GET READY FOR THE SWITCH: INTEL BUZZWORDS EXPLAINED

109
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2005

MacAddict

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Scarlett Johansson blasts away in *The Island*

4TH ANNUAL GEEK QUIZ

THINK YOU KNOW MAC? PROVE IT!

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CANON DIGITAL REBEL XT →
→ Absynth 3 software synth
→ Epson Stylus Photo R1800
→ Final Cut Pro 5 *... and 14 more*

HOW TO:

→ Build a Steadicam Rig
→ Use a PSP with Your Mac
→ Create a Birthday-Message Generator with Automator

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a better machine. a better magazine.

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From *Reviews*, p36.

CAMERA KEEPER
When shooting outdoor photography in the cold, put your camera in a Ziploc bag before going inside. This way, the bag, not your camera, will get wet with condensation.
From *Reviews*, p44.

PSP PUNX
Make sure you format your Memory Stick Duo (or better yet, a way-faster Duo Pro) for the PSP before filling it with media and files from your Mac.
From "Use a PSP with Your Mac," p60.

TURBO TRASH
In the Finder, press Command-Option-Shift-Delete to instantly empty the Trash, no questions asked.
From *Ask Us*, p56.

the disc

This month's Disc is stuffed with power tools, including killer software synth Absynth 3, almost-as-good-as-Photoshop-CS image editor Photoshop Elements 3.0, mind-melting video mixer Union 1.5, pro-level RAID software SoftRAID 3.2, and a ton of other apps, utilities, and games.

Unauthorized copying, reverse engineering, and transmission are violations of applicable laws. Please read the legal disclaimer file included on this CD-ROM. That all programs will work on all systems.

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POWER TO

We've got 46 of the latest and greatest m
apps on this CD, includ

theDisc September 2005

PLUS!
Apple Design Award winners, great games, essential utilities...
...and a whole ...ore!

Comic Life *demo*

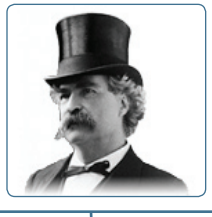
Create your own comics, annotate your family photos, design greeting cards, and more with this versatile, easy-to-use graphics app.

Delicious Library *demo*

Point your FireWire Webcam at the barcode on any book, movie, album, or video game, and—Shazam!—instant organizational bliss.

iSay *demo*

Why type an email when you can send a voice email? iSay is quick and easy, and the people you send notes to don't need any special software.



AUDIO & MUSIC
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CoverBuddy *demo*
MegaSeg for Mac OS 9 2.7.2 *demo*
MegaSeg for Mac OS X 3.1.4 *demo*
Peak LE 4.1.3 *trial*
SoundSoap 2 *demo video*

FUN & GAMES
Bionicle *video trailer*
BreakQuest *demo*
Laser Dolphin 1.0 *demo*

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Flip4Mac WMV Player & Player Pro 1.0.1 *demo*
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PTMac for OS X 3.0 *demo*
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Atomic Mac (OS X) 6.1.0 *demo*
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DiskTracker (OS X) *shareware*

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SoftRAID 3.2 *demo*
TechRestore *demo video*

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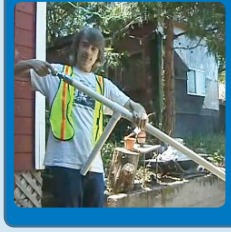
Earthlink *demo*
Flip4Mac WMV Player & Player Pro 1.0.1 *demo*
Laser Dolphin 1.0 *demo*
OmniGraffle 3.2.4 *demo*
OmniOutliner 3.0.3 *demo*
OmniWeb 5.1 *demo*
Peak LE 4.1.3 *trial*
SoftRAID 3.2 *demo*
SoundSoap 2 *demo video*



Staff Video: Steadicam Rig in Action

On page 58, we show you how to build your own Steadicam rig using PVC pipe, nuts, bolts, and a trailer hitch—but how well does it actually work? Follow our Doctor of Tinkerology, Niko Coucouvanis, as he gives the *MacAddict* Steadicam a trial run.

UPGRADE

If you don't receive the Disc with your copy of *MacAddict*, you might want to consider upgrading. Each monthly Disc contains cool demos, useful shareware and freeware, and the inimitable *MacAddict* Staff Video. To get 12 issues of *MacAddict* that include this value-packed disc with your subscription (prorated if necessary) for just $1 more per issue, call 888-771-6222—the operator will take care of everything.

MacAddict

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Intel Insight

"What" is always easier to understand than "why." What: Apple is switching to Intel processors. Why: Opinions vary. Let's take a look at some of the competing theories.

• **IBM's PowerPC G5 is simply too hot to run in a PowerBook.** Well, that was true when we discussed the Intel switch last month ("Change Is Good," Aug/05, p10), but since then IBM has announced a new, lower-power PowerPC 970FX (G5) that runs only a wee bit hotter than the Freescale MPC7448 (G4) chips in current PowerBooks. We gotta assume that Apple knew about this chip before it was announced, so the toasty-thighs theory is now less compelling.

• **Apple's looking to Intel for more than just microprocessors.** Intel not only provides PC manufacturers with CPUs, but also with the chipsets that integrate them into memory and I/O subsystems—chipsets that Apple currently (and expensively) designs on its own. Score one for cost efficiency and Apple staff streamlining—and factor into the mix that Intel is well known for providing deep-discount pricing to large customers.

• **Apple's planning on getting out of the hardware business.** Hardly—at least for the foreseeable future. As of today, Apple firmly states that it won't allow Mac OS X to run on generic Intel-based PC hardware—and Intel's upcoming LeGrande hardware-based security technology should make only-on-Apple restrictions difficult to overcome. That said, there's no reason to assume that Apple won't change its mind, especially if the next version of Windows (aka Longhorn) either slips further past its now-stated late-2006 release or proves to be a doggie. But even if Apple does eventually allows generic PCs to run OS X, expect Apple to continue producing cutting-edge machines for both consumers and pros.

• **It's all about the iPod and its successors.** PCs are already powerful enough for most users; digital-media players are The Next Big Thing. Apple is making money hand over fist on the iPod and the iTunes Music Store—but high-end iPod sales are bound to reach a saturation point, and Apple needs to produce a digital-media player that can handle both music and video. One of Intel's hottest technologies, XScale, is designed for high-performance portable devices, and it's far more powerful than the Texas Instruments ARM7 processor in the current iPod line. You connect the dots.

Enjoy,

STAFF RANTS

Q. What's the *real* reason that Apple switched to Intel processors?

Niko Coucouvanis PONCH WITHOUT A JON

What's the *real* reason that Apple switched to Intel processors?

Who cares? I just learned how to play the theme song to TV's *CHiPs* on a five-speed electric blender! Nuh, nuh, nuh, nuuuhhh, *nuh-nuh*!

Sean Molloy FLOATING POINTLESS

What's the *real* reason that Apple switched to Intel processors?

It turns out that 4,195,835 divided by 3,145,727 really *does* equal 1.33374, after all.

Roman Loyola ARRESTED DEVELOPER

What's the *real* reason that Apple switched to Intel processors?

My inside sources tell me that the real reason for the switch is Steve Jobs's fanatical obsession with the Blue Man Group. He's such a big BMG fan that he wanted to come on stage in blue-face at Mac Expo until he found out that the company that produces the blue makeup performs testing on lab animals.

Mark Rosenthal DABBLER

What's the *real* reason that Apple switched to Intel processors?

Well, during some downtime, Niko and I decided to throw a Pentium chip in a G5, and know what? The G5 ran real *smoooooth*. So we called Apple on our direct-dial Apple Phone and filled them in. Next thing we know: a media circus!

Jake Widman X86 EXEGETE

What's the *real* reason that Apple switched to Intel processors?

Steve Jobs has always loved alliteration and couldn't get over his envy of the "Intel Inside" slogan. For years he's pushed Apple's marketeers to come up with something that good, but after rejecting "PowerPC Powered!" and "G5: Gee Whiz!" he finally said the hell with it.

Peter Marshutz MIDDLE-AGED MAN

What's the *real* reason that Apple switched to Intel processors?

Well, when it comes down to it, I basically have no idea. But my guess is that it could be the result of a mid-life-crisis-driven lust for speed and power.

Max POWER MAX

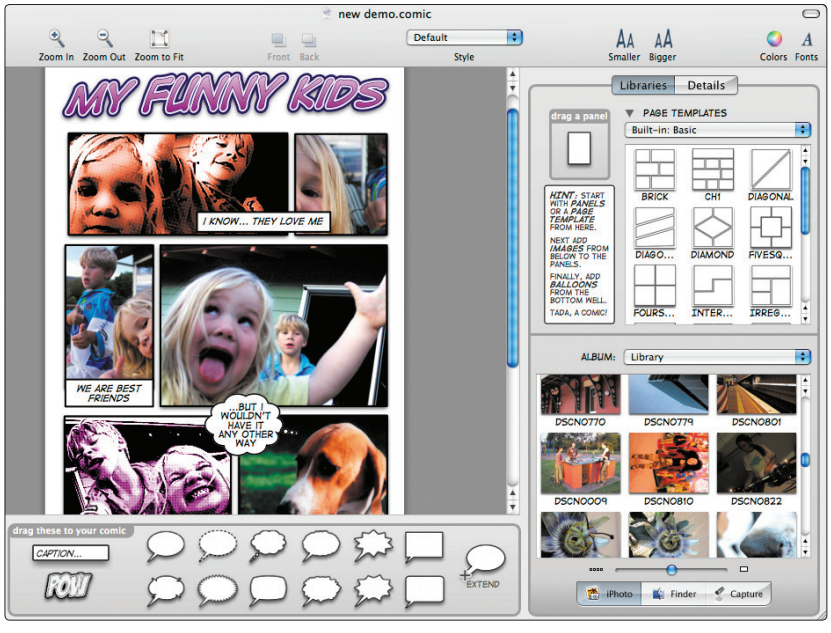
What's the *real* reason that Apple switched to Intel processors?

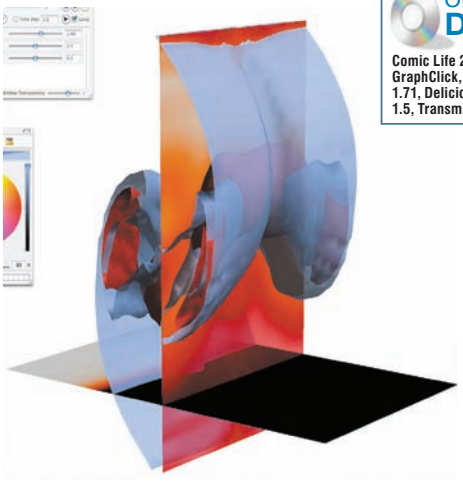
Can you keep a secret? The entire Intel brouhaha is simply a smoke screen. Yes, Apple is switching from the PowerPC—but not to Intel! To find out what will actually power the next generation of Power Macs, check out page 80 of this issue.

comingsoon:october2005

Here's what our editors are preparing for the next issue of *MacAddict*.

You'll kiss your font problems good-bye after you read our **guide to font management.** We'll also show you how to get yourself a **fit and trim Mac**. Our Field Guide will **decipher mysterious file types**—and even better, tell you what to do with them. We'll teach you how to cajole **perfect panoramas** out of the powerful yet puzzling PTMac software, how to **power your 'Pod** off a 9-volt battery, what separates **QuickTime 7 Pro** from regular old QuickTime, and how to automatically **convert your AACs to MP3s**. Finally, we'll take a look at Aspyr's **Sims 2**, Red Rock Software's **DeltaGraph,** M-Audio's GarageBand-wrangling **iControl**, Logitech's **Wireless Headphones for iPod,** and a whole lot more.





ON THE DISC

Comic Life 2.2, GraphClick, OsiriX 1.71, Delicious Library 1.5, Transmit 3.2

Above: DataTank, used for mathematical modeling, graphics, and data mining, won Best Scientific Computing Solution. Left: Comic Life lets you make your own photo comic books.

APPLE DESIGN AWARDS

Scientific and consumer apps share the spotlight at Apple's recent 2005 Worldwide Developers Conference.

Apple Design Awards (ADA) are handed out to the cream of the third-party-Mac-software crop during the Worldwide Developers Conference (WWDC) each year. This year, the judges—Apple employees—selected eight winners from over 400 entrants. Each winner received a top-of-the-line 17-inch PowerBook G4, dual Power Mac G5, 30-inch Apple Cinema Display, free membership in the Apple Developer Program, free pass to WWDC 2006, and booth at the January 2006 Mac Expo in San Francisco. As the pièce de résistance, Apple threw in a Developer Transition Kit, which includes an Intel-based Power Mac.

Don't panic. Panic's **Transmit** ($29.99, on the Disc, or download from www.panic.com), a file-transfer app, took home the prize for Best Tiger Technology Adoption. Transmit 3.2's Tiger support includes Automator actions, .Mac sync, Spotlight integration, a clever Dashboard widget for uploading files, and an OpenGL-based zooming Image Preview.

This particular release had an exceptionally short development cycle, and Panic's programmers were challenged to not live up to their name. "Before we knew it," says cofounder Cabel Sasser, "we had four weeks before the deadline. We immediately went into orange alert: a whole lot busier than yellow (fix bugs and maybe add that one thing) but not quite red (throw computer out the window)."

The Best User Experience award went to Delicious Monster Software's **Delicious Library** ($40, on the Disc, or download from www.delicious-monster.com), an app that lets you catalog and browse your media—books, movies, music, and more—with a level of elegance and attention to detail that impressed Apple's judges. Delicious Library incorporates a boatload of Mac OS X technologies: Address Book to wrangle borrowers, Quartz and OpenGL for graphics, iCal for tracking the return dates of your loaners, and more.

Mike Matas, cofounder and president of Delicious Software, believes that his company won the award because "we take user experience really seriously. When we developed the product, we had two people in the company: a programmer and a designer."

Lowering the bounds. The Best Product New to Mac OS X award went to **Comic Life** ($24.99, on the Disc, or download from www.plasq.com) from plasq. This app lets you use iPhoto's library to create your own photo comic books. Think about how often you've captioned photos (either by writing in your photo album, or just in your head), and Comic Life's utility becomes obvious.

"Comic Life lowers the boundaries to

creating and communicating with images and words," says Cris Pearson, plasq's founder. "Primary schools are already using it extensively for class activities; [it] doesn't take kids long before they're showing the teacher how to do things."

The Mac OS X Entertainment Product award went to Blizzard Entertainment's **World of Warcraft** (●●●●● Apr/05, p40). The dangerously addictive massively multiplayer online role-playing game (MMORPG) has already won a ton of awards; and despite being available on multiple platforms, it's still a first-class Mac OS X citizen.

Raising the stakes. A 3D- and 4D-visualization application for medical imaging, **OsiriX** (free, on the Disc, or download from http://homepage.mac.com/rossetantoine/osirix), was declared this year's Best Use of Open Source. To be eligible, an application must be available under an Open Source Initiative–approved license. It also has to deliver higher quality or greater interoperability using Mac OS X technologies—and OsiriX takes advantage of a boatload of 'em.

OsiriX lets you view complex medical images without the need for an expensive workstation.

"Modern scanners such as CT, MRI, and combined PET-CT scanners give us great information," says project founder Dr. Osman Ratib, "but displaying and manipulating these images requires very expensive—in the $100,000 range—workstations. These machines often aren't accessible to the clinicians and referring physicians who need them." Developed in six months by Antoine Rosset in Dr. Ratib's lab and released in April 2004, OsiriX now has approximately 8,000 users.

The Best Scientific Computing Solution award went to Visual Data Tools' **DataTank** ($600, on the Disc, or download from www.visualdatatools.com). Designed for mathematical modeling, graphics, and data mining, DataTank has integrated core OS X technologies, including the Accelerate framework, which lets it handle gigabytes of data with ease.

Visual Data Tools' lone developer David Adalsteinsson says, "I use Mac OS X like a Unix box, with command-line mode and no graphics. In terms of running simulations, at that point, the Mac is just like Unix." But when it comes to the GUI, the Mac is the only option. "I don't want to do [the GUI] in Unix, and [DataTank] is a graphical application."

Focus on speed. The ADA for the best Mac OS X Server Solution went to **QuickSilver InfiniBand** ($2,000 per port, www.silverstorm.com). Developed by SilverStorm Technologies and Small Tree Communications for high-performance business computing, InfiniBand promises improved performance from low-latency interconnections, as well as storage and networking access through a single server connection.

Corky Seeber, president of Small Tree Communications, says that developing on Mac OS X "is pretty slick. Knowing what goes where takes some learning, but the good news is that after implementation, you are left with a lot of Unix code that can be just chucked, since it's handled under the covers by IOKit."

GraphClick (on the Disc) won Simon Bovet the coveted Best Student Product award. Bovet's app lets you retrieve data from almost any graph, bar chart, or scatter plot. Apple judges found the multithreaded Cocoa application to be highly optimized for OS X thanks to Bovet's use of Apple's Shark and Quartz Debug performance tools. The judges also commended GraphClick for being the only noncommercial application capable of digitizing trajectories of objects from within QuickTime movies.

Bovet sums up what all Mac developers probably feel: "Writing an application for OS X is really a pleasure. All the technology inside the system lets the programmer just concentrate on what the app is really doing, not on the UI or other side problems."

—Iolande Bloxsom

NEW STUFF

IMAGE COURTESY OF OWC

ALUMINUM RAID

OWC Mercury Elite-AL PRO 800 RAID

$249.99 to $749.99

www.macsales.com

Available: Now

Store a whole lotta pics, videos, and tunes.

This stylish RAID array, available in capacities ranging from 160GB to 800GB, features a pair of 7,200-rpm drives and two FireWire 800 ports. All models come with EMC Dantz's Retrospect Backup, Intech's Hard Disk SpeedTools, and cables.

View your Web-page changes in real time.

LIVE, NUDE URLS!

Tumult HyperEdit 1.5

$19.95

www.tumultco.com

Available: Now

ON THE DISC
HyperEdit 1.5

HyperEdit has a preview pane that uses the same rendering engine found in Safari to let you preview your Web page as you write your HTML code—no more saving the file and using a separate browser to see what your work looks like.

GET MIC'D

Samson C01U

$234.99

www.samsontech.com

Available: Now

This condenser microphone plugs into your USB-equipped Mac—no converter box or preamp needed. Record directly into GarageBand or any other music-production application.

Simplify your recording setup.

IMAGE COURTESY OF SAMSON

DROOLWORTHY

Sexy Stuff We Can't Wait to Get Our Mitts On

Moderne shuffle

Pressure Drop's **DecoDock** ($28.99, www.pressuredropinc.com) adds art-deco flair to an iPod shuffle Dock. DecoDock is available in cobalt blue, obsidian black, silver, pink, green, and white.

Click on Wood

Holzkontor's **Solid Wood Wireless Mouse** ($149, http://holzkontor.us) brings the warmth o' wood to your desktop. This two-button mouse has a scroll wheel and is available in ash, beech, black cherry, mahogany, oak, red alder, soft or hard maple, and walnut.

HACKERS SPEAK

Why are there so few Mac-attacking viruses, Trojan horses, worms, and other digital-age maladies? Some say that Mac OS X's technical sophistication makes it hard to hack, while others claim that the Mac's safety is merely a result of its relatively small market share. During a recent meeting in the Washington D.C. area sponsored by *2600: The Hacker Quarterly* (www.2600.org), hacking aficionados shed some light on why Mac OS X seems so secure.

Some credited OS X's superior technology. "The NSA (National Security Agency) lists Mac OS X among the most secure operating systems because it uses an open-source monolithic kernel structure," according to hacker Patrick Roanhouse. "It takes all the necessary modules and drivers and incorporates them into the kernel to form one large kernel. You can't exploit communication between external modules and the kernel like you can in Windows and Linux."

Another hacker, who goes by the handle N11s, also credits OS X: "You can't infect the entire [Mac] OS unless you have root access in the first place. Windows is extremely vulnerable as far as system software and heap corruption."

Perhaps the chummy nature of the Mac community has an influence. "Most [Mac] hacker tools I've encountered have been related to a more-benevolent effort," says George Thompson, a network security consultant. "There's none of the malicious stuff like trying to propagate viruses."

Many feel there is validity to the safety-in-small-numbers argument, however. "If OS X were used as widely as 90 percent, then there'd be a lot more viruses for OS X," says hacker C0S. Another hacker named Cerastes put it all into perspective: "Given the size of Apple's market share compared to Microsoft, it's not possible to compare the security flaws between the two."—*Chris Barylick*

THE ROAD TO INTEL GAMING

Programmers porting games (such as Unreal Tournament 2004, pictured) to Intel-based Macs are encountering a bumpy ride.

While Intel-based Macs are still a ways off, the transition has already begun for a few game developers. Epic Games' master programmer Ryan Gordon sequestered himself in his lab and ported playable (but slow) versions of Unreal Tournament 2004, GameHouse's Feeding Frenzy, and GarageGames' Torque Game Engine. Gordon used Duke Nukem 3D to test Apple's Rosetta PowerPC-application translator on an Apple-supplied Intel-powered Mac and said the game runs about as fast as it does on his PowerBook.

Blizzard's Mac programmers tested World of Warcraft with Rosetta and reported slow performance and minor rendering glitches. When they recompiled WoW to run natively on the Intel Mac, it ran into a bug at startup. It's been a bug hunt ever since.—*Matt Osborn*

GAME REVIEWS

THE POSTMAN COMETH (AGAIN)

Postal players and Postal haters beware—this new single-player expansion pack for Postal 2 is gorier, more violent, and more offensive than ever. **Postal 2: Apocalypse Weekend** replaces the original game's nonlinear neighborhood with more-traditional level design and more-specific murderous goals. Of course, you'll need some ruthless new weapons like the boomerang machete—it can quickly turn a crowded room of people into spare parts. Both the scythe and the sledgehammer can also dish out heavy damage, and you can throw them to cause even more devastation. You'll use these new weapons along with your old favorites to rage in fun new areas like the Taliban Training Camp and the Elephant Preserve. Just watch out for the strangely Gary Coleman–esque Demon Dwarves.—*MO*

Always use the right tool for the job.

Postal 2: Apocalypse Weekend

Price	TBA
Available	TBA

Running with Scissors
www.gopostal.com

Even a mythic heroine isn't above hitting below the belt sometimes.

SPEAK GREEK AND CARRY A BIG SWORD

Strap on your winged sandals and prepare to battle ancient Greek heroes and monsters in **Mythic Blades**. You play as a hero sucth as Jason, Atalanta, or Odysseus or a monster such as the Hydra, Minotaur, or Medusa in a one-on-one 3D fight to the death. Master the 12 characters' special attacks and fill up your power gauge to unleash the fury of your guardian god in a Divine Attack. Mythic Blades looks quite a bit like a classic arcade game—only with togas.—*MO*

Mythic Blades

Price	$32.99 (retail), $24.99 (download)
Available	Fall 2005

Cartel Games
www.cartelgames.com

TIPS & TRICKS: LEGO STAR WARS

LEGO Stars Wars has a Death Star full of secrets and items to unlock. Try these tips to achieve true Jedi mastery.

EARN YOUR RUNNER Collect a certain number of studs (LEGO blocks) in a chapter to fill your Jedi meter. When the meter is full, complete the level to earn a piece of the game's super-kit vehicle: a Tantive IV Rebel Blockade Runner.

SMASH FOR STATUS Vehicular missions (particularly the pod race) can earn you the most studs, but be sure to smash all the destructible objects to gain True Jedi status for that chapter.

BE INVINCIBLE The invulnerability cheat (collect 1,000,000 studs in the diner level-hub area) can help you max out your Jedi meter, but don't get too cocky—you can still die in the vehicular stages.—*MO*

Bug of the Month

MacFixIt™
Troubleshooting Solutions for the Macintosh

SLEEP PROBLEMS AFTER MAC OS X UPDATES

A number of sleep-related issues can appear after incremental Mac OS X updates, including the inability to properly go to sleep, problems waking from sleep, and having your display go to sleep without your Mac going to sleep. The most common culprit is Bluetooth. Try these tips to fix your sleep problems.

WAKE UP In System Preferences › Bluetooth, uncheck Allow Bluetooth Devices To Wake This Computer. If you are using a Bluetooth mouse and keyboard, you'll have to wake your Mac by pressing the power button.

FILE CORRUPTION Your Bluetooth preference file may be corrupt—you'll need to delete it. Turn Bluetooth off, then go to the /Users/*user name*/Library/Preferences folder. Look for a file called com.apple.Bluetooth.plist and trash it. The OS will create a new preference file when you enable Bluetooth again.

ENERGY SAVER If you have issues with your display or Mac going to sleep at inappropriate times, you have a problem with Energy Saver. Delete the following .plist files and restart:

- /Library/Preferences/SystemConfiguration/com.apple.PowerManagement.plist
- /Users/*user name*/Library/Preferences/com.apple.systemuiserver.plist
- /Library/Preferences/SystemConfiguration/com.apple.AutoWake.plist

In some cases, running Mac OS X's cron tasks—maintenance that the OS performs automatically if you leave your Mac on 24 hours a day—can resolve many sleep problems. If you don't want to leave your Mac on, you can use MacJanitor (free, on the Disc, or download from http://personalpages.tds.net/~brian_hill/macjanitor.html), which lets you run the cron tasks whenever you want.

ON THE DISC
MacJanitor 1.3

Because your pocket protector and slide ruler already take up your shirt pocket.

SHUFFLE SHIRTS

If you think your iPod shuffle deserves better than being dangled by its lanyard or stuffed in your pocket, you can always slip it—and yourself—into a shirt from ShuffleShirt (above right, $20, www.shuffleshirt.com). The tees are available with smileys, catchy (or corny) phrases, or plain colors. Each shirt has a pocket on the left sleeve to house your shuffle.

Koyono's BlackCoat T (above left, $39, www.koyono.com) has a zipped pocket in the center of the chest for stashing your shuffle—there's even room for a cell phone and your keys. Witty rejoinders to "Is it cold in here, or is that a shuffle in your pocket?" are not included.—*Roman Loyola*

What's New

IMAGING AND PUBLISHING

Prep your kid for a Pixar internship with Cosmic Blobs.

- **BabelColor 2.5** ($65, www.babelcolor.com) translates and analyzes color. The latest version includes new spectral tools.
- A Lowly Apprentice Production's **Imposer Pro** ($399.99, www.alap.com) allows you to impose PDF pages from within an Acrobat document.
- Alias's painting and drawing app **SketchBook Pro 2** ($179, www.alias.com) now has PSD-file support, 75 levels of undo, and more.
- Alien Skin Software's **Eye Candy 5: Impact** ($99, www.alienskin.com) is a set of ten Photoshop filters, including Backlight, Brushed Metal, Extrude, Chrome, Glass, Motion Trail, and Bevel.
- nik multimedia's **nik Sharpener Pro 2.0** ($329.95, www.nikmultimedia.com) is a Photoshop plug-in that provides enhanced image-sharpening tools.
- **Cosmic Blobs** ($44.99, www.cosmicblobs.com) from Dassault Systèmes is a 3D-modeling app for kids that uses clay-like objects.
- WoodWing Software's database tool **Smart Catalog 4.0** ($999, www.woodwing.com) helps you create catalogs with Adobe InDesign CS2. It now supports XML and ODBC Database modules.
- **ImageVice** ($49.95, www.boxtopsoft.com), an Adobe Photoshop plug-in from BoxTop Software, performs color reduction for Web graphics.
- Teacup Software's **TableStyles and CellStyles 1.1** ($99.95, www.teacupsoftware.com) works with Adobe InDesign to let you apply styles to—you guessed it—tables and cells.—*Michelle Victoria*

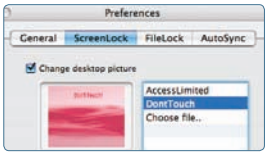
SHAREWARE PICK OF THE MONTH

PodSmith www.makienterprise.com $20

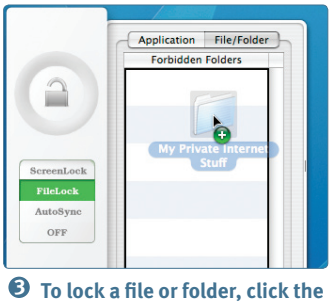
With PodSmith, you can use your iPod (any iPod) to lock your screen, files, and folders so no one can access your Mac while you're away. When you return, just plug in your iPod to regain access.—*Andrew Tokuda*

ON THE DISC
Podsmith

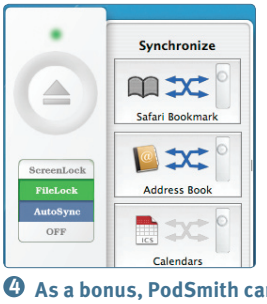
❶ Choose the ScreenLock option, click the eject icon, and unplug your iPod. Your Mac is now inaccessible to prying eyes.



❷ In PodSmith › Preferences, you can choose any image you'd like to display while your screen is locked.

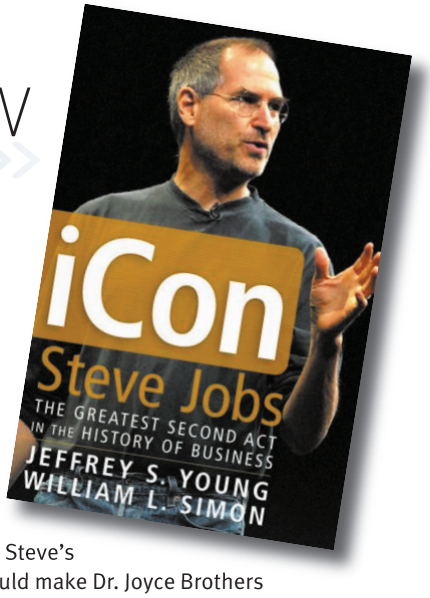


❸ To lock a file or folder, click the FileLock button, then drag the files or folders you want to protect into the Forbidden Folders well. By clicking on the Application tab, you can lock applications as well.



❹ As a bonus, PodSmith can also back up your Safari Bookmarks, Address Book contacts, and Calendars; it can even keep the data synchronized between your Mac and your iPod.

BookReview



iCon Steve Jobs

Steve Jobs hated *iCon Steve Jobs: The Greatest Second Act in the History of Business* so much that he banned all books from its publisher, John Wiley & Sons, from Apple Stores worldwide. We can see why. No, it's not merely that he's portrayed as a petulant, manipulative—if occasionally brilliant—bully, it's more that the book is, well, lousy. *iCon* is clumsily written, flyspecked with errors, cobbled together in many cases from familiar anecdotes, and filled with dime-store psychologizing that explains Steve's motives with an unsupported shallowness that would make Dr. Joyce Brothers blush. Coauthors Jeffery S. Young and William L. Simon have a whale of a tale to tell—the rise and fall and rise of a tetchy visionary—but they squander the opportunity. If you invest the $24.95 and hours of reading that *iCon*'s 334 pages require, you'll learn a lot of meandering *what*, but precious little insightful *why*.—*Rik Myslewski*

iPOD CASE OF THE MONTH

Contour's Showcase (www.contourcase.com, $32.95) and iSee ($19.99) are hard plastic cases that thoroughly protect your precious 'Pod from dings and scratches. The Showcase combines a clear plastic face with black or white rubber, while the iSee is made up of clear plastic. Both cases have belt clips. The Showcase is for the iPod photo and third- and fourth-generation iPods; the iSee fits the iPod mini and fourth-generation iPod.
—*Michelle Victoria*

Protect your 'Pod when getting your groove on.

SUBMIT YOUR CASE Whether your iPod case is a custom-made one-off or mass produced, you can submit it for Case-of-the-Month consideration—just send it to iPod Case of the Month, MacAddict, 150 North Hill Dr., Ste. 40, Brisbane, CA 94005. Please note that we cannot return cases.

THE OMNI GROUP

Building beautifully designed, easy to use applications since 1993.

OmniOutliner

Capture your ideas and organize your universe

Eliminate messy outlines and scattered thinking with a structured document tool designed for beginners and pros alike. Use OmniOutliner to draft to-do lists, create agendas, manage tasks, track expenses, take notes, plan events, write screenplays...and anything else you can think of.

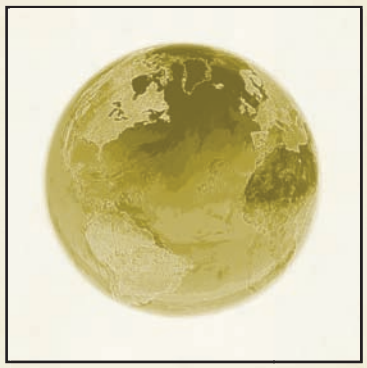
"...ever since I first fired up the ideas manager OmniOutliner Pro 3.0, I've been doing the Happy Dance right in my seat."
Andy Ihnatko, Macworld UK

"I have a feeling I'm going to live in this program--no more fighting with Microsoft Word's fussy outline styles."
PC World

"I would be lost without this indispensable tool."
Jeff Gamet, Design Tools Monthly

Macworld

OmniWeb



Revolutionize your web browsing experience

Quickly find the information you want with bookmarks that update themselves, built-in web shortcuts, and unique drag-and-drop tabs. Stay organized with workspaces that save your open windows. Customize the entire internet with site-specific preferences. Try it for yourself and see the difference a better web browser can make.

"...it's good to finally see a browser that marries solid performance with a quality interface where its visual flair also has practical benefits."
MacUser UK

"For Mac power users, OmniWeb should be the first alternative choice."
Macworld Magazine

"...with this release they're bringing some refreshing new power to web browsers."
Michael Brewer, MacDevCenter

Macworld

OmniGraffle

Powerful diagramming and drawing made easy

When you need a clear understanding of how tasks, activities, and processes are carried out, OmniGraffle can help you produce amazing-looking diagrams that communicate information far better than words. Drag and drop to create flow charts, brochures, network diagrams, posters, family trees, office layouts, and more.

Introducing the brand new OmniGraffle 4 with a host of exciting new features:

- Bezier curve drawing tool
- Dynamic outline view
- Document scale
- LinkBack support
- Tables
- Master canvases
- Updated interface
- Improved Visio XML import and export, and SVG export

"It's Worth It. With OmniGraffle 4, good things just keep getting better."
Victor Marks, MacNN

Learn more and download a free trial at www.omnigroup.com/macaddict9

OMNI

The Media Mac

There's more than one way to make your Mac the center of your home entertainment system.

By Alan Graham

The idea's been around for a while, but it was the Mac mini that really got the buzz going: How 'bout making your Mac the heart of your home entertainment system?

Most Mac addicts enjoy their growing digital-audio and digital-video collections—but listening to and watching it all on a Mac is neither terribly social nor particularly ideal. Admit it: What you really want to do is use your Mac to record, edit, and store digital content, and then send all that good stuff to your stereo and TV so it can be enjoyed from the comfort of the living-room couch. You want your Mac to become a media server that streams digital entertainment to home-theater equipment you already own.

The idea of turning a Mac mini into a media server has already given rise to the CenterStage Project (http://centerstageproject.com), an open-source effort to develop media-center applications for the mini, and HTmini (http://htmini.com), a blog devoted to mini-based home theater. With a little fiddling and the right products, you can turn your current Mac into a media server and move your digital music and video out of your office and into your living room where it belongs. Read on as we assemble some workable solutions, first for audio—an easier nut to crack—and then for video.

PHOTOGRAPHY BY MARK MADEO

What You Hear Is What You Get

We're going to assume that you've already figured out how to get music onto your Mac and play it, since iTunes pretty much takes care of both quickly and easily. Deciding how to get that audio from your Mac to your stereo is as simple as defining what your needs are—and how much you want to spend.

The Frugal Solution: Cables
Cost: Under $30

No doubt the most affordable way to get music from iTunes to another room is by running a cable from your Mac's speaker output to a set of powered speakers or, via an adapter, a free pair of input jacks on your stereo amplifier. You can get the parts at any local Radio Shack. And while this is amazingly simple, running an ugly beige wire across your apartment or between rooms is hardly an elegant solution. If aesthetics don't bother you, then usability might: You're going to be walking back and forth to and from your Mac every time you want to skip a song or change your playlist.

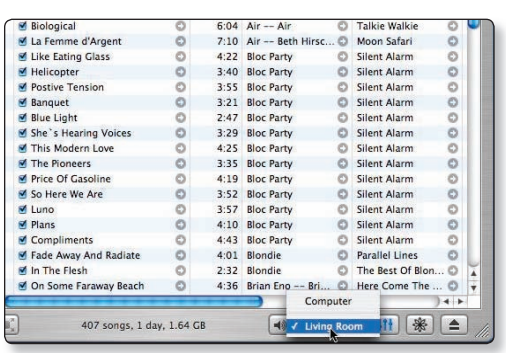
PROS: Dirt cheap. Almost zero configuration time or technical knowledge required.
CONS: Ugly, clumsy, and inelegant—in other words, very anti-Mac. Not easy to implement for multiple rooms.

The Practical Solution: A Wireless Connection
Cost: $129 to $149 and up

Wirelessly piping music from your Mac to your stereo is much classier than running cables throughout your living space. The most obvious way to free yourself from wires is by purchasing Apple's own **AirPort Express** ($129, www.apple.com), a wireless AirPort base station that also works as a bridge between iTunes and your stereo. Simply plug the Express into a wall outlet and connect it to your amplifier or powered speakers. In iTunes, go to Preferences › Audio, check the box labeled Look For Remote Speakers Connected With AirTunes, and the AirPort Express's AirTunes technology automatically sends iTunes music to the Express rather than to your Mac's speakers.

Unfortunately, while you can have multiple AirPort Express stations placed throughout your house, you can only stream music to one at a time. And at present, you can't stream audio from other applications, such as RealAudio, without the use of a third-party app. Thankfully, one such app exists: Rogue Amoeba's **Airfoil** ($25, www.rogueamoeba.com) can stream audio from any source on your Mac.

A nice add-on to the AirPort Express method is the **Keyspan Express Remote** ($59.99, www.keyspan.com). After you plug the remote's infrared receiver into the USB port of the AirPort Express, you can control iTunes over your network. Like other infrared remotes, though, the Keyspan only has about a 40-foot range, and you must have line of sight (though you can sometimes bounce infrared signals off walls).



With AirTunes, your Mac can send your iTunage anywhere—anywhere you've placed an AirPort Express, that is.

The Roku SoundBridge reaches out to your Mac over your network and brings back songs to play.

Another wireless option that offers a different set of benefits is the **Roku SoundBridge** (4 mice, Feb/05, p46). Unlike the brainless AirPort Express, which just passes on music from your Mac and can't do anything on its own, the SoundBridge has a display and a remote that lets you navigate iTunes and select songs, playlists, or even podcasts. And although you can only send music to one Airport Express unit at a time, you can add additional Soundbridges—up to a total of five—and have them all playing something different at the same time, assuming you have the bandwidth. If you want them synchronized to all play the same thing at the same time, you need to use a bit of open-source software called **SlimServer 6** (free, www.slimdevices.com); Slim Devices also makes a SoundBridge-like device, the **Squeezebox2** ($249).

The SoundBridge is just a device for playing music, though. While it communicates with your Mac wirelessly, it can't be used to extend your network the way the AirPort Express can—nor can the SoundBridge play protected AAC files purchased from the iTunes Music Store, a potential deal breaker for some Mac owners.

Apple AirPort Express
PROS: Relatively easy to configure. Minimizes cables. Works as a wireless base station.
CONS: Can only stream from one Mac to one room at a time. No built-in support for audio from other OS X sources.

Roku SoundBridge
PROS: Easy to configure. Allows for multiple streams in multiple rooms.
CONS: No synchronized streaming built in. Won't play AAC files purchased from the iTunes Music Store.

The Ultimate Solution: Dedicated Amplifier/Music Controller
Cost: $898 and up

The **Sonos Digital Music System** (●●●●○, Jun/05, p36) is, at present, the most capable way to stream audio through your home. It starts with a **ZonePlayer** ($499), a network device with an amplifier and connections for speakers or your stereo, and a **Sonos Controller** ($399), a Sony PlayStation Portable–size wireless remote with a backlit color display. The ZonePlayer can see your iTunes library and playlists, and you can access your music using the Controller. You can add music to more rooms in the house by simply plugging in more ZonePlayers, and the system requires almost no configuration—the first ZonePlayer has to be connected directly to your home network via Ethernet, but any additional ones can work wirelessly. You can stream different songs to different rooms, or the same song to all the rooms—even at different volumes, if you want.

The Sonos Controller (left) and ZonePlayer (right) work together to fill your home with sweet, sweet music.

Since we reviewed the Sonos, there have been a number of new updates and improvements, including a new Mac-based Desktop Controller client—you can now control almost every Sonos feature right from your Mac. Like the Roku SoundBridge, the Sonos won't let you play protected AAC files from the iTunes Music Store, but so far, the Sonos is the closest to streaming-music nirvana you can get.

You can control the Sonos Digital Music System from either end—from the ZonePlayer side using the handheld remote, or from the Mac side with the new Desktop Controller software.

Sonos Digital Music System
PROS: Great design. Easy setup.
CONS: Expensive, especially if you only need to stream to a single room. Won't play tunes from Apple's iTunes Music Store.

Seeing Is Believing

iTunes anywhere is great, but why stop there? Why not take your Mac media server to the next level and start recording video or sending streaming video to other rooms the way you send your music? But achieving this goal comes with its own set of issues—for one, just plopping a Mac in your living room doesn't present the coziest user experience. The Mac user interface was designed for computer displays, not TV screens, and you can't automatically control it with a TV-like remote. Instead, think about expanding your Mac's role as a media server and making it the center of your video-viewing world. What you need is a new device—something like a Roku SoundBridge, but for video—that connects your Mac to your TV. These boxes have come to be called media players, and they were everywhere at this year's Consumer Electronics Show—some 150 of them were shown. But before we look at video streaming, let's look the recording side of things.

The Pay-as-You-Go Solution: Mac Plus DVR
Cost: $199 and up (plus monthly service fee)

When digital-video recorder (DVR) devices like TiVo entered the living room and the lexicon, they changed the way people watch TV. And while most TV-based DVRs work great in the living room, they have long-term costs you won't find with a Mac-based DVR—primarily their monthly service charges. Nevertheless, they're easy to set up, and both of the two main competitors work with your Mac—to a degree.

If you connect multiple **TiVos** ($199 and up, www.tivo.com) or **ReplayTVs** ($149 and up, though the entry-level model may soon be discontinued; www.digitalnetworksna.com/replaytv) to your network, you can stream recorded video among units (though not from one brand to the other). Doing so lets you, for example, record a show on the DVR in the bedroom while you're watching a show on the DVR in the living room; you can then watch the show recorded in the bedroom while still in the living room. The TiVo can also display photos and play music from your networked Mac—which makes it useful for audio streaming as well, if you hook it up to your stereo. You can access your photos and music using the TiVo remote after you download TiVo Desktop from the TiVo Web site and install it on your Mac.

Tower of Power

Unfortunately, TiVo can't stream video from your Mac, so you can't use your Mac as a video server with a TiVo-connected TV. Also, although the latest version (2.1) of TiVo Desktop enables you to transfer recorded shows to a computer for archiving or remote viewing, it's only available for Windows—Mac users have to settle for version 1.9.1, which (aside from not supporting the transfer of shows) isn't compatible with Tiger. While there is a workaround for transferring shows to a Mac, it requires a level of hacker fu that we won't go into here—visit http://shughes.blogsome.com/2005/06/13/tivo-and-mac-osx-remux-redux to find out how.

Mac owners have a lot more options with ReplayTV. This DVR can't play your Mac's music, but it can display photos. More to the point, you can offload recorded TV shows to your Mac and stream them to a ReplayTV device using an application called DVArchive (free, www.dvarchive.org). Running DVArchive on your Mac enables it to find any ReplayTV device on your network and transfer the recorded video according to a schedule you set up. Even better, each ReplayTV on your network sees your Mac as another ReplayTV device from which you can stream your archived shows on demand. That feature only works with shows originally recorded by a ReplayTV device, however—it can't stream shows in other video formats, such as your iMovies.

TiVo
PROS: Easy to configure and operate. Can access Mac-based music and photos.
CONS: Ongoing service fees. Can't easily transfer recorded TV shows to the Mac. Can't stream video from the Mac.

ReplayTV
PROS: Easy to configure and operate. Can transfer recorded TV shows to the Mac. Can access Mac-based photos and TV shows.
CONS: Ongoing service fees. Can't access Mac-based music. Doesn't support streaming of standard, nonproprietary video formats from the Mac.

The Practical Solution: Mac as DVR
Cost: $299 and up

If you want to use the Mac to record TV off the air without a standalone, dedicated DVR, two products stand out: the Elgato **EyeTV 200** ($329, www.elgato.com) and the Formac **Studio TVR** ($299, www.formac.com). Both combine software with an external device that connects to your Mac and your cable, satellite, or antenna feed to give you DVR capabilities with zero monthly subscription fees. Both support remote scheduling, so you can tell them to record your favorite shows via a Web browser from any computer. (Of course,

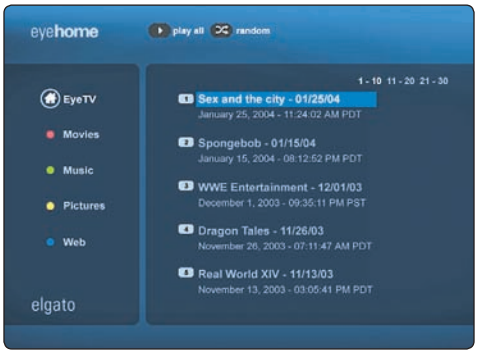
Everything in Its Place

Going by Apple's calculations for iPods, 60GB of hard-disk space should give you enough storage for about 15,000 songs. But what about video? Depending on the quality and the format your video is encoded in, you could be looking at anywhere from 350MB per hour of half-decent video to upwards of 8GB for one hour of high-definition TV. That's a lot of disk space.

If you're serious about streaming video, you should think about a Network Attached Storage (NAS) drive, such as LaCie's desktop Ethernet Disk mini (250GB to 500GB, $299 to $599, www.lacie.com) or more-capable, rack-mountable Ethernet Disk (400GB to 1TB, $729 to $1,449). A NAS drive is simply an external drive that connects directly to your network via a built-in Ethernet port; you mount it on your Mac via your Mac's networking utilities. Since a NAS doesn't require a FireWire connection to your Mac, you can place it anywhere in your home and access its contents from any computer, Mac or PC.

LaCie's Ethernet Disk mini: It's a harddrive—but with an Ethernet port.

YOU COULD DO A LOT worse than our Mac-based home entertainment system. This pile o' performance power includes (clockwise from bottom left) a Sonos Digital Music System (Controller and ZonePlayer pictured), an EyeTV digital TV recorder (shown with remote), a pair of M-Audio Studiophile DX4 speakers, a set of Sonos SP100 speakers, and a Sony MFM-HT95 HDTV-ready LCD monitor/TV. Oh, and don't forget the Power Mac G5!



This is your TV on EyeHome—use the remote to access the movies, TV shows, and music stored on your Mac.

EyeTV records shows or lets you watch them right on your Mac—and gives you an onscreen remote to do it with.

the Mac they're connected to needs to be on, and the device needs to be connected to a video source at the time you want to record.) Another advantage of using your Mac as your DVR is that you can to archive video in multiple formats or even take it with you. EyeTV has a video-export option for Sony's PlayStation Portable that lets you put your shows in your pocket. As a bonus, both devices have standard video inputs, so you can also use them to digitize your old analog VHS tapes.

Who needs TiVo? The Formac Studio TVR lets you play and record your favorite TV shows with your Mac—it converts your old analog videotapes, too.

But recording is only half the DVR story—there's still the playback side of things. You probably don't want to put your Mac next to your TV or use your TV as your Mac's display. Instead, you'll want to hook your Mac up to a digital-media player—one that connects to your Mac via Ethernet and connects to your TV through standard TV connectors. Elgato's **EyeHome** ($199) is one such player—it lets you use a remote control and your TV screen to access all the digital-media content stored on your Mac—photos, music, movies, and so on.

If you're looking for more, Buffalo Technology's **LinkTheater PC-P3LWG/DVD** ($349.99, www.buffalotech.com) combines a digital-media player with a progressive-scan DVD player, while D-Link's **MediaLounge DSM-320RD** adds both a DVD player and a media-card reader. Few of these players support the Mac out of the box, but fortunately Elgato's **EyeConnect** software ($99) enables any Universal Plug and Play (UPnP) device to stream your media content directly from your Mac.

Elgato EyeTV200
PROS: Scheduled recording of live TV. Multiple export options. Comes with remote.
CONS: Can't control recording from TV. Can't watch recording on TV without additional equipment. No analog output.

Formac Studio TVR
PROS: Scheduled recording of live TV. Analog video and audio output.
CONS: Can't control recording from TV. Can't watch recording on TV without additional equipment. No remote.

TIP

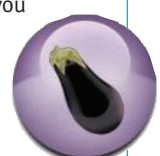
YO, WHAZZ' UPnP?

When looking for compatible consumer-electronic devices to add to your Mac-based home-entertainment network, the acronym to look for is UPnP (Universal Plug and Play). Devices that sport the UPnP standard will play well with other UPnP devices with little or no configuration.

Alan Graham's personal media solution consists of a Sonos system, EyeTV, EyeHome, 300GB NAS drive, Titanium G4 PowerBook, 300GB FireWire drive, and an Xbox. And yes, he is a bachelor.

The Headless Server

If you dedicate a Mac to the job of media server—a Mac mini, say, or an old Power Mac G4 you have lying around—you may want to control it without having to attach a keyboard and monitor (especially if you're using the mini near your entertainment system, where those peripherals will ruin the aesthetic appeal of your living room or home theater). There are a couple of ways to do this. One that works for iTunes only is a clever little app from SearchWare Solutions called **iHam on iRye** (free, www.searchwaresolutions.com), which allows you to control iTunes on one Mac from another on your network—for example, from your laptop next to the couch.



OSXvnc

For greater control, turn to Virtual Network Computing (VNC). Download a VNC-server application such as **OSXvnc** (free, www.redstonesoftware.com) and install it on your media-server Mac. (Tiger adds built-in VNC server capability: Go to System Preferences › Sharing, turn on Apple Remote Desktop, and click Access Privileges to find where to enable access.) Then put a VNC client such as **Chicken of the VNC** (free, www.geekspiff.com) on another Mac. Just tell the client the IP address of the server Mac, type in your password, and you can control the server Mac just as though you were sitting in front of it.

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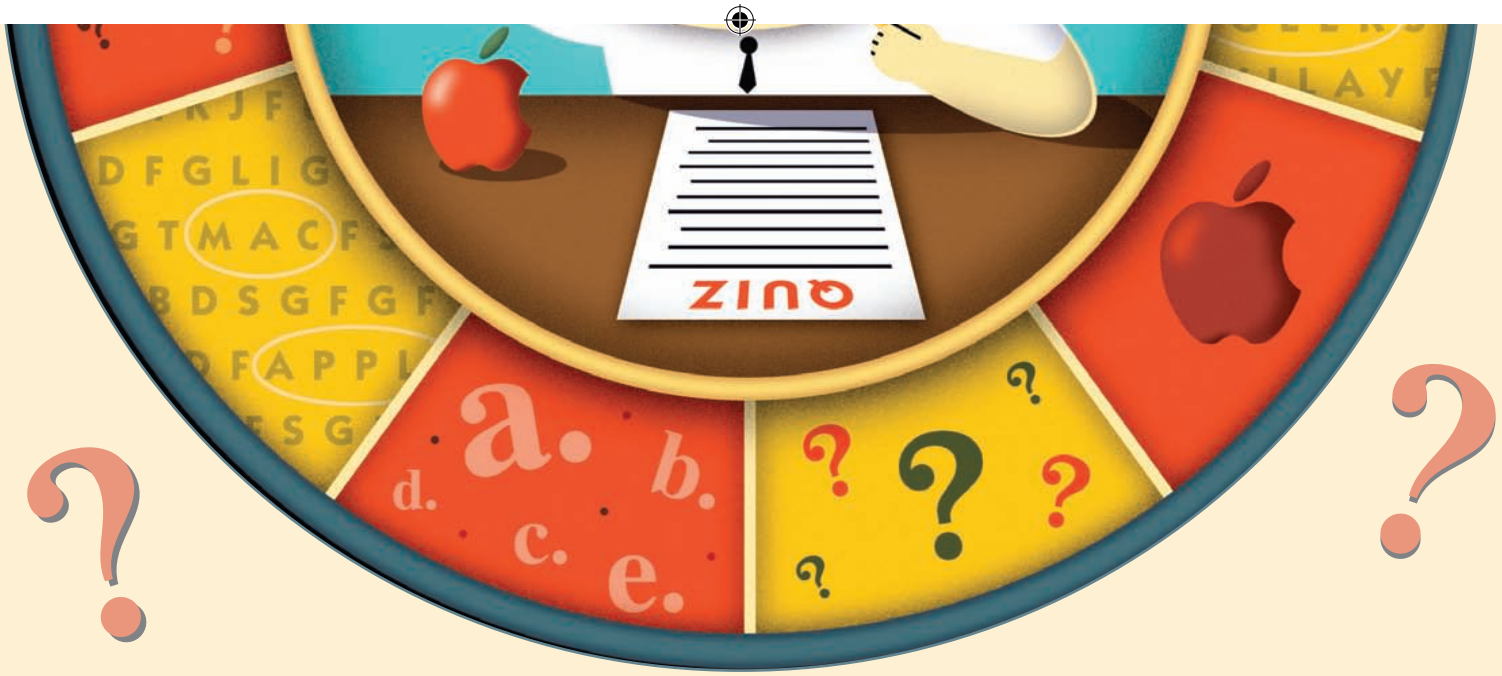


Do you think you know your way around your Mac—inside and out, old and new? Here's your chance to really see how you stack up. Our team of experts has compiled a collection of questions and puzzles designed to test how much you really know about the Macintosh. Study time's over—pick up your pencils and get to it. (And Googling is cheating!)

By David Biedny, Niko Coucouvanis, Roman Loyola, Rik Myslewski, Ian Sammis, Deborah Shadovitz, and Jake Widman
Illustrations by John Ueland

1 **What was the first Mac to ship with a two-button mouse?**
Ⓐ Dual 2.7GHz Power Mac G5 Ⓑ 2GHz iMac G5 Ⓒ Xserve Ⓓ 1.42GHz eMac G4 Ⓔ Why would anyone want a two-button mouse?

2 **What was the first image ever displayed on a Macintosh?**
Ⓐ An ASCII image of an apple Ⓑ A picture of President Jimmy Carter Ⓒ A picture of 1979 Playmate of the Year Monique St. Pierre Ⓓ An illustration of Scrooge McDuck Ⓔ A picture of Steve Jobs and Steve Wozniak in an embrace

3 **Who directed Apple's 1984 Super Bowl commercial?**
Ⓐ Ridley Scott Ⓑ Steven Spielberg Ⓒ Adrian Lyne Ⓓ Tim Burton Ⓔ Ed Wood

4 **What was the price of the Apple 1 when it was released?**
Ⓐ $999 Ⓑ $500 Ⓒ $2,495 Ⓓ $666.66 Ⓔ Free with a membership in the Homebrew Computer Club

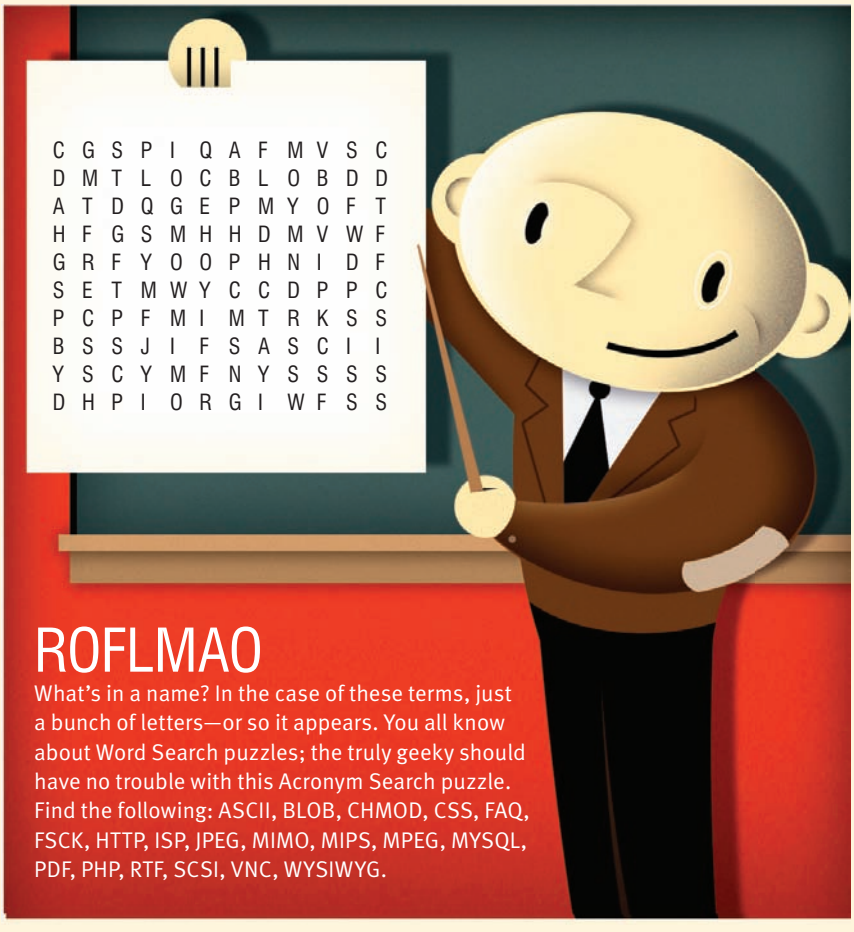
5 **"Oink" is to pig, as "Moof" is to:**
Ⓐ Llama Ⓑ Chihuahua Ⓒ Dogcow Ⓓ Armadillo Ⓔ Clippy, the Microsoft helper

6 **What did John Warnock and Chuck Geschke invent?**
Ⓐ PostScript Ⓑ Finder Ⓒ Mouse Ⓓ iPod interface Ⓔ The Clapper

7 **What was the Chooser?**
Ⓐ A way to install fonts in System 7 Ⓑ A pre-Mac OS X way to select a network and printer Ⓒ Andy Hertzfeld's pet dog that he often brought to work Ⓓ An app that lets you switch between Mac OS X and Classic mode Ⓔ An interview process at Apple to determine the best candidate for a job

8 Which port does this symbol represent ?

Ⓐ Serial Ⓑ ADB Ⓒ AppleTalk Ⓓ Printer Ⓔ Tawny



ROFLMAO

What's in a name? In the case of these terms, just a bunch of letters—or so it appears. You all know about Word Search puzzles; the truly geeky should have no trouble with this Acronym Search puzzle. Find the following: ASCII, BLOB, CHMOD, CSS, FAQ, FSCK, HTTP, ISP, JPEG, MIMO, MIPS, MPEG, MYSQL, PDF, PHP, RTF, SCSI, VNC, WYSIWYG.

9 **How did the printer manufacturer Epson get its name?**

Ⓐ It's the last name of the founder's mistress, Nobuko Nospe, spelled backward. Ⓑ It's an acronym for Electronic Printers, Sublimal or Nonsublimal. Ⓒ It's the name of a street in Minato-ku, Tokyo, where the company was founded. Ⓓ It means "Son of EP." Ⓔ It's a vulgar Japanese pun that roughly translates to "#&*$ Canon!"

10 **What was the first Mac to have a FireWire 800 port?**

Ⓐ Quicksilver Power Mac G4 Ⓑ Mirrored Drive Door Power Mac G4 Ⓒ Power Mac G4 Cube Ⓓ Power Mac G5 Ⓔ PowerBook G5

11 **In 1996, Adobe released a raster-image-processor alternative to PostScript for low-cost printers. What was this RIP called?**

Ⓐ PostScriptLite Ⓑ PrintGear Ⓒ LCP (Low-Cost PostScript) Ⓓ Post-PostScript Ⓔ CheapScript

12 **About how many 12-inch PowerBook G4s would it take to equal the weight of the original Macintosh Portable?**

Ⓐ 2.5 Ⓑ 3 Ⓒ 3.5 Ⓓ 4 Ⓔ I can't tell—my Portable's too heavy to lift onto the scale.

13 **What was the first commercial Macintosh game to feature sampled sound?**

Ⓐ Dark Castle Ⓑ Airborne! Ⓒ Ground Zero Ⓓ Crystal Quest Ⓔ Unreal Tournament

14 **When did Apple release its first Unix-based operating system?**

Ⓐ 1998 Ⓑ 1988 Ⓒ 2001 Ⓓ 1992 Ⓔ 1965

15 **What software featured the very first color painting tools on the Macintosh II?**

Ⓐ PixelPaint Ⓑ SuperPaint Ⓒ Video Works II Ⓓ ColorStudio Ⓔ Batshop Begins

16 **What did Steve Jobs hurl offstage in rage during his expo keynote heralding the digital lifestyle?**

Ⓐ His presentation clicker Ⓑ His water bottle Ⓒ A digital camera Ⓓ An ATI video card Ⓔ Phil Schiller

17 **Who said, "Never trust a computer you can't lift"?**

Ⓐ Steve Wozniak Ⓑ Bill Gates Ⓒ Steve Jobs Ⓓ An Apple II Ⓔ A Mac

18 **What was the first Mac to ship with OS X?**

Ⓐ Fruity iMac Ⓑ Power Mac G3 Ⓒ Power Mac G4 Ⓓ Power Mac G5 Ⓔ IBM PC AT

19 **What font was used in the first Macintosh logo?**

Ⓐ Apple Garamond Ⓑ Motter Tektura Ⓒ Geneva Ⓓ Jobs Overextended Ⓔ Apple Monospace

20 **What is the name of the technology that will allow PowerPC apps to run on Intel-based Macs?**

Ⓐ Classic Mode Ⓑ PowerPC-to-Intel Ⓒ Roswell Ⓓ Rosetta Ⓔ Molasses

21 **What types of apps will run on the translation technology referred to in question 20?**

Ⓐ Apps that require any G series processor Ⓑ Apps that will also run in Mac OS 8 or Mac OS 9 Ⓒ Apps written for a PowerPC G3 Ⓓ Apps written specifically for the Velocity Engine Ⓔ Apps that transparently autophase their nodal functions

22 Name that PowerBook.

Ⓐ PowerBook G3 (Wall Street) Ⓑ Clamshell iBook
Ⓒ PowerBook G3 (Lombard) Ⓓ PowerBook G3 (Pismo)
Ⓔ PowerBook G5

Match the Mac model to its code name.

1. Elroy	a. Power Mac G4 (AGP graphics)
2. Peter Pan	b. MacTV
3. Sawtooth	c. Centris 650
4. Yikes!	d. Power Mac 7100/66
5. Carl Sagan/BHA/LAW	e. Power Mac G4 (PCI graphics)
6. Wombat 25	f. iMac Rev A/B

BONUS POINT:
What does BHA stand for? What does LAW stand for?

23 The original Apple Lisa was based on what processor?
Ⓐ MOS Technology/ SynerTek 6502 Ⓑ Motorola MC68000 Ⓒ Western Design Center 65SC816 Ⓓ SynerTek 6502A Ⓔ Homer Bartman 302

24 What is SCSI-1's maximum data-transfer rate?
Ⓐ 2MB per second Ⓑ 3MB per second Ⓒ 4MB per second Ⓓ 5MB per second Ⓔ 56KB per second

25 What was the maximum volume size under System 6 and early versions of System 7?
Ⓐ 400KB Ⓑ 1.4MB Ⓒ 800MB Ⓓ 2GB Ⓔ 6GB

26 Years before Microsoft released the Xbox, Apple teamed up with Bandai to create a set-top Internet device and game console called:
Ⓐ Saturn Ⓑ eWorld Ⓒ Pippin Ⓓ eMate 300 Ⓔ iCouldn'tCareLess

27 What was the speed of the system bus on the Mac SE?
Ⓐ 4MHz Ⓑ 8MHz Ⓒ 16MHz Ⓓ 32MHz Ⓔ 128KHz

28 In 1995, Power Computing introduced its first Mac clone. What CPU did it use?
Ⓐ Motorola 68040 Ⓑ PowerPC 601 Ⓒ PowerPC 750 Ⓓ MOS Technology 6502 Ⓔ OU812

29 Which Mac OS was the last to run on both Motorola 68000 and Power PC CPUs?
Ⓐ System 7.5.1 Ⓑ Mac OS 8.1 Ⓒ Mac OS X Ⓓ Mac OS 9 Ⓔ Mac OS 68000PPC

30 What does Apple call an app that'll run on both PowerPC and Intel Macs?
Ⓐ Fat Binary Ⓑ Universal Binary Ⓒ Universal Code Base Ⓓ Single Code Base, Multiple Platform Ⓔ Really, Really Fast

31 Which of the following types of apps will not need to be recompiled to run on Intel-based Macs?
Ⓐ BSDUnix Ⓑ Java Ⓒ The ones you've already paid for Ⓓ Cocoa Ⓔ Carbon

32 Which Mac model shipped with System Software 1.0?
Ⓐ Mac 128K Ⓑ Mac 512K Ⓒ Mac 512Ke Ⓓ Mac Classic Ⓔ Mac Plus

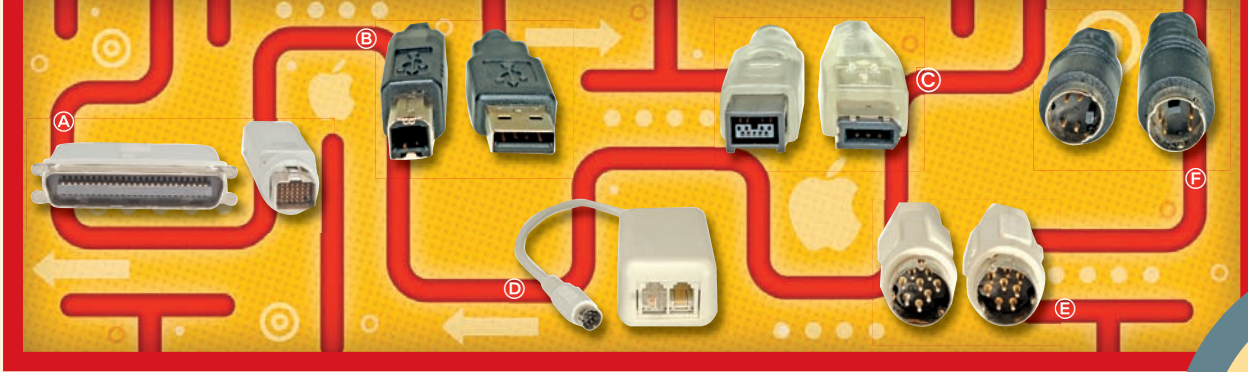
33 Which operating system was the first to use the blue smiley-face Mac OS logo?
Ⓐ System 7.2 (aka the "blue box") Ⓑ System 7.5.2 Ⓒ System Smiley Ⓓ System 7.5.1 Ⓔ System 7.6

34 Which of the following iMac G5 parts can you *not* replace yourself?
Ⓐ LCD display Ⓑ Hard drive Ⓒ Power supply Ⓓ Cheetos dust on keyboard Ⓔ Modem card

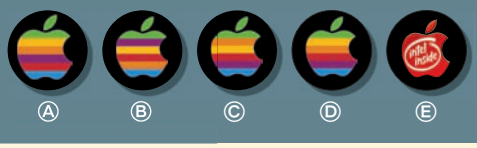
LINK THE LINKS! Match the cable to its description.

1. USB A to USB B___ **2.** Serial___ **3.** ADB___ **4.** FireWire 400 to FireWire 800___ **5.** SCSI___ **6.** PhoneNet___

BONUS POINT: What's that thing stuck in the left-hand jack in picture D?

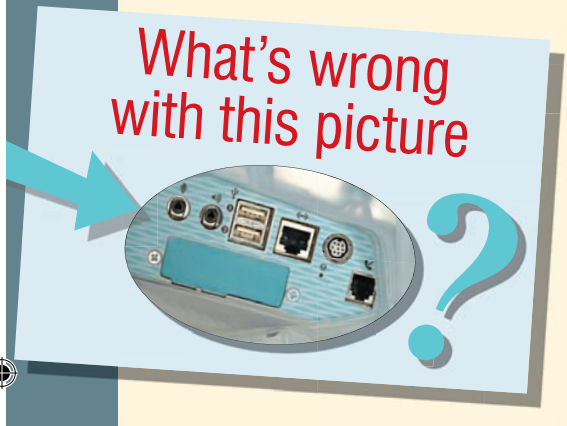


45 Which was the real Apple multicolored logo?



35 What does NAS stand for?
Ⓐ Network Attached Storage
Ⓑ Network Accessed Storage
Ⓒ Never Antagonize Steve
Ⓓ Network Administrator Status
Ⓔ Network Administration System

36 What's the maximum pixel resolution of a 15-inch PowerBook?
Ⓐ 1024 by 768 Ⓑ 1152 by 768
Ⓒ 1280 by 854 Ⓓ 1280 by 1024
Ⓔ This much by this much



37 In the current dual-chip Power Mac G5 line, the frontside bus runs at what speed compared to the installed CPU?
Ⓐ 1/3 as fast as the CPU Ⓑ 1/2 as fast as the CPU Ⓒ 1/4 as fast as the CPU Ⓓ Twice as fast as the CPU Ⓔ As fast as the driver wants to go, as long as it makes its stops

38 What is Apple Qmaster?
Ⓐ An input- and output-optimization technique used in the Power Mac G5 Ⓑ Apple's implementation of SATA2's native command queuing (NCQ) Ⓒ An in-house 3D-billiards app with advanced physics modeling Ⓓ A distributed-rendering system for Shake, Alias Maya, and others Ⓔ James Bond's gadget maker's boss

39 Which of the following is not a Unix shell?
Ⓐ bash Ⓑ tcsh Ⓒ csh Ⓓ korn Ⓔ conch

40 How were desk accessories stored in early Macintosh systems?
Ⓐ In the data fork of the System Ⓑ As DSKA resources Ⓒ As CODE resources Ⓓ As DRVR resources Ⓔ In the left-front drawer, behind the staples

41 Which shareware app's territory did Apple move in on with software of its own?
Ⓐ Program Switcher Ⓑ Watson Ⓒ Konfabulator Ⓓ Audion Ⓔ All of the above

42 Which companies were part of the Taligent partnership?
Ⓐ Apple, IBM, and Motorola
Ⓑ Apple, IBM, and Hewlett-Packard
Ⓒ Apple, Motorola, and Intel
Ⓓ Apple, IBM, and Microsoft
Ⓔ Microsoft, Pixar, and Disney

43 What's the best way to break in a new PowerBook or iBook battery?
Ⓐ Fully charge the battery, then disconnect the power adapter and use the 'Book until it goes to sleep; finally, fully charge the battery again. Ⓑ Drain the charge that it came with, then fully charge and drain once more. Ⓒ Run it through five full-charge/full-drain cycles. Ⓓ Get out of the past—it doesn't matter how you prime a battery! Ⓔ Put it in the freezer overnight.

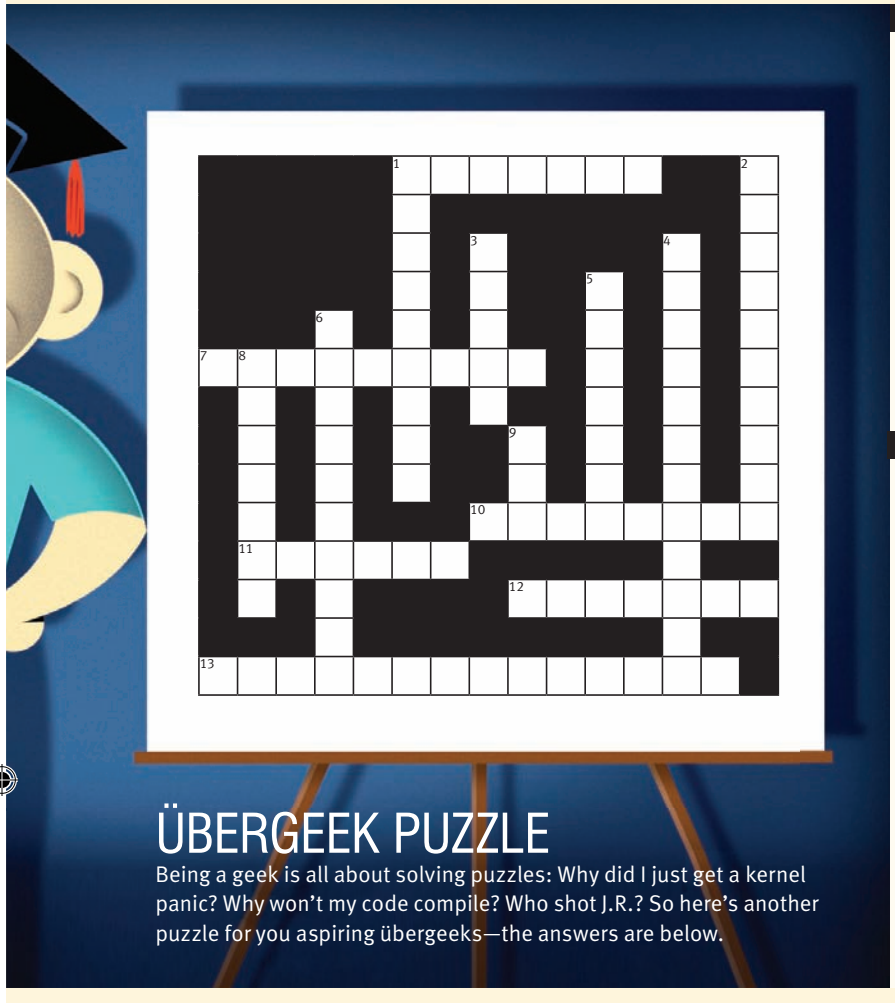
44 What's the Mac mini's most interesting secret?
Ⓐ Its G4 processor is actually an Intel Pentium—don't tell!

Geek Quiz Answers

0 to 25—GED (Geek Equivalency Degree)
26 to 50—BG (Bachelor of Geekiness)
51 to 75—MGA (Master of Geek Arts)
76+—GhD (Doctor of Geekology)

Time's up! Put down your pencils and prepare to find your score. There were 45 multiple-choice questions; 14 words in the Übergeek Crossword Puzzle; 19 terms in the Acronym Search; 6 Macintosh code names; 6 cables to identify; 3 Bonus Points; and one What's Wrong With This Picture. Get everything right, and you'd have 94 points. Get a few wrong ... well, see our scoring table above.

1 e	10 b	19 a	28 b	37 b
2 d	11 b	20 d	29 b	38 d
3 a	12 c	21 c	30 b	39 e
4 d	13 b	22 d	31 b	40 d
5 c	14 b	23 b	32 c	41 e
6 a	15 c	24 d	33 d	42 b
7 b	16 c	25 d	34 e	43 a
8 b	17 e	26 c	35 a	44 d
9 d	18 c	27 b	36 c	45 d



ÜBERGEEK PUZZLE

Being a geek is all about solving puzzles: Why did I just get a kernel panic? Why won't my code compile? Who shot J.R.? So here's another puzzle for you aspiring übergeeks—the answers are below.

ACROSS

1. The technology in Mac OS X that allows for automatic network configurations
7. The Mac's 2D drawing engine before Mac OS X introduced Quartz
10. Intel's upcoming hardware-level security technology
11. The open-source BSD Unix environment that lies beneath Mac OS X
12. Moving an application from one system architecture to another
13. An Intel technology that allows a single processor to handle two simultaneous data instructions

DOWN

1. The byte-ordering method used in the PowerPC family of processors
2. The type of file created when source code is compiled
3. A wireless Internet-connection technology with a range of up to 10 miles
4. The byte-ordering method used in the x86 family of processors
5. A byte-swapping callback routine used when preparing an application to run on both Intel and PowerPC chips
6. The framework that will ease a developer's transition from Velocity Engine–specific code to Intel-specific code
8. An industry-standard double-byte text-encoding methodology
9. The Intel technology closest in operation to the PowerPC's Velocity Engine

Ⓑ Like the G4 Cube, it has no internal cooling fan. Ⓒ It's got a subwoofer on the bottom that doubles as a heat sink. Ⓓ There's an unused FireWire lead inside, which is perfectly placed to feed an integrated iPod dock. Ⓔ You can overclock it using only a putty knife.

Believe it or not, David Biedny, Niko Coucouvanis, Roman Loyola, Rik Myslewski, Ian Sammis,Deborah Shadovitz, and Jake Widman actually have lives.

What's wrong with this picture? The original iMac (pictured) did not come with a serial port. **Match the Mac model to its code name.** 1f, 2b, 3a, 4e, 5d, 6c **Bonus points:** BHA stands for "Butthead Astronomer," referring to Carl Sagan's suit against Apple for using his name as a code name; LAW stands for "Lawyers Are Wimps," referring to Apple's lawyers' directive to find a code name other than "BHA." **Link the links!** 1b, 2e, 3f, 4c, 5a, 6d **Bonus point:** That's a resistor, which used to be required to terminate a LocalTalk chain.

ROFLMAO Acronym-Search Solution

C	G	S	P	I	Q	A	F	M	V	S	C
D	M	T	L	O	C	B	L	O	B	D	D
A	T	D	Q	G	E	P	M	Y	O	F	T
H	F	G	S	M	H	H	D	M	V	W	F
G	R	F	Y	O	O	P	H	N	I	D	F
S	E	T	M	W	Y	C	C	D	P	P	C
P	C	P	F	M	I	M	T	R	K	S	S
B	S	S	J	I	F	S	A	S	C	I	I
Y	S	C	Y	M	F	N	Y	S	S	S	S
D	H	P	I	O	R	G	I	W	F	S	S

Übergeek Crossword-Puzzle Solution

			B	O	N	J	O	U	R			E
			I									X
			G		W					L		E
			E		I			F		I		C
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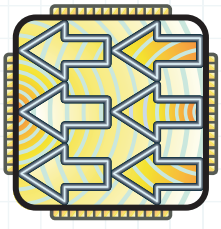
INTEL 101

By Rik Myslewski

Throughout the Mac's history, Mac addicts and peecee devotees have lived in parallel universes, with no need to know much about the chips that powered each others' machines. However, now that Apple is moving to Intel processors, those universes are colliding. We're going to hear quite a bit about Intel in the next couple of years; and Mac users have scads of new terms to learn, boatloads of new technologies to explore—and, of course, reams of new marketing hype against which to angle their BS deflectors. It's time to boost your Intel-ligence; this Field Guide is only the first baby step.

HYPER-THREADING



What it is: A way to make a processor accomplish two (or more) tasks at once.
What the PowerPC equivalent is: Nothing directly comparable at the processor level—though that's not necessarily a bad thing.
Why you should care: Intel's Hyper-Threading Technology essentially turns one physical processor into two *virtual* processors—that is, it allows two applications (or two threads of the same application) to use the resources of one processor at the same time. Sounds good? Well, it can be, as long as those two applications don't need to use the same part of the processor at the same time. If they do, one of the applications can hog that resource, and (similar to the total-processor hogging in the bad old days before Mac OS X's preemptive multitasking) that app can set up shop there for as long as it damn well pleases—and there's nothing that other apps or the OS can do about it.

The bottom line: If you have two apps that focus on different parts of the processor—say, a word processor that just needs to get simple work done and a 3D app that needs to tax the processor's higher-math capabilities, Hyper-Threading can help. But if, for example, you're running two multimedia apps, you're not going to see much benefit—in fact, one app could get seriously bogged down, twiddling its virtual thumbs while waiting for the impolite other app to finish its resource-hogging activities.

ILLUSTRATIONS BY JAMES F. KRAUSS

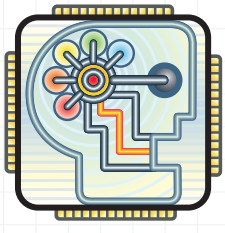
DUAL CORE

What it is: Two physical processors on the same chip.
What the PowerPC equivalent is: Two physical processors in the same Mac.
Why you should care: Over on the PC side of the fence, dual-core chips are all the rage. These single-chip dualies have two processors on the same chip in a setup that allows for *SMP*, or "symmetrical multiprocessing." (SMP arrived on the Mac with Mac OS X.) One of the reasons that the PCers are so jazzed about dual cores is that you can't use a garden-variety Pentium 4 in a dual-processor system—and the dirty little secret about that limitation is that Intel intentionally hobbled the P4 (as the cognoscenti call it) so that marketeers could pump up the prices of Intel's SMP-capable, server-level Xeon processors.

Since dual-core chips are so new—they're only now hitting the market—there's very little desktop-level Windows software that has been multithreaded to take advantage of them. Considering the long experience Apple engineers and developers have had creating both SMP Macs and the multithreaded apps that benefit from them, expect each and every Mactel Mac out of the chute to be both dual core *and* Hyper-Threaded.

Bonus: Clever engineering of a dual-core, Hyper-Threaded processor could alleviate the competing-app problem described in "Hyper-Threading" on page 32. Got two apps trying to use the same processor resource? No problem—Mac OS X will move one of 'em to the other processor, and everyone will be happy. Finally: Want to dream different? Think dual Hyper-Threaded dual-core processor setups—in effect, eight processor cores at your service.

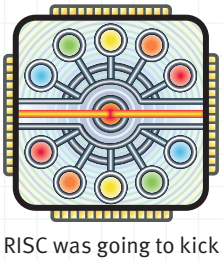
SSE



What it is: Intel's Streaming SIMD Extensions vector-processing technology.
What the PowerPC equivalent is: AltiVec (aka the Velocity Engine).
Why you should care: Yeah, we defined an acronym with another acronym—nobody said *everything* about the Intel transition was going to be a piece of cake. SIMD (Single Instruction, Multiple Data) technology is simply a way for a processor to perform the same operation on several chunks of similar data at the same time, a process that's especially useful in multimedia apps. SSE (SSE3 in its current implementation) is generally considered to be inferior to the PowerPC's SIMD technology, AltiVec—but not by a whole hell of a lot.

The biggest pain here is that AltiVec and SSE don't speak the same language. PowerPC developers who have optimized their code with AltiVec-specific instructions—that is, those who have addressed the intricacies of SIMD wrangling directly rather than leaving it to app-building compiler software—are going to have their work cut out for them if they want to apply the same level of optimization to Intel-executable code. Apple is, however, providing developers with what it calls the *Accelerate framework*; how this coding scheme works is too Deep Geek to go into here, but suffice it to say that it'll take much of the pain out of the transition to SSE by taking care of the AltiVec-to-SSE translation itself—though without the same level of optimization.

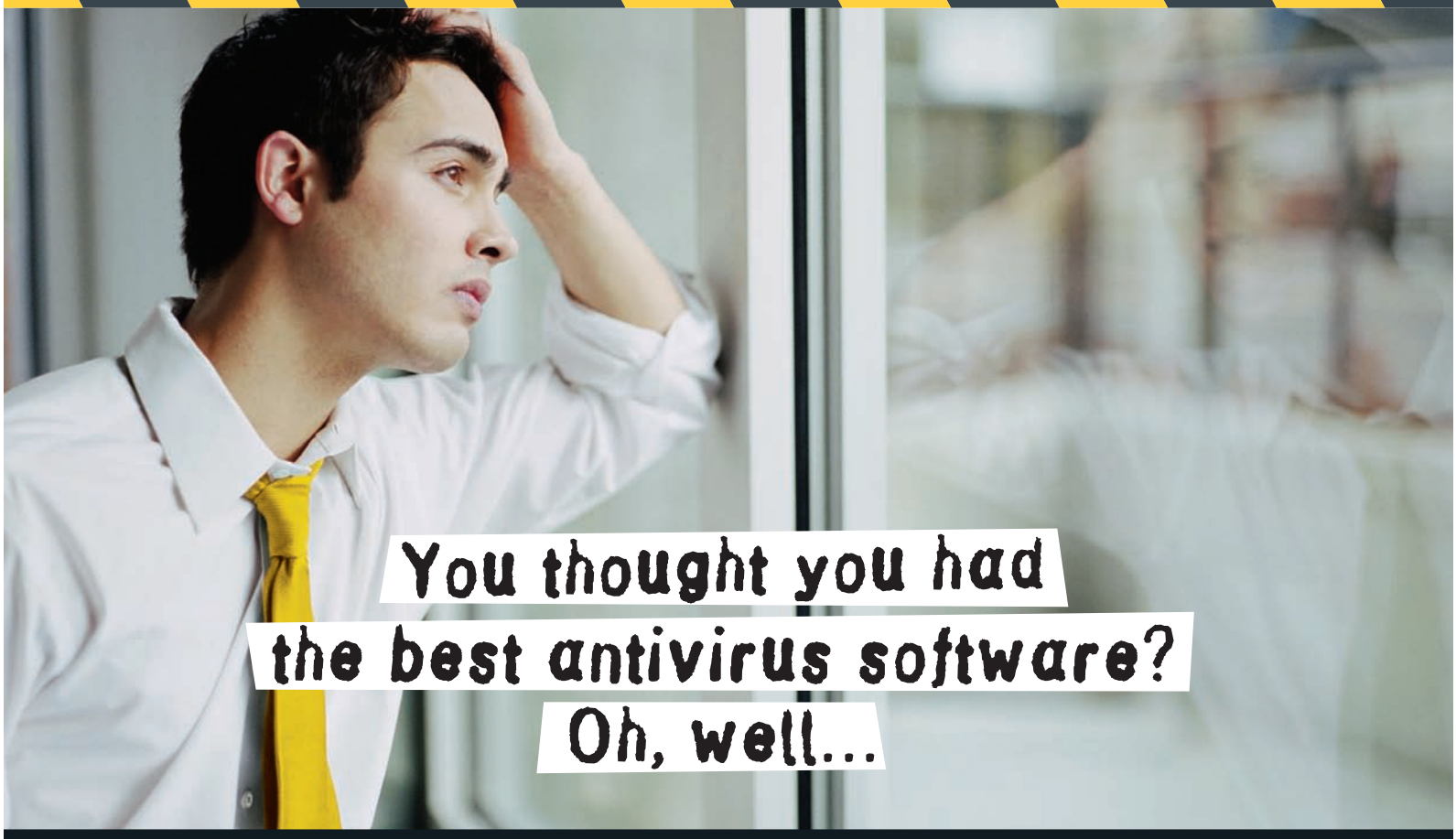
MICRO OPS



What it is: Intel's way of helping its CISC (Complex Instruction-Set Computing) processors approach the performance of RISC (Reduced Instruction-Set Computing) processors.
What the PowerPC equivalent is: IOPs (Internal Operations).
Why you should care: Remember when RISC was going to kick CISC's scrawny little ass? Well, maybe you don't—only true gearheads followed the heated debate about these two fundamentally different ways of creating a microprocessor architecture. Simply put, the difference is that a CISC processor (such as Intel's) tries to get a whole hell of a lot done with each instruction, while a RISC processor (such as PowerPC chips) flies through a rapid sequence of smaller, more individually targeted instructions.

Intel's CISC architecture is the older of the two systems—and the company is stuck with it because peecee users demand that every upgraded PC be backwards compatible with even the most archaic applications built using the company's Paleolithic x86 instruction set (which Intel prefers you call *IA-32*, which means "Intel Architecture, 32-bit," but we digress).

Although RISC is sleeker, slicker, and has inherent performance advantages, Intel's engineers came up with a nifty trick to level the playing field: In recent years, they've successfully eliminated the performance difference by adding intelligence to Intel processors that essentially breaks up the legion of overly complex and performance-reducing CISC instructions into more-nimble RISC-like instructions called *micro ops* (or *µops*). The equivalent instructions in a PowerPC are called *IOPs* (which, we're told, stands for "internal operations," not "itty-bitty operations"), but only a few of the PowerPC's already-svelte instructions need to be cracked into more than one IOP. Today the performance difference between well-designed CISC and RISC processors is negligible—the CISC versus RISC debate is now about as meaningful as that golden oldie about angels and pinheads.



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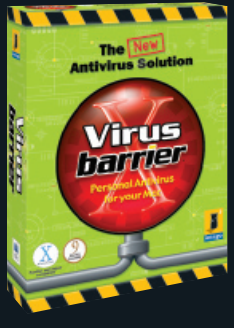

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MacAddict RATINGS

MacAddict RATED AWESOME	MacAddict RATED GREAT	MacAddict RATED SOLID	MacAddict RATED SO-SO	MacAddict RATED LOUSY
You'll be blown away.	You'll be impressed.	You'll be satisfied.	You'll be disappointed.	You'll be pissed off.

REVIEWS 35

better living through smarter shopping

After the initial shock and awe of this summer's blockbuster movies, what's left? Hopefully, inspiration and motivation. Grab your movie camera and create your own personal blockbusterette—it's not hard to do with the Final Cut Studio software suite. Or maybe "Action!" means something totally different to you, and you'd prefer games like Close Combat: First to Fight or Bionicle—both of which, by the way, look great on Eizo's FlexScan L778 display (pictured). Next month, we'll review Oakley's Thump MP3 player, Aspyr's Sims 2, Red Rock Software's DeltaGraph, and a lot more.

45 **Absynth 3** *software synthesizer*
49 **Air Flo EX** *gamepad*
49 **Bionicle** *action-adventure game*
50 **Camera Connector** *iPod photo-transfer device*
48 **Close Combat: First to Fight** *tactical shooter game*
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PLUS:

The**Hot**List

55 **The best of the best from recent reviews.**

PHOTOGRAPH BY MARK MADEO

Compatible with Mac OS X or later.

Compatible with Mac OS 9 or earlier.

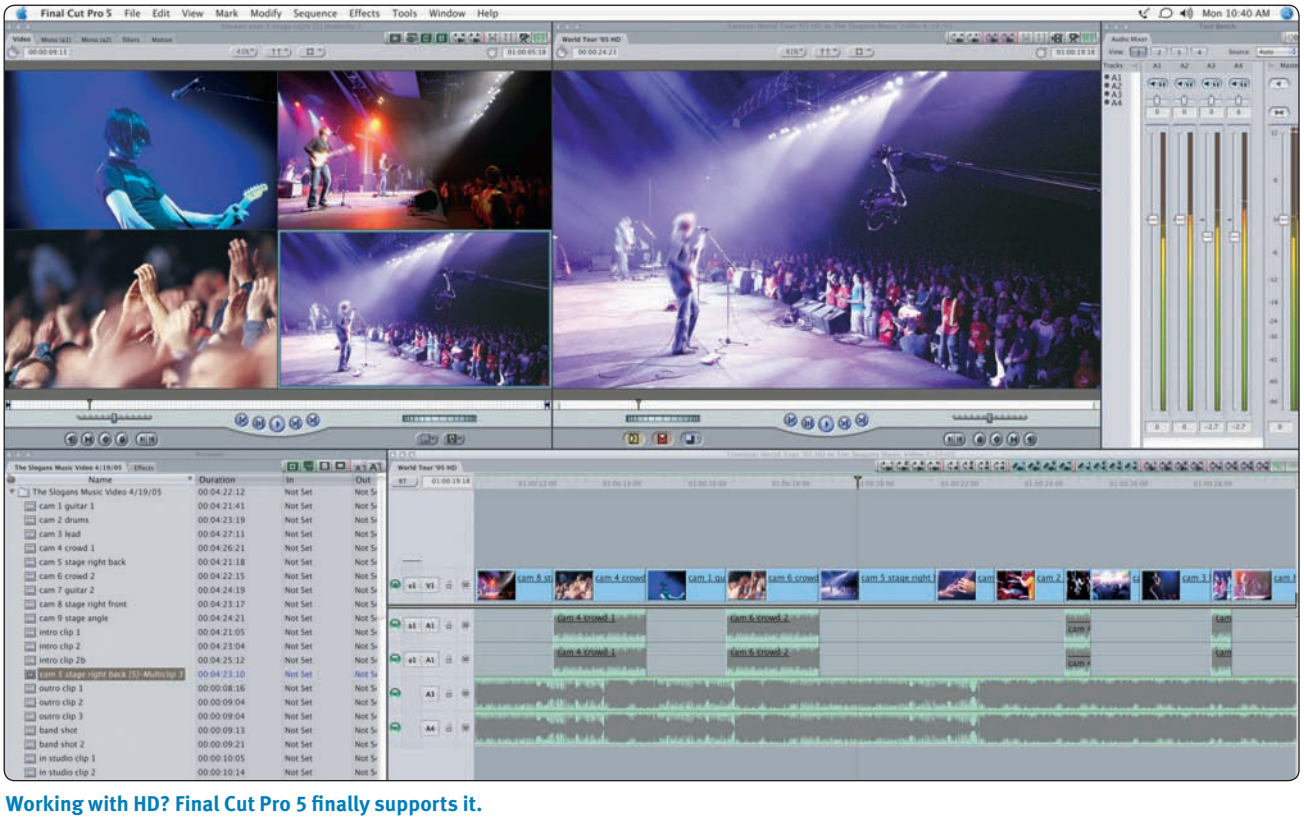
EDITORS' MacAddict CHOICE

We'd spend our own hard-earned money on this product.

Final Cut Pro 5

EDITORS' MacAddict CHOICE

PREMIER VIDEO EDITOR



Working with HD? Final Cut Pro 5 finally supports it.

Final Cut Pro 5, the crown jewel of Apple's digital-video empire, is a pro-caliber video editor in every respect. In fact, version 5 is proof of Final Cut's seasoned maturity—it's the first version that we can't recommend to everyone, simply because its new features are more narrowly focused than ever.

Case in point: Version 5 now supports multicamera editing (a feature that competitors such as Avid have long had), which lets you group different camera angles of the same scene together and easily switch from one angle to another. At the heart of multicamera editing is a new media element called a multiclip. Creating a multiclip is simple: Just select multiple video or audio clips in the Browser, and then choose Modify › Make Multiclip. Once created, you can watch your multiclip in Final Cut's Viewer window; instead of seeing one video clip play in the window, you'll see thumbnails of every camera angle playing simultaneously.

To edit a multiclip, just move it to the Timeline, play it, and then direct your attention to the Viewer window, where you can see the clip's camera angles all playing synchronously in real time. When you want to switch camera angles, just click an angle's thumbnail in the Viewer, or press a hot key on the keyboard. When you're finished, Final Cut automatically cuts your selected camera angles into your Timeline sequence exactly where you specified the cuts to occur. It's easy to make adjustments from there, as well; you can edit the clips with Final Cut's Ripple, Roll, Slip, and Slide tools, and you can easily switch an edited clip to a new camera angle by Control-clicking it and choosing the new angle from a pop-up menu. This easy and flexible approach offers editors a quick, intuitive way to assemble at least a rough cut of just about any project. Also, there's no reason you can't use a multiclip to edit multiple shots of a scene taken with the *same* camera; just group these clips into a multiclip and cut them together on the fly. The only hitch: Working with multiclips easily overwhelms many Macs. Our top-of-the-line PowerBook G4 couldn't play four-angle DV multiclips, though it could handle two-angle clips. It took a dual 2GHz Power Mac G5 to handle four- and six-angle clips.

High def. If you work with HD video, you'll rejoice in Final Cut's new ability to capture and edit the HDV format. Unlike iMovie HD or Final Cut Express HD, Final

COMPANY: Apple
CONTACT: 800-692-7753, www.apple.com
PRICE: $999, $399 (upgrade)

REQUIREMENTS: 500 MHz G4 (1GHz G4 for HD), Mac OS 10.3.9 or later, 512MB RAM (1GB for HD), AGP Quartz Extreme–compatible video card, 1GB disk space (up to 10GB for LiveType)

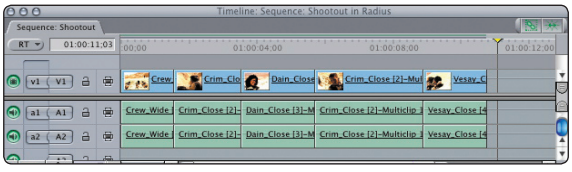
GOOD NEWS: Multicamera and lossless HDV editing. Includes LiveType for type effects. 24-channel audio.
BAD NEWS: Multicamera editing limited on middle-tier Macs. New features may be more than many editors need.

MacAddict RATED AWESOME

When making a multiclip, the Viewer lets you watch all your camera angles.

Cut Pro 5 doesn't convert HDV to an intermediate format during capture—it works with HDV in its native state, so there's no risk of losing image quality through the capture process or when recording the edited HDV back to HDV tape. Apple says that native HDV holds up better to recompression (via compositing, for example); also, exporting back to tape can be significantly quicker, since Final Cut only needs to render the edit points and filtered clips of your HDV project, not all of the video.

Final Cut Pro 5 also improves on its powerful RT Extreme technology, which lets you apply composite, color-correction, and motion effects without having to render them first. The new Dynamic option works while video plays from the Timeline to modify the quality of real-time effects depending on the complexity of



Play the multiclip, click on the angle you want to insert, and the software inserts it into the timeline.

a particular shot. We certainly welcome the feature, since it makes each shot look as good as possible as you review your overall project. However, it's mostly useful for jobs involving heavy effects and compositing; if you're doing more-straightforward editing, you really won't notice a difference.

More goodies. Other nice features: 24 channels of audio in and out, and tighter integration with the included Cinema Tools software for projects destined for negative cutting. Plus, there are plenty of other small but appreciated touches. For example, you can now display text in the Browser in Small, Medium, and Large font sizes—perfect for anyone who was going blind trying to read Final Cut's fine-print text on a big-screen monitor. From the Browser, you can Control-click any media clip and choose Reveal In Finder to quickly home in on the original media file. And if you ever have to reconnect unlinked media files, you can specify the media folders Final Cut will search first—no more wasting time while Final Cut searches through each and every one of your media volumes in no apparent order. Oddly, though, none of Final Cut's little touches seem inspired by Mac OS 10.4 (Tiger); we would have loved a Smart Folders feature, or at least a feature that made any media we dragged into the Finder automatically show up in the Browser. Likewise, Final Cut Pro 5 has no Automator actions.

Still, Final Cut 5 is the best-designed and most-capable video editor we've used, with specialized editing tools, media archiving and management, support for endless media formats (including all manners of HD and film), extensive interface customization, advanced color correction, keyframeable effects, render-free previews, tight integration with key applications such as Photoshop and Apple's other media programs, and much more. For $999, it's a steal.

The bottom line. If you want to work with HD or are excited about multicamera editing, get Final Cut Pro 5 now. Not everyone, however, will find these additions necessary for daily editing work. While we could wholeheartedly recommend previous versions of Final Cut because they always added a feature set that just about everyone could appreciate, we can't say the same for version 5. But that's the price Apple has to pay for having already polished Final Cut to near perfection.—*Helmut Kobler*

FINAL CUT STUDIO

Final Cut Studio includes Final Cut Pro 5 ($999), Soundtrack Pro ($299), DVD Studio Pro 4 ($499), and Motion 2 ($299), all for the low, low price of $1,299—that's a savings of nearly $800. Even better, if you own an older version of Final Cut, you can upgrade to the entire Studio for just $699—an astounding bargain for all these feature-rich, cutting-edge, digital-media tools.

The only thing that truly nags us about Studio is its copy-protection scheme, which prevents you from running any of its four applications on multiple Macs sharing the same network connection (AirPort included). Say you have a Power Mac and a PowerBook; you can't run Final Cut on your 'Book while running Motion on your Power Mac. Likewise, you can't run DVD Studio Pro on your Power Mac while running DVD Studio Pro's bundled Compressor on the 'Book.

We understand Apple's desire to fight piracy, but this is truly maddening for lone filmmakers who have a couple of Macs. If nothing else, Apple should prevent the *same* app from running on two Macs, not just *any* of the Studio apps. We really hope next time Apple takes a cue from Adobe's Photoshop CS2 by allowing the Studio to work with two Macs, no questions asked.—*HK*

Get a sweet deal on this suite.

COMPANY: Apple
CONTACT: 800-692-7753, www.apple.com
PRICE: $1,299 ($499 upgrade from Production Suite, $699 upgrade from Final Cut Pro)

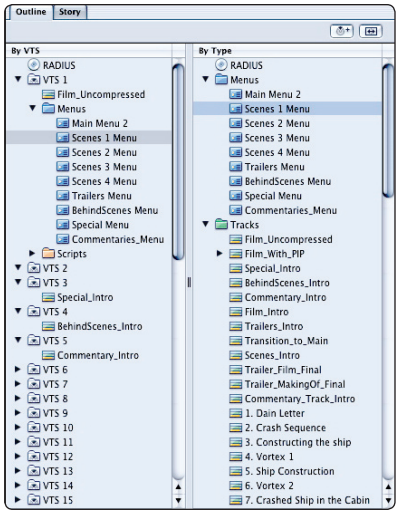
DVD Studio Pro 4

HIGHLY REFINED DVD-AUTHORING SOFTWARE

Now you can make high-definition DVDs with the new DVD Studio Pro 4.

DVD Studio Pro 4, like so many of Apple's current digital-media apps, embraces the world of high-definition video. In fact, the ability to author true high-definition DVDs is the software's biggest new feature—which seems a little strange because there are no consumer-level HD-compatible DVD players on the market yet. But hey, fortune favors the prepared, so we're not complaining.

DVD Studio Pro has the ability to encode and author video in the new H.264 codec, a high-quality compression format that upcoming high-definition DVD players are designed to read. Authoring a high-def DVD works very much like authoring a standard-definition DVD. You specify your HD usage when you create your project; you then import various HD-video formats (such as DVCPRO HD or HDV) into the project. All video has to be converted to H.264 before you're finished; you can let Studio Pro do the conversion automatically, or you can do it ahead of time with Compressor (see "Compressor 2," p21), Apple's handy batch-processing tool. Creating menus, buttons, and video and audio tracks works the same easy way it did in the previous version, only now there's a bonus: Instead of previewing your project in a small simulation window, you can preview it at full HD resolution if you have an HD-capable display such as Apple's 23-inch or 30-inch Cinema Display.



Dual-view capability lets you view an entire project by type and by VTS folder—just click and drag to rearrange elements.

Better organization. Outside of HD, Studio Pro also adds an intuitive drag-and-drop VTS (Video Title Set) editor, which lets you group menus and other content together into the same VTS folders. If VTS folders are new to

COMPANY: Apple
CONTACT: 800-692-7753, www.apple.com
PRICE: $499; $199 upgrade

REQUIREMENTS: 733MHz G4 (G5 for HD authoring), Mac OS 10.3.9 or later, QuickTime 7.0 or later, 512MB RAM (1GB for HD authoring), 8MB AGP graphics card, 4.4GB disk space

GOOD NEWS: Authors HD DVDs. Full-screen previews on compatible displays. VTS editor improves menu load times.
BAD NEWS: Consumer-level high-definition DVD burners and players aren't available yet. Quirky distributed encoding.

MacAddict RATED
GREAT

you, that's because they're part of the internal way a DVD is organized, and Studio Pro organizes them for you behind the scenes. But sometimes the software doesn't make the best decisions about how to organize your disc's content into various VTS folders (especially when you have a lot of menus); this can lead to small delays as menus are read from the DVD. To prevent this, you can now take charge and make sure that all your menus are contained within the same VTS folder, decreasing the time a DVD player spends hunting and loading.

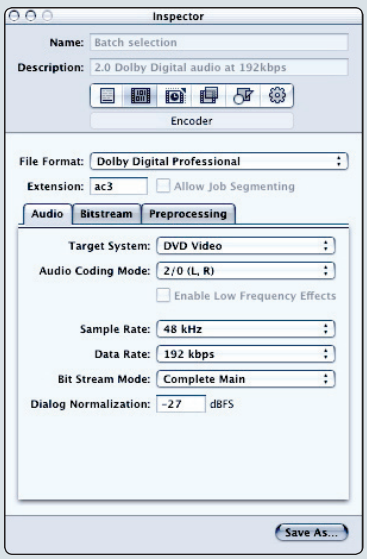
The bottom line. For authoring DVDs today, DVD Studio Pro 4 isn't a big step forward—but its eye is fixed on the near future. We look forward to the arrival of high-definition DVD players; that's when the software's HD-authoring support can truly be put to the test.—*Helmut Kobler*

COMPRESSOR 2

DVD Studio Pro 4 comes with a much-improved version of Compressor, an app that lets you batch process your video projects. Compressor 2's improved interface makes it easier to assign compression settings to multiple files, name new files, set destination folders, apply filters, tweak settings, and more.

Compressor also has new predefined settings to compress video in varying levels of quality for standard-definition DVDs, high-def DVDs, the Internet, and even third-generation (3G) cell phones. Many of these presets use the new H.264 codec that's included in QuickTime 7; our tests showed that H.264 is indeed a big step forward in delivering high-quality video in small file sizes. We compressed a 45-second DV video in H.264 and then in the older MPEG-4 codec. We encoded the test video at 480 by 360 pixels, 30 frames per second, and at a bit rate of 800 Mbps. Both the MPEG-4 and H.264 versions weighed in at 4.2MB, but the MPEG-4 version suffered from heavy pixelation. Amazingly, the H.264 version stayed razor sharp throughout. You'll need an extra dose of patience when encoding in H.264, however—it takes quite a bit longer to encode than MPEG-4. On our dual 2.0 GHz Power Mac G5, encoding the MPEG-4 video took only 2 minutes, while the H.264 video needed 12 minutes.

Compressor 2 now features distributive encoding, which means that it can use the brainpower of other Macs on a local-area network. Setting up this kind of teamwork is easy enough—but in our tests, sometimes it worked, and sometimes it didn't. When it did work, our Power Mac G5 was able to use an idle 1.67MHz PowerBookG4 to shave about 3 minutes off of the 12 minutes normally required to encode our 45-second test video to H.264. Three minutes may not sound like a huge improvement, but when you're encoding lots of video, a 25-percent savings in time adds up.



The most-welcome improvement to Compressor (cue "Hallelujah Chorus"): It can now encode DVD-destined audio into the space-efficient Dolby Digital files that most commercial DVDs use (Hallelujah!). Earlier versions of Compressor would output DVD-destined audio as an AIFF file, which you'd then have to manually import into a horrid little app called A.Pack (which shipped with previous versions of DVD Studio Pro and is gone from this one) to finally convert the AIFF into Dolby Digital. Compressor now directly encodes audio to Dolby 2.0, including Surround Sound variants for 5.1-channel speaker setups.—*HK*

You can now set your Dolby Digital encoding options through Compressor's easy Inspector palette. Hasta la vista, A.Pack.

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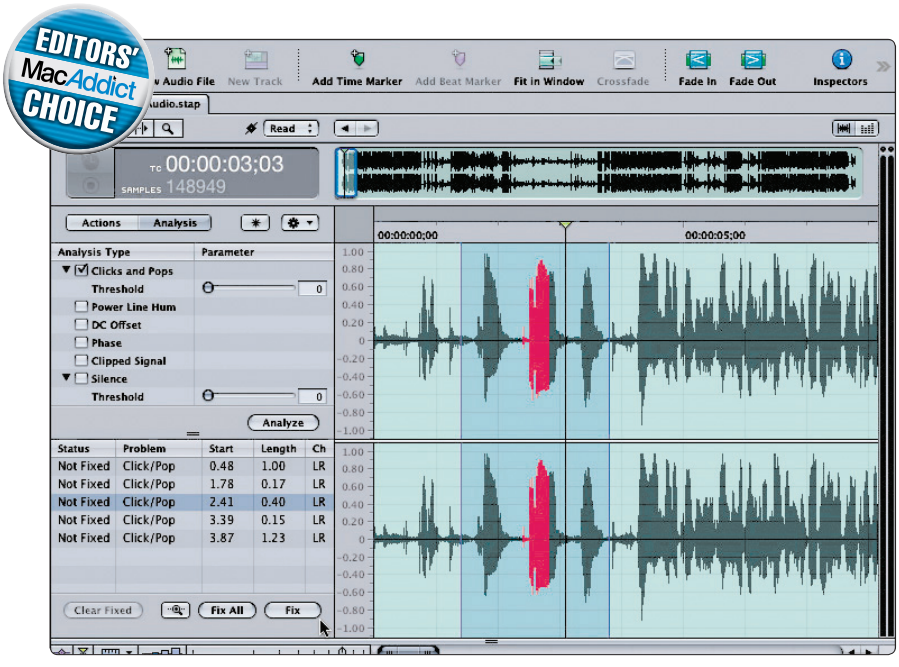


Create audio effects and fix noise quickly and easily with Soundtrack Pro.

Soundtrack Pro

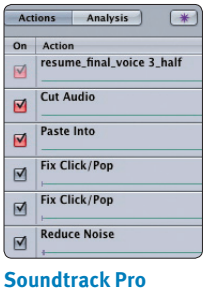
POTENT SOUNDTRACK EDITOR

The previous version of Soundtrack (●●●●○ Jan/04, p51) was handy for composing music for your Final Cut videos, but few editors used it—Apple barely updated the software. But lo and behold, the new Soundtrack Pro delivers the sort of great audio tools that videographers need.

Soundtrack Pro makes it easy to fix common audio glitches in your video projects. Sending audio to Soundtrack from a Final Cut project is as simple as choosing File › Send To Soundtrack. Final Cut responds by launching Soundtrack with your video's audio loaded. The audio isn't exported as a new file—Soundtrack works with your original audio files and creates rendered versions to reflect your changes. Once in Soundtrack, you can highlight an audio region and click the Analyze button to check for common problems like clicks and pops. We tried this with audio recorded by a cheap wireless microphone, and sure enough, Soundtrack quickly identified and listed the annoying pops and scratches. We could then review each problem segment and fix it using the Fix button (there's also a Fix All option).

It was also easy to remove background traffic noise in our test footage. We simply highlighted a segment of audio that contained traffic noise, played the segment in real time, and adjusted parameters to minimize the noise without affecting the dialogue on top of it. Soundtrack also lets you quickly replace unwanted sound with ambient noise—for example, if there's car noise off camera (and as long as it doesn't drown out dialogue), Soundtrack can replace that with cleaner-sounding background noise and automatically do all the crossfades to make a seamless fix (you can make manual adjustments as well).

The beauty of Soundtrack's audio-repair features is that they fix many audio problems in just a couple of steps. Of course, if you start with poor audio, Soundtrack can only do so much; it may even get confused and add glitches of its own—but that goes for just about any other audio app.



Soundtrack Pro highlights unwanted clicks and pops in your audio.

Making waves. Soundtrack's full-featured waveform editor lets you easily cut and paste waveform samples and apply over 50 included plug-ins to audio. Many of the plug-ins take much of the manual grunt work out of mainstream audio effects; for example, one plug-in helps create appropriate reverb for any size room, and another helps match and replace dialogue recorded in the field with automatic dialog-replacement (ADR) audio you recorded on a stage. To make editing easier, Soundtrack keeps a list of just about every change you make to an audio file; you can go back to the Actions list and toggle on or off just about any change you've made to an audio clip, rearrange the order of actions, and play the results again.

Soundtrack ships with 1,000 new sound effects—a lot, but not enough to build a rich, custom soundtrack. Soundtrack still includes its original library of 4,000 musical loops, and it's easy to arrange them on multiple tracks, change tempos, and shift keys. Unfortunately, Soundtrack Pro provides no support for MIDI or software instruments, so you can't make your own custom melodies as you can in GarageBand.

The bottom line. Audio professionals will stick to Pro Tools and Logic for their specialized audio tools—they might even consider SoundSoap Pro (●●●●● Jan/05, p42), which plugs into those applications—but Soundtrack Pro is aimed at a different crowd. Apple looked at the everyday audio work of video editors and producers and built an easy, accessible tool to handle it. It's our favorite component in the new Final Cut Studio suite.—*Helmut Kobler*

COMPANY: Apple
CONTACT: 800-692-7753, www.apple.com
PRICE: $299 (full), $99 (upgrade)

REQUIREMENTS: 500MHz G4, Mac OS 10.3.9 or later, 512MB RAM, 500MB disk space (8GB for Soundtrack media)

GOOD NEWS: Easy tools for fixing common audio glitches. Advanced waveform editor with many effects plug-ins. Action list fosters quick, nondestructive experimentation.
BAD NEWS: Some minor interface bugs.

MacAddict RATED ●●●●● AWESOME

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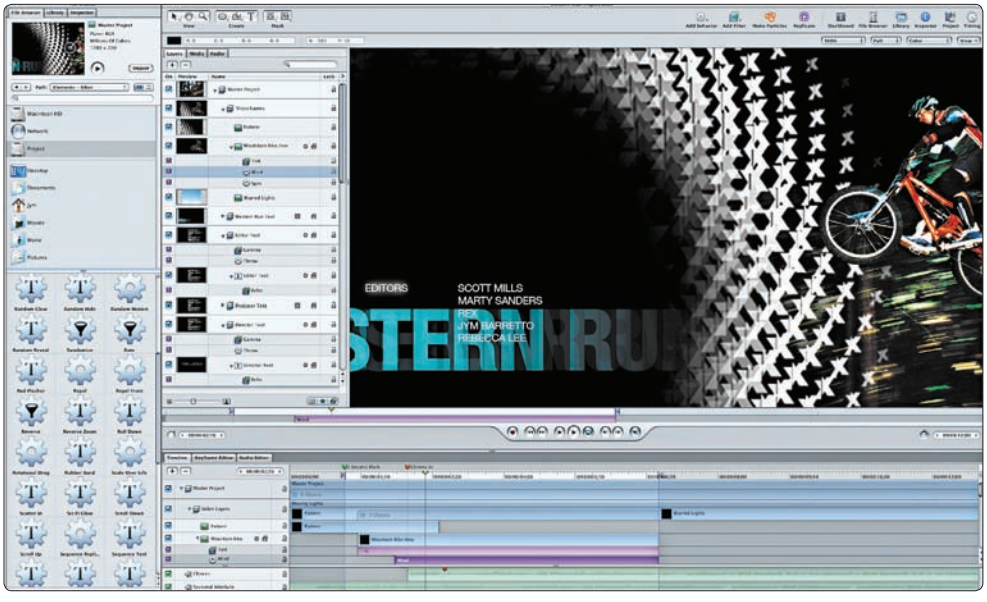


Apple's unique motion-graphics editor now boasts some cool new tools.

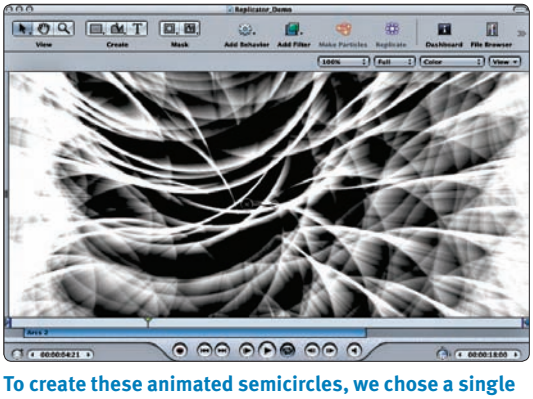
Motion 2

BUFFED-UP MOTION-GRAPHICS EDITOR

The original Motion (●●●●○ Nov/04, p36) let you create motion graphics in a totally new way; it didn't require renders to preview your work (provided you had robust hardware), and it used intuitive "behaviors" instead of conventional keyframes to plot motion. In version 2, Apple adds a number of solid refinements.

Motion 2 now supports 16- and 32-bit rendering. Working in 16 bits gives you 65,536 luminance levels for each red, green, and blue channel; working in 32 bits grants you over four billion luminance levels per channel. These higher bit depths give your imagery finer color detail and eliminate any color banding you might have previously encountered in renders. They also give Motion's graphics a dynamic range appropriate for film output (film has a greater dynamic range than video); you'll even see a boost in the quality of images destined for 8-bit or 10-bit renders, since the source images start out at a higher quality.

Motion commotion. Motion's rendering engine relies on your Mac's graphics card to do a lot of the number crunching, so you can squeeze appreciable performance out of an existing Power Mac just by buying a new video card. Motion also now works with more than 4GB of RAM, so feel free to stuff your G5 to the limit.



To create these animated semicircles, we chose a single Replicator preset and then applied a Light Ray filter.

Motion 2 includes a handful of new filters. Vignette adds a soft, faded border around an object, and Basic 3D rotates an object in 3D space. You'll find a few new generators as well, such as Caustics, which creates animated water-ripple and reflection patterns.

Also, Motion can now use third-party filters that work in real time and support 32-bit rendering; we hope to see developers build a library of custom effects over time.

The Replicator. Motion 2 includes a new tool called Replicator, which lets you quickly take a video clip, still picture, or graphic and repeat it in all sorts of custom patterns—grids, circles, spirals, and other geometric shapes. Likewise, you can apply other actions such as rotation and scaling for infinite customization. To get you started, there are 170 Replicator presets, which you can use to create everything from a heart-monitor signal to Las Vegas lights. Granted, not all motion-graphics jobs require Replicator's touch, but designers who get to know it will find plenty of helpful uses.

Of all Motion's new features, the think-outside-the-box award has to go to Motion's MIDI-interface support, which lets you use the keys, sliders, and knobs on a MIDI keyboard to trigger Motion filters and parameters. This opens up Motion to a new world of live performance art—video DJs and performers can use it to create spontaneous, sophisticated visuals on the spot, right on stage.

Finally, Motion 2 adds some smaller features such as support for HDV video, a more-precise keyframe editor (when keyframes are necessary), and the ability to import a project into an Adobe After Effects composition without having to render beforehand.

The bottom line. Motion's new features—big and small—add a nice, polished sheen to an already strong tool.—*Helmut Kobler*

COMPANY: Apple
CONTACT: 800-692-7753, www.apple.com
PRICE: $299 (full), $99 (upgrade)

REQUIREMENTS: 867MHz G4; Mac OS 10.3.9 or later; 512MB RAM; 10GB disk space; ATI Radeon 9600 Pro, nVidia GeForce Go 5200, or faster video card.

GOOD NEWS: Render-free experimentation and motion behaviors. 16- and 32-bit color support. MIDI support.
BAD NEWS: Best results require fast Mac, lots of RAM, and top graphics card.

MacAddict RATED ●●●●○ GREAT

Stylus Photo R1800

ALLURING INKJET PRINTER

EDITORS' MacAddict CHOICE

One look at the output, and you'll fall in love.

PHOTOGRAPH BY MARK MADEO

There's a lot to be excited about with the Stylus Photo R1800, from its marvelous image quality to its wide range of media sizes. If you're a photo enthusiast who's willing to spend money for a printer that'll make you proud of your prints, the R1800 won't let you down.

The R1800 uses eight pigment-based inks to output its consistently detailed and accurate prints: cyan, magenta, yellow, matte black, photo black, red, blue, and a gloss optimizer. Well, that last one isn't really an ink; it's used to fill in areas where there may be low or no ink saturation (white space, for example). The gloss optimizer creates an even glossy effect that makes your pictures look even better. The Epson also provides ICC profiles on its Web site if you're a stickler for accuracy—they'll vastly improve your prints, so take the time to read the "Managing Color with Profiles" section of the thorough user's guide.

The R1800's media support is similar to that of the venerable Stylus Photo R2200, which is no longer in Epson's product line. It can handle 4-by-6-inch all the way up to 13-by-44-inch media (the latter of which requires roll media), plus printable CDs and DVDs.

Speed and images. When printing at the top image-quality setting (Photo RPM), the R1800 is no speed demon. A full-color 8-by-10 image took over 5 minutes to print (we printed using both USB and FireWire and got similar times)—good speed, but not as fast as Canon's speedy i9900 Photo Printer (●●●●○ Nov/04, p46), which takes about 90 seconds at its comparable quality setting. The R1800 did better when printing at the Best Photo setting; the quality was a step down from Photo RPM, but prints took under 3 minutes (FireWire was 7 seconds faster than USB).

Once you see your output, you'll find the print times well worth the wait. The R1800 produces realistic tones, from earthy shades to those of the more human variety. Colors behave like they should—vibrant or subtle in the proper places, and always accurate. If you specialize in black-and-white photo prints, take a look instead at Epson's Stylus Photo R2400 ($849), which uses photo-black or matte-black ink, plus light black and (believe it or not) light-light black ink—you might call it gray.

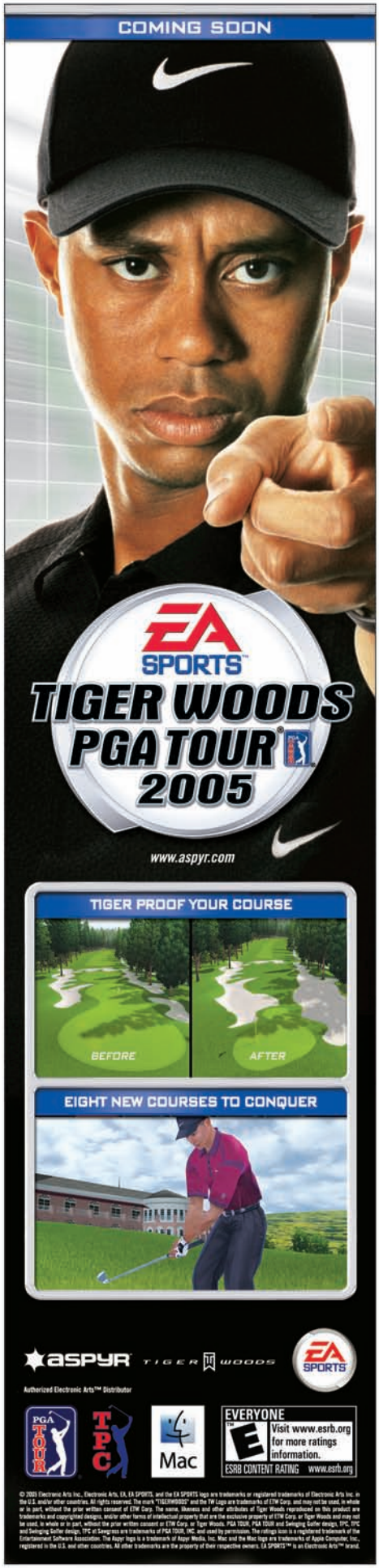
The bottom line. At $549, the R1800 is expensive for a casual user simply printing snapshots. But if you're a serious photog, you'll find it's worth every penny.—*Roman Loyola*

COMPANY: Epson
CONTACT: 800-463-7766, www.epson.com
PRICE: $549

REQUIREMENTS: USB- or FireWire-equipped Mac, 400MHz G3, Mac OS 10.2.4 or later

GOOD NEWS: Gorgeous image quality. Supports many different media sizes.
BAD NEWS: Faster speed would be nice.

MacAddict RATED ●●●●● AWESOME



EOS Digital Rebel XT

FIRST-RATE DIGITAL SLR

Still using a point-and-shoot? Here's another reason to switch to SLR.

PHOTOGRAPH BY MARK MADEO

Canon's follow-up to the EOS Digital Rebel (●●●●○ Mar/04, p48), the EOS Digital Rebel XT, has more pixels than its predecessor (8 megapixels, an increase of 1.7 million pixels), a battery-saving CMOS imager, and fantastic image quality—all inside a smaller, two-ounces-lighter body than the original Rebel.

The Rebel XT captures images at several JPEG compression levels and in Canon's proprietary RAW and RAW+JPEG file formats. Shutter speeds range from 1/4000 of a second to 30 seconds, and you can adjust exposure compensation by plus or minus two stops in 1/2- or 1/3-stop increments. The Rebel XT can also capture images at up to 3 frames per second, with the camera's buffer storing 14 images when the file format is set to the Large Fine setting. When set to Raw, the camera's buffer can store five images.

The viewfinder features seven focusing points that light up when the shutter-release button is pressed down halfway. If you don't want a particular object to be the center of focus, release the button, adjust your view of the subject matter, and press the shutter release down halfway again. Simple.

When it comes to the Rebel's excellent image quality, we could go on for hours.

Close up. The ability to accept Canon's EF-mount and EF-S series of lenses is an essential part of the Rebel XT's success; the kit includes a 18mm-to-55mm EF-S zoom lens. If you have other Canon EF lenses, be aware that you will experience the 1.6x telephoto effect with that lens—your 100mm telephoto lens will be the equivalent of a 160mm telephoto lens on this camera. And while the Rebel XT does have a built-in flash, it also accepts any of Canon's EX-series Speedlites.

We found the camera easy to handle, and although it was simple to maneuver through the varied menu selections, we wished it was possible to select image quality directly on the body as you can on other SLR cameras. There is no information display on the top of the body; readouts for shutter speed, aperture, and frame count appear on an LCD display on the back, above (and separate from) the color LCD monitor. The Rebel XT provides several shooting modes, such as Portrait, Sports, Landscape, and so on. It also provides a full Program mode and the traditional Manual, Shutter, and Aperture Priority modes.

TIP

COLOR SPACE

The Rebel XT can capture images using two color-space options: sRGB and Adobe RGB. Use sRGB if you plan on displaying your images on a monitor. If you want to print, use Adobe RGB.

When it comes to the Rebel's excellent image quality, we could go on for hours. Suffice it to say that Canon should be justly proud of the Digital Rebel XT and its output—color fidelity is excellent. We were also impressed with the camera's ability to focus properly. While CMOS imagers such as the one in the Rebel XT have a reputation for producing soft images, Canon has obviously found some way to overcome this shortcoming and keep images sharp.

The bottom line. The Rebel XT is a compelling reason to switch to a digital SLR camera; if you're an experienced photographer, it's a tempting secondary SLR.—*Rick Oldano*

COMPANY: Canon
CONTACT: 800-652-2666, www.canonusa.com
PRICE: $999 (kit), $899 (body only)

REQUIREMENTS: 400MHz G4; Mac OS 10.2 or later; 128MB RAM; 20MB disk space; host application that supports Audio Units, DirectX, RTAS, or VST plug-ins, or QuickTime 6.5 for standalone mode

GOOD NEWS: Excellent for new SLR users. Great image quality.
BAD NEWS: Still pricey for some.

MacAddict RATED ●●●●○ GREAT

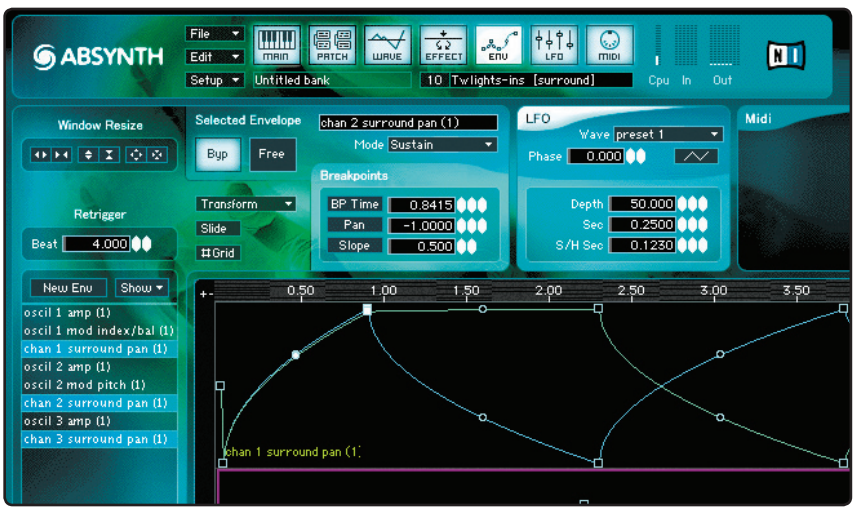
Absynth 3

EXCEPTIONAL SOFTWARE SYNTHESIZER

EDITORS' MacAddict CHOICE

Absynth is a favorite among electronic musicians looking for dense, slowly evolving aural landscapes, luscious pads, and downright-bizarre sonic hallucinations. Version 3 offers a myriad of tweaks and additions that further cement Absynth as an awesome software synth from another dimension.

Useable as a standalone instrument or as a sequencer plug-in, Absynth 3 is amazingly straightforward, especially given the sheer power of the underlying audio architecture. One of the first visible changes is that the user interface has been consolidated into a single window—a much cleaner arrangement than in previous versions. There are 256 new presets, many of which take direct advantage of surround-sound modes that will delight pro sound designers.



Engulfing surround sound is just a few clicks away.

Look to the future. And we're not talking about vanilla surround-sound support tacked on as an afterthought—Absynth 3 is ready for surround-sound formats that haven't even been deployed yet, with wild choices including 7.1 heptaphonic and eight-channel octophonic. A slick visual controller lets you dynamically slam sounds around the surround field, making the process of designing 3D audio effects practically effortless.

In terms of core synthesis goodies, a new Fractalize oscillator helps create truly gorgeous sonic delights, and the Unison mode—borrowed from classic analog synths such as the Sequential Circuits Prophet 5—takes a single note and fattens it up for some potent lead and bass-line mayhem. You can now even use live audio as an oscillator, taking the idea of a wavetable synthesizer to new heights of sonic splendor.

New effects include a three-line echo with filters and a slick Resonator effect, which livens up otherwise flat sounds and does wonders with live-audio input. And don't get us started on the new envelope control options.

The bottom line. Absynth 3 is an easy Editors' Choice recipient.—*David Biedny*

ON THE DISC
Absynth 3

COMPANY: Native Instruments
CONTACT: 866-556-6487, www.native-instruments.com

PRICE: $339 (full), $119 (upgrade)
REQUIREMENTS: 500MHz G3, Mac OS 10.2.6 or later, 512MB RAM

GOOD NEWS: Incredible audio quality. Plethora of surround-sound options. Cool new effects.
BAD NEWS: No significant bad news.

MacAddict RATED AWESOME

LifeDrive

SOUPED-UP PDA

With its large-capacity hard drive, multimedia capabilities, and myriad connectivity options, palmOne's LifeDrive goes where no other Palm OS device has gone before. Unfortunately, in its attempt to be all things to all people, it fails to be great at anything.

The LifeDrive can function as a PDA, 'Book semisubstitute, MP3 player, and digital-picture repository. At 4.76 by 2.87 by 0.74 inches and 6.8 ounces, it's extremely portable, although not as pocketable as other Palm PDAs—and certainly not a replacement for an iPod mini if small size and light weight are major concerns.

The LifeDrive's 4GB MicroDrive provides plenty of space to store MP3s, photos, videos, and business documents. An SD card slot allows for expandability and is especially useful if you have a digital camera that saves to SD—you can offload your pictures to your LifeDrive and view them in portrait or landscape mode on the large and lovely 320-by-480-pixel transflective TFT screen. The built-in Camera Companion easily lets you copy photos from your card to the LifeDrive, or from your LifeDrive to your Mac (you can also delete individual pics from your card).

You can listen to MP3s (sorry, no AACs—either unprotected tunes or protected ones from the iTunes Music Store) with a built-in app called pTunes, which is fairly easy to use and lets you create and edit playlists. The built-in speaker sounds OK—not great—but thankfully there's a headphone jack. To record a voice memo, simply press the mic button on the upper-left side of the LifeDrive and start yakking.

The device responded slowly to virtually every command.

Get to work. When it's time to get down to business, the LifeDrive includes Docs to Go, an app for working with Microsoft Office documents, as well as built-in Wi-Fi and Bluetooth. Using the device's 802.11b capabilities, we were able to check our email and surf the Web using the included VersaMail and Blazer browser—although using the onscreen keyboard to type out email messages is not our idea of fun. For the most part, the device easily accessed our wireless network, yet there were times when it failed to connect and would move on to another neighborhood network even though we were sitting right next to our router and Wi-Fi was up and running on our laptop.

Smaller than a 'Book, bigger than a 'Pod.

Performance proved to be problematic all around. The device responded slowly to virtually every command, and it took its sweet time when launching apps. Multitasking was a bear—our music would stutter and sometimes stop playing altogether whenever we attempted to do more than play music on the device. And battery life was just so-so; it lasted four days when we used it slightly more than an hour each day.

The LifeDrive comes with USB 2.0, which is fine for newer Macs but rather painful for those with relic Macs like a dual 1.25GHz G4. For example, copying just 88MB of music took about 3 minutes. However, transferring files was a cinch: The included Drive Mode app lets you launch the LifeDrive as a USB drive on your desktop so you can drag and drop files, photos, music, and pictures. Unfortunately, the included LifeDrive Manager app, which provides file-synchronization capabilities, only works with PCs.

The bottom line. If you're looking for a gadget that can do a little bit of everything—play music, view photos, surf the Web, check email, and work on Word or Excel docs—then the LifeDrive fits the bill. Just be prepared to deal with a few headaches.—*Cathy Lu*

TIP

ENCRYPTION

Lose your LifeDrive? It could happen. Protect your precious data from prying eyes by using the LifeDrive's built-in encryption. Using encryption will slow down your LifeDrive, so choose what you encrypt carefully.

1. Go to Applications, and then select Prefs.
2. Select Security.
3. Select Options and then select Security Options. (Enter your password if you need to, and then select OK).
4. Check the box for Encrypt Data When Locked.
5. Select Choose Applications.
6. Select the applications you want to encrypt, then select OK.
7. Select OK, and then select Done.

COMPANY: palmOne
CONTACT: 800-881-7256, www.palmone.com
PRICE: $499

REQUIREMENTS: USB-equipped Mac, Mac OS 10.2.6 or later

GOOD NEWS: 4GB hard drive. Built-in Wi-Fi and Bluetooth. Nice display.
BAD NEWS: Slow response times. Spotty behavior. LifeDrive file-syncing app works on PCs only.

MacAddict RATED
SOLID

PHOTOGRAPH BY MARK MADEO

Groove Agent 2

UPBEAT DRUM-MACHINE SOFTWARE

Click on a style and start dancing to the groove!

We've all heard the tired jokes about the slack work ethic of drummers, but if Steinberg's Groove Agent 2 has anything to say about it, we're going to have to start making up new anecdotes. This is one hot drummer that shows up on time, stays locked on the beat, and sounds positively divine.

Groove Agent 2 is based on prerecorded drum tracks of acoustically isolated instruments, which results in outstanding sonic quality and an incredible range of styles and sounds. The intuitive single-screen interface sports a slider control that lets you pick from a virtual history of contemporary music from 1950s swing, samba, and cha-cha through 1970s funk and disco to today's tribal techno, hip-hop, and Nordic pop. There are 81 different styles total, and there's not a dog in the entire bunch. Each style has its own associated sampled drum kit reflecting the typical sounds of the period, delivering superb authenticity.

Another slider gives you access to the different patterns for each style (up to 25), increasing in complexity and number of percussion-instrument tracks (up to eight at a time). Automatic fills create transitions as you change patterns, and you can even change a pattern's drum kit—playing a heavy-metal stomp with a delicate jazz kit is just way-groovy fun. The playback tempo locks to your sequencer's master tempo for perfect synchronization control.

Real feel. Lest you fear that this is a sterile beat box with no heart, the Humanize and Shuffle controls do a great job messing up the timing and interaction of each instrument in musically useful ways, giving the beat a decidedly organic and convincing feel. Limiting and Ambience knobs deliver quick and easy signal compression and reverb acoustics, and tiny dials let you edit the volume, tuning, reverb, hit velocity, and decay of each individual instrument.

You can also save patterns as standard MIDI files so you can edit them in other apps or assign different instruments and synths in your sequencer. The USB hardware-key protection is unfortunate, but the manual is outstanding—it even has pictures of the drum-recording sessions.

The bottom line. Even if you can't drum your fingers on a tabletop, you can make a perfect beat with Groove Agent 2.—*David Biedny*

COMPANY: Steinberg
CONTACT: 800-833-6687, www.steinberg.de
PRICE: $339 (full), $119 (upgrade)

REQUIREMENTS: 867MHz G4, Mac OS 10.2.5 or later, 384MB RAM, 45MB disk space

GOOD NEWS: Excellent variety and quality of drum patterns. Effortless interface. Excellent audio-routing options. Saves patterns as MIDI files.
BAD NEWS: USB hardware-key copy protection.

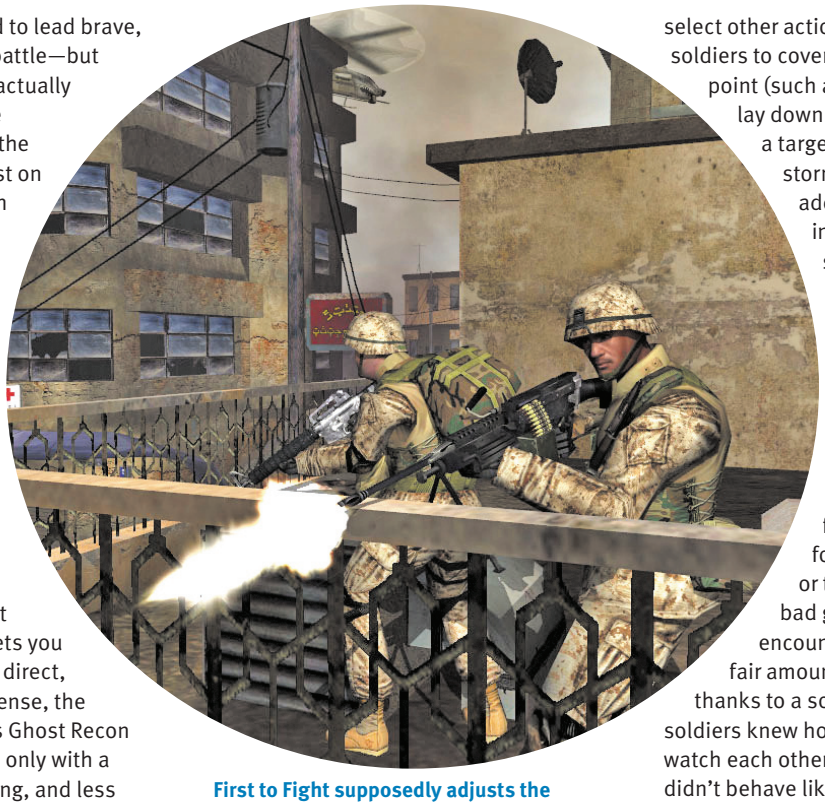
MacAddict RATED
GREAT

Close Combat: First to Fight

EDITORS' MacAddict CHOICE

SEMIREALISTIC TACTICAL SHOOTER

If you've always wanted to lead brave, courageous men into battle—but without the prospect of actually getting shot—then Close Combat: First to Fight is the game for you. A cool twist on conventional first-person shooters, First to Fight has you leading a squad of four U.S. Marines through a fictitious war in Beirut, using the same urban-combat tactics that real-world Marines employ today. Sure, games such as Call of Duty, Blackhawk Down, and installments of the Medal of Honor series also put you on a combat team, but First to Fight lets you give your fellow soldiers direct, specific orders. In that sense, the game is a lot like Aspyr's Ghost Recon and Rainbow Six games, only with a faster pace, more shooting, and less time spent quietly creeping around.



First to Fight supposedly adjusts the effectiveness of your soldiers based on morale, but we saw no appreciable change in behavior.

You control your character (you always play the squad leader) as you would in any first-person shooter, while you direct your squadmates with keyboard and mouse commands. By default, your fellow Marines follow your lead, moving together while each team member covers a key firing angle. But you can also tell your teammates to move to a specific spot by aiming your sights at a visible location and pressing the G key; to move an individual soldier, press the 7, 8, or 9 key first before you select your location. (You can, of course, remap all the keys if you wish.)

Commands. Other key commands order your Marines to hold position, cease fire, and form up around you—individually or as a group. Clicking the right mouse button lets you quickly select other actions: You can call for soldiers to cover a particular vantage point (such as a closed door), lay down suppressing fire at a target, order the team to storm a room, or radio for additional fire support in the area: a nearby sniper, mortar squads, gunships, and the like.

It took us about 30 minutes to get the hang of these options—but once we did, we had a blast controlling our team, positioning soldiers to form effective kill zones for advancing enemies or to flank entrenched bad guys. These kinds of encounters all play out with a fair amount of realism, as well, thanks to a solid AI system; our soldiers knew how to use cover and watch each others' backs—enemies didn't behave like stooges, either.

One complaint—and it's not huge—is that the game's realism is interrupted not by AI issues (although there are occasional lapses), but by the fact that you can get shot multiple times and heal yourself repeatedly, typical of most video games. How 'bout a one-shot-one-kill option? It would make you tread carefully and think your actions through like real-life Marines; instead, it's too easy to resort to the video-game bum rush.

First to Fight's custom 3D engine renders environments and characters in great detail—though not quite Doom 3–quality detail.

The bottom line. A lot of hard work went into First to Fight (see "Modern Warfare," Jun/05, p10), and it shows. The gameplay is intense, and controlling your team is easier and more flexible than it is in other squad-based tactical games we've tried. All in all, First to Fight is good to go.—*Helmut Kobler*

COMPANY: MacSoft
CONTACT: 763-231-8050, www.macsoftgames.com
PRICE: $39.99

REQUIREMENTS: 867MHz G4, Mac OS 10.2.8 or later, 256MB RAM, ATI Radeon 7500 or nVidia GeForce 2 MX video card with 32MB VRAM, 2.5GB disk space, DVD drive

GOOD NEWS: Smart AI for friends and foes alike. Easy, precise control over your fellow marines. Multiplayer mode supports PCs.
BAD NEWS: Occasional AI lapses. Unrealistic healing.

MacAddict RATED GREAT

Bionicle

GOOD-LOOKING, FUN ACTION-ADVENTURE GAME

Bionicle combines nice graphics, enjoyable gameplay—and LEGO robots.

Feral Interactive's Bionicle is an impressive action-adventure game that blends classic platform-jumping gameplay with robust graphics and LEGO's Bionicle robots. While the storyline could have used a revision or two, it doesn't detract from the overall game experience.

In Bionicle, you play as a robotic warrior, and your object is to save the island of Mata Nui from Makuta and his army of insect-like warriors. You start each level as a new robot equipped with powers based on natural elements. For example, one robot is designed for the water and is capable of incredible bursts of speed while swimming; another is designed for air and can glide effortlessly through jungle-canopy levels.

Looks good. Graphics, sound, level design, and game modes are where Bionicle shines. The look of the game is solid, detailed, and consistent. The particle effects are brilliant, and the game's rich sound design makes the most of proximity-related volume and bass. The detailed 3D level maps contain a mix of third-person run-'n'-gun action, first-person mini-games (such as surfing down a mountain), and sequences that offer an old-school 2D perspective.

ON THE DISC
Bionicle

Bionicle's plot is enjoyable, but its save-the-island premise is as old as the hills. The game's between-level story sequences, while easy to follow, introduce new terminology with little explanation. The most creative, detailed, and informative cut scenes appear toward the end of the game—they would have been far more helpful near the beginning or the middle. The result is a stilted and uneven story delivery.

Bionicle's camera is adequate but not intuitive, as it continually tries to position itself behind you throughout the game. Sometimes you don't get the best angle for a given situation—you'll have to adjust the camera's position manually as you play. You'll also want to customize the keyboard and mouse controls from the awkward default setup, which you can easily do through the game's options. Bionicle also supports a wide range of USB gamepads.

The bottom line. Bionicle is enjoyable—if not engrossing—from beginning to end. It's time to get your bot on.—*Chris Barylick*

COMPANY: Feral Interactive
CONTACT: +44 208 875 9787, www.feralinteractive.com
PRICE: $40
REQUIREMENTS: 1GHz G4, Mac OS 10.2 or later, 256MB RAM, 1.5GB disk space, 32MB ATI Radeon 7500 or nVidia GeForce 2 video card or better, DVD-ROM drive

GOOD NEWS: Great graphics. Fun levels and satisfying platform-style gameplay. Runs well on mid-level Macs.
BAD NEWS: Flighty camera controls. Story doesn't pull you in.

MacAddict RATED
SOLID

Air Flo EX

COOL AND COOLING GAMEPAD

Nyko's Air Flo EX gamepad works as tough as it looks. Armed with dual analog sticks, an eight-way d-pad, and the usual complement of 13 buttons, the Air Flo EX fits well in adult-sized hands; plus, its logical button placement didn't cause us any undue fatigue or annoyance. The kicker is the pad's two-speed internal blower and ventilated handles, which kept our hands sweat-free during some particularly intense sessions of Tony Hawk's Pro Skater. We dig the pad's crazy-long, ten-foot USB cord with attached Velcro cord wrangler; well-placed, responsive buttons; and the ability to turn the fan off.

If your game doesn't recognize the Air Flo automatically, you can use the included software to map keyboard keys to the pad's buttons—not as simple to set up as an Air Flo–supported game, but better than scissoring a banister grind.

The bottom line. It's a responsive controller that keeps us cool. What's not to like?—*Niko Coucouvanis*

PHOTOGRAPH BY MARK MADEO

This thing blows—literally.

COMPANY: Nyko
CONTACT: 888-444-6956, www.nyko.com
PRICE: $24.99
REQUIREMENTS: USB-equipped Mac, Mac OS 10.2 or later

GOOD NEWS: Responsive, well-placed buttons. Mega-long cord.
BAD NEWS: Key-mapping software could be smarter.

MacAddict RATED
GREAT

iPod Camera Connector

SERVICEABLE PHOTO-TRANSFER DEVICE

When we reviewed the iPod photo (●●●●○ Jan/05, p34), we bemoaned the fact that—unlike most other media viewers—Apple's offering provided no way to directly import images from your camera or media card. Now with the $29 iPod Camera Connector, this shortcoming has been addressed—although not in a terribly elegant or efficient way if you prefer to shoot in RAW mode.

At press time, Apple listed 83 Camera Connector–compatible cameras at www.apple.com/ipod/compatibility/cameraconnector.html. Moving your images from one of them to your iPod photo is simple; just insert one end of the Camera Connector into your iPod's docking slot, then connect your camera's USB cable into the USB slot on the other end of the Camera Connector. A couple seconds later, your iPod displays the number of photos in your camera and the total size of the import. Select Import, click your iPod's central selection button, and the import begins—just be prepared for a bit of a wait, depending upon the number and type of images on your media card. We tested the Camera Connector with a Nikon D70 and a 1GB SanDisk Ultra II CompactFlash card. Importing a card filled with 182 RAW files took just under half an hour; 180 RAW-plus-JPEG image pairs took the same amount of time; 572 JPEGs at Normal resolution took a bit over 45 minutes.

A RAW deal. When the import process is complete, you're offered two choices: Done or Erase Card. Choose Done, and you'll see a list of the just-imported roll and other previously imported rolls. Select a roll, and you're given the option to Browse that roll or Delete it. Unfortunately, you can only delete an entire roll, not individual images—an annoying limitation.

Select Browse, and you're presented with the iPod photo's standard five-by-five-microthumbnail image-selection screen, where you can select an image for viewing or start an on-'Pod slideshow using the settings you've defined in Photos › Slideshow Settings, including your choice of music. If, however, you shot your images in RAW-only mode, the microthumbnails are merely circles with the word RAW inside them. Select one of them, and an error message pops up to tell you that "This photo format cannot be viewed on iPod;" it then instructs you to connect your 'Pod to your computer and synchronize with iTunes to view them.

This tiny chunk of plastic is good news for casual shooters but of less value to pro photogs.

Back to Mac. Here's where things get a bit less intuitive: When you dock you iPod and open iPhoto, you're presented with a pane that displays an image of an iPod photo and Ready To Import *number* Items—if you've shot in RAW-plus-JPEG mode, that number is double your actual exposures. Click the Import button, and the images are displayed during import. iPhoto then displays the Library with the uploaded photos appended; RAW photos are given a Keyword of Raw. If you now check in your Mac's *user name*/Pictures/iPhoto Library, you'll find a dated folder containing the JPEGs you imported; your NEFs are in a nested Originals folder. However, iPhoto not only keeps the JPEGs of the RAW-plus-JPEG pairing, it also creates JPEG duplicates of the RAWs and keeps them along with the original JPEGs—each image appears twice in the iPhoto Library.

To get the images into your iPod photo's Photo Library, launch iTunes and dock your iPod photo; iTunes will update it with the images you imported into iPhoto. If you shot your photos in RAW-plus-JPEG mode, both the original JPEGs and the JPEGs made from NEFs appear in the iPod photo's Photo Library; the originals in Photo Import › Roll are untouched and must be deleted manually.

The bottom line. If you only shoot JPEGs, the iPod Camera Connector is a serviceable tool, but if you shoot in RAW or RAW-plus-JPEG mode, you'll encounter annoying hiccups. However, no matter what mode you shoot in, this little chunk of plastic is a helpful way to clear off your camera's media card and get back to shooting.—*Rik Myslewski*

TIP

LEAPFROG iPHOTO

If you shoot in RAW-plus-JPEG mode, avoid importing duplicate images by not using iPhoto to download your photos from your iPod. Instead, connect your iPod to your Mac, launch iTunes, select iTunes › Preferences › iPod, and check Enable Disk Use. With your iPod mounted on your desktop, double-click the iPod icon, find your photos in /DCIM/*number*APPLE, drag them to wherever you want on your Mac, unmount your iPod, open iPhoto, then select the JPEG or RAW files you want to put into iPhoto and drag them into the iPhoto window—they'll be imported as a new roll.

COMPANY: Apple
CONTACT: 800-795-1000 or 408-996-1010, www.apple.com
PRICE: $29

REQUIREMENTS:
iPod photo, iPod photo Software 1.1

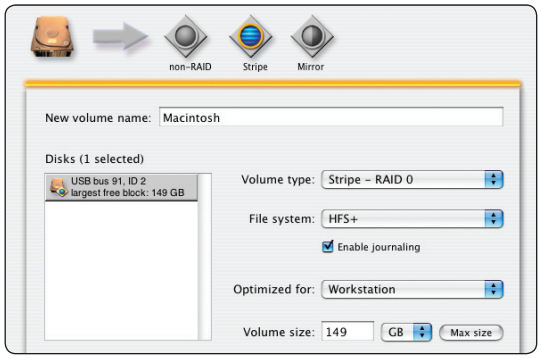
GOOD NEWS: Easy to use. Compact. Works great with JPEGs.
BAD NEWS: Can't view RAW photos on your iPod photo. If you shoot in RAW-plus-JPEG mode, you can view images on iPod photo, but iPhoto creates duplicate JPEGs of the RAWs.

MacAddict RATED ●●●●○ SOLID

PHOTOGRAPH BY MARK MADEO

SoftRAID 3.2

FLEXIBLE RAID SOFTWARE



Better than Apple's RAID? You bet.

Using a RAID—which stands for either "redundant array of inexpensive drives" or "redundant array of independent disks" (your choice)—can help improve your performance as well as provide fault tolerance. Apple provides RAID support through Disk Utility, but it's elementary at best. SoftRAID gives you more flexibility and superior management tools, making it a better alternative to Apple's RAID.

Setting up a RAID on our dual 2.7GHz Power Mac was a snap. We used the Mac's internal 250GB Serial ATA hard drive and an external 250GB LaCie d2 Hard Drive Serial ATA ($299, www.lacie.com) without any problems. SoftRAID says it can support any mix of ATA, SATA, SCSI, Fibre Channel, FireWire 400 and 800, and USB 1.x and 2.0 drives—they don't have to be the same capacity or type.

ON THE DISC
SoftRAID 3.2

Stripes and mirrors. After you initialize the drives, you create new volumes: either RAID 0 striped volumes for speed (files are saved as segments on two disks so both disks can perform reads) or RAID 1 mirrored volumes (the same data is written to each disk). Video and audio editors who use striped volumes will be happy to know that SoftRAID can create volumes on the outer third of the disk for increased performance. In addition, SoftRAID includes a host of management, status, and error-reporting capabilities.

One of Softraid's restrictions is that it requires its own RAID drivers, so if you move your drives to another Mac or if the Mac with SoftRAID is in Target Disk Mode, the host Mac won't be able to read the drives until you run SoftRAID and install the drivers.

The bottom line. Ditch Apple's elementary RAID software. SoftRAID is a better way to go.—*Roman Loyola*

COMPANY: SoftRAID
CONTACT: www.softraid.com
PRICE: $149

REQUIREMENTS: G3, Mac OS 10.2 or later, SCSI and ATA cards (with updated firmware), two or more hard drives

GOOD NEWS: Better overall management tools compared to Apple RAID.
BAD NEWS: Need to have SoftRAID drivers installed to see disks. No RAID 3 or RAID 5 support.

MacAddict RATED GREAT

Take Your Digital Photos Beyond the "Ken Burns Effect"

Photo to Movie™ incorporates a powerful version of the "Ken Burns effect" to bring photos alive with motion. Photo to Movie lets you add music tracks, voice narration, and a variety of slide-to-slide transitions. Export movies from Photo to Movie and use them in iMovie™, burn them to DVD, post them on the Web, or even email them.

Download a FREE trial version of Photo to Movie today and get ready to be amazed. Experience Photo to Movie's powerful features for yourself. Visit our web site for details. Retail price $49.95

"It's simple and does what it does better than any other." *Mac360.com*

"I've gotten more favorable comments on my project than anything I've done to date." *Gregg, Photo to Movie user*

MacAddict RATED GREAT July 2005 Issue

Sold at these and other retailers: CompUSA, Apple Stores, J&R Music World Computer World, amazon.com, Fry's Electronics

Photo to Movie
www.phototomovie.com

FlexScan L778

READY-FOR-GAME-TIME LCD DISPLAY

Meet the gamer's LCD.

You'll often find CRT-based monitors attached to the Macs of gamers and movie buffs; that's because many LCDs can't handle quick color changes, and they wind up producing images with streaks and blurs. The FlexScan L778 is designed with games and video in mind, and it may be the LCD that replaces your CRT—if you're willing to spend the money.

The L778 has an overdrive circuit, similar to the type used in flat-panel TVs, to help boost its response time. While playing Unreal Tournament 2004, World of Warcraft, and Kill Monty, our images looked good, and we didn't notice any blurring. The DVDs we watched (including *Battlefield Baseball*, *Lawrence of Arabia*, and *Finding Nemo*) all displayed nice-looking color tones and crisp movement, although we yearned for the widescreen format of displays such as Apple's 20-Inch Cinema Display (●●●●●○ Nov/04, p39), which is $130 cheaper.

Adjust your screen. The L778's controls are located at the bottom of the screen. A one-touch FineContrast mode allows you to choose one of five different display settings. For example, Picture mode adjusts the settings for viewing photos; Text mode is designed to make text look its best; you also get sRGB, Movie, and Custom modes. The different modes have a drastic effect on how images look on the screen, each preset works well for its prescribed use.

A pair of 2-watt surround-sound speakers are built into the sides of the display. Unfortunately, you can't instantly access the volume controls; you have to enter the display-adjustment controls, navigate to the speaker-control set, and select Volume before you can adjust the audio. If that sounds annoying, you can just rely on your Mac's volume controls.

The bottom line. As a multimedia display, the L778 performs well, and you'll appreciate its flexible image controls—but not its sound controls. —*Roman Loyola*

PHOTOGRAPH BY MARK MADEO

COMPANY: Eizo
CONTACT: 562-431-5011, www.eizo.com
PRICE: $929

REQUIREMENTS: Analog-RGB or digital-DVI connector

GOOD NEWS: Gorgeous image quality. Great image controls.
BAD NEWS: Pricey. Hard to access speaker-volume controls.

MacAddict RATED ●●●●○ GREAT

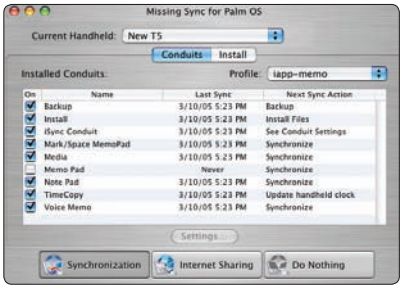
The Missing Sync for Palm OS 4.0.4

CONVENIENT SYNCING TOOL

Whether you use Palm Desktop, Apple's iCal and Address Book, or Microsoft's Entourage, The Missing Sync keeps your Palm device and Mac in step. It even goes beyond your standard sync software by providing more control.

With The Missing Sync, you can set up different syncing profiles that let you, for example, install files onto your handheld without syncing your contacts and calendar—very convenient. The app also offers connectivity options galore, allowing you to sync over Bluetooth, USB, or Wi-Fi. We synced our Tungsten T5 to Address Book and iCal over both Bluetooth and USB with no problem.

TMS lets you mount your device's internal memory (or any SD card in the device) on your desktop, but depending on your handheld, that capability may not matter. The Drive Mode feature of the T5, for example, does the same thing—it even allows you to mount both your internal memory and SD card to your desktop at the same time. With TMS, you can only mount one at a time.



The Missing Sync is much easier to deal with than other syncing alternatives.

TMS is well integrated with iTunes and iPhoto. When you mount an SD card on your desktop, that card automatically appears in your iTunes Source pane, so you can drag and drop music files to the card. In iPhoto, just select the photos you want to move to your device, and TMS's iPhoto plug-in places them in your file queue so they're transferred to your handheld the next time you sync.

You can also connect to your Mac via Bluetooth or USB and use the Mac's Internet connection to surf the Web or download email.

The bottom line. You don't *need* The Missing Sync. But it makes syncing your Palm to your Mac much more pleasant.—*Cathy Lu*

COMPANY: Mark/Space
CONTACT: 408-293-7299, www.markspace.com
PRICE: $39.95

REQUIREMENTS: Mac OS 10.2.8 or later (10.3.7 or later recommended), PDA running Palm OS 4 or 5

GOOD NEWS: Multiple syncing profiles. Integration with iTunes and iPhoto.
BAD NEWS: Offers a bunch of conveniences, but you can get by without it.

MacAddict RATED ●●●●○ SOLID

HL-2070N

CONVENTIONAL MONOCHROME LASER PRINTER

When it comes to printing text, laser is best.

Sure, inkjet printers are cheap, but their text quality can't come close to what you get from a monochrome laser printer. Fortunately, laser printers—even Ethernet-equipped ones such as Brother's HL-2070N—are becoming more affordable; in fact, if you print a lot of text and business graphics (charts and graphs), you might consider having an inkjet *and* a laser printer.

The HL-2070N is certainly cute (its shape reminds us of Apple's old Personal LaserWriter 300), and at 14.6 by 14.2 by 6.5 inches, it won't take up a lot of desk space. When it's sitting idle, you won't hear a peep from the HL-2070N, but when it's printing, the fan and engine are loud enough to hear from across a room—but not noisy enough to be disruptive.

Images and speed. Text quality from the HL-2070N is crisp and clean—terrific. Solid grays and blacks look good, too. The HL-2070N doesn't do as well with gradients, however; our test PowerPoint presentation, which included a gradient background, showed banding at the transition from medium to light gray. Our illustrations and charts turned out fine, but more-photographic images were too dark—you wouldn't want to use the HL-2070N to print photos.

We were pleased with the HL-2070N's ability to print a 50-page Microsoft Word document in just over two and a half minutes. Results varied drastically when we printed out a 15-page PowerPoint presentation, however; at the default 600-dpi setting, the printer finished in 1 minute, 18 seconds; but at the 1,200-dpi setting, the printer took over 10 long minutes.

The bottom line. If you print lots of text and business graphics, the HL-2070N is an affordable complement to your inkjet printer.—*Roman Loyola*

PHOTOGRAPH BY MARK MADEO

COMPANY: Brother International
CONTACT: 800-276-7746, www.brother.com
PRICE: $199.99

REQUIREMENTS: USB-equipped Mac (Ethernet for network), Mac OS 9.1 to 9.x or 10.2.4 or later

GOOD NEWS: Small footprint. Crisp and clean text.
BAD NEWS: Loud. Mediocre quality on complex images.

MacAddict RATED
GREAT

Restore your LP records, tapes and DVs –
Quickly & Easily!

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- Edit and process your audio
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Digital Album

DISAPPOINTING PORTABLE MEDIA PLAYER

PHOTOGRAPH BY MARK MADEO

Keep your charger at hand.

It has a big screen, media-card slots, and plays music *and* movies—yeah, Transcend's Digital Album sounds like serious competition for the iPod photo. Dig deeper, however, and you'll discover that its head-turning features lack the depth required to seriously compete against Apple's wonder gadget.

Physically, the 4.5-by-3.25-by-1-inch, 8-ounce Digital Album is stout and shaped like a book with its spine turned downward. Its brushed-metal and plastic body frames a 2.5-inch, 294-by-288-pixel LCD that produces brightly colored images with reasonable sharpness. The Digital Album has 20GB of built-in storage; support for a plethora of media-card types including CompactFlash, Microdrive, SmartMedia, MultiMediaCard (MMC), Secure Digital (SD), and Memory Stick; and a USB 2.0 port (cable included) for dragging and dropping files to and from your Mac. Portable power comes from a rechargeable lithium-ion battery that lasts for a disappointing 3 hours and 40 minutes when playing music.

Player hater. The hardware looks good; it's too bad the software doesn't hold up its end of the bargain. Take, for example, audio playback. Custom playlists? No. Equalizer? Nyet. Shuffle and repeat tracks? Nada. Even more, the software only supports MP3 tracks, plays only Motion JPEGs, and offers no full-screen mode for NTSC video output when your video's resolution is less than 640 by 480—the same goes for pics, too.

The Digital Album's bright spot: photos. You can rotate and zoom in on images (zooming only works if your image is larger than 640 by 480), plus you can attach 10-second sound bites to each image. You can also control slide shows from a distance using the neat little remote—paired with video out, it's a great way to show off pics. Your slide shows won't have a soundtrack, however, because the Digital Album doesn't let you add background tunes.

The bottom line. The Digital Album gave us hope but left us with an empty feeling. Good thing we have our iPod to set us right.—*Gil Loyola*

COMPANY: Transcend
CONTACT: 714-921-2000, www.transcendusa.com
PRICE: $365
REQUIREMENTS: USB-equipped Mac, Mac OS 10.1.2 or later

GOOD NEWS: Nice screen. Memory-card support. Good remote control.
BAD NEWS: Short battery life. MP3 player feels like an afterthought.

MacAddict RATED SOLID

theHotList

THE BEST OF THE BEST FROM RECENT REVIEWS

SHOPPING? HERE'S WHAT WE RECOMMEND

NEW THIS MONTH

Adobe InCopy CS2

If you have both editors and layout artists working with InDesign, you owe it to yourself to check out what publishing pro John Cruise calls "an invaluable tool."

Epson P-2000

Photography guru Michael J. Shapiro says that this compact media player performs "exceedingly well" at "clearing your camera cards and displaying images in striking detail."

Mitsubishi HC100U

Reviews Editor Roman Loyola calls this projector/screen combo a great choice "for when you want to bring the cineplex into your living room."

SOFTWARE

AUDIO			
Ableton Live 4	$499.00	Jan/05, p43	This top real-time sequencer now has improved MIDI powers.
Bias SoundSoap 2	$99.00	Jul/05, p37	SoundSoap Pro's little brother is a capable audio cleaner.
U&I Software MetaSynth 4	$499.00	Jul/05, p34	"Outrageous" is the only fitting description for this unique synth.
GAMES			
Aspyr Doom 3	$49.99	Jun/05, p48	Hellish, scary fun—but not for the faint of hardware.
Blizzard World of Warcraft	$49.99	Apr/05, p40	This rich online role-playing game is more addictive than nicotine.
MacSoft Halo: Combat Evolved	$29.99	Mar/04, p38	It's as awesome as your Xbox buddies say it is.
MacSoft Unreal Tournament 2004	$39.99	Jun/04, p48	The best first-person shooter adds new vehicles and weapons.
GRAPHICS & LAYOUT			
Adobe InCopy CS2	$249.00	Aug/05, p42	This workflow app amps up any InDesign team's productivity.
Adobe InDesign CS2	$699.00	Aug/05, p40	A strong upgrade to the world's most feature-rich layout app.
Adobe Photoshop CS2	$599.00	Aug/05, p38	A raft of new photo-focused features makes this upgrade rock.
Adobe Photoshop Elements 3.0	$89.99	Mar/05, p36	Adobe's affordable image editor gets a significant upgrade.
Corel Painter IX	$429.00	Feb/05, p38	This natural-media champ is now faster and more capable.
PRODUCTIVITY & UTILITIES			
Bare Bones Software BBEdit 8.0	$199.00	Jan/05, p36	By far the most powerful text editor money can buy.
FileMaker Pro 7	$299.00	Jul/04, p46	A complete rewrite vaults this database into the big leagues.
Microsoft Office 2004	$399.00	Aug/04, p42	Enhancements to every app add up to a worthy upgrade.
VIDEO & ANIMATION			
Adobe After Effects 6.5	$699.00	Sep/04, p46	This upgrade is strong enough to be called version 7.
Apple Final Cut Express HD	$299.00	Jul/05, p32	This low-cost editor adds HDV support, Soundtrack, and LiveType.
Vidvox Grid2	$75.00	Feb/05, p39	Join the VJ ranks with this MIDI-capable video-mixing software.

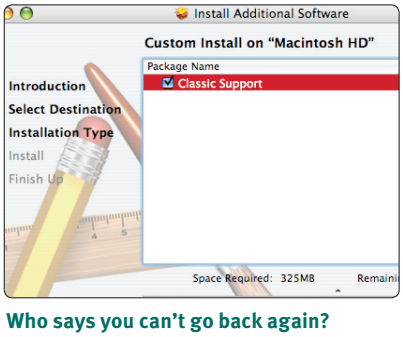
HARDWARE

ACCESSORIES			
Apple AirPort Express	$129.00	Oct/04, p48	This portable wireless router will stream your iTunes music.
Better Energy Systems Solio	$99.99	Jul/05, p45	Use the sun to power your 'Pod with this gorgeous gadget.
Canary Wireless HS10	$59.95	Apr/05, p44	This device finds hotspots and reports on network status.
Epson P-2000	$499.99	Aug/05, p46	This media player's gorgeous display is a photographer's dream.
palmOne Treo 650	$699.00	May/05, p44	It's the best PDA-and-cell-phone combination on the market.
AUDIO & VIDEO			
Mitsubishi HC100U	$1,495.00	Aug/05, p52	This projector/screen combo is the perfect home-theater pair.
Native Instruments Guitar Rig	$499.00	Nov/04, p40	Killer software plus a sturdy stomp box will wow any guitarist.
Sonos Digital Music System	$1,199.00	Jun/05, p36	Pricey, yes—but it's the best music streamer you can buy.
Tivoli Audio iPal	$129.99	Nov/04, p50	You won't believe the sound of this compact radio and speaker.
DIGITAL CAMERAS			
Canon PowerShot A85	$299.99	Mar/05, p40	This 4-megapixel point-and-shoot beauty takes great pictures.
Nikon D70 Digital SLR	$1,299.00	Jul/04, p50	It's as close to perfect as any digital SLR camera we've seen.
PRINTERS			
Canon i560	$89.99	Sep/04, p28	Ninety bucks can buy an exceptionally capable photo printer.
Canon i860	$119.99	Sep/04, p29	This printer's Photo Black cartridge makes color photos pop.
Canon i900D	$199.99	Sep/04, p31	Gorgeous prints, CD printing, color-LCD editing—all good stuff.
SCANNERS			
Epson Perfection 2580	$149.00	Oct/04, p37	This flatbed handles both reflective and film scans with ease.
Epson Perfection 4180	$199.99	Oct/04, p39	Superior image quality earns this scanner our recommendation.
Microtek ScanMaker i320	$119.00	Oct/04, p35	Killer photo-rescue software comes with this affordable unit.
STORAGE			
ILY SlimDVDup	$699.00	Apr/05, p45	Quickly duplicate CDs and DVDs without tying up your Mac.
LaCie Big Disk Extreme 500GB	$399.00	Aug/04, p55	Cutting-edge technology provides cutting-edge performance.
LaCie d2 DVD±RW Double Layer	$189.00	Feb/05, p48	Cram 8.5GB of data onto DVDs with this speedy burner.
Sony DRX-710UL-T	$229.95	Jun/05, p46	This double-layer burner has scorching single-layer performance.
WiebeTech G5Jam 1TB	$1,249.00	Aug/04, p59	This internal four-drive RAID makes a Power Mac G5 scream.
WiebeTech TrayDock	$169.95	May/05, p49	This slick hard-drive enclosure provides the ultimate in flexibility.

ask us

CLASSIC INSTALL

My new iMac G5 came with Mac OS 10.4 (Tiger) preinstalled, but not Classic mode. I also don't see it on my Tiger install disc. How can I put Classic mode on my iMac G5?



Who says you can't go back again?

Indeed, the default Tiger installation leaves Classic mode out in the cold, but the retail distribution does come with good ol' Mac OS 9.2.2—it's just not on the Tiger install disc. Dig out your Tiger box and find the Additional Software & Apple Hardware Test disc. Insert it into your iMac, double-click Install Extra Software, and follow the instructions until you get to the screen with the Customize button at the bottom. Click Customize, check Classic Support, and click Install to get the goods.

MORE-SUPER DRIVE

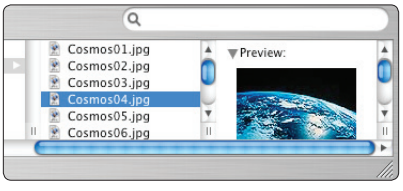
I have an iMac G5 with a standard-issue SuperDrive. I would like to update it to something that can burn dual-layer or double-layer 8.5GB DVDs. Is this possible?

Yup, it sure is possible—and if you're handy with a screwdriver, you can even do it yourself. Both Other World Computing ($169.99 for dual-layer, www.macsales.com) and MCE Technologies ($199.99 for double-layer, www.mcetech.com) offer such upgrades. Both companies provide complete installation instructions and claim full compatibility with Mac OS X and all the iApps, as well as Roxio Toast and Dantz's Retrospect. Either company can install your new drive for a little extra cash: MCE does it through local affiliates, while OWC requires that you ship your Mac to Woodstock, Illinois, which may more than make up for OWC's lower base price. As you may have guessed, both companies offer similar 8.5GB DVD upgrades for any Mac—'Books and minis included.

SCREEN-SAVER PICS

I really dig the intergalactic scenery in my Mac's Cosmos screen saver. Where can I find the picture files used in the screen saver?

Like most of Mac OS X's best eye candy, those files are cleverly hidden. Navigate to the /System/Library/Screen Savers folder and locate the file called Cosmos.slideSaver. Control-click the file and choose Show Package Contents from the Contextual Menu to reveal the file's hidden bits. The Cosmos screen saver's image files live inside /Contents/Resources. To copy the files from there (you know that *moving* them will break the screen saver, right?), hold down the Option key while dragging the files to your desktop.



Leave it to Apple to hide the Cosmos.

MISSING DISCS

I'm having trouble with my iMac not recognizing CDs consistently. I can boot off a CD fine by holding down the C key, but when the iMac is running off its internal hard drive, it ignores all of my CDs. Is my disc drive shot?

Since you can boot from a System CD consistently, there is nothing physically wrong with your iMac's drive. What you're experiencing could be caused by especially dirty discs (yes, we've seen this problem before—wipe gently from the center outward with a soft cotton cloth); or maybe someone messed with your Finder Preferences (Finder › Preferences)so that optical discs don't show up on the desktop or in the Finder Sidebar. When all else fails, check System Preferences to make sure you didn't set your Mac to ignore discs (in the CDs & DVDs pane) and that no one turned

quick answers

UNIVERSAL PICS

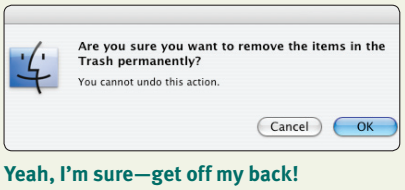
If I send my friend a JPEG image, will he be able to view it on his PC?

JPEG files, named for the Joint Photographic Experts Group, are completely platform independent and can be viewed by pretty much any modern-era computer.

TRASH TALK

How can I make my Mac quit warning me every time I empty the Trash? I know it's permanent!

Open Finder › Preferences › Advanced and uncheck Show Warning Before Emptying The Trash. Or just press Option while selecting Finder › Empty Trash. You can also do it all from the keyboard by pressing Command-Shift-Option-Delete.



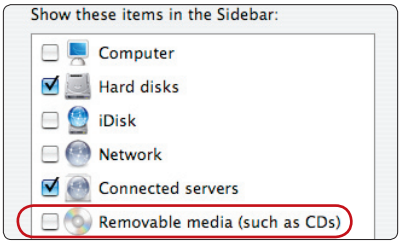
Yeah, I'm sure—get off my back!

SPROING!

I love Mac OS X's spring-loaded folders that pop open for me when I drag and hold a file over a folder icon, but can I speed up the spring-loaded part?

Open Finder › Preferences › General to fine-tune the spring-loaded-folder delay. You can also make the target folder spring open immediately by pressing the spacebar as soon as your cursor is positioned over the folder.

on Parental Controls. Otherwise, chalk it up to gremlins and reinstall Mac OS X.

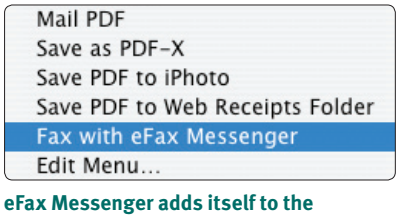


One possible cause of discus incognitus.

EMAIL FAX

Can I use my DSL line to send and receive fax transmissions?

DSL runs on POTS (plain old telephone service) and uses the same wires as your landline telephone. But since DSL enters your Mac via its Ethernet port or through a wireless interface, it bypasses a crucial part of the equation: your Mac's fax modem. The workaround is simple—insert your home phone line into your Mac's modem port. You can also send faxes via email if you use a third-party service such as eFax (www.efax.com), which charges $19.95 a month for full send-and-receive fax service. eFax also provides a free receive-only service—and yes, it's all Mac compatible.



eFax Messenger adds itself to the Print dialog's PDF menu.

UNIX UNIVERSITY

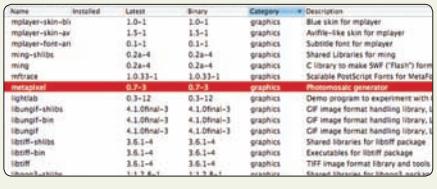
OPEN-SOURCE FOR EVERYONE

I've been told to use Fink to install Unix apps in Mac OS X. Who is this Fink and what does he/she/it do?

Unlike most of the short, snappily titled words we associate with Unix (ASCII, FSCK, GREP, SATAN, and so on), Fink isn't an acronym—it's actually the German word for *finch*. Fink is an open-source project with the noble goals of bringing more software to Mac OS X and, better yet, making sure that software is accessible to normal Mac-using humans—a nice gesture, especially since open-source Unix software generally tends to terrify all but the most accomplished geek.

The Fink Project's home base is at http://fink.sourceforge.net. There you can find everything from Fink's raw source code to binary packages that install usable applications with a simple double-click—just like real software. The Fink Project has ported an incredible range of software and utilities, from Ogg Vorbis codec tools to games inspired by Pong and Tetris. Check http://fink.sourceforge.net/pdb for a listing of applications available through Fink (5,261 at press time).

To get started with Fink, first download it from the Fink home page. The Fink installer includes one key piece of software that opens the door for Unix newbies: FinkCommander, a Mac OS X app that lets you browse and install available packages via a graphical interface—no arcane Terminal commands required! But you'll have to hit the Terminal at some point to use most Finkware—it's still Unix, after all.



FinkCommander make thousands of Unix apps way more Mac friendly.

eMAC SANS WIRES

I have an eMac that doesn't have an AirPort card. I live among many free wireless hotspots—is it too late for me to get my eMac online wirelessly?

Whether your eMac uses the old-style 802.11b AirPort or the newfangled 802.11g, you can still scare up the appropriate AirPort card. The current AirPort Extreme card ($79, www.apple.com) works great in modern eMacs, but if you have one of the first eMacs (any 700MHz model or an 800MHz model that was produced before May 6, 2003), you need the original AirPort card. Believe it or not, original Airport cards can be tough to find, but we've seen them going for about $80 on eBay, and MacWireless (www.macwireless.com) claims to have the original AirPort cards in stock for $89.98. You can also use Ethernet or USB adapters such as Belkin's 802.11b Wireless USB Network Adapter (Belkin part number F5D6050, $44.99, www.belkin.com). There are loads of similar adapters—just make sure that Mac driver software is available.

SERVERLESS STARTUP

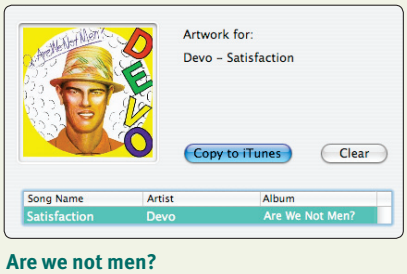
How do I make Mac OS 9 stop trying to mount a server at every startup?

Dig into System Folder:Startup Items and delete any server aliases you find there. Also delete the AppleShare Prep file from System Folder:Preferences. OS X users can manage startup items in the Startup Items section of System Preferences' Accounts pane.

ARTFUL iTUNES

Is there any software that bulk-retrieves album artwork from the Internet for my iTunes songs?

As a matter of fact, there is! It's called Fetch Art (free, www.aric.org/fetchart). Install it, then highlight any song or album in iTunes and select Fetch Art from iTunes' Scripts menu.



Are we not men?

Buz is a graphic designer living in Florida. He has been a devoted Mac user for over 10 years and has worked for both Apple and Power Computing.

Submit technical questions or helpful tips directly via email (askus@macaddict.com) or c/o *MacAddict*, 150 North Hill Dr., Ste. 40, Brisbane, CA 94005.

Make a Steadicam Rig

EASY

ON THE DISC
Staff Video: Steadicam Rig in Action

by Niko Coucouvanis

WHAT YOU NEED

PVC Pipe:

- 1 12-foot length of 1.25-inch-diameter PVC pipe
- 1 T joint
- 4 elbow joints
- 1 end cap
- PVC cement

Nuts and Bolts:

- 1 0.25-inch machine bolt (1.25-inch length) for camera mount
- 3 0.25-inch machine bolts (2-inch length) for locking PVC joints
- 2 0.25-inch flange washers (0.75-inch diameter) for camera mount
- 5 0.25-inch lock washers
- 3 0.25-inch wing nuts
- 1 0.25-inch nut
- Small, dense, 2- to 3-pound weight (we used a trailer-hitch ball)

Tools 'n' Stuff:

- Duct tape
- Saw (to cut PVC)
- Electric drill with 0.25-inch bit
- Protective eyewear

Steve Jobs may have declared 2005 to be the year of HD video, but some of us are still trying to figure out video basics—such as how to stabilize the damn camera during handheld shots and smooth out the herky-jerks in our moving-camera shots. You could drop big coin on a professional Steadicam rig, but that would probably cost more than your camera—so we'll show you how to make one yourself.

Shaky handheld footage is so 1990s—shoot smooth handheld footage with a home-brew Steadicam.

PHOTOGRAPHS BY MARK MADEO AND SAMANTHA BERG

1 Get the Goods

Our inspiration for this project came from Johnny Chung Lee's justly famous $14 Steadycam Web site (www-2.cs.cmu.edu/~johnny/steadycam). But rather than attempt to drill lead pipe per Johnny's instructions, we opted for good old PVC (that's "polyvinyl chloride," not "permanent virtual circuit") and used a nice compact trailer-hitch ball in place of his suggested barbell weight.

We found all of our supplies at the local Ace Hardware. We chose PVC because it's lightweight, strong, and rigid, yet easy to drill holes in and cut into custom sizes. Plus, to our geeky eyes, it looks sexy—in that Band-Aid–taped-eyeglasses kind of way. If you don't want to cut the PVC yourself, get it cut to order; figure 10 inches for the handle and 10 inches or more each for the upper and lower tubes. Using three 10-inch pieces creates a well-balanced unit, but PVC is easy to cut (and cheapest in 12-foot lengths), so it's simple to experiment with different configurations. We had terrific results using 10-inchers for the handle and upper tube, and a 3-foot piece for the lower tube.

Parts is parts: Even if you can't find this exact pile, any Home Depot has alternatives aplenty.

2 Assemble the Frame

First you need to put together the tubing. If you didn't buy precut PVC, bust out a saw (anything that cuts wood will do) and cut two 10-inch lengths and one 3-foot lower tube. Keeping the upper and lower pieces securely attached to the T joint is crucial, so drill a hole and stick a 2-inch-long machine bolt through both pieces where they fit into the T joint. Secure the bolt with a locking washer and wing nut; do the same with the handle. If that's too MacGyver for you, use PVC cement (and lots of it) to secure all three pieces of PVC to the central T joint.

PVC is incredibly versatile—for example, you can seal it with PVC cement (left), or use a drill and attach two pieces with a bolt.

3 Pop a Hole in the Cap

Carefully drill a 0.25-inch hole straight through the tip of the end cap. Make sure that the hole is as centered and straight as possible so that the bolt you insert into it sticks out straightly and vertically—you'll attach the camera to this bolt. Since the caps are inexpensive (about $1.49 each), we suggest buying a couple extras to spare you another trip to the hardware store if you mess up the hole. If you have access to a workshop with a vise and drill press, such tools make the job easier; if not, set the end cap on a scrap of two-by-four or similarly thick slab of wood so you can drill through the plastic without worrying about messing up the floor or table below. And watch your fingers!

Mind those precious digits, and don't forget the eye protection.

4 Mount Up

Now slide a lock washer (the little one) and then a flange washer onto a 1.25-inch machine bolt. Stick the bolt assembly inside the end cap and up through the bottom so the large washer gets stuck in the rounded end; then add another lock washer and a regular nut to the end of the screw protruding from the end cap. Before tightening the nut, work the bolt into as near a straight, vertical position as you can—the washer inside the cap will help you adjust the bolt. When the bolt is straight, secure the nut tightly with a wrench. Make it good and tight, since this supports your camera; you don't want to worry about your camera coming loose while you're stalkerazzi-ing the local blonde lollipop.

To create the camera mount, start with a wing nut. Thread it onto the bolt upside-down as in the photo below. Before screwing on your camera, slip a flange washer onto the bolt to spare the camera's tripod mount from bearing all of the weight.

Stick the threaded end of the 1.25-inch machine bolt up through the bottom of the cap. If you have an old tripod lying around, feel free to cannibalize its mount (or even the whole head).

5 Weigh It Down

Now add the counterweight. For our slick trailer-hitch model, simply tape its oversized nut to the bottom of the drop tube (use duct tape, and lots of it)—that'll give you the added benefit of being able to unscrew the ball if you ever need an impromptu set of brass knuckles while Steadicamming. That's it! Now just hold the camera as shown in the photo below.

If you plan on doing some pets-eye-view filming, you can flip the rig upside-down, but first you'll need to make a few adjustments. Move the counterweight to the top and create a bracket to mount the camera at the bottom of the lower tube. Cut three 6-inch pieces of PVC and connect them with two of the elbow joints to make a C shape—you can use PVC cement to join these pieces, as you won't need to change them later. Use another elbow joint to connect the bracket to the bottom of the lower tube; secure the connection by drilling a hole all the way through both the connecting piece and the end of the pipe, and sticking a 2-inch machine bolt all the way through. Lock it in place with a 0.25-inch lock washer and nut. Now attach another elbow joint to the bottom of the C bracket. Since the end cap holding the camera mount is the same diameter as the elbow piece, cut a 2-inch length of PVC and stick one end up into the camera-mount end cap, and stick the other end into the elbow joint. Place your counterweight on top of the rig, and you're ready to get down and dirty.

Whether you use duct tape or nuts and bolts, make sure to secure your counterweight—your little toe will thank you.

Connect your C bracket to the 3-foot portion of PVC with a bolt, lock washer, and nut (inset), and shore up all your joints to ensure your camera's safety.

Niko Coucouvanis wants to take his Steadicam rig out for a fast motorcycle ride to get some nausea-inducing ground-level footage.

Use a PSP with Your Mac

EASY

ON THE DISC
PSPWare 2.0.14

by Matt Osborn

WHAT YOU NEED

- Sony PlayStation Portable ($249, www.sony.com)
- USB-A–to–5-pin-USB-mini cable or Memory Stick Reader ($59.99, www.sony.com)
- 128MB to 1GB Memory Stick Duo or Duo Pro ($39.99 to $139.99, www.sandisk.com)
- HandBrake (free, http://handbrake.m0k.org)
- iPSP for Mac OS X ($19, http://kaisakura.com)
- PSPWare 2.0 ($15, on the Disc, or www.nullriver.com)

Unlike most of Sony's gear, the PSP works pretty well with a Mac.

The PlayStation Portable—PSP to its friends—is a powerful handheld gaming platform with a few multimedia tricks up its sleeve. With a little technical jiggery, a third-party app or two, and some patience, you can easily transform this gaming gadget into pocket-sized entertainment nirvana. You still wear cargo pants, right?

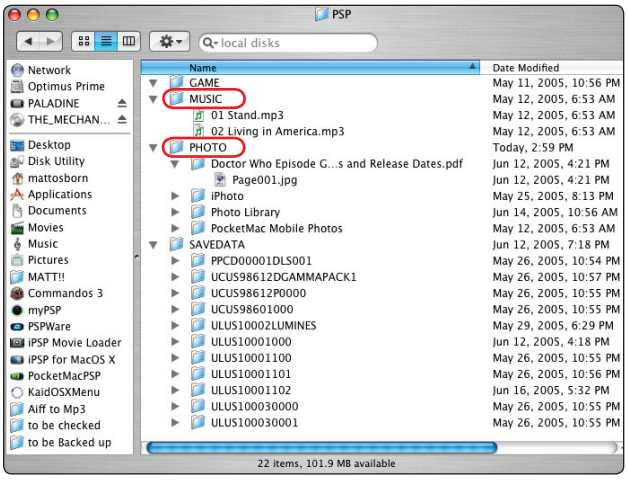
1 Make the PSP Connection

First, make sure you have a Memory Stick Duo or, preferably, a Duo Pro for its faster transfer rate. Next, connect your PlayStation Portable to your Mac via a USB-A–to–5-pin-USB-mini cable (the type used by most Sony Cyber-shots and many other digital cameras). On your PSP hardware, press the X button to navigate to the Home menu; under Settings, select USB Connection. Your PSP's Memory Stick should automatically pop up on your Mac's desktop just like a removable drive. No USB cable? If you have a Memory Stick Reader, that works just as well. If you've previously used the Memory Stick in any other device, make sure to format it on the PSP before proceeding.

The PSP (we call ours Paladine) mounts on the desktop like a removable volume—but only after you supply a USB cable.

2 Rock Your PSP

It's no iPod, but the PSP can still carry a tune. You can't put AAC audio files on your PSP, but you can load up MP3 or ATRAC3 (Sony's proprietary audio format) tracks. To do so, mount the PSP on your desktop as described in step 1. Now just drop your audio files into the /PSP/Music folder. If neither the PSP nor Music folder exists, press Command-Shift-N to create whatever's missing. You can even use subfolders to organize your music into playlists—but you can only go one level deep; so your tunes can live in /PSP/Music/Ramones, but not in /PSP/Music/Ramones/RocketToRussia. Alternatively, if you have an app like PocketMac for PSP ($9.95, www.pocketmac.net), you can skip all the hackery and just transplant whole playlists in bulk from iTunes to your PSP.

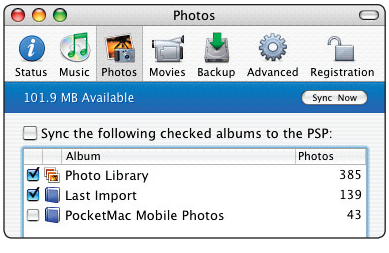


Here's where the PSP stores your files—if it's not completely filled with game saves.

3 Put Grandma in Your Pocket

To fortify your PSP with photos, connect it to your Mac, open the PSP volume, and create a folder within the PSP folder named Photo. Now drop your JPEGs (JPEGs only, please—the PSP is finicky about such things) into the Photo folder. Like the Music folder, this folder also supports one level of subfolders, so you can place photos into an album by storing them in /PSP/Photo/*albumname*. You don't even need to worry about resizing the files, as the PSP automatically resizes each image to fit its screen. If your photos aren't in JPEG format, convert them using image-editing software (such as OS X's own Preview app; just select File › Save As) or use an app such as PocketMac for PSP or PSPWare (on the Disc, or download from www.nullriver.com), either of which can transfer entire iPhoto albums to the PSP.

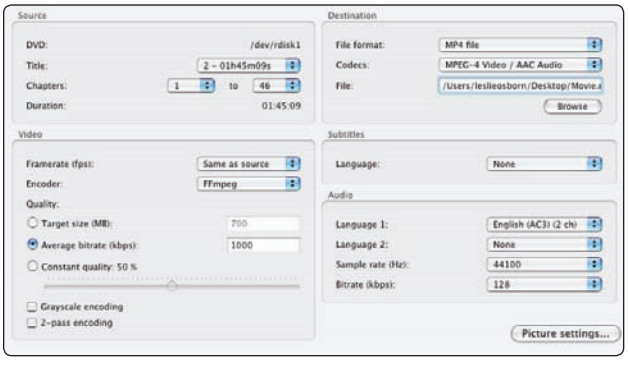
To view your images on your PSP, press the PSP's Home button (X), select the Photo icon, choose an album, and click a photo to view it. Press the PSP's R or L button to go to the next or previous photo, or press the triangle button to bring up a superimposed menu with options for zooming, rotating, and manipulating the image; you can also access a Help screen that explains the different buttons' functions. To start a slideshow, go back Home (press the X button) and select the Photo icon; then press triangle and select Slideshow from the resulting menu—you can press triangle again while viewing the slideshow to see the slideshow options.



PSPWare takes the tedium out of filling a PSP with photos.

4 Rip 'Em if Ya Own 'Em

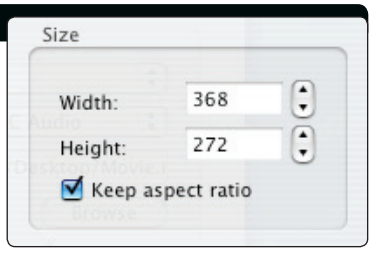
When you need a break from mashing buttons, you can enjoy a video on the PSP's 4.3-inch TFT LCD. While you can buy PSP-ready movies on UMDs (Universal Media Discs), you can also convert commercial DVDs into a PSP-friendly format and load the whole show onto your Memory Stick. Mount your DVD on the Mac and fire up HandBrake (free, http://handbrake.m0k.org); in the opening screen, your DVD should be identified as /dev/disk1. (If it's not, click the Detected Volumes radio button.) Click Open and wait while HandBrake copies the files. When it's done, click the Title pull-down menu and select the longest clip (the length is displayed in the title). For best results, set the Framerate to Same As Source, Encoder to FFmpeg, and Average Bitrate (Kbps) to at least 768; also check 2-Pass Encoding. If you want subtitles or a specific audio track, choose those from the pull-down menus in the Subtitles and Audio panes. Just be warned that as of press time, HandBrake is still beta software—the queuing function doesn't work yet—but hey, it's free.



HandBrake turns your (legally owned) DVD into a PSP-friendly file.

5 Pee-wee's 480-by-272 Adventure

Now it's time to tweak the movie for the PSP's small screen. Click Picture Settings, and in the resulting dialog, click the box labeled Keep Aspect Ratio. Now you only have to adjust one dimension and the other will snap to the appropriate value. For television's 4:3 aspect ratio, set the Width field to 320 (the Height will automatically set itself to 240). For widescreen 16:9 aspect ratio, set the Width to 368 and Height to 208. Now click Close. Back in the main HandBrake window, click the Rip button.

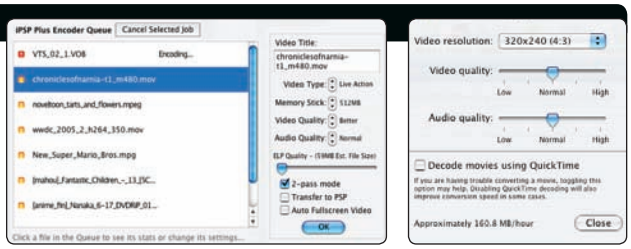


If you keep the aspect-ratio box checked, HandBrake keeps your video straight.

6 Next Stop: PSP

Now that your movie is in MPEG-4 format, you still need to fine-tune it and get it onto the PSP; that's where iPSP and PSPWare come in. To use iPSP to add movies, launch the app, click the Add Video button, and navigate to the movie file on your Mac. Set the Video Type, Memory Stick size, Video Quality, Audio Quality, and fiddle with the ELP Quality slider until you like its estimation of the output's file size. Check the 2-Pass Mode box for a cleaner encode, check Transfer To PSP if you want to send the video to your PSP, and check Auto Fullscreen Video to crank out a version that perfectly fits the PSP Display—but only if your source movie was originally in widescreen format.

To add movies with PSPWare, launch the app, click the Movies button, and use the plus-sign icon to add movies to the list. Press Options to bring up a sheet where you can set Video Resolution and play around with Video Quality and Audio Quality sliders. Selecting the Decode Movies Using QuickTime option will add some time to the conversion—only try it if your first attempt produces a blank or otherwise unacceptable file. Click Close to return to PSPWare's main interface, where your movie conversion is already underway. When it's finished, check the box next to your movie(s) and the one next to Sync The Following Checked Movies To The PSP, and press the Sync Now button. Done.



iPSP (left) and PSPWare for Mac OS X (right) queue, encode, and deliver videos directly to your PSP.

PSP addict Matt Osborn thought he could steal *MacAddict* Editor-in-Chief Rik Myslewski's "Enjoy" tagline. Think again, Matt!

Create an Automator Workflow

EASY

by Niko Coucouvanis

WHAT YOU NEED

Mac OS 10.4

Friends with birthdays

In our megaspecial report on Mac OS 10.4 ("Taming Tiger," Jul/05, p12), we mentioned how slickly Automator automates mundane tasks such scouring your iCal calendar for friends' birthdays, then raiding Address Book for the relevant addresses, and finally firing off heartfelt birthday e-greetings in Mail. (You do keep track of your friends' birthdays in iCal, right? No? Well, no wonder you don't have many friends.) Astute readers noticed how we glazed over the actual process, and they have demanded satisfaction. So here it is: how to build an automated birthday greeter.

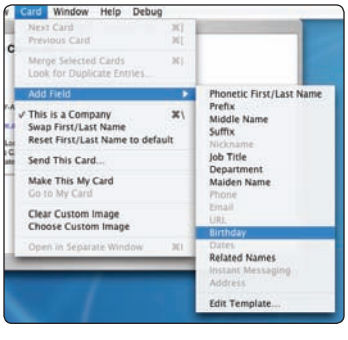
Nothing says "It's the thought that counts" like an automated birthday greeting.

ILLUSTRATION BY CHRISTINA EMPEDOCLES

1 BYO Birthday Field

If you've already populated your Address Book with contacts, you'll have to manually add the Birthday field; to do so, open a person's card by clicking on his or her name in Address Book's Name column. Now select Card › Add Field › Birthday from the menu bar—this kicks the specified contact's card into Edit mode and adds the Birthday field for you.

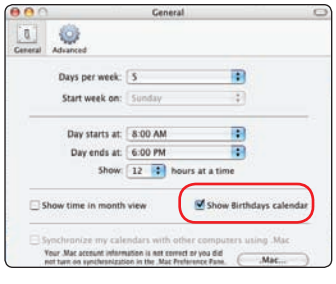
To make sure the Birthday field appears in any contact you might add in the future, select Address Book › Preferences and click the Template tab. Here, you can modify Address Book's default template—just select Birthday from the Add Field pull-down menu.



In addition to contacts' birthdays, you can also add fun stuff like fo-net-ick names and corporate-tool tags (er, job titles).

2 Bust Out the Birthdays Calendar

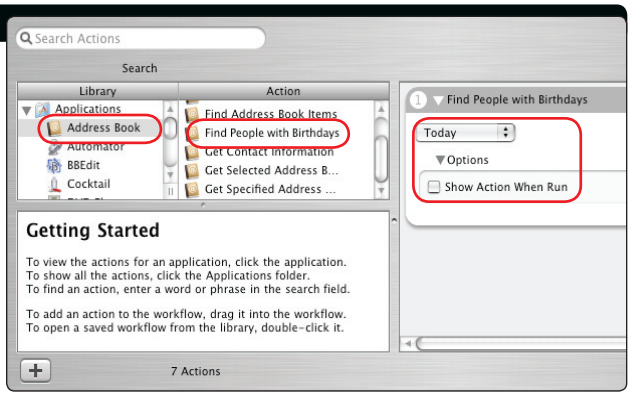
Open iCal and select iCal › Preferences; in the General section, check the box labeled Show Birthdays Calendar. iCal creates a new calendar and populates it with Events identifying the birthdays that you added to your Address Book contacts. Nice, but this ain't Havana—we want choices. You might, for example, want to send extra-special greetings to some contacts, and virtual flaming-bags-of-poo-on-the-porch to others. The Birthday Calendar automatically updates itself according to birthdays you've entered in Address Book, but the Birthday Calendar is read-only, so you can't add custom alarms to differentiate your boss's special day from your lewd, crude, rude, and tattooed drinking buddy's. No worries, there's an easy workaround—but you'll need to make the Automator workflow first.



iCal supports birthdays—but only after you tell it to.

3 Kick Automator into Action

Now here's the tricky part. Launch Automator (/Applications/Automator). Next, you need to consult Address Book to find out whose birthday is coming up, and then tell Mail to create the messages and mail them. First, click Address Book in the Applications list; then in the Action menu, click Find People With Birthdays and drag it into the Workflow column. Now tell the Action the scope of your birthday spamming: people with birthdays today, tomorrow, this week, next month, and so on. Pick Today from the pull-down menu. Ignore the Options disclosure triangle for now.

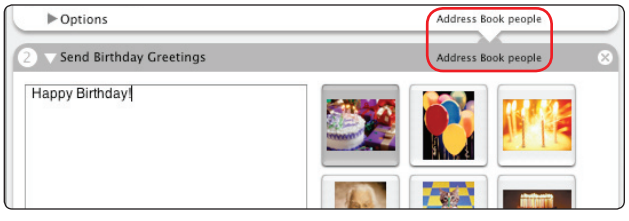


Fortunately, Automator already knows all of the Actions you'll need.

4 Add Another Action

Now you need a Mail Action, so click Mail in the Library column. Drag Send Birthday Greetings from the Action column into the Workflow column. Notice how the Address Book People input and output flags match up? That's Automator letting you know that your workflow is kosher.

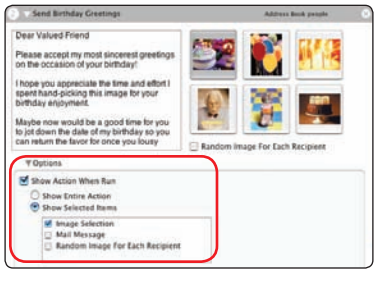
While your workflow may look done, it needs one more action. The Send Birthday Greetings action creates the messages in Mail, but it doesn't actually send them. Make sure Mail is still selected in the Library column, then drag Send Outgoing Messages from the Action column into the Workflow column.



If an action's output doesn't match the next action's input, your workflow won't flow.

5 Exercise Your Options

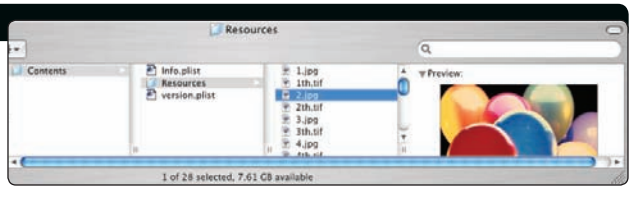
To personalize your canned greetings a bit, click in the field where it says "Happy Birthday!" and change that to whatever you like. You can also designate an image from the Action's six offered images. Not sure what you'll want in the greetings? Click the Options disclosure triangle and check the box labeled Show Action When Run; if you select Show Entire Action, the Action will prompt you for both the text and the image at run time; otherwise click Show Selected Items and use the check boxes below to designate prompts for just the text or just the image. Now press Command-S and save your progress in the default Workflow format. If you want to change the stock images, quit Automator and go to step 6. If you're pleased with the defaults, skip ahead to step 7 to wrap up this little luv generator.



Here, you can opt to later customize the greeting, the picture, or both.

6 Make It Your Own

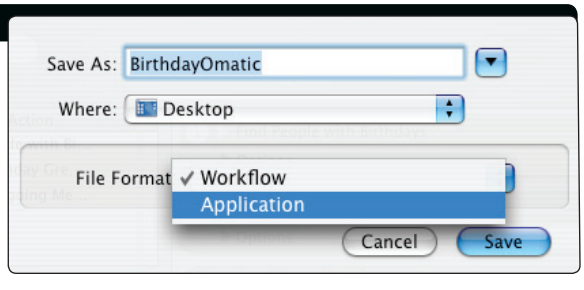
Automator's six included images are plenty festive, but none are of your pet, child, or Barbie Dream Car. You can fix that. Navigate to /System/Library/Automator and find the file called Send Birthday Greetings.action. Control-click the file and select Show Package Contents from the Contextual Menu, then navigate to /Contents/Resources in the resulting window. The image files 1.jpg and 1th.tif through 6.jpg and 6th.tif are the six images and thumbnails in Automator's interface. Copy them somewhere safe (just in case), and replace the originals in the Resources folder with your own images, following these simple guidelines: The TIF files need to be 45 pixels wide by 60 pixels tall—any bigger and the preview will only show a 45-by-60-pixel chunk of it. You can use any size for the full-size JPEGs, but 400 or 500 pixels per dimension fits well in an email message.



Dig in to Automator's Resources to customize the birthday card.

7 Make the Workflow Flow

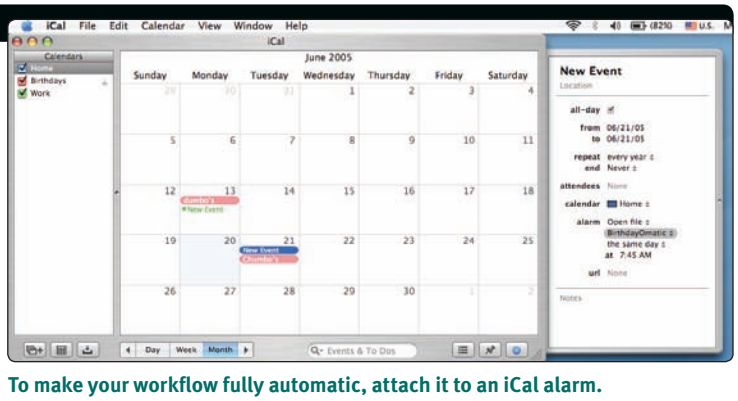
To run the workflow manually, make sure the workflow is open in an Automator window, and then press the Run button in the upper-right corner. To make your Mac do all the work itself, save your workflow as in step 5—only this time, select Application from the File Format pull-down menu. Now you can run the workflow by double-clicking its icon in the Finder rather than launching Automator and clicking the Run button.



Save your workflow as an application so you can run it outside of Automator.

8 Arm iCal Alarms

For total automation, set your workflow application to activate with an iCal alarm, so that when a friend's birthday rolls around, you don't have to do anything other than accept gratitude. Launch iCal, select a calendar other than the Birthdays calendar, and double-click in a day that contains a birthday. If iCal's Info pane isn't open, press Command-I or select View › Show Info. In the Info pane, click on Alarm and select Open File, then select Other from the pull-down menu that appears below the Alarm pull-down. Navigate to your saved workflow application and you're done.



To make your workflow fully automatic, attach it to an iCal alarm.

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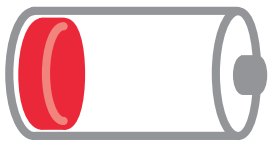

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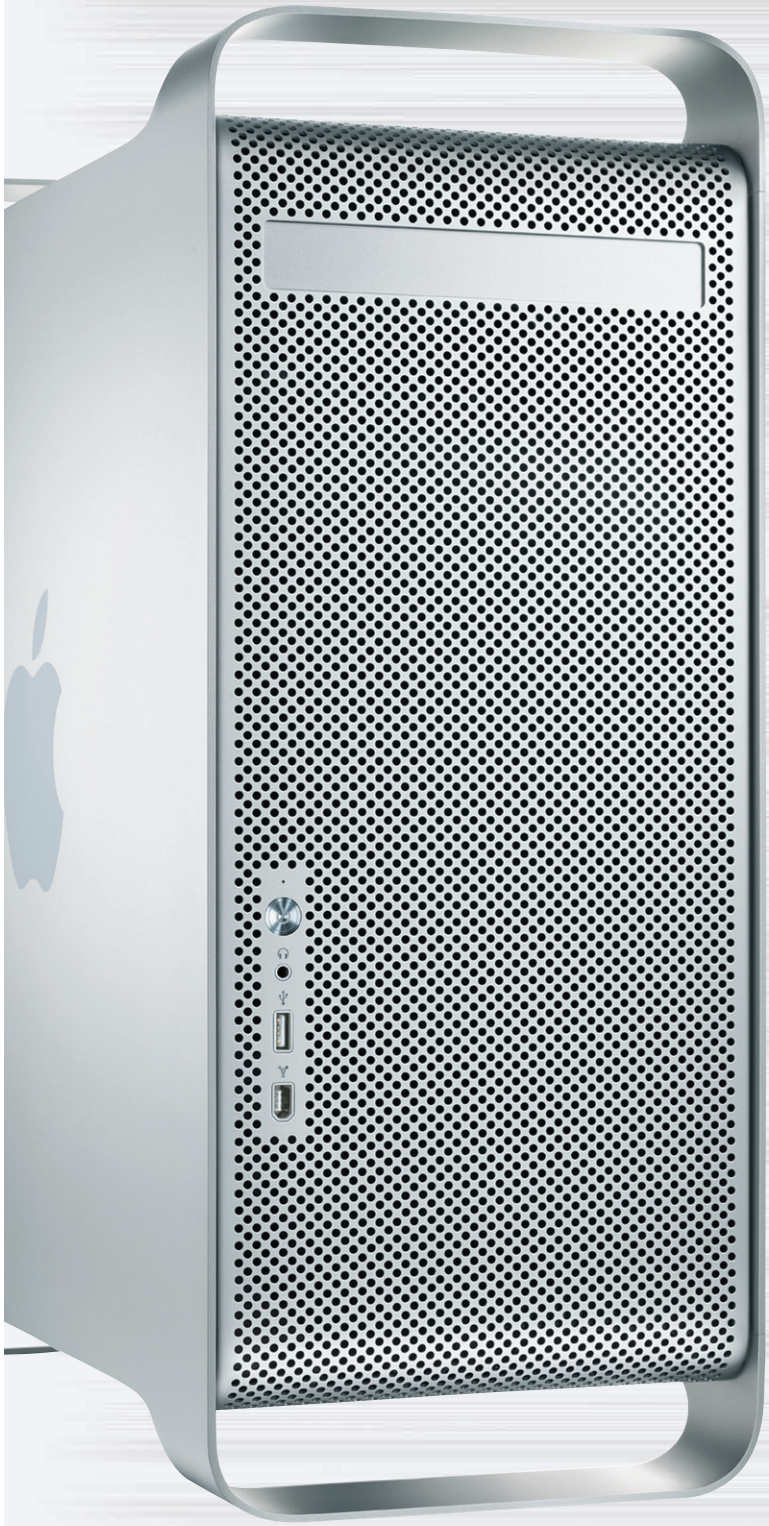

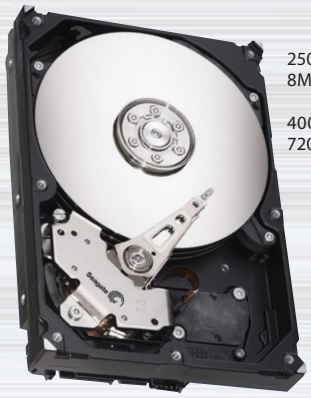

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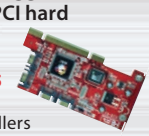

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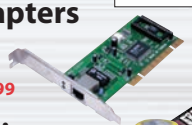

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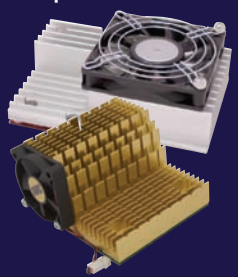

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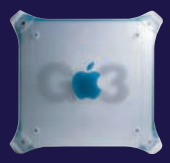

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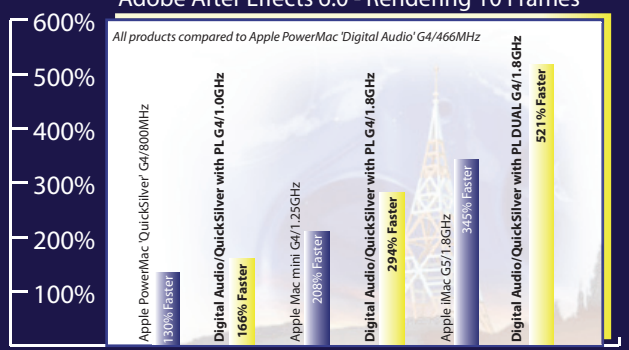

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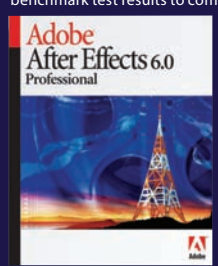

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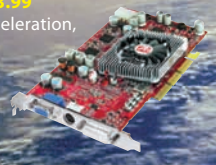

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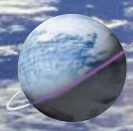

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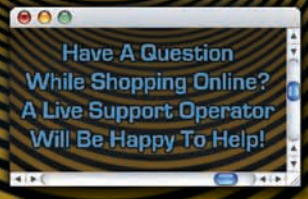

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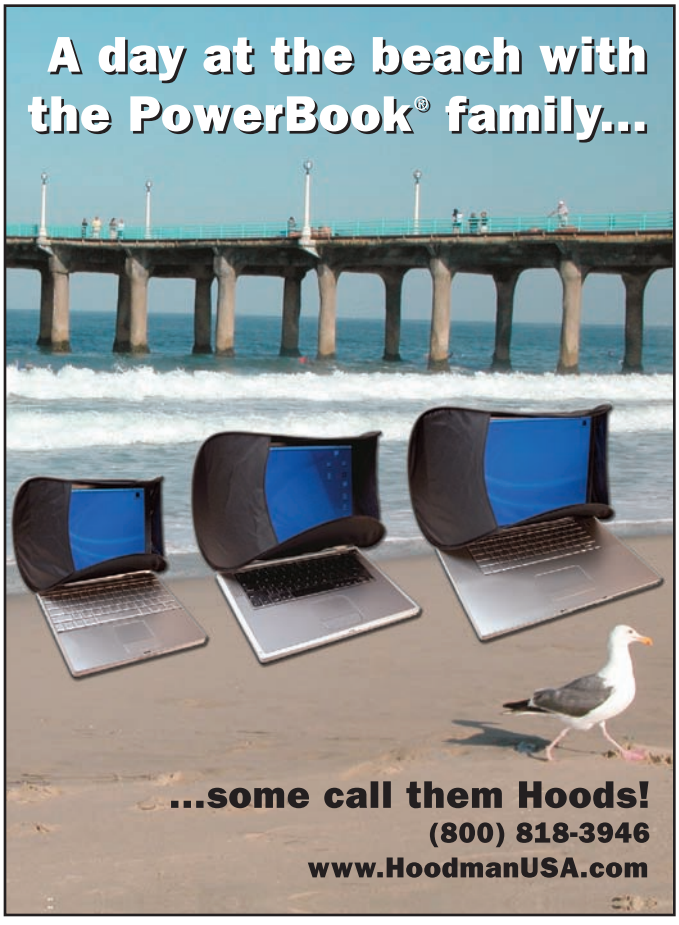

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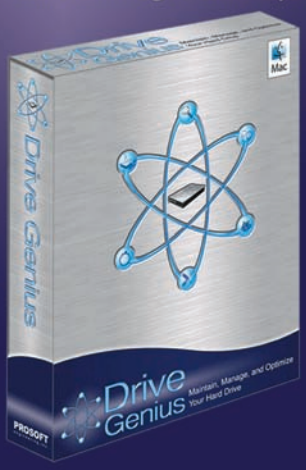

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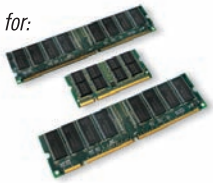

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08 EDITORS' PAGE
a note from the kernel

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theHotList
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LETTERS

Scotty: "Captain, you canno' mix Apple and Anti-Apple! The ship'll *explode*!"

iLLUMINATI?

What were the chances of you running a contest asking readers to write a caption for the Apple logo with the Intel logo inside (Apr/05, p79) and, several months later, having Apple announce plans to actually put Intel inside? I don't think anyone could have imagined months ago during your contest we would actually be facing this reality.—*Scott Slone*

Here's hoping that Michael Milauskas's winning caption (above) doesn't also come true.—*Max*

DO YOU HAVE ANY ENEMIES?

I hate cats, but I love Tiger. Your July issue rocked! Niko's "Create a Dashboard Widget" (p57) was phenomenal—still working on my mighty fun widget. Thanks for everything, including the sleepless nights, blurry vision, loss of memory, twitch in my left eye, and leg cramps.—*Evelyn Walker*

You're welcome, Evelyn, but if you'd read our disclaimer, you'd know that *MacAddict*'s side effects only include dry mouth, irregular heartbeat, seizures, and—in some rare cases—discoloration of urine. Sounds like you may have been poisoned.—*Max*

THE WHOLE-GRAIN DIFFERENCE

I was getting groceries and spotted this picture on the back of a Cheerios box: Mac OS X running on some nondescript Wintel laptop. It seems that General Mills knew all about Apple's Big Switch from the PowerPC to Intel CPUs. Now if they only had one of those as the surprise inside each box!—*Robin Grant*

Cheerios keeps you regular and lets you peer into the future.

Ancient Chinese secret, huh?

PRINGLES ARE SO PASSÉ

Why settle for old-school American junk food for wireless reception ("Boost Your Wireless Connection," Jun/05, p56), much less your mother's used aluminum foil, when exotic Asian cookware is ready-made for the task? Wok and roll parabolically at www.usbwifi.orcon.net.nz.—*Jay Ach*

RHODES SCHOLAR

Nice shirt, Nick.

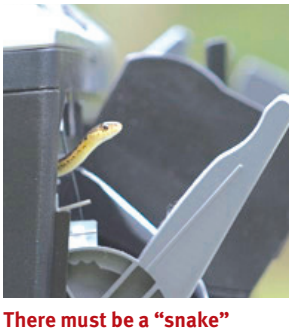
My girlfriend informed me that the photo below Simon LeBon in "Duran Duran: Mac Serious" *(Get Info*, Jul/05, p11*)* is Andy Taylor, the guitarist, not Nick Rhodes like you said it was. —*Miguel Santana*

Suuuure she did. In any case, here's the real Mr. Rhodes.—*Max*

SLITHERING STYLUS

I came in to pick up the phone and something slithered across my desk into our Epson Stylus Photo 2200 printer. My husband disconnected it, took it outside, removed the back, and waited for our guest to depart.—*Megan Lane*

Ah, a good omen indeed—the arrival of a snake symbolizes healing, fertility, renewal, and rebirth. Your printer will surely outlast its specified life cycle, and your ink cartridges shall never run dry.—*Max*

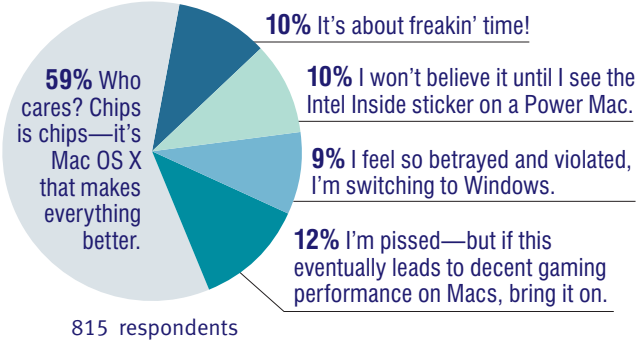


There must be a "snake" and "Apple" pun hiding here somewhere.

Survey Says

Here are the results of our May 2005 survey. Check out www.macaddict.com each month for a new online poll.

What do you think of Apple's announcement that it will transition from PowerPCs to Intel processors?



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SEARCH US

I can't believe your "Search Party" article (Jul/05, p28) left out the KartOO visual metasearch engine (www.kartoo.com), one of my favorites; and it'd be one of yours, too, if you'd give it a try. With KartOO, you get much more than search results—you get a visual map of the connections between the results!—*William Burke*

Discover the rich mineral deposits hiding between Web sites with KartOO.

XPOSTFACTUAL ERROR

In "46 Bugs," (Aug/05, p25), you incorrectly identify Ryan Rempel's XPostFacto as donationware. It's actually a $25 shareware application from Other World Computing. Dowload it at http://eshop.macsales.com/osxcenter. —*Sam Marshall*

IT'S CONSTITUTIONAL

While Roman's run-in with a camera-shy Apple Store patron made for a funny desk-toy replay (*Staff Video*, Jul/05), he didn't have to leave. The first amendment gives journalists the right to cover things like this in public. The Apple Store is private property, so they could stop him from filming inside the store, but they can't do anything to prevent him from doing so on a public sidewalk. Unless, of course, San Francisco is not a part of the United States. —*Alan Youngblood*

We San Franciscans are waiting for that earthquake to knock us into the Pacific so we can call ourselves New Atlantians, sprout gills, and lord over all the creatures of the sea. Hopefully we'll have waterproof iPods by then.—*Max*

101 USES FOR A DEAD MAC

Cat bed? Max Headroom Halloween costume? The sky's the limit!

Recently, the monitor on my reliable ol' G4 gave out on me, so presto—Catintosh 1.0! I don't care if Apple is going over to the dark side—my next project is stenciling the Intel Inside logo on the litter box.—*Joshua Rutsky*

My daughter has to use Windows machines at school, and she wants me to get her a Dell this summer. I have repeatedly told her "no," so now it looks like she's trapped in the world of Mac! (Slightly unhappy, as you can see.)—*Dan Hess*

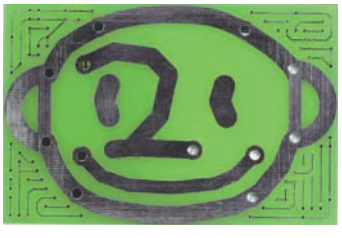
WIN!

Max Out Your Mac!

Mac OS X loves loads of RAM. So does Adobe Photoshop—and, for that matter, so does practically every other app. With that in mind, this month Crucial Technology will max out your Mac or 'Book to its highest user-accessible amount of RAM. For example, if you own a top-end Power Mac G5, that'd be a cool 8GB ($951.96 at press time, www.crucial.com). All you need to do to stuff your Mac full of all the RAM it can handle is write the best caption for the image below.

Only one entry per contestant.

Entry Form



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150 North Hill Dr., Ste. 40, Brisbane, CA 94005.
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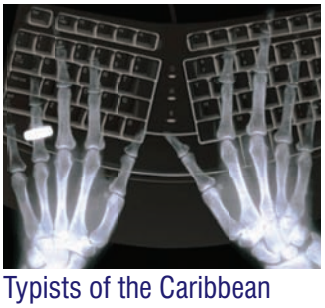
Contest results will appear in our Jan/06 issue.

Contest Rules The judges will be *MacAddict* editors and will base their decision on 33 percent humor, 33 percent originality, and 33 percent creativity. All entries must be received no later than September 30, 2005, with the winner announced around January 2006. By entering this contest, you agree that Future Network USA may use your name, likeness, and Web site for promotional purposes without further payment. All prizes will be awarded, and no minimum number of entries is required. If two or more people enter identical winning captions, the entry received first will be awarded the contest prize. Prizes won by minors will be awarded to their parents or legal guardians. Future Network USA is not responsible for damages or expenses the winners might incur as a result of this contest or the receipt of a prize, and winners are responsible for income taxes based on the value of the prize received. A list of winners may also be obtained by sending a stamped, self-addressed envelope to Future Network USA c/o *MacAddict* Contest, 150 North Hill Dr., Ste. 40, Brisbane, CA 94005. This contest is limited to residents of the United States. No purchase necessary, void in Arizona, Maryland, Vermont, Puerto Rico, and where prohibited by law.

Winner!

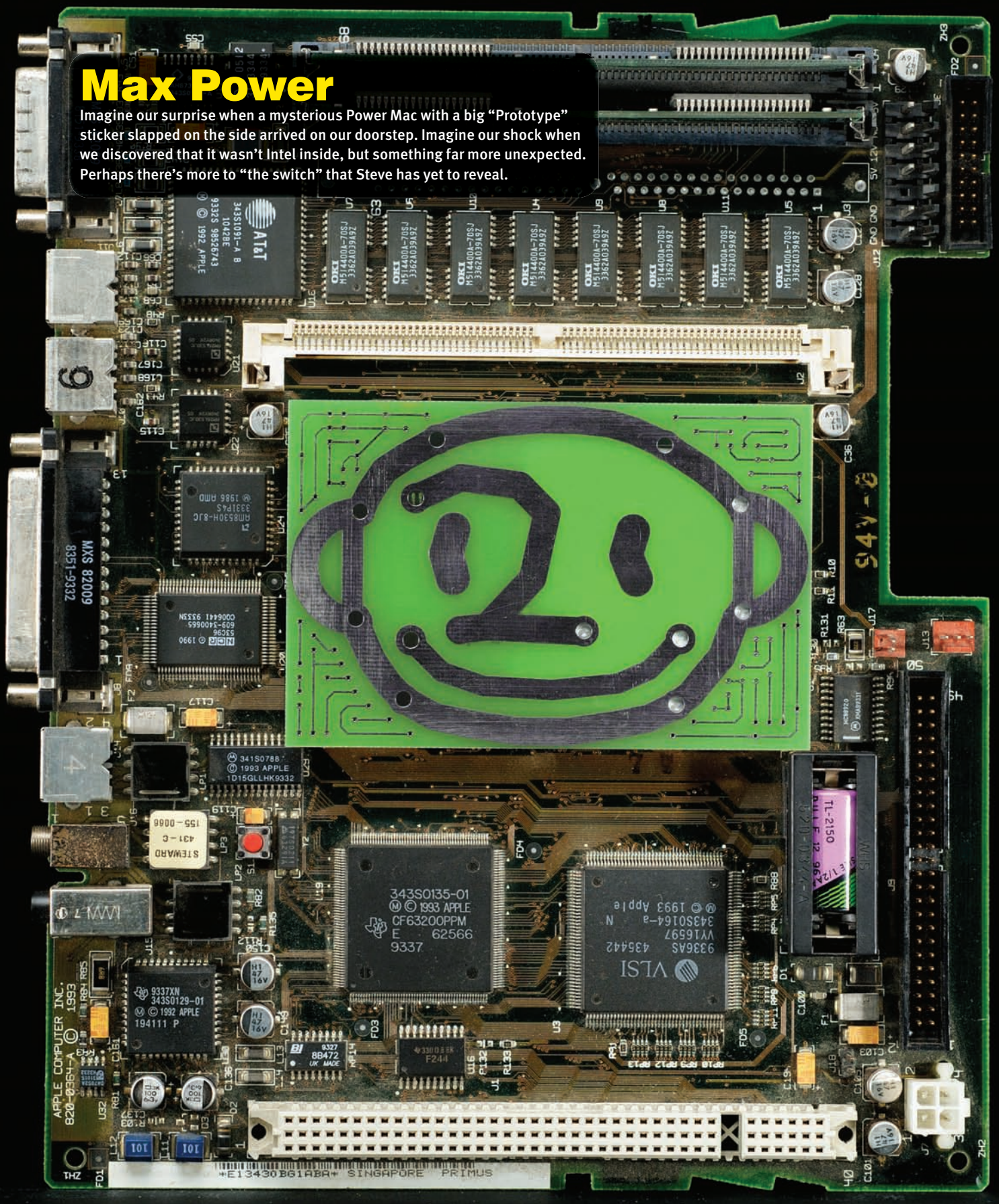
Congratulations to Marie Blasco, whose caption (right) won her a set of ProSticks speakers from DVForge ($369.99, www.dvforge.com). And special thanks to the 59 readers whose captions riffed on *The Lord of the Rings* or Superman.



Typists of the Caribbean

Max Power

Imagine our surprise when a mysterious Power Mac with a big "Prototype" sticker slapped on the side arrived on our doorstep. Imagine our shock when we discovered that it wasn't Intel inside, but something far more unexpected. Perhaps there's more to "the switch" that Steve has yet to reveal.



PHOTOGRAPH BY MARK MADEO