:** If you've already listened to one section of a multi-part audiobook, you can opt to not sync it to the iPad.

You can buy audiobooks from the iTunes Store on your computer or using the iTunes app on the iPad. Another popular source is Audible (http://www.audible.com/), which is owned by Amazon; if you try to purchase an audiobook from Amazon, in fact, you're redirected to Audible. Audible works on a subscription basis, granting you a number of credits per month or per year. Most books cost one credit.

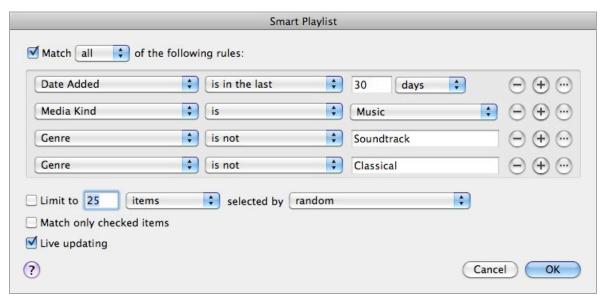
**Don't lose your place:** When you sync podcasts and audiobooks, iTunes and the iPad maintain the position where you stop playing. That way, you can listen to part of the item on the bus ride home, for example, sync your iPad, and then catch the rest on your computer (or iPhone, or Apple TV, or iPod) later. Read Play Podcasts and Audiobooks to learn about special playback controls for these audio types.

# **Smart Playlists**

A smart playlist grabs media based on criteria that you specify, and it can update its content when material in the iTunes library is added or changed. For example, I created a smart playlist called "Music added <1 month," which automatically includes all music added to iTunes within the past 30 days. It's also set to include only music and to ignore songs marked as Classical or Soundtrack genres. With that smart playlist set to sync, I always have my newest tunes on my iPad.

Follow these steps to create a Smart Playlist in iTunes:

- 1. Choose File > New Smart Playlist.
- 2. The initial Smart Playlist dialog is smaller than the expanded one shown in **Figure 28**. Choose a selector from the first pop-up menu; as you can see, I've set it to Date Added and then, using the other menus and fields in that row, specified that an item must have been added in the last 30 days.



**Figure 28:** A smart playlist gives you much more control over which items are included in the playlist. If you keep the "Live updating" checkbox at the lower left selected, the smart playlist will always be up to date, too.

- 3. Click the 🛨 button to add a new selector. Continue doing this until you've included the criteria you want, then click OK.
  - Your new smart playlist appears in the iTunes sidebar, under the Playlists category.
- 4. To customize the smart playlist's name, double click it in the sidebar.

**Tip:** The button creates nested conditionals, which can specify groups of criteria instead of all selectors being applied on an "all" or "any" basis.

## (Don't) Manually Manage Music and Videos

The iTunes Summary tab for your iPad has the option to "Manually manage music and videos," which sounds like a good way to ensure that only the media you want ends up on your iPad. The problem is that this option was added to iTunes back in the iPod dark ages when people generally had smaller libraries. My modest iTunes library currently has 3,700 items, of which roughly 3,700 are items I don't want to manage by hand. The sync in iTunes 9 is advanced enough that I think most people won't need to manually drag items from iTunes to the iPad in the sidebar.

## **Download Music from the iTunes Store**

Using the iTunes app on your iPad, you can wirelessly download new audio files directly to your device. The music is added to your iTunes library the next time you sync with your computer.

To browse the music offerings, tap the Music button in the tab bar at the bottom of the screen. Tap a song to open a preview window with more info (**Figure 29**).



**Figure 29:** The interface for previewing a song in the iTunes app is brilliant. Without occupying any more screen real estate, it changes the track number for the currently playing song into an indicator that not only shows which song is playing and how much of the sample has elapsed, but also serves as a Stop button.

Tap the song title to listen to a sample or tap the price button to purchase it.

**Tip:** After downloading purchases in the iTunes app, tap the Purchased button in the Downloads screen to jump to the Purchased playlist in the iPod app.

# **USE THE IPOD APP**

The iPod app is your home base for listening to audio synced from iTunes to your iPad. Let's look at how to Find Your Media, Listen in iPod, and Make Playlists.

## **Find Your Media**

The problem with having thousands of songs and videos available on the iPad is getting to them easily.

#### Search for Media

Sometimes you know exactly what you're looking for, such as the name of a song, but you don't know the artist or album. In the iPod app, enter the name in the Search field. Results appear as you type (although I've found that sometimes they don't appear for a second or two) (**Figure 30**).



Figure 30: The search interface provides results as you type them.

You can narrow the search results by tapping a category button—such as Songs, Artists, or Albums—at the bottom of the screen (just above the onscreen keyboard, if it appears). Tap a song title to play it, or tap an artist or album to view more songs.

**Tip:** The iPad's Search screen can also bring up results from the iPod app. To reach the screen, go to the Home screen and swipe *right* past the leftmost page or press the Home button twice.

## **Browse Your Library**

If you don't have a specific song or artist in mind, browse your Library by tapping a playlist name in the Library sidebar, or tapping one of the browse buttons in the tab bar at the bottom of the screen and then scrolling through the lists.

To quickly scroll down a long list, drag along the right edge of the screen or tap a letter to jump to that section.

If you use the Genius recommendation feature in iTunes, tap the Genius Mixes item in the sidebar to reveal the Genius Mixes that iTunes built based on your library. Each mix is based on a genre (Rock Mix, Alternative Mix, and so on), and isn't editable. You have to trust Apple's silent DJ algorithms to deliver a good mix. (So far, the mixes have been highly complementary for me.)

Tap a mix to start playing it.

**Note:** If Genius is not enabled in iTunes on your computer (choose Store > Turn On Genius), this button doesn't appear.

# Listen in iPod

Playing your music or video is mostly straightforward: find song, tap on song, enjoy song. The Now Playing screen appears for the first song you play after you open the iPod app, showing a large version of the song's cover art (if available); tap once to display the playback controls (**Figure 31**).



**Figure 31:** The Now Playing screen has playback controls, including some that don't appear anywhere else.

To view the current song in the context of its album, tap the button in the lower-right of the Now Playing screen. To exit the album track list view, tap the album art thumbnail that appears at the lower right. You can also pinch the screen as if you were minimizing the album art.

**Rate it:** This album track list view reveals another control, which appears **only** in this screen: the track's rating. Tap the dots just above the list to assign a star rating to the currently playing song.

The downside to the Now Playing screen is that you can't browse the library while listening to the current song. To return to the library, tap the button in the lower left. You can return to the Now Playing screen by tapping the Now Playing button (the album art) in the sidebar.

# **Control Audio Playback**

Playing a song may be as simple as tapping the large Play/Pause button at the top of the screen, but the iPod app also offers more playback control than it might seem from the look of the simple controls that appear at the top of the main iPod screen (**Figure 32**).



**Figure 32:** The Back and Forward buttons flank the Play/Pause button at the center of the main iPad screen. The playhead appears in the scrubber bar beneath the round buttons. These controls also appear on the Now Playing screen.

Here's a rundown of the controls and playback features, many of which aren't immediately obvious:

- Restart the currently playing song: Tap the Back button once.
- Move playback to the beginning of the previous song: If playback is at the start of a song, tap the Back button once.
   Otherwise, tap it twice.
- Move playback to the beginning of the next song: Tap the Forward button.
- **Fast forward and rewind:** Touch and hold either button to rewind or fast-forward the current song; the longer you hold the button, the faster the action occurs.
- **Scrub:** The scrubber bar below the Play/Pause button indicates how far along you are in a song. To skip ahead while listening to the playback (called *scrubbing*), drag the playhead along the slider.

However, the slider is clever and can scrub at different rates. When you're viewing the Now Playing screen (but not the library screen), tap the scrubber bar and drag your finger *down* to adjust the speed of the scrubbing; then, drag your finger left or right to scrub at that speed (for example, to scrub ahead, drag your finger down and then right, making an L shape). The rate appears below the slider, such as "Half Speed Scrubbing" (**Figure 33**).

The farther down the screen you drag your finger, the finer the adjustment, which is helpful when you want to back up just a few seconds in a long track or a podcast.



**Figure 33:** Scrub in fine increments by first sliding your finger down the screen, then dragging left or right.

• **Loop:** On the Now Playing screen only, tap the Loop button at the left of the scrubber bar to loop playback. The button turns blue

to indicate that looping is on. Tap again to replay the current song over and over; the button turns blue and gains a 1 badge.

• **Shuffle:** On the Now Playing screen, tap the Shuffle button at the right of the scrubber bar to play songs in a random order. The button turns blue to indicate that Shuffle is on. A Shuffle button also appears at the top of the Songs list when you're viewing the library. The shuffle applies to whatever is being played: songs are shuffled within a playlist, within an album, within all albums by a selected artist, and so on.

**No Shake to Shuffle**: The iPhone and iPod touch have a clever feature called Shake to Shuffle: simply shake the device to enter shuffle mode and play a new song at random. The feature is missing from the iPad (despite my repeated, and silly-looking, tries).

## **Play Podcasts and Audiobooks**

In addition to the playback controls mentioned just previously, a few other controls appear when you're listening to podcasts or audiobooks:

- Change playback speed: Tap the w button to change the audio's speed. The button changes to display the speed: 1x for normal speed, 2x for double speed, and 1/2x for half speed.
- **Jump back 30 seconds:** Tap the button to back up 30 seconds and hear something again without scrubbing.
- **Share link:** Tap the button to send an email message to someone with a link to the item (podcasts only).

# **Control Playback outside the iPod App**

Unlike watching a movie or playing a game, listening to music is often a background action. Instead of switching to the iPod app whenever you want to do something iPod related—like jump to the next song or pause—use these alternate methods of controlling playback:

• When you're in some app other than the Home screen, double-press the Home button to view playback controls (**Figure 34**). (You can configure this in Settings > General > Home; tap iPod Controls.)



**Figure 34:** Play or pause, jump to the previous or next song, or change the volume without opening the iPod app (or, tap iPod to switch to the iPod app).

- If you have a set of iPhone or iPod touch earbuds that include remote controls (such as volume), double-press the center button to bring up the playback controls.
- Of course, you can always adjust the volume using the physical volume switch on the edge of the iPad.
- To limit the volume that headphones can output, in Settings, tap iPod > Volume Limit. Set the desired limit and then tap Lock Volume Limit. You will be asked to input a four-digit lock code.

## **Headphones and Speakers**

A great surprise of the iPad is its internal speaker. Despite being relegated to the lower-right of the device, the sound is remarkably good! However, that's not very helpful (especially to other people around you) when you're listening to music or watching a movie on the train. Here are some other audio output options:

- The headphone jack accepts any 3.5mm headphone plug (the iPad does not include earbuds).
- You can pair stereo Bluetooth headphones or speakers to the iPad and listen to music wirelessly. For instructions on how to set them up, see the free ebook *Take Control of iPad Basics*. When a Bluetooth device is connected, a Bluetooth icon papears at the lower-left of the library screen, or at the bottom of the Now Playing screen; tap it to choose an audio device.
- If you purchased an iPad Dock, you can attach wired headphones or powered speakers to the audio line out port located on the back near the Dock connector port.
- Do you own Apple's iPad Camera Connection Kit? Using the USB adapter in the kit, you can connect a USB headset and listen to audio through it. An extra bonus? This connection works for audio input, too, so you can speak into the headset's microphone (if one is equipped) and use an app such as Skype to make free phone calls.

# **Make Playlists**

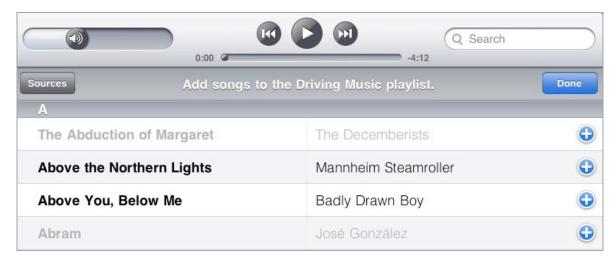
Playlists make it easier to use a large iTunes library, and that extends to the iPad as well. In addition to listening to playlists transferred from your computer, you can create your own playlists in the iPod app.

## **Regular Playlist**

A regular playlist plays only the songs you add to it, the modern version of your own custom mixtape (compare that to a Genius Playlist, which I discuss shortly). To create a new regular playlist on the iPad, do the following:

1. In the iPod app, tap the New Playlist + button in the lower-left corner of the screen.

- 2. Enter a name in the New Playlist dialog that appears, and tap the Save button.
- 3. From the list of songs that appears, tap the name of each track you wish to include in the playlist (**Figure 35**). Don't worry about the order of the songs at this point.

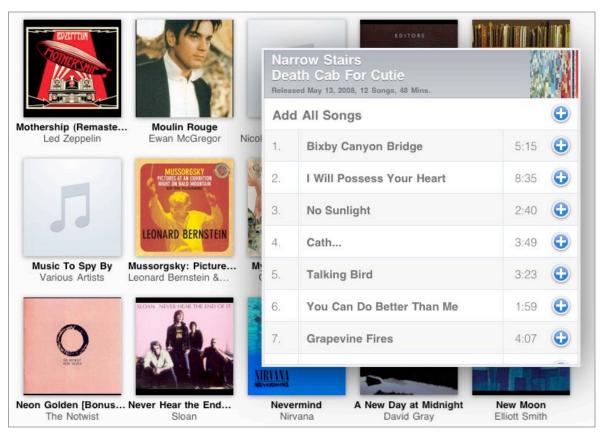


**Figure 35:** A song appears in gray after you add it to the playlist.

**Note:** Tap the Sources button at upper left to narrow the scope of what's included in the list. This option lets you choose tracks from existing playlists, for example.

You can also tap the buttons in the tab bar at the bottom of the screen to view your library by Artists, Albums, Genres, or Composers. In these modes, an extra tap is required to add songs. For example, in the Albums view, tap an album's thumbnail to reveal its track list, where you can tap individual songs or tap the Add All Songs item to include the whole album (**Figure 36**). Tap outside the track list to dismiss it.

**Wait to remove:** If you add a track and then change your mind, you'll need to wait until the next step, after the playlist is created, before you can remove the song.



**Figure 36:** Tap an album to view its tracks, and then choose which ones to add to the playlist.

**Tip:** If you're viewing the list by Artists, tap an artist's name to view his or her albums and tracks. Swipe down to reveal the Add All Songs item at the top of the list, which is normally hidden.

**Tip:** Tapping a song multiple times adds multiple instances of the song to the playlist. I can see how this might be a nice option—if you want the playlist to open and close with the same song, for instance—but this behavior is not apparent at all in the interface.

- 4. When you're finished adding songs, tap the Done button.

  The new playlist is now selected in the sidebar in its editing mode.
- 5. Modify the list:
  - To remove a song from the list, tap the round minus button adjacent to its name and then tap the Delete button that appears at the right of its listing (**Figure 37**).

- Did you forget a song? Tap the Add Songs button at the top of the list to return to the adding mode.
- To re-order the items, drag the icon = at the right of each track.



**Figure 37:** Deleting a track from a playlist requires two taps, to ensure you don't accidentally remove an item.

6. Tap the Done button to finish creating the playlist.

You can edit a playlist later by selecting it in the sidebar and tapping the Edit button. The next time you sync with your computer, the playlist is added to iTunes.

**Note:** Smart playlists transfer from iTunes, but they can't be edited on the iPad.

# **Genius Playlist**

If you've enabled Genius in iTunes on a computer (by choosing Store > Turn On Genius), the data it uses to generate recommendations transfers to the iPad when you sync and you can then create new Genius playlists on the device—which is significantly less involved than creating regular playlists.

When a song is playing, tap the Genius button that appears on either the library screen or the Now Playing screen. The iPod app builds a Genius playlist based on that song (**Figure 38**).



Figure 38: A genius with great taste lives inside your iPad.

Tap the Refresh button to make another list based on the same song, or tap the New button to choose another song from the full song list.

If the Genius recommendation turned out to be especially good, tap the Save button to create a new Genius playlist containing those items. The playlist stays in the list of other playlists (marked with a Genius icon) and is also copied back to iTunes the next time you sync.

# **STREAM AUDIO**

So far I've concentrated on playing audio through the iPod app, using material stored on the iPad as the source. You can also listen to live radio or news programming using third-party apps that stream the audio over the Internet. I definitely encourage you to explore the App Store for streaming apps. Here are two to get you started:

- Pandora Radio: One of the most popular apps for streaming music, this app provides not only a virtual radio station, but the songs are based on a band or album that you like. (Pandora Media, free)
- SomaFM Player: At this writing, the SomaFM app is still an iPhone app, but for audio you don't need a full-screen experience. (Check for an iPad release before you buy.) SomaFM offers several themed "stations" like Indie Pop Rocks (alternative and indie music) or Lush (mostly female vocals). (Saturn 5 Technology, \$3.99)

# Watch Video

A year before Apple announced the iPad, my friend David Blatner and I were discussing tablet computers. David had been waiting for an Apple tablet for years, and I admit I didn't understand the appeal. He mentioned having a bigger screen than the iPhone for reading ebooks and watching movies, and I pointed out that I've done both on my iPhone, and the experience is "just fine."

But that's just it. "Fine" is a compromise, and the iPad's larger screen makes watching movies, TV shows, and home videos more enjoyable. Apple's Videos app plays videos from the iTunes Store or from your iTunes library on your computer. But other options are available, including streaming video from the Internet or from a computer on your network, or even watching videos in Good-Reader, an app initially designed to read PDFs.

## **PUT VIDEOS ON THE iPAD**

Let's start with a few common scenarios for adding videos to an iPad:

- If you'd like to rent or buy a video from Apple's iTunes Store directly on the iPad, then Rent or Buy on the iPad from Apple.
- If you have video on a computer that you'd like to move to the iPad, it might already be in iTunes. If that's the case, you can Sync Videos from iTunes. Alternately, you might transfer it from your computer to your iPad using an app. For an example, read Side-Load Videos into Good Reader.
- If the video isn't in iTunes already, you can Add Videos to iTunes.
   I particularly explain how to Encode Videos from Your DVDs and how to Share Movies from iMovie.
- Yet another approach to moving movies to your iPad is to transfer them from an SD card, as I explain in Copy Videos from an SC Card.

**Note:** If you want to stream video to your iPad so that you can watch it as it flickers through, skip ahead to Stream Video.

In nearly all the above cases, once you've put a video file on the iPad, you use the Videos app to play it. Even where you don't use it, the controls will likely be similar, so you can still refer to Use the Videos App for help.

# Rent or Buy on the iPad from Apple

I own few movies, because I usually want to watch a movie only once. But I do enjoy renting intriguing movies. The iTunes Store gives me convenient access to a wide range of old and new movies (and TV shows), and it integrates nicely with my iPad and other Apple devices.

Just as you can rent or buy movies from the iTunes Store on a computer, you can do so directly on the iPad. In the iTunes app, tap the Movies button in the tab bar at the bottom of the screen and browse the listings. Tap a title to view more information about it, and to find the Rent and Buy buttons (**Figure 39**).



**Figure 39:** The only HD option for this movie is to rent it. Tap the Standard Def. button at right to view buttons and pricing for renting and buying the movie.

You can tap the Rent button to rent or tap the Buy button, which becomes a Buy Now button; tap it again to complete the transaction and download the file to the iPad. (I cover the differences between HD and SD video, whether you should rent or buy, and how exactly a rental works just ahead.)

**Tip:** Videos can be downloaded only over a Wi-Fi connection, not a 3G network (thank goodness, since a movie rental would wipe out most users' data allocations). If you try, the iTunes app asks you to try again on Wi-Fi or on a computer.

## **High Definition vs. Standard Definition**

Is HD (high definition) video worth the extra expense over SD (standard definition)? It depends on how picky you are. Viewed on the iPad's screen, HD footage tends to look sharper, due to its higher resolution (**Figure 40**). However, the difference isn't staggering—not enough, in my opinion, to warrant paying more every time I rent or buy a video. You'll see the biggest difference when zooming a video to fill the screen (instead of watching in widescreen mode).



**Figure 40:** Compare iPad screenshots of a frame from the HD and SD versions of the same video; the detail boxes are shown at actual pixel size, taken from a screenshot. You can see sharper contrast in the hairs of the eyebrow in the HD version, while the SD version appears soft.

**Tip:** When browsing the movie listings in the iTunes app, you'll see some buttons with a price, and some that just read "View." View indicates there are multiple options (rental, HD).

Video files tend to be large, especially HD videos, so consider the download time when choosing between HD or SD. I made the mistake one night of renting Quentin Tarantino's *Inglourious Basterds*, thinking I'd watch it before going to bed. The HD version was over 5 GB

(about five times larger than the SD version), and even on my fast cable Internet connection, the download didn't complete until I had already gone to sleep.

## How to Compare HD to SD Video on Your iPad

If you're willing to put in a little time, you can compare HD to SD yourself and see how much you notice the difference: In iTunes on your computer, access the iTunes Store, switch to the Movies portion of the store, and find the "Free On iTunes" option (currently near the upper right in the Movies Quick Links list). Once you've found an HD video, download it, transfer it to your iPad, and view it. (Look for a title with a Free HD Movie button, or, browse the Podcasts directory and look for the "In HD" category.)

Then, to compare, select the iPad in the iTunes sidebar on your computer, go to the Summary tab, and enable the "Prefer standard definition videos" option. Sync again and view the video at SD quality.

## **Rent or Buy?**

To entice you to purchase a movie instead of rent it, Apple offers *iTunes Extras* (supplementary features, as you'd find on a DVD) that are available only if you buy the movie. However, they don't download or play on the iPad. To retrieve them, you must launch iTunes on your computer and choose Store > Check for Available Downloads. Then, watch the extras on the computer.

When you rent, you pay less, but be aware that a few strings are attached:

- After you rent the movie, you must watch it within 30 days. If you don't, it's automatically deleted.
- Once you begin watching a movie, regardless of how many days remain in the rental period, you have 24 hours before it's deleted.
   So, you can watch it as many times as you wish, or you can watch it in separate chunks, as long as it occurs within that 24 hour window.
- If you start watching a rental just before the expiration time, you can finish watching it in that session; it won't go *poof* in the middle of the movie. However, that means you must stay in the Videos app and watch the movie.

Those limitations apply to all iTunes Store rentals. Movies you rent on the iPad are bound by a few extra rules:

- HD rentals are often (but not exclusively) available on the iPad, but not in iTunes on a computer. If you're browsing on your computer and hope to view a movie in HD, look for text in the left column of the listing that reads, "Also available in HD on iPad and Apple TV."
- Movies you rent on the iPad—either HD or SD—can't be transferred to any other device. The problem isn't a technology limitation; it's the studios' licensing whims. Whenever possible, I rent a movie from iTunes on my computer, and then sync it to the iPad (although that often means I won't be able to watch it in HD), as I detail shortly ahead. Really, if I'm paying money for something, I should be able to view it when and where I want.

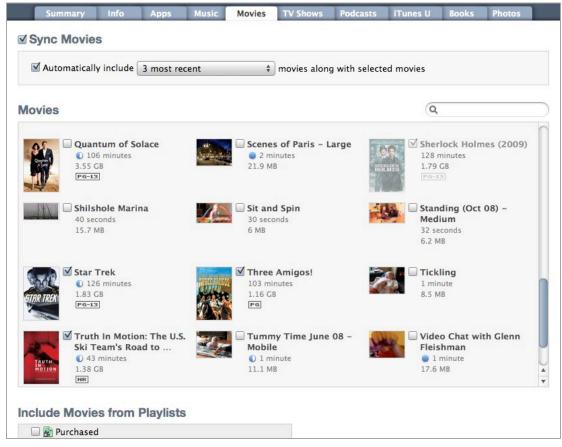
Rent vs. buy confusion: An aspect of the iTunes Store that regularly infuriates me is that some movies can only be rented, while others can only be purchased. Some can be rented approximately one month after they appear for purchase at the iTunes Store (often noted in the fine print in the left column of the movie's information). Some disappear. And those options can change at the whim of the studios. You need to view the movie's details in the iTunes app or on the computer to learn what options are available.

# **Sync Videos from iTunes**

Because Apple considers the iPad a satellite device orbiting a computer, you'll likely store videos in iTunes on your computer, ready to be copied to your iPad. I describe how to Add Videos to iTunes ahead, for now I'm assuming you already have videos in iTunes. The process of syncing movies, TV shows, and video podcasts is similar to that of syncing audio, but iTunes Store movie rentals get special treatment.

#### **Movies**

In iTunes on your computer, select your iPad in the sidebar and click the Movies tab. Make sure the Sync Movies checkbox is enabled and choose which movies to include by marking their checkboxes. The "Automatically include" pop-up menu will automatically copy movies for you, if you choose (**Figure 41**). The menu also includes options to sync everything (provided your iPad has enough free storage) or sync only unwatched items.



**Figure 41:** In this example, recent movies, such as Sherlock Holmes, are automatically synced to the iPad. Because the automatic option is controlling the syncing, its checkbox is dimmed.

Videos can appear in iTunes playlists, too. If you've created video playlists, you can enable them in the Include Movies from Playlists list.

#### Rentals

After you rent a movie in iTunes, a Rented Movies area appears at the top of the Movies pane (**Figure 42**).



**Figure 42:** I rented both movies in iTunes on the computer, and moved one to the iPad (on the right).

The twist with rentals is that a rented movie can appear on only one device, instead of copying like other video files. To transfer a rental to your iPad, do the following:

- 1. Select your iPad in the iTunes sidebar and click the Movies tab.
- 2. For the rental you wish to transfer, click the Move button.
- 3. Click the Apply button at the bottom of the iTunes window to initiate a sync and transfer the movie to the iPad. iTunes communicates the new location to Apple's servers, so you need an active Internet connection to make the transfer.

**Delete a rental from iTunes:** A rented movie on the iPad can be deleted within iTunes—click the Delete button that appears in the On "[iPad name]" pane, and then click the Apply button. I can think of only two reasons for doing so: to make room on the iPad for other (better?) movies; or, more likely, to manually delete a movie you've already watched instead of waiting for it to disappear on its own.

## **TV Shows and Podcasts**

The TV Shows and Podcasts tabs in iTunes work like the Movies tab that I just discussed, except that they enable you to choose which episodes to sync (**Figure 43**). Note that audio and video podcasts are not differentiated on the Podcasts tab.



Figure 43: Select a TV show to view and select available episodes.

## **Add Videos to iTunes**

Any compatible video file can be added to iTunes for transfer to the iPad. Do one of the following:

- Drag the file from the Desktop to the iTunes window, releasing it on the Library section of the sidebar.
- Choose File > Add to Library and locate the file.

**iPad video specifications:** Here's exactly what Apple lists as the requirements for video playback on the iPad, broken up with list formatting for your reading ease. Explaining it all could fill a Take Control book, so I don't feel bad about taking advantage of the presets in HandBrake or iMovie:

- H.264 video up to 720p, 30 frames per second, Main Profile level 3.1 with AAC-LC audio up to 160 Kbps, 48kHz, stereo audio in .m4v, .mp4, and .mov file formats
- MPEG-4 video, up to 2.5 Mbps, 640 by 480 pixels, 30 frames per second, Simple Profile with AAC-LC audio up to 160 Kbps, 48kHz, stereo audio in .m4v, .mp4, and .mov file formats
- Motion JPEG (M-JPEG) up to 35 Mbps, 1280 by 720 pixels, 30 frames per second, audio in ulaw, PCM stereo audio in .avi file format

## **Encode Videos from Your DVDs**

I know we're living in the future, where tapping a few buttons delivers a movie over the Internet, but there are still good reasons to stick with humdrum *physical* DVDs. For one, a DVD makes a good backup in the event of a hard drive crash or other calamity; movies take up a lot of storage on disk, so you may not want to include them in your normal backup system. (You *do* have a backup system, right?) Another reason is cost: New DVD releases of popular movies are often discounted when they appear, and also include DVD extras not available online.

Using a free program called HandBrake (http://handbrake.fr/), you can encode the video to a file on your computer. (Or, for an interesting alternative, read about Air Video and StreamToMe in From a Computer, ahead.)

# Is It Legal?

Technically, copying of a commercial DVD (also known as *ripping*) is illegal in the United States. However, there's a fair-use argument for creating digital versions of media you already own for your personal use. The Electronic Frontier Foundation provides more info about this topic at <a href="http://www.eff.org/IP/digitalvideo/">http://www.eff.org/IP/digitalvideo/</a>.

## **Encoder Helpers**

If you're encoding commercial DVDs (as opposed to DVDs of your home movies), you'll need an additional utility to bypass the discs' copy protection.

### Macintosh

The utility you use on the Mac depends on whether you download the 32-bit or 64-bit version of HandBrake. The 64-bit version can encode a bit faster than the 32-bit version—about 10 percent, according to HandBrake's developers.

For the 32-bit version, grab VLC (http://www.videolan.org/vlc/, free) and run the program only once; HandBrake can then decrypt the DVD by itself. Currently there is no 64-bit version of VLC, so if you use the 64-bit version of HandBrake, you need Fairmount (http://www.metakine.com/products/fairmount/, free). When you insert a DVD, it handles the decryption.

It sounds like a hassle, but it's not in practice. For the least amount of friction, download the 32-bit version of HandBrake and VLC.

### Windows

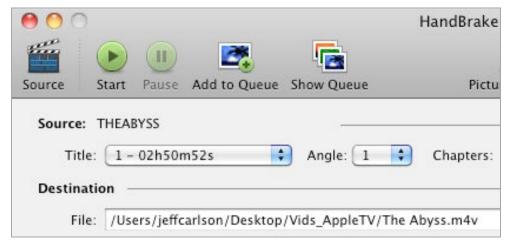
Under Windows, download DVD43 (http://www.dvd43.com/, free), which does the decrypting.

#### **Encode in HandBrake**

It's possible to geek out at a deep level with the advanced video encoding controls in HandBrake. Fortunately, the program also includes video presets that do the work for you. Here's how to rip a DVD in HandBrake:

1. Launch HandBrake and, optionally on the Mac, Fairmount.

- 2. Insert your DVD into the computer's optical drive. If you're using Fairmount, the utility will create a disk image and unmount (but not eject) the original disc.
- 3. In HandBrake, if an Open dialog isn't already showing, click the Source button.
- 4. Choose the name of the disc in the menu or dialog that appears, and then click Open.
  - HandBrake scans the disc to locate *titles* (the pieces that comprise the entire movie), and then chooses the first title, which is most likely the movie.
- 5. In the Title pop-up menu, look for a time listing that could match the movie (**Figure 44**). If the default that HandBrake chose doesn't look like the correct title, choose one from the pop-up menu.



**Figure 44:** The first title here is 2 hours, 52 minutes, 52 seconds, which is definitely the feature film.

- 6. Choose a destination for the ripped file by clicking the Browse button to the right of the File field.
- 7. Click the Toggle Presets button in the toolbar to view available presets in a shelf if it's not already available.
- 8. Select the AppleTV preset (**Figure 45**).



**Figure 45:** The presets in HandBrake circumvent the need to muck with a lot of video encoding settings (but if you want to tailor how your movies are encoded, the advanced controls are available).

9. Click the Start button in the toolbar to begin encoding.

Even on a powerful machine, video encoding takes time, so step away from the computer for an hour or so. When you return, the movie will be ready as a QuickTime .m4v file that can be added to iTunes. Flip back a few pages in this section for help with how to Add Videos to iTunes and Sync Videos from iTunes.

#### **Rip TV Shows**

If you purchase a television show on DVD, each disc usually contains a handful of episodes. You can use HandBrake to record them all as separate files by altering the steps above slightly:

- 1. In Step 5, above, locate the first episode on the disc based on the title track's duration (typically 20 minutes for a half-hour show, or 40 minutes for an hour-long show; it makes you realize just how many ads appear on regular television).
- 2. In the File field under Destination, enter a unique filename to indicate which episode it is.
- 3. Make sure the AppleTV preset is selected in the shelf.
- 4. Click the Add to Queue button.
- 5. Choose another episode from the Title pop-up menu, and repeat Steps 2 through 4 here to add them to the queue.
- 6. When you're ready to encode, click the Start button.

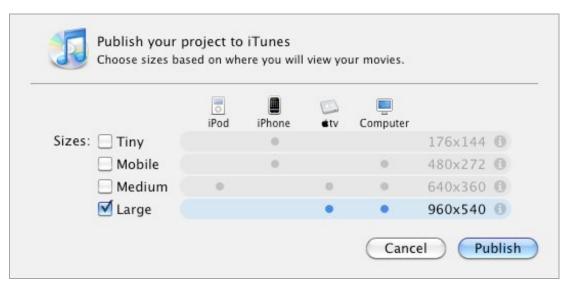
**Note:** Some commercial DVDs include a digital copy of the movie to discourage you from ripping your own copy. Often, you must insert a second "special features" disc to get the official digital copy, but the situation can be a little sneakier than that. The DVD release of the 2009 Star Trek movie, for example, includes a second disc, but the movie file isn't there: instead, you're taken to iTunes to download a free copy that can be played the iPad.

#### **Share Movies from iMovie**

Hollywood movies aren't the only videos you may want to store on your iPad. I recently had coffee with a friend I hadn't seen in over a year, and in addition to showing off photos of my daughter, I pulled up a short video of her I had edited in iMovie '09. My friend was amazed (and more determined to buy an iPad for herself soon).

Here are the steps to share a movie from iMovie to the iPad:

- 1. In the Project browser, select or open a project. If your project is in HD and you want to export that resolution, however, skip ahead to the next set of steps.
- 2. Choose Share > iTunes.
- 3. In the dialog that appears, mark the checkboxes for the sizes you wish to send to iTunes. Unless you're trying to conserve storage space, mark the Large option (**Figure 46**).



**Figure 46:** The highest resolution available is Large.

Your movie should now be available in iTunes for syncing to the iPad; flip back to Sync Videos from iTunes for details.

#### **Export HD Movies from iMovie**

iMovie '09 was designed before the iPad came out, so although the iPad can handle 720p HD video, iMovie doesn't know it. To take full advantage of HD footage you shot and edited, do the following:

- 1. Choose Share > Export Movie (Command-E).
- 2. In the dialog that appears, select the HD option under Sizes to Export.
- 3. Type a name for the exported file (if you want something other than the project title) and specify a location on disk where it will be saved.
- 4. Click the Export button.

You can now add the exported file to iTunes as described earlier, in Add Videos to iTunes.

#### **Not Just from iMovie**

Apple makes it easy to share videos from iMovie due to its tight integration with iTunes, which is why I'm using iMovie as the example here. But you can export a home movie from whichever software you're using, whether that's Final Cut or an older version of iMovie on the Mac, Windows Live Movie Maker under Windows, Adobe Premiere on either platform, or a host of others. Add the exported movie to iTunes, then use the steps described in Sync Videos from iTunes to copy it to the iPad.

## **Side-Load Videos into GoodReader**

The techniques I've discussed so far all revolve around iTunes, but you might want to put a video file on your iPad without going through an iTunes sync or you might want to use a third-party app to play a video. One of my favorite alternatives is via GoodReader for iPad, the PDF-reader-that-also-seems-to-do-everything-else. You can load files into GoodReader using iTunes or using a local wireless network. And you can do it on any computer with iTunes, not just the one to which you sync the iPad.

To load a video file into GoodReader using iTunes:

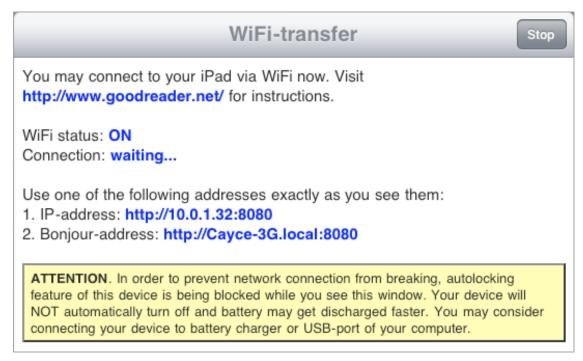
1. Connect the iPad to the computer and launch iTunes.

If the computer isn't the one you normally sync the iPad to, iTunes may ask if you want to erase it and set it to sync with that computer. **Be sure to click No.** 

- 2. Select the iPad in the iTunes sidebar.
- 3. Click the Apps tab.
- 4. In the File Sharing area at the bottom of the tab, select GoodReader in the Apps list.
- Drag the movie file to the Documents pane.iTunes copies the file directly to the iPad without syncing.

To transfer a video file into Good Reader using a wireless connection:

- 1. In GoodReader, tap the Wi-Fi connection so button.
- 2. Follow the instructions in the Wi-Fi Transfer dialog: open a Web browser on the computer and enter one of the Web addresses displayed (**Figure 47**).



**Figure 47:** GoodReader creates a local Web server that you can access from any computer on the network.

- 3. In the Web browser, go to "Select file to upload" and click the Choose File button.
- 4. Locate the movie file and click Select.
- 5. Click the Upload Selected File button.
- 6. GoodReader displays a message that the file transfer is in progress. When that message disappears, tap the Stop button to close the connection.

Applications on the iPad are "sandboxed," so the video can be played only within GoodReader, not in the Videos app. Tap the movie file in the My Documents column to play it.

**Not just GoodReader:** This capability exists because developers can tap into the iOS's features for playing supported media, so other apps (Air Sharing HD is another example) can also side-load videos. GoodReader just happens to be a great example.

# **Copy Videos from an SD Card**

Say you'll be away from home for a few weeks and want to take just the iPad—but it doesn't have enough free storage for all the movies you want to add. To solve this problem, copy the movie files to inexpensive SD memory cards and buy Apple's \$29 iPad Camera Connection Kit (http://store.apple.com/us/product/MC531ZM/A).

The kit includes two adapters that plug into the iPad's dock connector port; one adapter accepts a USB cable and the other accepts SD cards. They're designed to import digital photos and videos directly from a camera or an SD card. You can't watch a video file directly from the memory card, but you can copy it to the iPad's photo library and watch it there.

Not all formats will play: I discovered I could import clips from a Flip MinoHD video recorder to the iPad using the USB connector module of the kit, but couldn't play them on the iPad. Movies purchased from the iTunes Store, which are wrapped in Apple's FairPlay digital rights management scheme, also won't play using the following method; those must be synced via iTunes. To take advantage of this capability, start by copying video files from your computer to the SC card:

- 1. On your computer, copy the files to the DCIM folder on the SD card. (If that folder doesn't exist, create it.)
- 2. Eject the card from the computer.

When you want to watch a video file on the iPad, follow these steps to import it and play it in the Photos app:

1. Attach the SD connector module to the iPad, and insert the card into the SD connector.

The Photos app open in the Camera pane.

2. Tap to select the video you want to watch (**Figure 48**).



Figure 48: Select a movie stored on the SD card to import.

- 3. Tap the Import button, and then tap the Import Selected option that appears.
- 4. After the video copies, you're asked if you'd like to delete it from the memory card; tap the Keep button (unless you do want to delete it).
- 5. In the Photos app, find the imported video in the Last Import collection under the Albums pane (as well as the Events pane if you normally sync the iPad's photos with iPhoto). The movie stays in the Photos app, not in the Videos app. Tap its icon to start playing it.

After you've watched a movie, you can delete it from the iPad by tapping the Trash button at the right of the toolbar. Then load another movie from the SD memory card and watch that at your leisure.

## **USE THE VIDEOS APP**

After all this preparation to put videos onto the iPad, it feels anticlimactic to reveal the simple controls for playing them—but isn't that the point? You want to focus on the video, not the buttons and options.

#### Watch a Video

For the most part, videos on the iPad share the same playback controls regardless of which app you're using. Usually the biggest difference is how to you get to the videos, whether that's through a list of collected files, like in GoodReader, or thumbnails of available movies, as in the Videos app. I'm using the Videos app as the most obvious example.

Follow these steps to play a video:

1. Find your video by tapping a category button at the top of the screen (**Figure 49**); a button appears only when there is content for it, so, for example, the Rentals button is gone if you have no rentals on the iPad.

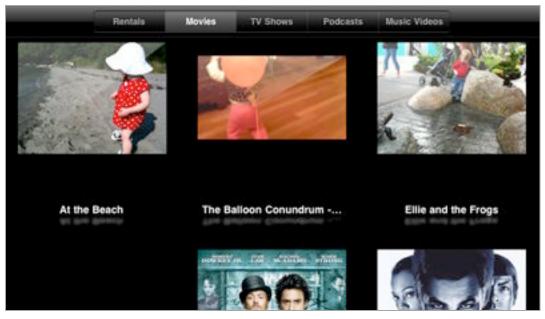


Figure 49: Movies in the Videos app appear as thumbnails.

- 2. Tap a video's thumbnail image to view more information about it:
  - If a video includes chapters, tapping the Chapters button reveals the sections (**Figure 50**); tap one to begin playing it.



**Figure 50:** Commercial movies break the running time into chapters that you can jump to quickly.

- In the case of TV shows and podcasts, the information screen lists the episodes available.
- 3. To begin playing a movie, tap the Play button or tap the name of a TV show or podcast episode.

The video takes over the entire screen and begins playing. The play-back controls appear briefly and then disappear out of the way. Tap the screen to reveal them (**Figure 51**, slightly ahead).

Here's how the playback controls work:

- Play/Pause: Tap the familiar triangle icon to play, or tap the double-bar icon to pause playback.
- **Fast forward and rewind:** Touch and hold either button to advance or rewind through the video at increased speed.

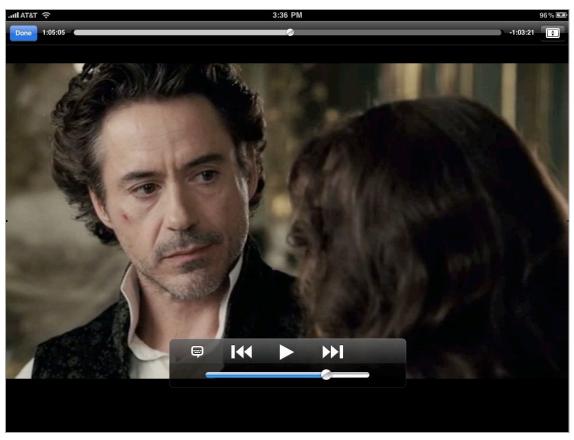
Tapping either button once jumps between chapters, if available.

**Tip:** If you're using an iPhone headset (or one with similar features), double-press the headset button to go to the next chapter.

- **Volume:** Drag the slider beneath the controls to change the volume (or use the physical volume control on the iPad's case).
- **Scrub:** The scrubber bar at the top of the screen indicates how far along you are in a video. Go to any section of the video by dragging the playhead along the slider.

As with audio files (see Control Audio Playback), the slider is clever and can scrub at different rates. Tap the scrubber bar and drag your finger *down* to adjust the speed of the scrubbing; then, drag your finger left or right to scrub at that speed (for example, to scrub ahead, drag down and then right, making an L shape).

- **Fill the screen:** Tap the Fullscreen button to switch between viewing widescreen video in its original aspect ratio (which leaves black bars above and below the image) and filling the screen (which cuts off the left and right edges of the video). Or, double-tap the screen to toggle between fullscreen and widescreen modes.
- Choose a language: If these options are available, tap the Language button to activate them.
- **Done:** Tap Done to exit the player and return to your library.



**Figure 51:** The playback controls, fortunately, disappear after a few seconds.

#### **Keeping Your Place**

The Videos app keeps track of where you stop watching a movie if you exit the app, so that when you return to it later, playback resumes from that point. That information also syncs to iTunes and other compatible devices, allowing you to start watching a movie on the iPad and finish watching it on an Apple TV or your computer, for instance. If you prefer to disable this behavior, go to Settings > Video > Start Playing, and tap From Beginning.

#### Remove a Video

If you're syncing videos from iTunes, the easiest way to remove a video from the Videos app is to not copy it during a sync operation by unchecking its checkbox on the appropriate tab in iTunes (see Sync Videos from iTunes, earlier).

Occasionally, however, you may want to delete a movie from the Videos app directly:

- For a movie: Tap and hold a movie's thumbnail until you see an X button appear in the upper-left. Tap that and then confirm in the dialog that appears that you want to delete the movie.
- For an episode of a TV show or podcast: View the list of episodes and then swipe left or right over the description of the one you wish to remove (**Figure 52**). Tap the Delete button that appears, and then tap Delete in the confirmation dialog.

Warning! If you delete a video rented or purchased on the iPad, it's gone; you would need to rent or purchase it again to watch it.



**Figure 52:** You can delete TV show episodes individually.

Note that deleting a video on the iPad *doesn't sync the deletion back to iTunes*—in fact, the next time you sync you'll discover the video has reappeared if you don't delete or disable the item in iTunes.

# **Output to a Television**

I once visited my father with a fully loaded Apple TV so we could watch movies on his new high-definition television. Now, I can do the same thing with less bulk using an iPad and a set of special cables.

The iPad supports limited video-out capability. The built-in Videos, Photos, and YouTube apps can play video on an external display, Apple's Keynote app can output a presentation, and some third-party developers have added video-out support to their iPad apps. The oftmentioned GoodReader for iPad, for example, supports video out. However, video-out doesn't kick in until an app activates the mode, for instance, when you tap Play in the Videos app.

The cables required for this feat are available from Apple, and depend on the connections available on your television:

• Apple Component AV Cable: For connecting to an HD television, this is my favorite option. The red, green, and blue cables deliver a digital signal that includes HDCP encryption data from movies bought or rented from the iTunes Store. HDCP is designed to prevent you from watching content on devices that don't include corresponding decryption hardware—in other words, it's an effort to reduce piracy. The Component AV Cable includes two audio cables in addition to the three video cables, all of which are wrapped up and end in a 30-pin dock connector that plugs into the iPad.

This cable also includes a USB power adapter to charge the iPad, which can be handy even when you're not watching television (http://store.apple.com/us/product/MB128LL/B, \$49).

The cables won't transfer full HD: Although you can watch 720p HD video on the iPad, you can't watch the same quality through the adapter cables. According to the iPad technical specs, the Apple Component AV Cable offers 576p (usually 720 by 576 pixels) and 480p (usually 640 x 480); the Composite kit handles 576i and 480i (the same resolutions, but interlaced—every other horizontal line is drawn per frame—instead of progressive—each frame entirely refreshes).

- **Apple Composite AV Cable:** The Composite AV Cable plugs into most older—or non-HD—televisions, and includes a single yellow video cable and two (red and white) audio cables. Because composite cables send analog signals, you can't view protected movies from the iTunes Store on a television with this kit. It also includes a USB power adapter (http://store.apple.com/us/product/MB129LL/B, \$49).
- **Apple iPad Dock Connector to VGA Adapter:** This adapter features a 30-pin dock connector at one end and a female VGA connector at the other (http://store.apple.com/us/product/MC552ZM/A, \$29).

Making video-out work is actually pretty simple:

- 1. Go to Settings > Video and check that the TV Signal preference matches your television (NTSC or PAL). If your videos are widescreen, make sure the Widescreen option is turned on to avoid unwanted image cropping or stretching.
- 2. Connect the cable between the television and the iPad.
- 3. Launch the Videos app and begin playing the video; it will appear on the television.

# **STREAM VIDEO**

Given the iPad's powerful processor and strength at playing video, I assumed it would be like the Apple TV and stream audio or video from any computer running iTunes on a local network. I was wrong. Instead, with the Videos app, you're shackled by the need to physically connect it to a computer and sync the content you want to watch. If you're a fan of movies and you purchased a 16 GB iPad, you quickly realize that there isn't much free space for all that media.

So imagine my joy when I learned that third-party developers had already provided the feature I wanted. Even better, video streaming isn't limited to your local network: with sufficient bandwidth, you can watch a feature film from Netflix (in the United States) or an ABC television episode, without having to first download a file to the iPad.

# From a Computer

I own a couple dozen movies on DVD, flicks that I've received as gifts and some favorites that I could watch over and over. That collection also includes a few movies my daughter likes (*The Many Adventures of Winnie-the-Pooh* is a current favorite). I've digitized the movies (using the steps in Encode Videos from Your DVDs), and I store the electronic copies on a Mac mini that acts as my home media server.

When I want to watch one of these movies at home, I can do it on my iPad anywhere using Air Video (Matej Knopp, \$2.99) or StreamToMe (Matthew Gallagher, \$2.99).

I use Air Video, which requires the free Air Video Server application running on the computer from which I stream my videos. I set my iTunes Movies folder as the source material, but you can specify any folders. You can also run the Air Video Server on several machines.

Watching a movie involves a few short steps:

- 1. On the iPad, launch the Air Video app.
- 2. In the Servers list at the left, tap the name of the computer on which the server software is running.
- 3. Tap the name of the movie you want to watch (Figure 53).



**Figure 53:** Air Video lets you stream movies that are stored elsewhere on your local network.

4. Tap the Play button. To view the movie full-screen, pinch outward on the movie or tap the Full Screen button in the lower-right corner.

Air Video can play movies that aren't encoded for the iPad. When viewing the movie's information and preview, tap the Convert button to create a compatible version, or, if the host computer has the horse-power, tap the Play with Live Conversion button to encode it on the fly. StreamToMe also handles any conversion automatically, if necessary.

**Internet streaming:** Air Video and StreamToMe can also stream movies over the Internet, provided the server is behind a router that supports UPnP or NAT-PMP. Consult the developers' Web sites for more information.

## From the Internet

The iPad has many options for streaming video from the Internet. Let's look at a few possibilities.

#### YouTube

The iPad includes a dedicated YouTube app that streams videos from the sharing service directly, without the need for a Web browser. I admit that on the iPhone, I simply ignored it. On the iPad, however, the YouTube app is more enjoyable to use. The increased screen real estate makes browsing for clips easier, for example, letting me see up to 12 videos that I've marked as favorites. (My enthusiasm could also be due to the fact that my 2-year-old daughter sometimes asks me to play the "I want cake" song, or anything by Caspar Babypants.)

When you encounter a YouTube video embedded on a Web page, chances are it will open and play within the frame just like any other video, using the same playback controls I've already discussed (including the option to view the movie full screen). I say "chances are" because not all videos on YouTube have been converted from Flash format, which the iPad does not support, to H.264 encoding. If that's the case, the app will notify you that it cannot play the file.

**Note:** While this book was in production, YouTube debuted an alternative to Apple's YouTube app in the form of a mobile Web site at <a href="http://m.youtube.com/">http://m.youtube.com/</a>. On the site, tap a playing video to access the playback controls and position the iPad in portrait orientation for the largest image.

#### **Netflix**

Shortly before the iPad was released, Netflix announced that it would release an app that let subscribers (in the United States) stream movies directly to the iPad over the Internet. Unfortunately, the company made the announcement on April 1, leading many people to believe it was just a hoax. Movies instantly streamed to the iPad? Surely, that was too good to be real.

But when the iPad did appear, there was the Netflix app. For as little as \$8.99 per month, subscribers can stream as many movies and TV show episodes as they want. The selection of streamed movies doesn't match the latest movie releases, but it's great if you want to watch a movie and don't want to wait for the entire file to download, or if you want to catch up on a television series. The app adjusts video quality based on the speed of the network connection, so you'll see a higher quality picture on a fast Internet service over a Wi-Fi connection.

Watch that bandwidth! To get a sense of how far 250 MB of data would go on my 3G iPad (that's the least expensive AT&T data plan for the iPad, I fired up the Netflix app and started streaming video over 3G. It took a little more than 1 hour to deplete my quota (and \$15!). iPad owners who paid \$29.99 for AT&T's unlimited data plan wouldn't need to worry about bandwidth, so long as they continue to renew it faithfully.

The TV network ABC also offers streaming. The free ABC Player app streams episodes of its TV shows (with commercials, but fewer than what you'd encounter during a network broadcast) (**Figure 54**).

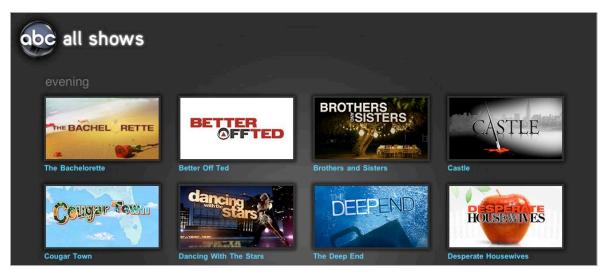


Figure 54: ABC streams full episodes of many of its shows for free.

#### Safari

Many Web sites include videos that can be played directly within Safari. Look for a large Play button in the center of the video's frame to indicate that Safari can handle it (**Figure 55**).

The iPad and Adobe Flash: The iPad doesn't support Adobe's Flash technology, which is widely used on the Web for video. The reasons are too complex to go into here, but the result is that you may frequently hit a site where the video won't play. The popularity of the iPad and technical stumbles with Flash by Adobe are prompting publishers to serve videos in other formats that are friendly to the iPad.



**Figure 55:** This movie, found at the *New York Times* Web site, can be played within Safari on the iPad.

Tap the Play button to start playing a movie, which offers a condensed set of onscreen controls (**Figure 56**). In addition to Play/Pause and a scrubber bar, the video player includes a Fullscreen button to view the movie larger (without exiting Safari). The normal playback controls appear when you tap the screen in fullscreen mode.

**Pinch to zoom:** Pinch outward on a Web movie to expand it to fullscreen mode, or pinch inward to put the video back into its box.

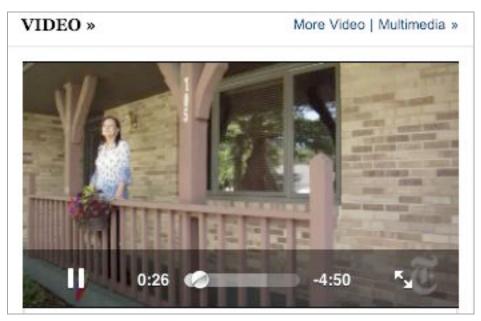


Figure 56: Movies playing in Safari have minimal controls.

# View Photos

The shift from shooting photos on film to shooting them digitally happened much faster than most people anticipated. As a result, the means to display digital photos is still largely relegated to viewing them on a computer or on a phone—the latter can be acceptable, but is nonetheless constrained by the small screen.

The iPad seems as if it were designed for digital photos. The large, high-resolution screen is great for showing off albums, playing slide-shows, presenting a portfolio, or even using the iPad as a digital picture frame. Combined with Apple's iPad Camera Connection Kit, the iPad can also store photos directly from a camera.

# **PUT PHOTOS ON THE iPAD**

iTunes, not surprisingly, acts as the main gateway to copying photos to the iPad. But photos are often widely shared among people, leading to several ways to get them onto the iPad:

- Transfer Photos Using iTunes: Use iTunes to specify compatible photo-organizing software, like iPhoto or Photoshop Elements for Windows, to choose and sync photos.
- Email: Email photos to yourself, or receive photos as email attachments from others, and save them to the Photos app.
- Save in Safari: Copy an image in Safari (or other apps) to the Photos app.
- Import Photos and Videos Directly: Copy them directly to the iPad from a digital camera or SD memory card using Apple's iPad Camera Connection Kit.

# **Transfer Photos Using iTunes**

Unlike the way iTunes handles music, videos, and books, the catch-all application leaves the task of organizing photos to other software. On the Mac, iTunes can sync with iPhoto 4.0.3 or later or Aperture 3.0.2 or later. Under Windows, it recognizes photo libraries in Photoshop Elements 3.0 or later. And within both environments, you can alternatively sync photos from a folder (and its subfolders) on disk.

**Tip:** In any of the supported photo organizing applications, create a smart album that includes your highest-ranked photos and sync it to the iPad to make an instant portfolio of your best work.

Here's how to sync albums to the iPad:

- 1. Open iTunes and connect your iPad.
- 2. Select the iPad in the sidebar.
- 3. Click the Photos tab.
- 4. Enable the "Sync photos from" checkbox and then, from the pop-up menu associated with the checkbox, choose one of the following options:
  - Your photo application: iPhoto or Aperture on the Mac, or Adobe Photoshop Elements under Windows.
  - A folder on your hard disk: select the Choose Folder item and navigate to a folder containing photos.
- 5. Now select which photos you want to copy:
  - To copy all available photos, select "All photos and albums" (or similar, depending on the software you're syncing).
  - To copy only some photos, select "Selected albums..." and enable the albums you want to add. If you're syncing with iPhoto or Aperture, you can also specify events and faces to broaden the criteria of what to include (**Figure 57**). (If you're using a folder as a source, this option becomes "Selected folders," referring to sub-folders within the source folder you chose.)



**Figure 57:** Choose which photos appear on the iPad by selecting Albums and, in the case of iPhoto or Aperture, events and faces.

**iTunes Faces bug?** You can't choose to hide all Faces on the iPad. In iTunes 9.2, if any photos that have been tagged with Faces are included in an album or event—even if you chose no people in the Faces pane—the Faces entries for them appear on the iPad.

- 6. If you want to include videos shot with a digital camera that are stored in your photo library, enable the "Include videos" checkbox; iTunes ignores them otherwise.
- 7. Click the Apply button to sync the iPad and transfer the photos (and jump to Use the Photos App).

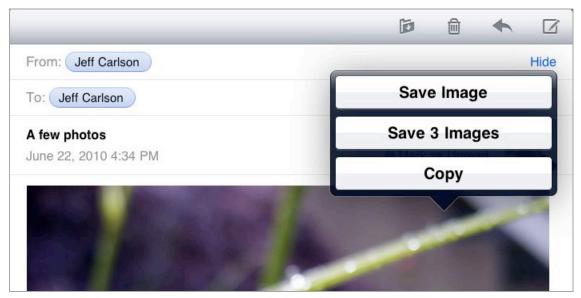
## **iTunes Photo Optimization Explained**

During a sync, iTunes "optimizes" photos before copying them to the iPad, which means they're resized and converted so the original high-resolution versions don't slow performance in the Photos app. Photos are resized to 1536 pixels on the shortest side (so, a horizontal picture could be something like 2048 pixels wide by 1536 pixels tall, while a vertical shot would be 1536 pixels wide and 2048 pixels tall). Images are also converted to JPEG files, which compresses the image data without noticeable degradation of detail.

#### **Email**

I often receive photos from friends via email. It's not the best or most reliable way to send images—large attachments can trigger spam filters and overwhelm some people's account storage quotas—but email is often the method that involves the least amount of friction.

When you receive a message with an attached image in the Mail app, touch and hold on the image to bring up a popover (**Figure 58**) with the following options:



**Figure 58:** Touch and hold on an attachment to view options for saving or copying it.

- Tap Save Image to save the photo to the Saved Photos album in the Photos app.
- If more than one photo is included in the message, tap Save [number] Images to grab them all and save them in the Photos app.
- Tap Copy to copy the image to the iPad's Clipboard for pasting elsewhere.

#### Save in Safari

Saving an image on a Web site works the same as grabbing one from email: touch and hold the image you want, and tap Save Image or Copy from the popover that appears.

I want to highlight two important points about Web images:

- Most Web photos are screen resolution, or 72 pixels per inch, and therefore won't reproduce well. If you're viewing a photo site such as Flickr, for example, look for an option to view a larger-size version with much better resolution.
- Only grab photos that you have the legal rights to use.

**Tip:** Looking for stock photos or images for research? Connected Flow's Viewfinder for iPad (which was not yet available when this book went into production) can search Flickr for photos, with the capability to filter images that have Creative Commons licenses for use. (A Macintosh version of the software is available at <a href="http://www.connectedflow.com/">http://www.connectedflow.com/</a>, £18).

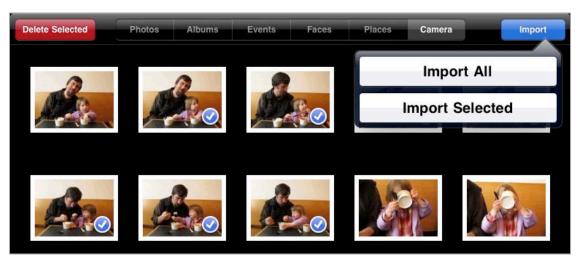
# **Import Photos and Videos Directly**

The iPad's high-quality display makes the iPad a good, lightweight field monitor for reviewing photos and videos you've captured on your camera—better than the camera's comparatively tiny LCD, and smaller than a laptop. Using Apple's \$29 iPad Camera Connection Kit (http://store.apple.com/us/product/MC531ZM/A), you can import photos and videos to the iPad. A sufficiently high-capacity iPad can also serve as temporary storage or backup (even Raw-formatted images).

With a camera full of images and the iPad Camera Connection Kit in hand, follow these steps:

- 1. Insert the camera's SD card into the SD card adapter, or connect a USB cable between the camera and the USB adapter.
- 2. Unlock the iPad if it's currently asleep, and plug the adapter into the iPad's dock connector. After a few seconds, the Photos app launches, and a new Camera button appears on the tab bar at the top of the screen. Thumbnails of the available photos and video clips appear below.
- 3. Now, do one of the following:
  - To copy all of the items to the iPad, tap the Import All button.

• To be more selective, tap the items you wish to import; a blue checkmark symbol indicates the item is queued for import. Once you've made your selections, tap the Import button; the app gives you one last chance to import all items, or you can import just the selected ones (**Figure 59**).



**Figure 59:** Import all photos on a memory card or from a camera, or import only selected ones.

Importing and duplicates: The Photos app notices if you connect a camera or memory card that includes previously imported images; they appear with the green checkmark icon. You can reimport a photo by tapping it again, which brands it with a blue checkmark icon. It will be transferred again, overwriting the one previously imported, when you tap the Import button.

4. After the transfer is complete, you're asked if you want to delete the imported items from the camera or keep them. Tap the Keep button—it's usually better to format memory cards within the camera instead.

The photos and videos are found in two new albums: All Imported and Last Import (which shows just the most recent imported images).

**Tip:** Import photos and videos shot with an iPhone directly to the iPad by plugging the dock connector cable into the USB adapter and stringing them between the iPhone and iPad. (Unfortunately, the iPhone can't be charged this way, as would happen when connected to a computer.)

#### **Handle Raw Files**

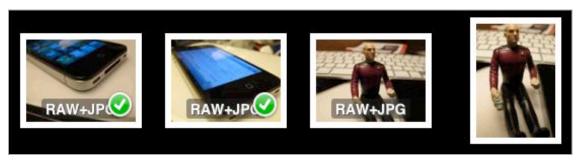
Many cameras can shoot in *Raw format*, which is the unedited image data that is recorded from the camera's sensor. Raw gives you more data and greater latitude when editing the photos later, but there are many Raw formats (not just between manufacturers, but among different models, even from the same company). In contrast, most cameras apply some color boost and sharpening before saving in the compressed, but widely supported, JPEG format.

The iPad can read and display Raw files thanks to a clever trick: the image you see of a Raw file imported into the Photos app is the JPEG thumbnail that the camera created for displaying on its LCD.

The Photos app was designed as a viewing platform, so this situation works fine. Typically, you'll use the iPad as a temporary storage pen for Raw files until you can offload them to a computer. You don't want to keep the Raw files there indefinitely, though, because they occupy so much more space than JPEG files.

You may also want to use photos in other apps such as Pages or Keynote, which can access images from the Photos app's library. Other apps, like Photogene for iPad (Omer Shoor, \$3.99), can edit photos like Adobe Photoshop. Although serious pixel-manipulation should be handled in Photoshop on a computer, the editing apps for the iPad are great for making mockups or for having fun with kids. But if that's the case, do you want to use the preview the camera generated?

Instead, if your camera supports it, shoot in Raw+JPG mode. The camera saves two versions of every shot, the original Raw file and a JPEG version. When importing to the iPad, one thumbnail represents both versions, and includes a RAW+JPG label (**Figure 60**).



**Figure 60:** Photos shot as Raw+JPG are labeled at import, and appear as one image, even though both files—Raw and JPEG—are present. The photo on the far right was shot in Raw mode.

When it's time to transfer images from the iPad to the computer, the files appear individually (**Figure 61**). Import just the Raw versions and delete them from the iPad's storage, leaving the JPEG versions on the device for viewing or incorporating into other apps' projects.



**Figure 61:** In the Image Capture utility on the Mac, the Raw (.CR2) and JPEG (.JPG) versions of a photo appear separately.

#### **Move Photos from the iPad to the Computer**

iTunes doesn't provide a method for moving stored photos from the iPad to your photo-organizing software, but your photo software (like iPhoto) should recognize the iPad as a USB storage device and let you import photos as if you'd just plugged in the camera or its memory card.

# **USE THE PHOTOS APP**

The Photos app, more so than the other built-in apps, is a good showcase for using multi-touch gestures on the iPad. Instead of just tap-tap-tapping on boxes, you can preview albums with a pinch, in addition to swiping to view different photos.

Launch the Photos app to view photos and videos you've synchronized with your computer (consult Transfer Photos Using iTunes, a few pages earlier) or those you've imported from other sources.

#### **View Photos and Videos**

The app provides several ways to locate the photos you want to view, depending on how you've synced the software with your computer. In the main Photos app screen, the following buttons may appear in the toolbar at the top of the screen:

- **Photos:** This view shows thumbnails of all the photos in the library, seemingly arranged in no particular order.
- **Albums:** In this default view for the Photos app, each album appears as a stack of thumbnails. Tap on an album to view its contents; the album's photo thumbnails fill the screen.

However, you can also preview the pictures in an album (or any stack in the Events or Faces views) without opening it entirely. Touch an album with two fingers and pinch outward (**Figure 62**). Thumbnail icons of the photos spread apart as you drag your fingers, until the thumbnails occupy the entire screen. If you don't see the photo you're looking for, pinch inward to return the album to its stacked state.



**Figure 62:** In this example, I've pinched outward on the Quite Decent album (left), which expands to preview the photos included in the album (right).

**Pinch me:** When an album is expanded—in fact, even when you're viewing a photo full screen—pinching inward collapses the thumbnails and returns you to the Albums screen. I find myself doing this more often that tapping the Back button, because my hands are typically already in the middle of the screen while I review photos.

- **Events:** The Events button appears when you sync with iPhoto or Aperture, or when you import photos from a camera or memory card.
- **Faces:** In iPhoto and Aperture, the Faces feature scans your images for people's faces, and lets you identify them. If the feature is active, the Faces button automatically appears. Tap or expand a person's face thumbnail to view pictures in which they appear.
- **Places:** This option appears whenever a photo includes geographic location information. Tap a red pin to view photos associated with that location (**Figure 63**).



**Figure 63:** Several of my photos include location information, because they were shot with my iPhone, which can automatically append that data.

To view a single photo or movie, tap its icon. You can rotate the device to match a photo's vertical or horizontal orientation—the app resizes images to best fit within the screen (**Figure 64**).



Figure 64: Viewing a photo in the horizontal orientation.

While you're pondering the beauty of the photo or movie you chose, take note of the actions you can take:

- Tap once to make the onscreen controls appear or disappear.
- Go to the previous or next item by swiping left (previous) or right (next) with one finger.
- Double-tap the screen to zoom in on a portion of a photo; you can then drag with one finger to make other areas of the photo visible. Double-tap again to view the entire image within the screen.
- Expand two fingers to zoom in (even further than the amount provided by the double-tap), or pinch to zoom out.
- Tap the Send To button for more options.

Items you've imported gain a couple of other controls:

• Tap the Trash button to delete a saved or imported item (photos you've transferred from your computer can't be deleted here); tap the Delete Photo or Delete Video button to confirm your choice, or tap Cancel.

• Tap the Rotate button to turn the photo 90 degrees counterclockwise to compensate if the orientation was not honored during import. (You may need to click the button repeatedly if the image needs to be rotated 180 or 270 degrees.)

# **Play and Trim Imported Video**

To play a movie shot on a digital camera and then imported, open it from an album and tap the large Play button that appears in the center. You can also tap the Play button in the toolbar.

**Two play or not to play:** Yes, you read that correctly—there are two Play buttons. The large Play ▶ button appears only when you first open the video; after you start playing a movie, it disappears. If you pause the video, you need to tap the toolbar's Play ▶ button to start playing again.

The Photos app does more than just play these videos, however. You can *trim* unwanted sections from the beginning and end of a clip. This feature was designed with the assumption for times when you want to quickly share a video and want to avoid importing the footage into a video editor and working with it there. Here's how to trim a clip so you upload only the best part:

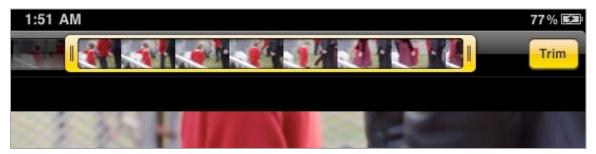
- 1. Tap a video to edit it. The frame viewer, a strip of thumbnail images from the movie, appears at the top of the screen, with a playhead indicating the current frame of the video.
- 2. Tap and drag the playhead to jump to any part of the clip (**Figure 65**). It's helpful to get a sense of where you want the new starting or stopping point of the movie.



**Figure 65:** Drag the playhead (the silver bar in the middle of the frame viewer) to view portions of the movie.

**Tip:** The entire movie is visible in the frame viewer normally, but if you tap and hold the playhead or one of the trim handles, the viewer zooms to display more frames, pushing the visible edges of the viewer off the screen.

3. Tap and drag the left and right edges of the frame viewer to select the portion of the video you want to keep. A yellow border appears along with a Trim button (**Figure 66**).



**Figure 66:** Portions of the video outside the yellow selection are deleted when you tap the Trim button.

**Tip:** Touch and hold the playhead or one of the edges of the frame viewer, and drag your finger *down* and out of the way. You can then drag the item left and right, but your finger doesn't obscure the viewer.

- 4. Tap the Trim button to delete the video outside the selection.
- 5. Tap Save as New Clip. You'll find the new version in the All Imported album; the original video remains untouched.

## Play a Slideshow

When she gets older, my daughter will never believe that people carried printed photos in their wallets. Why haul that paper when you can store hundreds of photos on an iPad and view them in a slideshow?

In the Photos app, set up and play a slideshow by doing the following:

1. Tap an album to open it and then tap the Slideshow button to bring up the Slideshow Options popover (**Figure 67**).



Figure 67: Set the options before running the slideshow.

- 2. Customize how the slideshow appears:
  - Slide the Play Music switch to On if you want music to play during the show.
  - Tap the Music button to choose a song from your music library.

One song, really? Before you plan an elaborate playlist to coincide with your images, note that you can currently play just one song in a slideshow. I'm sure this must be a bug in the initial release of the iPad's software—otherwise the feature is nearly useless. Even worse, the song automatically repeats until the slideshow ends.

- Select a transition type.
- 3. Tap the Start Slideshow button. To stop playback, tap the screen.

#### View a Slideshow on a Television

With the addition of the appropriate video adapter cables, you can display a photo slideshow on a television or computer monitor (see Output to a Television). The signal activates when you begin the slideshow, and the only transition available is Dissolve. Still, it's a great way to show off photos to a group of people.

Additional controls for slideshow playback appear in the Photos portion of the Settings app:

- **Play Each Slide For:** Choose the length of time each photo remains onscreen—2, 3, 5, 10, or 20 seconds. (3 seconds is the default.)
- **Repeat:** Turn this option on to replay the slideshow from the beginning automatically.
- **Shuffle:** Enable this option to display the photos in a random order.

## **Delete Multiple Photos or Videos**

When you want to delete more than one imported item, there's an easier method than tapping the Trash button for each one. Do the following:

- 1. Tap the Saved Photos, Last Import, or All Imported album to open it.
- 2. Tap the Send To 🖾 button.
- 3. Tap to select the items you want to delete (**Figure 68**); a blue checkmark appears on each selected thumbnail.



Figure 68: Delete (or copy) several items in a batch.

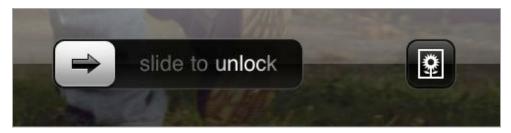
4. Tap the Delete button (which also shows the number of items selected), then tap the Delete Selected Items button to remove them.

#### **USE THE IPAD AS A PHOTO FRAME**

A few years ago, the must-buy holiday gift was a digital picture frame. What's the point of having all of our digital photos sitting unviewed in folders on hard disks? The quality of the picture frames varied widely, as expected, and it was often difficult to get photos onto them. Their popularity has waned significantly—I don't know anyone with a frame that still has it turned on.

But the core idea still has merit, which is why the iPad can also be used as a picture frame—but in this case, a picture frame that has many more uses.

To activate the frame, wake the iPad from sleep and tap the Picture Frame button located to the right of the unlock slider on the lock screen (**Figure 69**). A slideshow begins immediately (and the iPad remains locked).



**Figure 69:** The Picture Frame button at right appears only on the lock screen.

A few options are available in the Settings app for controlling the playback. Tap the Picture Frame item and manage the following options:

- **Transition:** Only two transitions are available: Dissolve, the traditional smooth fade between images, and Origami, a clever appearance of endlessly folding paper. Tap a transition to select it.
- **Zoom in on Faces:** If Dissolve is the selected transition, you can opt to see just people's faces when their photos appear. Personally, I find this option annoying, because more often a zoomed-in face is

blurry compared to the rest of an image. Tap the switch to turn the feature on or off.

- **Shuffle:** Display the photos in random order by switching this option to On.
- **Source:** In the next section of preferences, choose whether you want to view all photos or specific albums. Faces and events also appear if you sync with iPhoto or Aperture.

After you've chosen your source, tap to select which albums, faces, or places to include.

To exit Picture Frame mode, tap the screen or the Home button and either press the Picture Frame button again, or move the unlock slider.

#### SHARE PHOTOS AND VIDEOS

After you've shot a good photo or video, you can share it directly from your iPad via email or MobileMe. The sharing interface also enables you to delete several photos or videos at once.

#### Share a Photo or Video

When you're viewing a photo or video in the Photos app, tap the Send To button to bring up a menu containing the following options (the text, of course, depends on whether you're sharing a photo or video):

• **Email Photo/Email Video:** Tap this button to create a new outgoing email message with the photo or video attached. Enter a recipient, title, and optional text in the message body and then tap the Send button.

**Email to online services:** The Photos app does not support uploading photos to services other than MobileMe, but you can still publish to sites like Flickr or Smugmug. Tap Email Photo and send the message to the email address provided by your service to publish a photo.

• **Send to MobileMe:** If you're a MobileMe subscriber, tap this button to upload the photo to your MobileMe Gallery. Enter a title and optional description, then tap the name of one of your existing albums. Tap the Publish button to upload the image. When the

upload finishes, the software provides you with some options (**Figure 70**): View on MobileMe, which opens the image in Safari; and Tell a Friend, which creates a new outgoing email message containing a link to the photo on the Web.



Figure 70: Photo shared directly to MobileMe from Photos.

**Raw deal for MobileMe:** The Photos app will not publish imported Raw images. However, for photos shot as Raw + JPG, the JPEG version uploads fine (see <u>Handle Raw Files</u>).

- **Send to YouTube:** If you are sharing a video, you can upload it directly to YouTube.
- **Assign to Contact:** Tap this button to use the photo as the image for a person's information in the Contacts app.
- Use as Wallpaper: Tap this button to make the photo appear as the background image for the Lock screen, the Home screen, or both.
- **Copy Photo/Copy Video:** Copy the image or video to the iPad's Clipboard for pasting elsewhere.

**Note:** These are the most convenient options for sharing photos, but they compromise image quality in favor of smaller file sizes. See Share Better-Quality Photos and Videos, shortly ahead.

# **Share Multiple Items**

You can share several items at once from the Photos app—though only via email. Tap the Send To button and then tap the photos or videos you want to send. You can share only photos *or* videos, however, not a mix of the two types.

**Note:** Sharing multiple items using this technique doesn't retain the original filenames. For example, shared photos are titled photo\_1.JPG, photo\_2.JPG, and so on.

# **Share Better-Quality Photos and Videos**

The built-in sharing features of the Photos app place a higher priority on minimizing network bandwidth than on sharing the best versions of your photos. A perfectly fine video viewed on the iPad, looks almost impressionistic when uploaded directly to MobileMe. However, there are ways of sending the original files instead, if you don't mind a little extra work.

#### **Copy and Paste Photos into Mail**

When you choose Email Photo after tapping the Send To button, the image is reduced in size before sending. Instead, do the following:

- 1. Tap the Send To button, and then choose Copy Image.
  - Or, touch and hold on a photo in the Photos app (viewing either an album's thumbnails or a single photo) and then tap Copy when the option appears.
- 2. Switch to the Mail app.
- 3. Create a new outgoing message.
- 4. In the body of the message, touch and hold until the Paste option appears, and then tap it.

When you send the message, the full-resolution version of the photo is sent as an attachment.

**Tip:** To copy and paste more than one photo, tap the Send To button, and then select the photos (or videos) you wish to share. Tap Copy to copy them all, then go to Mail and paste them there.

#### **Import Videos and Raw Files to the Computer First**

The Copy and Paste trick doesn't work for video or imported Raw files, so you need to take a side trip to your computer to share the best quality files.

**Note:** Under Windows, Adobe Photoshop Elements can import videos, as can the built-in Windows photo import tool and Windows Explorer (choose one of the options from the dialog that appears when the iPad is connected). On the Mac, turn to iPhoto 4.0.3 or later, Aperture, or the Image Capture application. I'm including instructions for using iPhoto here.

To import a video into iPhoto and then share it from there:

- 1. Connect the iPad to your computer.
- 2. Open iPhoto and import the movie to your iPhoto Library.
- 3. Select the imported movie and choose File > Export (Command-Shift-E).
- 4. In the dialog that appears, make sure you're in the File Export pane and then choose Original from the Kind pop-up menu.
- 5. Click Export to save the file to your hard disk.
- 6. Attach the file to an outgoing email message to send it.

# Use Your iPad as a Remote

Apple's free Remote app isn't included with the iPad, but it should have been. Its premise is simple: control iTunes or an Apple TV remotely over a Wi-Fi connection with an iPad, iPhone, or iPod touch.

Although the iPad makes a nice music player, you may wish to play music that's not on the iPad or through a better speaker system. For example, in my house, we listen to music streamed to an AirPort Express—Apple's small wireless base station that includes audio hookups—connected to the stereo. The music resides on my wife's laptop in the living room or my laptop in my home office upstairs. Remote lets me change playlists, pause the music, and control other aspects of iTunes without having to go to one of those computers.

Remote also lets you control an Apple TV—not just music playback, but also the full interface.

Currently, Remote is an app for the iPhone and iPod touch—it hasn't yet been optimized for the iPad. But it works great, even in the iPad's pixel-doubled emulation mode.

# **CONNECT TO AN ITUNES LIBRARY**

Remote can control as many iTunes libraries as you like (one at a time). However, you must pair the iPad with iTunes before you're granted access.

## Add a Library

When you launch Remote, and your iPad has a Wi-Fi connection, it looks for any available libraries on the local network. Do the following to pair the device with iTunes or an Apple TV:

1. On the Settings screen, tap the Add Library button.

Remote displays a screen with a passcode.

- 2. Get ready to enter the passcode by doing one of the following:
  - In iTunes on your computer, click the name of your iPad under the Devices heading in the sidebar.
  - On the Apple TV, go to Settings > General > Remotes and then choose your device (it will also say "Click to add").
- 3. Enter the passcode from Step 1.

Repeat those steps for every device you want to use to control iTunes.

**Note:** To delete a library from Remote, go to the Settings screen, tap Edit, and then tap the delete button that appears by a library.

**Do you use Remote?** If you often control iTunes using Remote—frequently picking new songs, for example—enable Stay Connected on the Settings screen to make the playback controls come up faster when you access the app. However, your battery will drain faster.

# Request a Song Using iTunes DJ

iTunes DJ is a cool feature in iTunes and Remote that encourages several people to influence what gets played. If I owned a coffee shop, I'd run iTunes DJ all the time. Once set up, owners of devices running Remote can optionally vote for songs in the library; when a song gets a vote, it gets pushed higher in the queue.

## **Set Up iTunes DJ in iTunes**

To configure iTunes on your computer to accept Remote requests:

1. In the iTunes sidebar, select the iTunes DJ item under Playlists.

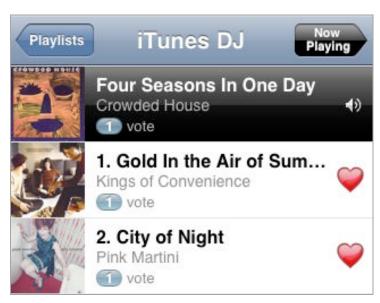
**If you don't see iTunes DJ:** Open the iTunes preferences and, in the General pane, make sure iTunes DJ is enabled.

- 2. If you get a welcome screen, click Continue.
- 3. Click the Settings button near the bottom-right of the window.
- 4. Enable the option titled "Allow guests to request songs with Remote for iPhone or iPod touch." You can also set optional features:
  - Type a welcome message that appears when the iTunes DJ option appears in the Remote app.

- Select "Restrict requests to source," and choose a playlist from the pop-up menu to make sure some yahoo doesn't start playing Christmas music at your summer birthday party.
- Mark the "Enable voting" checkbox to play songs based on votes. More votes push songs higher up the playlist. If this option is disabled, then any requested song is added to the list.
- Enable the "Require password" option to restrict the requests to people with whom you've shared a password.
- 5. Click OK to activate the iTunes DJ.
- 6. Choose the iTunes DJ playlist and start playing it. (Requests are ignored if you're playing any other playlist.)

#### **Request Songs**

Open the Remote app on the iPad, which displays the currently playing song within the iTunes DJ playlist. Tap the Back button to view the iTunes DJ playlist. If voting is enabled in iTunes, tap the heart button to the right of a song to move it up the list (**Figure 71**).



**Figure 71:** Vote with your heart—or at least with your finger on the heart button—to move a song up the playlist.

To request a song not listed, tap the Request a Song button and navigate through the library to locate a song you want to hear.

**Tip:** Instead of browsing thousands of tracks, let iTunes help. Tap a song in the playlist to view its Genius recommendations.

# **CONTROL VIDEO PLAYBACK**

When Remote is connected to an iTunes library, its uses similar controls for locating and playing music as those employed by the iPod app. (See Control Audio Playback.)

One difference, however, is support for choosing which speakers are used. In Remote parlance, a "speaker" is any supported source on your network that can play music.

The speaker control appears in two places within Remote:

- On the Settings screen, tap the On/Off button for any of the sources listed under Speakers.
- On the Now Playing screen, tap once to review additional controls (such as the Genius and Shuffle buttons), then tap the Speakers button located just above the playback controls. Tap a speaker name to enable (designated by a checkmark) or disable it (**Figure 72**).



Figure 72: Enable or disable speakers from the Now Playing screen.

**Note:** When you turn a speaker on or off, playback pauses for a few seconds while iTunes synchronizes the music stream.

#### **CONTROL AN APPLE TV**

If you own an Apple TV, you can use the Remote app to control media playback as described in this section so far. However, another option appears when you're connected to the Apple TV: Control.

The blank screen operates as a virtual trackpad (**Figure 73**): Drag to move the selection highlight among the Apple TV's menus and tap to select an item. To navigate back one level in the menu hierarchy, tap the Menu button.



**Figure 73:** Welcome to the most boring figure in this book! What you don't see is that the entire empty field in the center of the screen acts as a trackpad. Here, I'm tapping (illuminated in blue) the Menu button.

If options are available (for example, to mark a TV show as watched), tap the button. Tap the button to reveal the other Remote controls (Playlists, Artists, and so on).

**Tip:** To switch among different organizational tabs, such as listing podcasts by date, show, or watched state, flick left or right on the trackpad.

The trackpad enables other non-obvious but helpful controls, which I describe in  ${f Table~1}$ .

Table 1: Apple TV Playback Controls		
Media	Action	Gesture
Video	Play or Pause	Tap once.
	Rewind or fast-forward	Flick left or right, or tap and hold.
	Show chapter markers	Flick down to reveal, then flick left or right to skip.
	Jump back 10 seconds to replay	Drag two fingers to the left.
Audio	Play or Pause	Tap once.
	Rewind or fast-forward	Drag left or right and hold.
	Previous song or next song	Flick left or right.

The Remote app also adds a welcome control to the Apple TV. When you need to enter text, such as when you perform a search at the iTunes Store, you can use the iPad's built-in keyboard (**Figure 74**) instead of highlighting individual letters with the Apple TV's minimal remote (**Figure 75**).



**Figure 74:** If you need any further convincing that Remote is the perfect complement to an Apple TV, I present: *text input*. Use the iPhone's keyboard to enter text on the TV (see just ahead).



**Figure 75:** With the Apple TV's default equipment, typing requires you to highlight and input each letter individually.

## **OTHER REMOTE APPS**

If you'd like to go beyond Apple's Remote app, a few options exist. Here's a quick look:

- Control a Mac over Wi-Fi: Apple's Remote app works well with iTunes and an Apple TV, but if you're already sending commands from your iPad over the network, why stop with just iTunes and an Apple TV? Two universal apps, Rowmote (\$0.99) and Rowmote Pro (Evan Schoenberg, \$4.99), can send commands to other applications, too, including Hulu Desktop, Boxee, and Apple's Front Row software. The latter is included with Mac OS X and provides an interface similar to the Apple TV for playing audio and video.
- **Control devices using IR:** Most remote controls use infrared (IR) light to beam commands to televisions, stereos, DVD players, and all sorts of other devices. Companies have developed "IR blaster" accessories that plug into the 30-pin Dock connector port found on the iPad, iPhone, and iPod touch to provide the IR beam. One example is I-Got-Control (http://i-got-it.com/), a \$70 adapter that is controlled by the free I-Got-Control app (**Figure 76**).



**Figure 76:** The I-Got-Control app contains profiles for hundreds of devices, such as my Sony DVD player, shown here.

After setting up the app to recognize the media devices you own, you can use the iPad (which one would presume is within easy reach in the living room) as a universal remote control. The app is currently designed just for the iPhone or iPod touch (meaning it runs in the iPad's emulation mode), but the company says an iPad-native version is coming soon.

# **About This Book**

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# **ABOUT THE AUTHOR**

Jeff Carlson gave up an opportunity to intern at a design firm during college because he suspected they really just wanted someone tall to play on their volleyball team. Instead, he worked in the Whitworth College publications office where he got to actually, you know, design stuff. In the intervening years, he's been



a designer, editor, and writer: He's the Managing Editor of *TidBITS*, a columnist for the *Seattle Times*, a frequent contributor to *Macworld*, and the author of best-selling books on the Mac, video editing, digital

photography, and, in earlier incarnations, Web design and Palm organizers. He consumes almost too much coffee. *Almost*.

To contact Jeff about this book, send him email at jeffc@tidbits.com and please include Take Control of Media on Your iPad in the subject of to help ensure it doesn't get accidentally filtered as spam.

## **AUTHOR'S ACKNOWLEDGMENTS**

The immeasurably patient Tonya Engst gets most of my acknowledgment for this book, not only for her sharp eye and expertise, but for also not booting me to the curb when it became clear I wasn't going to meet the original schedule (due to another pressing deadline).

Thanks also to Adam Engst, in his dual roles as publisher of Take Control and *TidBITS*, and to my fellow *TidBITS* and Take Control colleagues Glenn Fleishman, Joe Kissell, and Matt Neuburg.

I also thank my wife Kimberly and daughter Ellie for their endless support and encouragement.

# **SHAMELESS PLUG**

The iPad has nearly consumed my life since it was first announced, which has been exciting and exhausting at the same time. The project that kept me from jumping into this book right away was writing a print book for Peachpit Press: *The iPad Pocket Guide*. It contains 240 pages of information about all aspects of the iPad, and it is a great gift for someone new to the device or who does not require the depth provided by the Take Control titles.

## **ABOUT THE PUBLISHER**

Publishers Adam and Tonya Engst have been creating Apple-related content since they started the online newsletter *TidBITS*, in 1990. In *TidBITS*, you can find the latest Apple news, plus read reviews, opinions, and more (http://www.tidbits.com/).



Adam and Tonya are known in the Apple world as writers, editors, and speakers. They are also parents to Tristan, who thinks ebooks about clipper ships and castles would be cool.

# **PRODUCTION CREDITS**

Take Control logo: Jeff Tolbert

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