

**PHOTOSHOP 6.0 EXPERT GUIDE**

Get the Most from Adobe's Image-Editing Application, page 48

01.2001

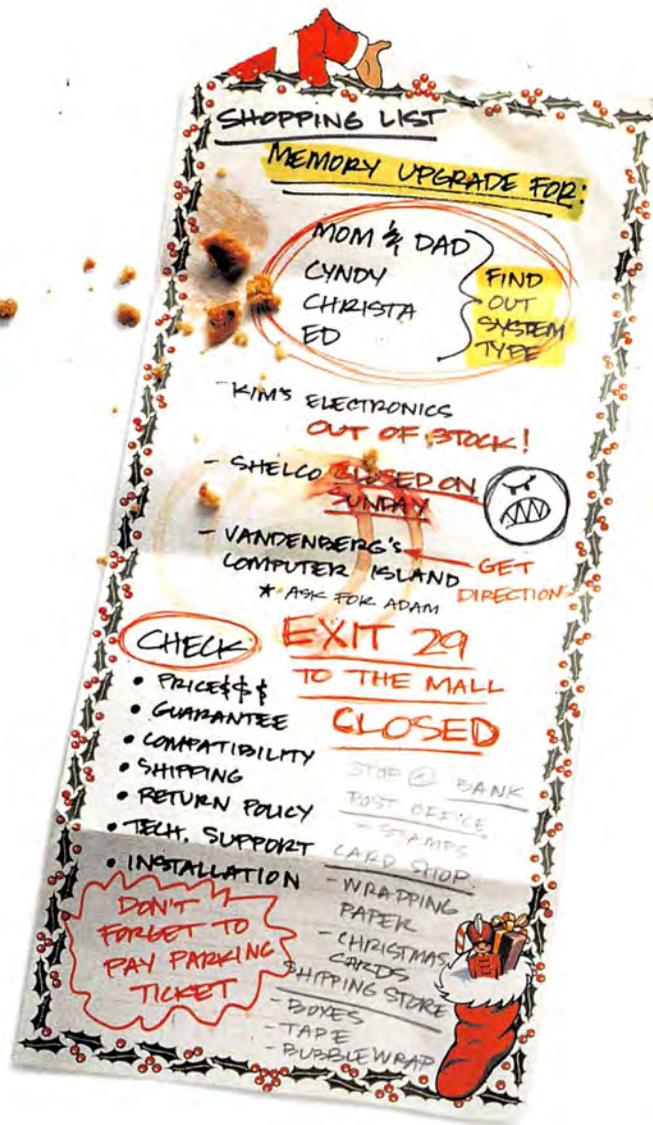
# Macworld



## OFFICE 2001 SECRETS

What's the Inside BUZZ?

**FireWire DV  
Camcorder Shoot-Out**  
Macworld Lab Puts  
Canon, Panasonic, Sharp,  
and Sony to the Test



**Buying memory doesn't have to be complicated.**

Online discounts for over 49,000 upgrades at:

**www.crucial.com**

or call toll-free 1-888-363-3082



### Win a computer and RAM!

Enter to win an Apple PowerMac G4 Cube with monitor, 128 MB RAM, and Madden Football 2000.

Visit [Crucial.com](http://Crucial.com) for complete details.



# You need Crucial RAM.

The right memory at the right price. Just one reason why the world's leading computer manufacturers buy their memory from us. Upgrade factory-direct from [Crucial.com](http://Crucial.com) and get top-quality RAM at nearly half the price of our leading competitor.

**\$53<sup>99</sup>**

**64MB PC100 SDRAM**

**for today's most popular systems**



**Price reflects an automatic 10% discount for ordering online.** Prices were taken on 10/27/00 from Crucial and Kingston Web sites; however, prices can (and do) change daily. Prices may vary according to specific system requirements.

\*2000 Micron Semiconductor Products, Inc. All rights reserved. Crucial Technology and the Crucial logo are trademarks of Micron Technology, Inc. and Micron is a registered trademark of Micron Technology, Inc. All other brands and names used herein are the property of their respective owners. Crucial Technology is a division of Micron Semiconductor Products, Inc. Phone 208-363-5500. Fax 208-363-5501. E-mail [crucial.sales@micron.com](mailto:crucial.sales@micron.com). Crucial Technology is not responsible for omissions or errors in typography or photography.

**The Memory Experts™**

**crucial**  
TECHNOLOGY  
A Division of Micron®

## Opinion

### 7 The Vision Thing

ANDREW GORE As a Mac user, it's easy to support a good cause.

### 15 Feedback

Readers respond.

### 97 The Game Room

ANDY IHNATKO Powerful game consoles are on the way, but don't count the Mac out just yet.

### 164 Desktop Critic

## Buzz

20 3Com's new Internet appliance, Adobe Photoshop creator John Knoll, MadSci.org, and robots built from Legos.

## How-to

### 48 Photoshop's New Frontier

### 56 Organize with Entourage

MACWORLD STAFF Use a new Microsoft Office program to keep track of your schedule and correspondence.

### 60 Starving for Storage?

JOSEPH SCHORR Expand your options by adding a second internal hard drive to certain G3s and all G4s.

### 64 Slide Show to Go

STEVE SCHWARTZ Share PowerPoint with everyone—turn your presentations into QuickTime movies.

### 69 Mac 911

CHRISTOPHER BREEN Organize digital photos into a slide show, squeeze System Folders onto a startup Zip disk, and combine multiple sounds in QuickTime Pro.

January 2001

# Macworld

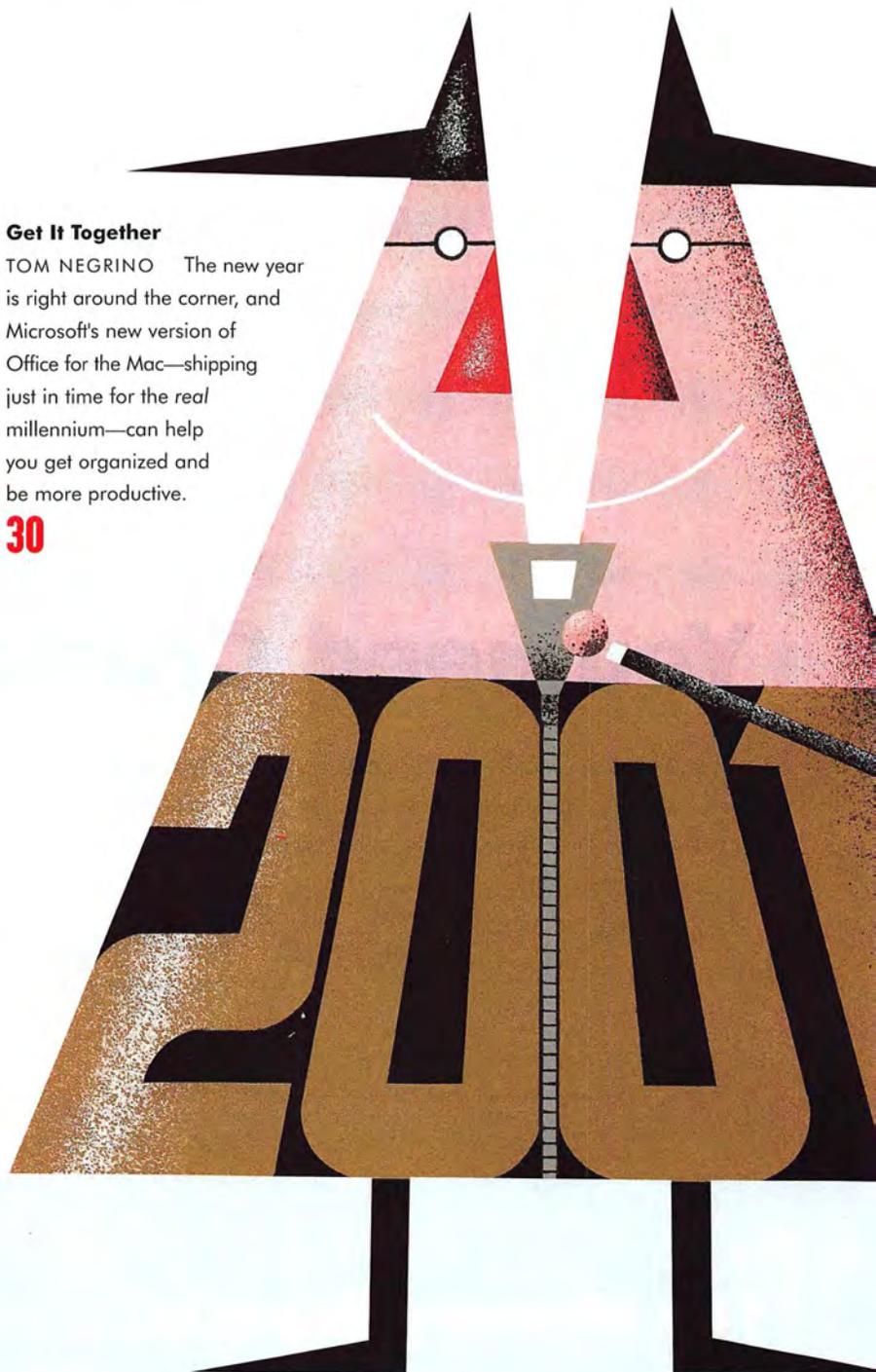
www.macworld.com

Incorporating MacUser

### Get It Together

TOM NEGRINO The new year is right around the corner, and Microsoft's new version of Office for the Mac—shipping just in time for the real millennium—can help you get organized and be more productive.

30

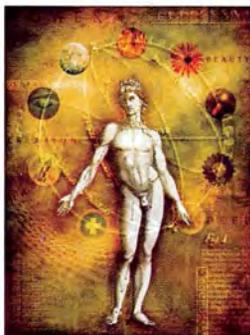




### The Macworld 2000 Game Hall of Fame

CHRISTOPHER BREEN AND  
ANDY IHNATKO It's that  
time again! Come take a  
gander at Macworld's annual  
awards for the best games  
of the year.

**40**



### Photoshop's New Frontier

DAVID BLATNER The new-  
est version of Photoshop packs  
some breakthrough features,  
including the long-anticipated  
ability to work with vector  
graphics. Find out about  
improvements both large and  
small, and learn how to get  
the most out of Photoshop's  
expanded capabilities.

**48**

### Desktop Critic

DAVID POGUE Who needs  
crash-test dummies when you  
can use real live consumers?

**164**



### Macworld.com

Online-exclusive news, reviews, and how-to's in the world of Macintosh: our iMovie and Javascript tutorials continue, and the Sherlock Files unravel a few more Mac mysteries.

## Reviews

- 72** ★★★★★ **Microsoft Office 2001**  
Productivity suite
- 76** ★★★★★½ **Adobe Photoshop 6.0**  
Image editor
- 79** ★★★★★½ **Brother HL-2400CeN;**  
★★★★ **HP Color LaserJet 8550N;**  
★★★ **Lexmark Optra C710;**  
★★★★½ **Minolta magicolor 2200EN;**  
★★★★ **NEC SuperScript 4650N;**  
★★★★½ **Tektronix Phaser 750DP;**  
★★★ **Tektronix Phaser 850DP**  
Color laser printers
- 82** ★★★★★ **Canon Optura Pi;**  
★★★★ **Canon ZR10;**  
★★ **Panasonic PV-DV200;**  
★★★ **Sharp ViewCam VL-SD20U;**  
★★★★ **Sony DCR-TRV11**  
DV Camcorders
- 87** ★★★★★ **BEdit 6.0**  
Text editor
- 89** ★★★★★ **Palm VIIx**  
Wireless handheld organizer
- 91** ★★★★★ **Finale 2001**  
Music-notation software
- 92** ★★★★★½ **Nisus Email 1.0.9**  
E-mail program
- 93** ★★★★★ **MindControl 1.1**  
System utility
- 95** ★★★ **Back-UPS Pro 500**  
Uninterruptible power supply
- 95** ★★★★★ **Movie Magic Screenwriter 2000**  
Scriptwriting software
- 95** **Macworld.com Reviews**  
More reviews online

**THE ART  
JUST  
GOT A  
NEW  
STATE.**



## GCC INTRODUCES THE ELITE 21 SERIES, AND A NEW PRICE/PERFORMANCE STANDARD FOR WORKGROUP PRINTERS.

If records are made to be broken, and bars are set to be raised, then what we have here is your typical bar-raising event.

Our Elite™ 21 Series laser printers aren't just the fastest we've ever made (21 pages per minute); they're also the gathering place for an array of features you won't find elsewhere in their category. Including...

A new PowerPC-based processor that handles even complex documents quickly and effortlessly, with high (1200 x 1200 dpi) resolution.

Enhanced connectivity, so that your printer arrives fully network-ready.

A flash ROM feature that guarantees you'll always have access to the most current software available.

Compatibility with both Mac and Windows platforms.

Plus such utilities as double-sided printing and singularly dexterous paper-handling capabilities, with automatic collating, three motorized paper feeding trays, and an envelope feeder.

All this from the company that also set standards for hand-holding. With 24/7 technical support for the entirety of the one-year warranty period. Plus a 30-day money-back guarantee and our Platinum Exchange Warranty, which provides you a replacement part or printer by the next business day if there's ever a problem we can't solve over the phone.

But the Elite 21 Series is different from its competitors in another important respect: you buy it direct, minus bricks, mortar and middlemen. As a result prices start at just \$1299.

You see, our printers aren't just about raising bars; they're about lowering barriers at the same time.

**To order or find out more about our special introductory offer, call 1.800.422.7777 or visit [www.gccprinters.com/macworld](http://www.gccprinters.com/macworld)**



www.nemetschek.net

1-888-646-4223

# VectorWorks

*Object-Based CAD for Professionals*



Design is ever changing, dynamic. From initial concept, through production and revisions, the entire process becomes faster and easier with VectorWorks.

## Productivity of Object-Based Design

VectorWorks' next-generation Object technology accelerates the design process. Now, creating common design elements is effortless. Objects such as doors, windows, nuts and bolts can be created and edited with a simple mouse click.

## Strength and Proven CAD Technology

The Best Selling CAD software on the Mac and, an emerging standard on Windows, VectorWorks provides everything you need for 2D drafting and 3D modeling. But, that's not all. An integrated database tracks costs and materials, and built-in presentation capabilities can literally help you sell the job.

## The VectorWorks Advantage

With VectorWorks you get it all—The productivity of Object-Based Design combined with the flexibility and control of proven CAD technology.

Giving you an extra edge, VectorWorks ships FREE solutions for Architecture, Landscape, DTM, Theatre Lighting and Mechanical Engineering among others. And, VectorWorks' built-in scripting environment makes creating custom solutions, and automating routine tasks easy. No other CAD program offers so much for so little!

## Add-on Products Expand VectorWorks Core Capabilities



RenderWorks—Bring your designs and animations to life with realistic textures and dramatic lighting and shadowing effects.



VectorWorks ARCHITECT—The ultimate in architectural CAD. Integrate Design, Production and Project Management into a system delivering unparalleled productivity.



**NEMETSCHKE**  
NORTH AMERICA

**I**t's cold. But that's OK, because the constant patter of rain on my Bondi Blue poncho keeps my mind off the cold. However, it's not quite enough to keep my mind off the fact that my toes are soaked and freezing and that I've lost feeling in them. But at least I've had about nine hours to get used to the sensation.

And then, of course, there's the hillside I'm sitting on—the constant rain and the constant milling about of 20,000 feet have turned it into chocolate pudding. But then the next band starts playing—Tom Petty and the Heartbreakers—and everything's OK. Like the last half-dozen bands to play that afternoon, they're great.

As the sound rises and my lawn chair sinks further into the mud and another accidental bodysurfer skids past me, I remind myself it's all for a good cause. Because this is more than a regular concert—it's a charity concert, benefiting the Bridge School, a local school for children with severe communication disorders.

### Caring and Sharing

Standing there in the rain got me thinking about charity. This last year has been especially good to me, as it has to much of the Mac world. And I've begun to develop a real appreciation for exactly how good it can feel to give back to your community when your community has given you so much.

Donating your time, sharing of your knowledge, contributing your old equipment, even doing something as simple as taking a walk, all these things can help others and give you a real sense of accomplishment. Mac users like to think of themselves as being slightly more evolved. Well, nothing could be more evolved than to give of yourself. Think of it as another way Mac users can

ANDREW GORE

# Charity Case

USE YOUR  
CREATIVE SPIRIT  
TO GIVE  
SOMETHING  
BACK TO  
THE COMMUNITY



distinguish themselves, and show that our innate sense of superiority is more than mere posturing.

### Givin' Time

Time is money, or so they say. And giving doesn't have to be expensive, or for that matter, cost anything at all. All around the country there are organizations that put together groups for special projects, from beautifying the landscaping of a developmental center to helping sort food for the Food Bank. I've done both of these; both activities took only a few hours on the weekend, and I got to meet some new people who hadn't heard any of my jokes yet. (Although by the end of the afternoon they'd had more than their fill, I'd wager.)

As Mac users, we have special skills that many organizations are dying for. We know how to use a computer, a skill many in our society lack. Users groups are always in search of instructors to help new members get the knack of using their Macs. Many schools, public and private, want mentors to help students after class with typing, programming, graphics, even reading and writing. And most schools have a significant investment in Mac systems.

Even senior centers often look for volunteers to help introduce their clientele to the intimidating world of the Internet. Imagine the sense of accomplishment you would have if you showed an older person how to use e-mail to keep in touch with grandchildren and other distant family.

Make whatever you do a social event. Get your friends together and form a team—you'll be amazed how easy it can be to get started. It may even turn into a regular happening.

### Working Assets

I've often thought of turning my garage into a Museum of Macintosh Technology. From that original 128K Mac

*continues*

case I've been meaning to turn into an aquarium for ten years now (apologies to Andy Ihnatko, but he was not the first person to think of turning a Mac into an aquarium) to the half dozen Power Computing clones in various states of disrepair, my storage shelves are packed with the flotsam of a Mac aficionado with more dollars than sense. And we won't even talk about the Newtons, except to say I have at least one of every model ever created, including some that never shipped.

I've recently started the process of divesting my Mac assets, because I've discovered that many organizations out there are delighted to receive machines I've long since cast off. My garage has become like the Island of Misfit Toys, and I'm playing Rudolph. True, I have no real use for a PowerPC 601-based clone, but my local public school is still trying to get by with classrooms full of Mac IIcx machines. (Where do they find the gerbils to keep those antiques running?)

If you have a Mac you no longer use because it doesn't have a G3, or enough storage or enough RAM or an AirPort slot, don't dump it at your next garage sale, donate it. I can almost guarantee your local church, community center, even public school will be happy to take it off your hands and give you a great tax write-off in the process.

### Donate Your Body

I'm what you might call coordination impaired. I like sports, but lack the physical coordination to do anything but be an easy target in most team or individual activities. It's pretty sad, actually. The one sport I do excel at is running. Because, really, how much coordination does it really take to run? Step One: Put left foot in front of

right foot. Step Two: Put right foot in front of left foot. Step Three: Repeat Step One and Step Two as fast as you can for as long as you can.

It was only recently that I found a way to put running to a use other than making up for a wasted adolescence. And that is running for charity. I found that, without much effort, I could find a 10K race almost every month within driving distance of my home that I could participate in and raise money for a good cause. From the Senior Center in Half Moon Bay, California, to The Leukemia & Lymphoma Society, there are races and walkathons going on year-round.

Best part is, you don't even have to spend your own money if you don't want to. Many races encourage participants to collect money from sponsors, usually friends and coworkers, who agree to donate a certain sum based on the distance you cover. You'd be amazed how much money you can raise just by going for a walk in the park with a few thousand friendly striders.

If the spirit of the Macintosh is one of creativity and individualism, we should remember that we're not the only ones who should benefit from those traits. Whether we're giving Macs away, teaching people how to use computers more effectively, or just using the Web to find a nearby charity to support, this time of year we should all turn some of our creative energies toward helping other people. ■

ANDREW GORE is editor in chief of *Macworld*. To comment on this column, please visit the Vision Thing forum at [www.macworld.com/columns/visionthing/](http://www.macworld.com/columns/visionthing/)

# Macworld

<b>VP OF CONTENT/EDITOR IN CHIEF</b>	Andrew Gore
<b>EXECUTIVE ASSISTANT TO THE VP OF CONTENT</b>	Shane Clark
<b>EDITOR, MACWORLD.COM</b>	Jason Snell
<b>EXECUTIVE EDITOR</b>	Scholle Sawyer McFarland
<b>SENIOR EDITORS, REVIEWS</b>	Linda Comer, David Weiss
<b>SENIOR EDITOR, MACWORLD.COM</b>	Lisa Schmeiser
<b>SENIOR EDITOR, HOW-TO</b>	Terri Stone
<b>ASSOCIATE EDITORS</b>	Lotus Abrams, Jennifer Berger, Mathew Honan, Kelly Lunsford, Philip Michaels, Jonathan Seff
<b>ASSISTANT EDITORS</b>	Brett Larson, Adrienne Robillard
<b>EDITORIAL ASSISTANT</b>	Bonnie Huie

## CONTRIBUTING EDITORS

Henry Bortman, Christopher Breen, Adam C. Engst, Bruce Fraser, Jim Heid, Ted Landau, Deke McClelland, Tam Negrino, Nancy Peterson, David Pague, Stephan Somogyi, Franklin N. Tessler

## LAB

<b>DIRECTOR OF PRODUCT EVALUATION</b>	Kristina De Nike
<b>TEST MANAGER</b>	James Galbraith
<b>SENIOR LAB ANALYST</b>	Jeffy K. Milstead
<b>LAB ANALYST</b>	Gil Loyola
<b>ASSOCIATE TECHNICAL ANALYST</b>	Ulyssis Bravo
<b>LAB ADMINISTRATOR</b>	Jason Cox

## COPY EDIT

<b>MANAGING EDITOR</b>	Jennifer Scholl
<b>ASSISTANT MANAGING EDITOR</b>	Charles Purdy
<b>COPY EDITORS</b>	Dione Ollis, Sue Voelkel

## ART AND DESIGN

<b>DESIGN DIRECTOR</b>	Sharon Anderson
<b>ASSOCIATE DESIGNER</b>	Jackie Goodman
<b>DESIGN ASSOCIATES</b>	Amy Conger, Alissa Mach
<b>PREPRESS CONSULTANT</b>	Stephen Sugg

## MACBUY.COM

<b>ASSISTANT PRODUCER</b>	Cathy Begien
---------------------------	--------------

## INTERNATIONAL EDITORS

Steven Noble, Australia; Barnard Le Du, France; Andreas Borchert, Germany; Enrico Lotti, Italy; Yashio Moriya, Japan; Tomasz Bitner, Poland; Daniel de Blas, Spain; Nils Holmlöv, Sweden; Anderson Huang, Taiwan; Bahattin Apak, Turkey; Simon Jary, United Kingdom



Flatbed Laser Multi-Function  
As Low as \$699

Flatbed Color Multi-Function  
As Low as \$499

Laser Multi-Function  
As Low as \$399

Color Multi-Function  
As Low as \$299

## Machines That Do Everything.

Affordable Multi-Function Center® Models—one less thing you'll have to wait for, thanks to our Mac compatible MFCs. Fact is, we've developed some very smart all-in-one solutions. That's right, all-in-one, as in printing, copying, scanning and even faxing—all in one compact unit. Plus, your MFC is available in zippy 12 page per minute laser, color inkjet, flatbed and sheet-fed models. When it comes to multi-function, think better... think Brother.



iMac DV+

PowerMac G4

iBook

G4 Cube

## For Machines That Mean Everything.

Various models available at: MACWAREHOUSE, CDW, MACZONE, J&R COMPUTER WORLD, OFFICE DEPOT, OFFICEMAX, FRY'S, MACCONNECTION AND STAPLES

At your side.™

# brother®

© 2000 Brother International Corporation, Bridgewater, NJ • Brother International Corporation, Nagoya, Japan  
For more information please call the Brother Fax-Back System at 800-521-2846 or visit our web site at [www.brother.com](http://www.brother.com)

# Macworld



## BREAKTHROUGH STUDY REVEALS

## STARTLING NEW DATA :



## PEOPLE AREN'T THE SAME SIZE.

Most furniture is built around the average person. But, darn, we've never met one. So we build workstations to fit you - your legroom, your reach, your equipment. To learn more about our sized-to-fit AnthroCarts, lifetime warranty and passion for service, visit our website. It's more fun and comprehensive than your average trip down cyberspace.



AVAILABLE AT:  
[WWW.ANTHRO.COM](http://WWW.ANTHRO.COM)  
or 1-800-325-3841

**PRESIDENT AND CEO** Colin Crawford  
**VP/CHIEF OPERATING OFFICER** Stephen Daniels  
**BUSINESS MANAGER** Eos de Feminis  
**ACCOUNTING COORDINATOR** Ronda Bittner  
**BILLING MANAGER** Ricardo Sandoval  
**VP OF HUMAN RESOURCES** Sue Murphy  
**HUMAN RESOURCE MANAGER** Su-Tsen Wu  
**CHIEF INFORMATION OFFICER** Lynn Heiberger  
**INFORMATION TECHNOLOGY**  
**DIRECTOR** Michael Dawson  
**IT MANAGER** Jennifer Torres  
**IT SPECIALIST** Jose "Peps" Jara  
**RECEPTIONIST** Cheryl Richardson  
**OFFICE ASSISTANT** Marvella Simpson

### DISPLAY ADVERTISING SALES

**VP OF SALES/PUBLISHER** Steve Plevin (415/243-3509)  
**ASSOCIATE PUBLISHER, EAST** Cynthia Ramsey (973/243-1197)  
**SALES BUSINESS MANAGER** Gabrielle Lindsley (415/243-3578)  
**SALES & MARKETING COORDINATOR** Laura Ross (415/243-3642)  
**NATIONAL ACCOUNTS MANAGER** Paul Bonarrigo (508/533-4020)  
**ACCOUNT EXECUTIVE** Jo Zottarelli (516/277-4134)  
**NATIONAL ACCOUNTS MANAGER** Sara Culley (831/768-8472)  
**ACCOUNT EXECUTIVE** Margaret Level Green (415/243-3582)  
**REGIONAL ACCOUNTS MANAGER** Coretta Wright (415/243-3615)  
**ACCOUNT EXECUTIVE** Michelle Davis (415/243-3577)  
**SALES ASSISTANT** Jim DeCleene (415/243-3662)  
**SALES ASSISTANT** Janecke Hausken (415/243-3583)  
**SHOWCASE ACCOUNT MANAGER** Niki Stranz (415/243-3664)  
**SHOWCASE ACCOUNT MANAGER** Carol Johnstone (415/243-3691)  
**SHOWCASE SALES ASSISTANT** Franck Zamora (415/243-3628)  
**ONLINE SALES MANAGER** Doug Dellefsen (415/243-3598)  
**ONLINE ACCOUNT EXECUTIVE** Derek Song (415/243-3557)

### MARKETING

**DIRECTOR OF MARKETING** Hilary Weber  
**MARKETING COMMUNICATIONS MANAGER** Sharon L. Cordesse  
**MARKETING SERVICES MANAGER** Tara C. Gibb  
**ONLINE PROGRAMS MANAGER** Joe Raffetto  
**MARKETING COORDINATOR** Bryan Irwin

### PRODUCTION

**PRODUCTION DIRECTOR** Steve Spingola  
**PRODUCTION MANAGER** Lewis Lee  
**PREPRESS TECHNICIAN** Alan Anzalone  
**AD COORDINATOR** Megan Matteoni

### ONLINE

**SENIOR TECHNOLOGY DIRECTOR** Paul Forrester  
**ONLINE PRODUCTION MANAGER** Ron Neal  
**ONLINE PRODUCTION ASSISTANT** Benjamin Edlavitch  
**WEBMASTER** Michael R. Evans

Macworld is a publication of Mac Publishing, L.L.C. Macworld is an independent journal not affiliated with Apple Computer, Inc. Macworld, MacUser, MacWeek, Macworld Interactive, Macworld Shopper, MW, MW Lab, MW Shopper, The Desktop Critic, Expert Graphics, Quick Tips, Star Ratings, Buyers' Tools, Streetwise Shopper, and Conspicuous Consumer are registered trademarks of Mac Publishing, L.L.C. Apple, the Apple logo, Mac, and Macintosh are registered trademarks, and MacLetter and PowerBook are trademarks, of Apple Computer, Inc. Printed in the United States of America. Copyright © 2000 Mac Publishing, L.L.C. All rights reserved.



# MacSOHO?<sup>TM</sup> It rocks!

If your small office has a Mac and PC that need to share files, then you need MacSOHO, from Thursby Software. MacSOHO is the easiest, most cost effective way for your Macs and PCs to become best friends. It's fast, really fast, and secure and it's so simple to use and easy to install on your Macintosh, you'll think it rocks! MacSOHO, the perfect solution for your home or small office.

Download a free evaluation today.

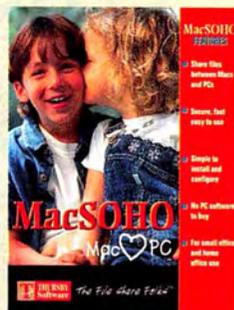


*The File Share Folks<sup>TM</sup>*

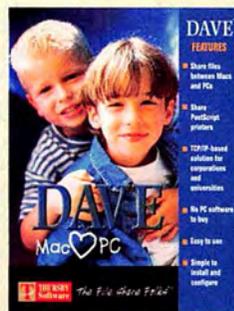
[www.thursby.com](http://www.thursby.com)

Circle 124 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

**THURSBY SOFTWARE** has the perfect file share solution to meet your needs.



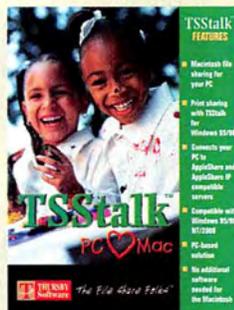
The ideal solution for the small office where Macs & PCs need to share files.



The fast, easy way to share files and printers between PCs and Macintosh systems.



Achieve true NFS connectivity between your Mac and UNIX systems.



Windows users can access files on any Mac workstation or AppleShare server.

# Just StuffIt.



**NEW!**  
Version 6.0

Works with Mac® OS X  
Public Beta

**Great new features.**  
**Same rock-solid performance.**



**Now with ReturnReceipt™**  
Now you know they got it,  
because now you get a receipt.



**Now with ArchiveSearch™**  
Search your StuffIt archives as easily as  
you search for other files on your Mac®



**Upgrade now for just \$29<sup>95</sup>  
at [www.aladdinsys.com](http://www.aladdinsys.com)**

Copyright © 2000, Aladdin Systems, Inc. All rights reserved. StuffIt, StuffIt Deluxe, the StuffIt logo, ReturnReceipt, ArchiveSearch, Aladdin Systems and the Aladdin Systems logo are trademarks of Aladdin Systems, Inc. All other trademarks are the property of their respective owners.

Circle 8 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

# Macworld

## HOW TO CONTACT MACWORLD

**Subscription Information and Services**  
Phone 800/288-6848 or 850/682-7624, from the United States and Canada 303/604-7445, from all other locations  
U.S. Mail Macworld Subscription Services P.O. Box 54529, Boulder, CO 80322-4529 (Include a mailing label with correspondence.)  
World Wide Web <http://service.macworld.com> (for service) or <http://subscribe.macworld.com> (to order)  
E-mail [macworld@neodata.com](mailto:macworld@neodata.com) (Send your full name and the address at which you subscribe; do not send attachments.)  
Fax 850/683-4094, from the United States and Canada 303/604-0518, from all other locations

**Subscriptions**  
The one-year (12-issue) subscription rate is \$34.97 in the United States and \$54.97 for all other countries. The rate for a one-year (12-issue) subscription with the monthly CD-ROM is \$54.97 in the United States and \$74.97 for all other countries. Checks must be made payable in U.S. currency to Macworld. Please allow 3 to 6 weeks to receive your first issue or for changes to be made to an existing subscription.

**Back Issues of Macworld**  
Back issues (subject to availability) are \$8 per issue for U.S. delivery (\$12 outside the United States); prepayment in U.S. currency to Macworld is required. Send check or money order to Back Issues, Macworld, P.O. Box 53131, Boulder, CO 80322-3131.

**Reprints and Permissions**  
You must have permission before reproducing any material from Macworld. Write to Macworld, Reprints and Permissions, 301 Howard St., 16th Fl., San Francisco, CA 94105; include a phone number. To order reprints of your company's editorial coverage, call Reprint Management Services at 717/399-1900; fax 717/399-8900; e-mail [sales@rmsreprints.com](mailto:sales@rmsreprints.com).

**Mailing Lists**  
We periodically make lists of our customers available to mailers of goods and services that may interest you. If you do not wish to receive such mailings, please write to us at Macworld, P.O. Box 54529, Boulder, CO 80322-4529. Please include a copy of your mailing label.

**Macworld on Microfilm**  
Macworld is available on microfilm and microfiche from UMI, 300 N. Zeeb Rd., Ann Arbor, MI 48106-1346; 734/761-4700.

**Macworld Editorial**  
The editors of Macworld welcome your tips, compliments, or complaints. Stories and product reviews from past issues can be located at [www.macworld.com](http://www.macworld.com). We are unfortunately unable to look up stories from past issues; recommend products; or diagnose your Macintosh problems by phone, e-mail, or fax. Contact Apple toll-free at 800/538-9696, ext. 500, for information on user groups in your area.

Our offices are located at 301 Howard St., 16th Fl., San Francisco, CA 94105; 415/243-0505, fax 415/442-0766.

**LETTERS TO THE EDITOR** Direct all comments and suggestions regarding any aspect of the magazine to [letters@macworld.com](mailto:letters@macworld.com). Due to the high volume of mail received, we can't respond personally to each letter. We reserve the right to edit all submissions. All letters published in Macworld or Macworld Online become the property of Mac Publishing.

**MAC 911** Send your questions or tips on how to use Mac computers, peripherals, or software to Macworld, Mac 911, 301 Howard Street, 16th Floor, San Francisco, CA 94105; fax 415/442-0766; or e-mail [mac911@macworld.com](mailto:mac911@macworld.com). Please include your name, address, and telephone number. To share tips and discuss Mac problems with other Mac users, visit the Mac 911 Forum ([www.macworld.com/subject/mac911](http://www.macworld.com/subject/mac911)).

**MACWORLD EXPO** As the flagship sponsor of Macworld Conference and Expo, Macworld encourages all subscribers to attend this exciting biannual industry event. For more information about registration, exhibitor lists, conference schedules, dates, and much more, please visit [www.macworldexpo.com](http://www.macworldexpo.com).



## BURN YOUR CDs WITH ICE

CD REVO ICE FIREWIRE  
12X CDRW | \$379

CD REVO ICE USB  
4X CDRW | \$249

BUY ONLINE TODAY AT  
[WWW.CDCYCLONE.COM](http://WWW.CDCYCLONE.COM)  
OR CONTACT A HELPFUL  
RESELLER BELOW...

**MEDIASTORE** [www.mediastore.com](http://www.mediastore.com) 1-800-555-5551  
**Superdups** [www.superdups.com](http://www.superdups.com) 1-800-617-3877  
**CD** [www.cdyclone.com](http://www.cdyclone.com) 1-714-247-0099

**Ultra160 SCSI. A better way to use your time.**

How frustrating. Just when you're on a creative roll, file saving and scratch disk processing run smack into your train of thought. Not even G4s solve that. But Adaptec has.

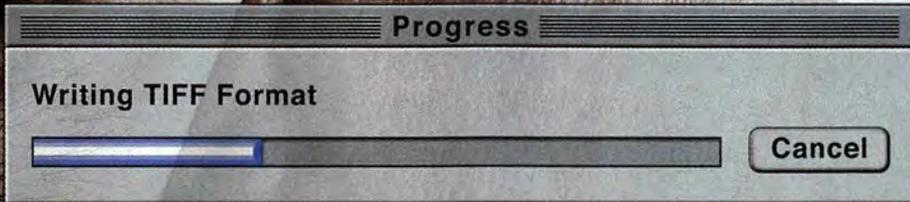
Adaptec's PowerDomain® 29160N Ultra160 SCSI card is three times faster than FireWire™. A hundred times

faster than USB. And, backward compatibility makes legacy drives and peripherals snap to attention.

Adaptec offers a complete line of SCSI cards from our flagship dual channel Ultra160 PowerDomain 39160 to portable SCSI for your PowerBook®. So instead of worrying about how to get everything done on time, find out how to improve your Mac's performance at [www.adaptec.com/mac](http://www.adaptec.com/mac). And be sure to include Adaptec SCSI with your next Macintosh® purchase.



**adaptec**  
delivering the promise



SITTING AROUND WITH  
EVERYTHING TO DO?

**SEE US AT MACWORLD SF, BOOTH #2017**

"HOUSTON..."

"THE iBOT™ HAS LANDED."



## THE FASTEST WEB CAM ON EARTH

Orange Micro is first to market with the iBOT, a FireWire-based desktop video camera. iBOT harnesses the speed and power of FireWire unmatched by the slower USB-based web cams. In fact, the inexpensive iBOT uses the same IEEE 1394 technology built into pricey DV camcorders costing over 7 times as much. Orange Micro's iBOT is the desktop video camera for the rest of us,

providing crisp, clear video at a price you can afford. (640x480 @ 30 fps)

The iBOT supports all known software for the following applications: simple video editing, presentations, video teleconferencing, video e-mail, and video monitoring / surveillance. The iBOT pro version includes a microphone and additional free software.



© 2000 Orange Micro Inc.

Circle 61 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)



[www.orangemicro.com](http://www.orangemicro.com)

# Feedback



## The Doctors Are In

The article on troubleshooting the Mac ("Mac Rx," October 2000) covered most of the basic techniques for getting a Mac back online, but it missed an important tip: your system could be corrupted, needing a clean reinstall. This happened to me, and a clean

reinstall of the system, along with desktop rebuilding and Norton Utilities, brought my machine back to life.

**Carlo Federiconi**  
Los Angeles, California

Ted Landau's "Mac Rx" contained good information, but it failed to address a common and simple-to-repair reason a Mac might fail on start-up: a dead battery. A friend managed to save a \$50 diagnostics fee and 48 hours of downtime by replacing the battery in his Mac.

None of Landau's fixes would have diagnosed and repaired this problem, leaving unsuspecting users to shell out hundreds of dollars in software and repairs while the solution is only a cheap battery away.

**Bill De Brauwert**  
Garner, North Carolina

### A Cubed Reaction

Your coverage of the Power Mac G4 Cube was a great disappointment (*Buzz*, October 2000). What hap-

pened to your in-depth coverage of new Mac products, with pictures and descriptions of all ports? What about technical specifications, such as interface speeds and Speedmark performance results? What software ships on the G4 Cube? Will it work with my non-Apple LCD screen? *Macworld* does not even mention whether the G4 Cube has Ethernet.

And what about comparisons between the G4 Cube and other Macintoshes, especially those just released? What about the basics? Instead, we read that the G4 Cube can be used as an entertainment hub. Who cares? Hey, I love the Cube's design and want to buy one—I just want to make sure it works for me. *Macworld's* coverage didn't help me make such a determination.

**Brian A. Foster**  
Castro Valley, California

*Our October story on the Power Mac G4 Cube was based on the limited information available as that issue*

*went to press. Our November 2000 issue features an in-depth review of the Cube.—Ed.*

### Click Me

*Macworld* has printed one snide remark after another about the Apple round mouse, and I must rise to its defense. I am a full-grown adult woman who finds the round mouse both comfortable and easy to use, so Andrew Gore's assertion that it is "too small for adult-size hands" (*Reviews*, October 2000) reveals a certain masculine bias. Not all of Apple's users are large males; in my household (of four Macs), four of the five users do not fit that profile, and all four prefer the iMac mouse to any other mouse hands down. My husband, being handicapped by large masculine hands and a shady past as a Windows user, is the only one who has a problem with it; for the sake of his disability we bought a Macally mouse with a wheel. The *continues*

rest of us happily plug in the round mouse and go.

**Sarah Stegall**

Livermore, California

### Smile

**M**y Kodak DC215 camera turns out supercrisp images, suitable for 8-by-10-inch prints, and the colors not only are brilliant but also appear

completely accurate to my eye. You led readers to believe exactly the opposite (*Reviews*, October 2000).

Why do you extol the features of spot meters and adjustable ISO settings on low-end cameras? I really doubt that buyers of low-end cameras want all these adjustments, or have the time or the inclination to master their use. I thought we were

headed in the direction of completely automated, one-step photography.

**Peter W. Smith**

Plainfield, New Hampshire

*We're far from completely automated photography. No camera can accurately meter every circumstance, and complicated lighting situations require a spot meter or exposure-compensation controls. When a flash is inappropriate, adjustable ISOs can help ensure that you still get the shot. Even novice film users are accustomed to the idea of using films with different speeds. ISO controls allow digital-camera users the same sensitivity choices as film-camera users. The presence of a CCD in a camera doesn't solve all photographic problems. A few simple controls can make an inexpensive camera more flexible.*—Ben Long

### Crossed Wings

**A**llow me to point out an error. When reviewing Falcon 4.0 (*The Game Room*, October 2000), Andy Ihnatko says, "Falcon is a slightly less meticulous simulation of an F-14 fighter." The fighter that Falcon simulates is the F-16 (Fighting Falcon). The F-14 is the Navy's twin-engine fighter (Tomcat).

**Kevin Cotham**

Rome, Georgia

*Hey, anyone dumb enough to pilot a MiG into my sky won't live long enough to tell the difference, knowwhutimean?—Andy Ihnatko* **m**

## Feedbag

Say what you will about the Power Mac G4 Cube . . . . No, seriously, say *whatever* you like—everybody else has. We've been inundated by mail and online postings about Apple's revolutionary new desktop Mac in the past month. As you might expect, opinion is split: some love the Cube, some dislike it, and some reactions not even our finest Earth scientists have been able to decipher.

"MacMan," a Macworld.com user, points to the Cube as proof of a higher power: "God obviously touched the minds of Apple engineers, for them to create such a beautiful and functional product." He goes on to propose it as a "therapeutic tool for treating depression." And if the Cube can clear up gout, it may *really* have a future!

Other impressions of the Cube veered more toward the profane. "Chicks dig the Cube so much," declared one anonymous reader, "my house has turned into chicks-ville." Groovy. Swinging singles everywhere can now abandon the time-worn "etchings" come-on.

Reader "Eric," on the other hand, dismissed the Cube as "an

overdressed bimbo." Who knew that a computer model could elicit such unenlightened comments?

But "Krass" wrote to reassure us: "If Macs were (any) more popular, Apple would be ripped apart faster than a raw steak (thrown) to a pack of wild dogs." We're not sure what that means, but it doesn't sound good. Then again, the pack of wild dogs might not be so threatening—it all depends on the dog. Take "Kirin2112," who pointed out that not only will she fork over \$30 for a copy of the Mac OS X public beta, but "I also own a pink poodle."

What with the threat of rampaging wild dogs—and pink poodles—perhaps it's all for the best if the G4 Cube doesn't become a runaway smash. Several readers *did* write in complaining about "hair-line cracks" in their Cubes, blemishes that Apple says are naturally occurring mold lines (see *Buzz* elsewhere in this issue).

But with one "J.J." those gripes didn't hold sway. "Help," he mocked. "My toilet paper is perforated every six inches!" Now that sounds like a job for the healing power of a G4 Cube.

# APC introduces the best protection available for your Mac.

## 8 million computer users can't be wrong about APC power protection

Don't let a lightning storm destroy your Mac system in the blink of an eye. Your hard drive, modem and RAM are all at risk, not to mention peripherals like your zip drive, scanner, monitor and printer. Rely on an APC Back-UPS Pro® to save your investments from high voltage surges.

APC power protection also provides clean, continuous power that lets you function without frustrating interruptions, unlike cheap power strips that don't prevent any of the power problems that can cause keyboard lock-ups, systems crashes, and lost Internet connections.

And if your system is ever damaged by a surge, even lightning, APC's Lifetime Equipment Protection Policy will pay up to \$25,000 to replace your equipment.

\* (see policy for details)

Discover why 8,000,000 customers trust in APC's Legendary Reliability and protect your Mac system with an APC power protection unit today.



APC Back-UPS Pro®  
500 USB BP500CLR

### An APC Back-UPS Pro 500 USB provides:

- Emergency battery power for continuous uptime to help save your data through brief power outages
- Auto-shutdown software that saves your files and data, even when you're away from your computer
- Audible and visible alarms alert you to power events as they occur
- \$25,000 Equipment Protection guarantee
- 2 year comprehensive warranty
- iMac colored configurable speaker guards to match your computing environment



APC Back-UPS Pro® 500:  
"APC's latest plugs into a USB port, making it completely painless to protect your PC from power snafus and electrical spikes."  
- PC Computing 4/99



**APC**  
Legendary Reliability™

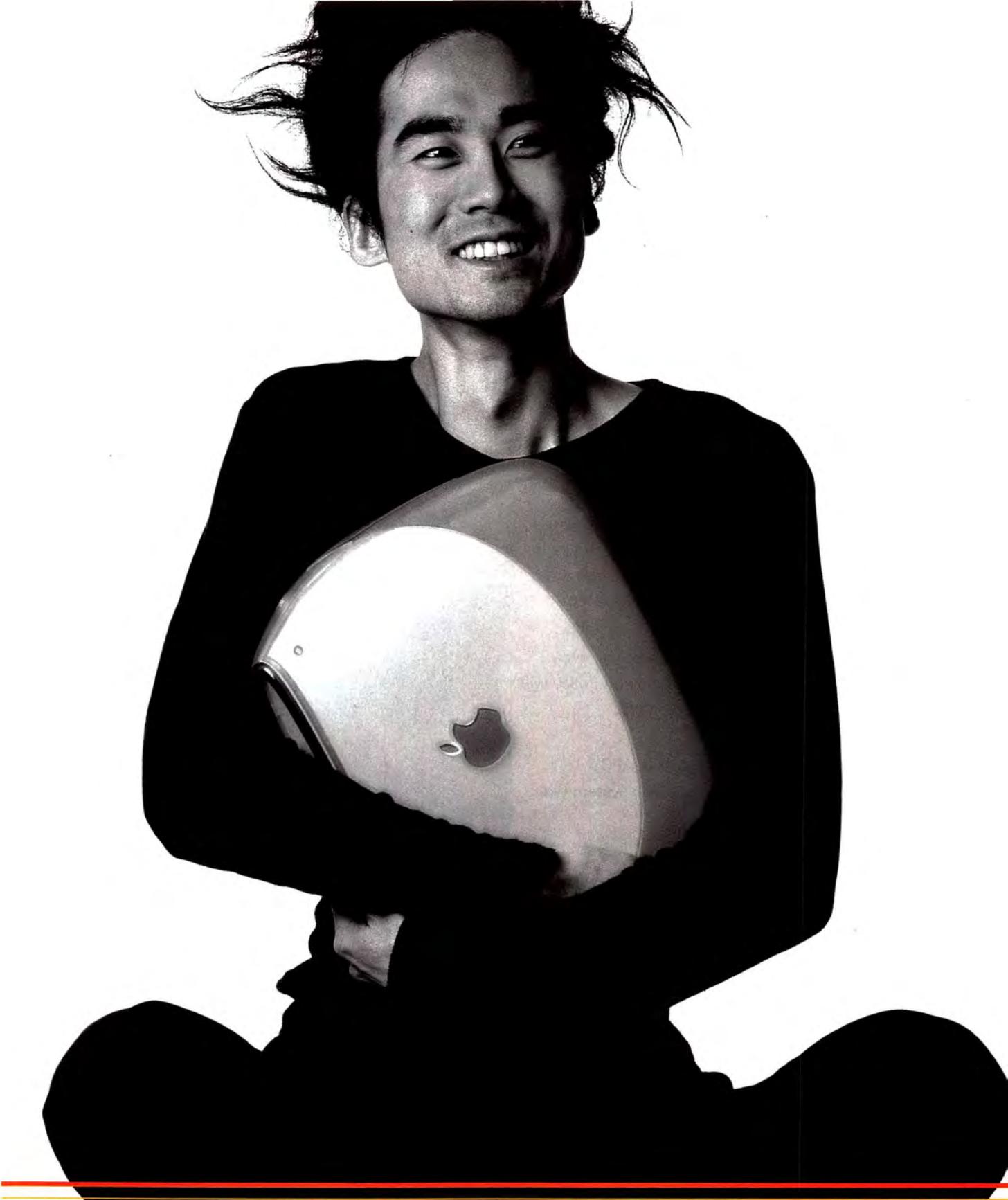


## Enter to win a clear APC Back-UPS Pro® 500 for your Mac!

Enter to win APC's legendary power protection for your Mac, a \$179.99 value! All entrants will also receive an "Are You at Risk" Kit. (See APC's Web site for complete promotion details)

Enter now: Visit <http://promo.apcc.com> Key Code w423z • Call 888-289-APCC x4021 • Fax 401-788-2797

©2001 American Power Conversion. All Trademarks are the property of their owners. APC1D0EF-USA • PowerFax: (800)347-FAXX • E-mail: [apcinfo@apcc.com](mailto:apcinfo@apcc.com) • 132 Fairgrounds Rd., West Kingston, RI 02892 USA



Pan

I get paid for my ideas. But first I have to get them across. To clients. To budget committees. To people thousands of miles away. **Microsoft Office 2001** keeps me on top of my business. And my life. All the essentials. Made easy. Made for my Mac.

[microsoft.com/mac](http://microsoft.com/mac)

Microsoft  
**Office:mac**  
2001

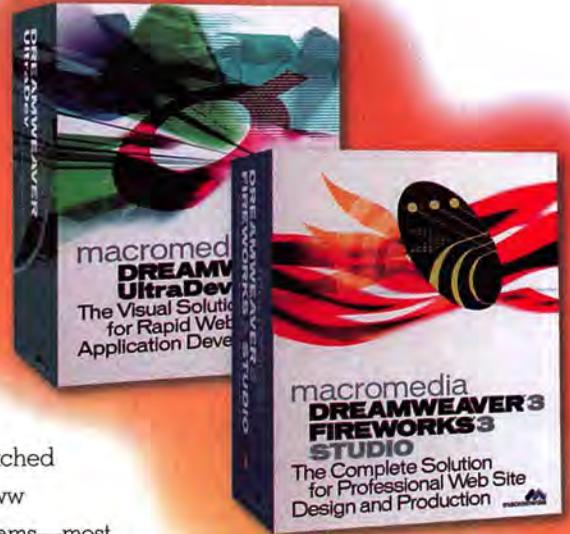
# Triple Feature

You can't release a Web graphics or design product these days without talking about integration. Designers want to be able to import, edit, and save files without worrying about what application they're using.

Macromedia (800/470-7211, [www.macromedia.com](http://www.macromedia.com)) put that idea into practice when it released Fireworks and Dreamweaver updates in late 1999; version 3 of both programs featured tight integration with each other. Macromedia's move matched a longtime strategy of Adobe (800/833-6687, [www.adobe.com](http://www.adobe.com)), which continues to produce programs—most notably, its recent Illustrator and GoLive updates—that offer shared features.

So how does Macromedia keep pace with Fireworks 4, Dreamweaver 4, and Dreamweaver UltraDev 4? (And no, you didn't miss versions 2 and 3 of the database-driven Web-site tool; Macromedia has synced the program's version number with Dreamweaver's.) Would you believe even tighter integration between Macromedia applications?

Fireworks and Dreamweaver now sport a common Macromedia user interface introduced in Flash 5—an interface that should be familiar to anyone who uses Adobe products. Dreamweaver and Dreamweaver UltraDev add Flash Text and Buttons tools that create editable vector graphics directly in the applications. The



two programs also feature "round-trip" graphics editing, allowing users to exchange files with Fireworks. Fireworks offers round-trip table editing, letting users update HTML and JavaScript code and graphics from Dreamweaver.

The three upgrades—all of which should be available in December—provide more than just tighter integration. They add new tools (see "What's New"), as well as maintain the flexibility and customization Macromedia has offered in previous versions.

Fireworks 4 and Dreamweaver 4 sell for \$299; you can upgrade to either program for \$149. Dreamweaver UltraDev 4 sells for \$599, with a \$129 upgrade cost. Macromedia will sell a Fireworks-Dreamweaver suite and a Fireworks-UltraDev package for \$399 and \$699, respectively.—PHILIP MICHAELS

News,  
Views, and  
Chatter  
from the  
World  
of Macs

## What's New

Here are some of the major changes to version 4 of the Macromedia Web design applications.

FIREWORKS 4	DREAMWEAVER 4	DREAMWEAVER ULTRADEV 4
Pop-up-navigation-menu creator	Live syntax coloring in Code view	Integrated Text Editor
Drag-and-drop-rollover creator	Split Code and Design views	Remote database connectivity
Enhanced Masking And Layers panel	JavaScript Debugger	JavaBean support
Improved import and export of Photoshop files	Code reference information on JavaScript, HTML, CSS, and browser DOMs	Live Objects for easier form layout

# iMac, Meet Audrey

The machine boasts a radical new design that puts the PCs of old to shame. It promises a speedy on-ramp to the Internet, with quick and constant access to e-mail. And its maker hopes it will revolutionize the way we use technology.

Oh, and that iMac thing is nice, too.

Apple's iMac is getting a run for its money from Ergo, 3Com's new brand of Internet appliance, as both companies vie to offer *the* low-cost solution for easy Internet access. The first Ergo model, dubbed Audrey (\$499), hit the shelves in October.

With its curved corners, sleek casing, and choice of five colors, Audrey cuts a striking figure. A stylus for on-screen scribbling docks onto the top of the device and doubles as an e-mail indicator, blinking when you've got mail. Audrey bears a vague resem-



blance to Rosie, the robot maid from *The Jetsons*, if you can imagine that George Jetson finally lost his cool and beheaded his mechanical domestic.

*Functionality* is what 3Com hopes will set Audrey apart. Think of it as the ultimate organizer, an always-on central terminal where family members can share schedules and to-do lists. At least, that's how 3Com envisions it. The front of the device sports six buttons—a power button and others for e-mail, a date book, an address book, a Web browser, and an Actions palette that moves information between applications.

Any similarity to the Palm Pilot is purely intentional; in fact, 3Com sees Audrey as a natural extension of Palm-based personal digital appliances. The device runs on the QNX operating system and uses Palm's syncing technology. Along with its two USB ports and built-in modem, Audrey sports a serial port for a Palm cradle in back, for syncing with your Pilot.

There's only one problem with 3Com's scenario: What can Audrey do that a low-priced computer can't? For \$799 these days, you can buy an entry-level iMac. Sure, 3Com's Audrey costs several hundred dollars less, but the iMac is built to let you do a whole lot more. It all comes down to what you want out of a computer: inexpensive Internet capability or greater functionality.

Unless, of course, you find Audrey's resemblance to the severed head of a cartoon robot just a little unsettling. . . .—PHILIP MICHAELS

## MAC STUFF

### Good to the Last Drop

High-tech workers, expensive electronic equipment, and over-caffeinated beverages are a dangerous combination. After your fifth or sixth triple espresso, you tend to start knocking cups over instead of picking them up. The Cyber-Drinkholder (888/428-7465, [www.cyber-drinkholder.com](http://www.cyber-drinkholder.com)) can help. Able to handle anything from a smallish coffee cup to a 32-ounce Big Gulp, the Cyber-Drinkholder either suctions to your desk or glues to the side of your computer, making your caffeine-infusion system-of-choice nearly impossible to upend. Resembling a floppy disk, the tabletop Cyber-Drinkholder sells for \$20; the upright model costs \$13. Available in all the old iMac colors—and with new colors in development—it's the perfect way to say, "I have lost all hand-eye coordination."

—GREG KNAUSS



#### More Info:

[www.macworld.com/2001/01/buzz/audrey.html](http://www.macworld.com/2001/01/buzz/audrey.html)

Macworld.com tells you how Audrey—and other Internet devices—measure up to the iMac.

# Cracking Up?

The minute Apple debuted its sleek G4 Cube, you plunked down \$1,799 for the pint-size supercomputer with the singular look. When it arrived, you immediately opened the box to marvel at your eye-catching machine . . . only to notice hair-thin lines on the Cube's casing.

If you put it that way, it's easy to see why the very faint lines are causing such a very big fuss. The appeal of the G4 Cube lies as much in how it looks as in what it does.

The lines appear around the two bolts and DVD drive on the top of the Cube and near the logo on its front. Apple says these are mold lines—not weaknesses or defects in the plastic—that appear because of the injection molding process used to form the Cube.

Some Cube owners don't buy that; they argue that the lines are actually cracks, an allegation Apple denies.

Given the uproar over the lines, is the Cube the right machine for you? Here are three arguments for and three against the square computer with the much-debated design.—PHILIP MICHAELS



BUZZ

### 3 Reasons to Buy a Cube

1. Lines, schmines—they're hardly noticeable. Besides, it's a cosmetic issue that doesn't affect the Cube's performance.
2. It's not just the Cube's look that makes it revolutionary; this is a 7-inch-square computer that takes up little space and is a snap to open.
3. Nothing changes the fact that you get a 450MHz processor and 20GB of storage in a tiny computer.

### 3 Reasons to Take a Pass

1. If your interest in the Cube is purely aesthetic, the lines—no matter how minor—are a visible blemish.
2. The Cube doesn't have any PCI slots, and expandability is limited.
3. You're paying a premium for a radical design, especially when a 400MHz G4 tower can be had for a lower price.



www.madsci.org

[CLICK HERE](#)

## Blinding Me with Science

You might think scientists would be too busy cloning a race of genetically perfect sheep to field questions about oxygen molecules and volcanoes. But that's what's going down at [MadSci.org](#). The Mad Scientist Network pools the collective craniums of hundreds of scientists versed in everything from astronomy to zoology. Visitors can submit a specific question or browse through the site's archives for past answers. Since the site is run by scientists, you're treated to organization that rivals taxonomic classification—information is sorted by subject, grade level, and keyword. If all this wisdom makes your head spin, fire up the Random Knowledge Generator to retrieve a sampling of questions and answers. To put your newfound smarts into practice, click on the MadLabs link and explore the Edible/Inedible Experiments archive. And spread the word—not all mad scientists use their knowledge for evil.—LISA BAGGERMAN

ILLUSTRATION BY STUART BRADFORD

# The Naked Sim City

Since it hit the platform this summer, Aspyr Media's *The Sims* has captured the imaginations of Mac gamers—so much so that some aren't stopping at just playing the game. Not content to merely control the lives of their virtual creations, some gamers have created skins and patches to liven up *The Sims*. And truth is sometimes stranger than fiction—try to tell which of the following are actual *Sims* downloads and which are just products of our fevered imaginations.—MATHEW HONAN

- a) **The Nude Patch:** Now your *Sims* can walk around wearing only a smile. This patch also removes the blurry spot that appears when the *Sims* shower.
- b) **The Slot Machine Patch:** Install a slot machine in the living room, and watch your *Sims* fulfill their tiny dreams of avarice.
- c) **The Ebola Patch:** Flesh-eating viruses are no laughing matter (except when it's virtual flesh).
- d) **The Bill Clinton Patch:** This is one of the many skins that changes the look of the *Sims*—in this case, giving them a striking resemblance to a certain commander in chief.
- e) **The Monica Lewinsky Patch:** If combined with the Nude Patch and the Bill Clinton Patch, this patch just spells trouble.
- f) **The Ken Starr Patch:** Look out, Mr. President! He's got a subpoena!
- g) **The Marijuana Plant Patch:** It's just there for decoration—don't expect to see your *Sims* turning on and dropping out.
- h) **The Titanic Patch:** One simple download, and your *Sims'* humble abode looks like the deck of the doomed ocean liner. Tell that Canadian chanteuse to knock off her caterwauling!



ILLUSTRATION BY JOHN RITTER

# MAC STUFF

## Legos, Will Robinson! Legos!

Three emotions dwell in the heart of every geek: an innate desire to build things, a fondness for interlocking plastic blocks, and the impulse to destroy the earth with killer robots. One product satisfies these urges—Lego's RoboLab, available from educational distributors such as Pitsco Lego Dacta ([www.pitsco-legodacta.com](http://www.pitsco-legodacta.com)). Based around a \$125 computerized central control, your Mac, and the unblinking infrared eye that allows the two to communicate, RoboLab kits combine motors, sensors, and enough Lego bricks to kick-start a reign of robotic terror. The kits, which sell for \$110 and up, are designed for students, but why should they have all the fun? Especially when there's an entire world to enslave with plastic kill-bots.—GREG KNAUSS



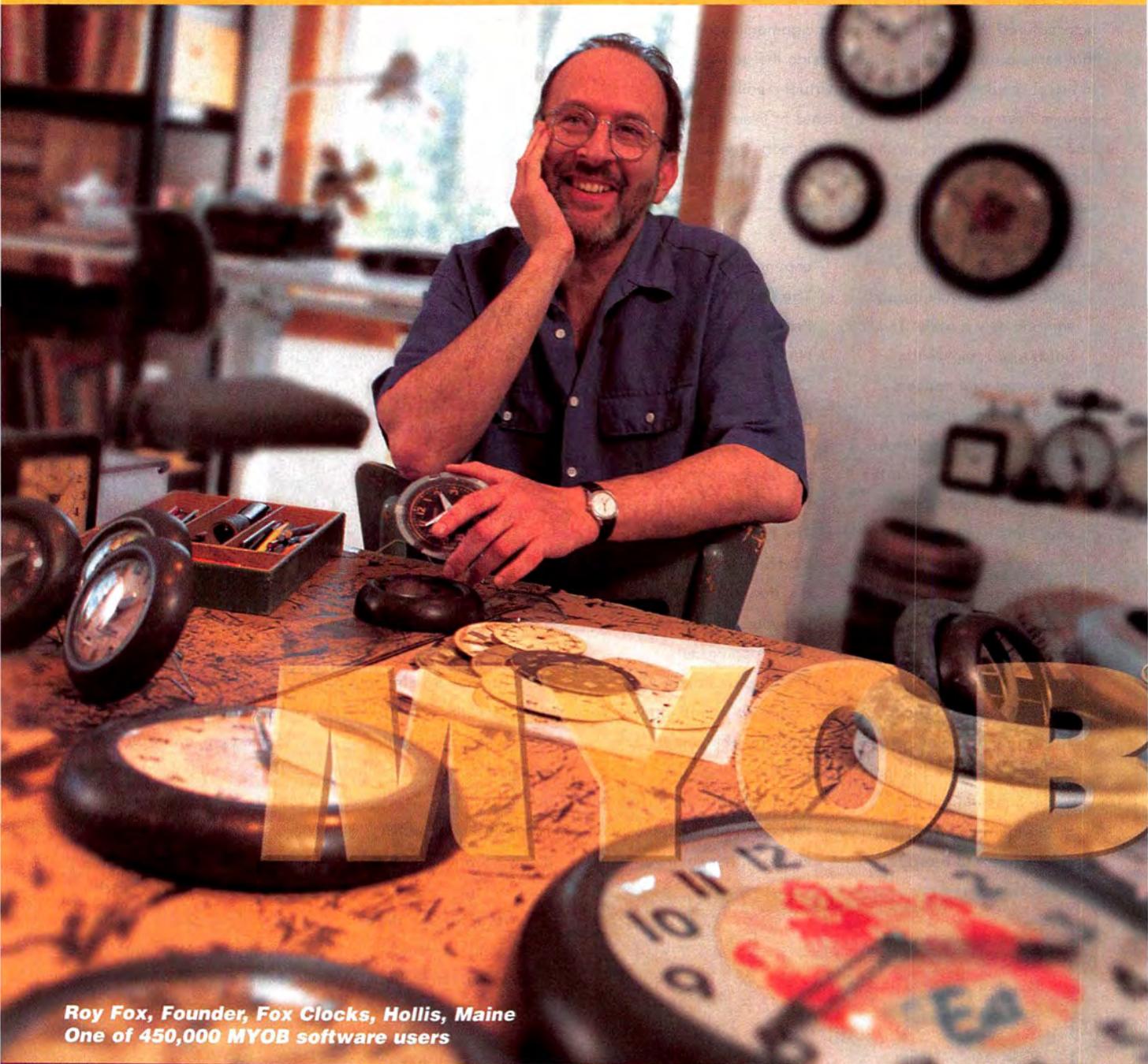
BUZZ

- i) **The Napster Patch:** Help your *Sims* stick it to the Man as they illegally download copyrighted material without paying a cent.
  - j) **The Teleporter Patch:** Boldly go where no Sim has gone before.
  - k) **The John Rucker Patch:** Download the mouthy Atlanta Braves pitcher in either his home or road uniform.
  - l) **The Bill Gates Patch:** Who wouldn't want his Sim to look like the world's richest man?
  - m) **The Steve Ballmer Patch:** Who wouldn't want his Sim to look like the world's richest man's ill-tempered sidekick?
  - n) **The Plague Patch:** Buy a guinea pig, and watch in horror as it unleashes a virus that destroys your *Sims*, your game, and your God complex.
  - o) **The Jerry Garcia Patch:** Jerry lives, dude! And he's eyeing that Marijuana Plant Patch a little too conspicuously for our taste.
- ANSWERS: c), f), h), i), and m) are all willful, deliberate frauds. If you were able to weed out the lies from the actual *Sims* patches, congratulations. And try to get out of the house more.

DESIGNED FOR THE WAY YOU WORK

*I'd rather create clocks than invoices.*

***If I wanted to keep books all day, I'd have been an accountant***



**Roy Fox, Founder, Fox Clocks, Hollis, Maine**  
One of 450,000 MYOB software users

**MYOB**

**Small Business.  
Smart Solutions.<sup>SM</sup>**

800.322.MYOB  
[myob.com/us](http://myob.com/us)

MYOB software is the simplest, most powerful, most complete solution for managing my company on the .Mac, from the day to day to the bottom line.

**Antique frames. Quartz movements. That's my business.  
MYOB software works for me.**



## PRO FILE

# Imaging is Everything

Q & A with JOHN KNOLL

*John Knoll picks good hobbies. His interest in building miniatures got him his first Hollywood gig as a model maker.*

*Patching together a rudimentary motion-control camera in his basement landed him a job as a camera operator. And tinkering with image processing led to two great advances—the knockout special-effects work he's done for George Lucas's *Industrial Light & Magic* and the development, with his brother, Thomas, of the image-editing application *Photoshop*. "I have this history of turning hobbies into professions," Knoll says.—ADELIA CELLINI*

**Q: When did you first use a Mac?**

**A:** In 1984. I was coming close to my final year at USC and my dad had gotten one of the original 128K Macs. I was at home visiting, and I played around with it for a little while. I thought it was the coolest computer ever.

**Q: How did the idea for *Photoshop* come up?**

**A:** I was tinkering around with this new hobby of writing computer graphics software. I had been exposed to color-image processing over in the computer-graphics department [at *Industrial Light & Magic*], and my older brother, Tom, was working on his doctoral thesis, which included image processing. I remarked how similar it was to some of the stuff I'd seen on this Pixar image computer. At the same time, I was interested mostly in the code for how bright a pixel should be and not how to display it on the

screen. Some of Tom's tools could take a raw image back on disk and display it and save it in different formats. So Tom gave me some of the tools he'd been writing, so I could do manipulations to the images.

**Q: What's the advantage of *Photoshop* in moviemaking?**

**A:** It came about right around the same time the whole film industry was beginning to move rapidly toward digital compositing and computer graphics. It was a tool that filled a niche that was very important to the industry. A lot of image compositing—taking a lot of images from different sources and putting them together into one image—was actually done in *Photoshop* for a couple of different shows, such as *The Rocketeer* and *Memoirs of an Invisible Man*.

**Q: How has digital manipulation changed moviemaking?**

**A:** It used to be in the not-so-good-old-days that you were very limited in the kinds of effects that were technically possible with the limits of the equipment. A lot of times a huge amount of effort went into a shot, making sure there wasn't a black line around objects. Now you can kind of take those sorts of issues for granted. Most of the effort that goes into a shot now goes into whether it looks good or not, not the mechanical issues of putting the pieces together.

## COOL STUFF

### Scanning's New Dimensions

If you've ever tried to scan a three-dimensional object—a product, any part of your body, the family pet—you know the results can be less than satisfactory, the details lost in murky shadows. The \$400 Lightshow 3D Object scanning system from 3D Scan (570/283-3151, [www.3dscanner.com](http://www.3dscanner.com))



can tackle such shadowy problems. An iMac-blue box that sits atop any 11-by-17-inch or smaller flatbed scanner, Lightshow employs a transparent

double-sided acrylic mirror to illuminate an enclosed object from all directions. The result: bright, clear pictures that offer depth and dimension, perfect for desktop publishing, Web images, or 3-D modeling—or preserving images of Fluffy for posterity (though you didn't hear that from us).—GREG KNAUSS

#### More Info:

[www.macworld.com/2001/01/buzz/knoll.html](http://www.macworld.com/2001/01/buzz/knoll.html)

John Knoll has more to say about movie special effects and the future of image processing.

LINK

BUZZ

# Medicine For Your Mac



Nothing can ruin your day faster than a sick and ailing computer. And while Macintosh is one of the most reliable computers in the world, sometimes things can go wrong. That's why we invented TechTool Pro. TechTool Pro is the super-utility that can find and isolate almost any problem on your computer. No other utility in the world comes even close to covering as many aspects of your Macintosh as does TechTool Pro.

But diagnosing computer maladies is only half the battle. Besides repairing drives, recovering data and checking the health of your Macintosh components, TechTool Pro can now help protect you against virus problems and software conflicts. TechTool Pro can also keep your Mac running at its peak between problems. The program optimizes your disk drive to make your computer run faster and more efficiently. Our RAM panel even allows

you to see the inner configuration of your memory without needing to open the case.

Do all these features make TechTool Pro complicated to use? Not at all. The MultiTester feature allows you to give your computer a full checkup with one click of your mouse. TechTool Pro even creates graphic, easy-to-read and understand reports. Now you can know the state of your computer without having a degree in computer science.

Every day, more and more Macintosh professionals are choosing TechTool over other system utilities. In fact, even Apple Computer includes TechTool Deluxe with every copy of their AppleCare™ Protection Plan. Simply put, TechTool Pro 3 is the most complete and powerful troubleshooting and repair utility available for your computer. Why would you settle for anything less?



Micromat Inc.  
800-829-6227  
707-566-3831  
FAX: 707-566-3871  
info@micromat.com  
www.micromat.com



# What's HOT

A QUICK LOOK AT THE WORLD OF TECH

## SPECIAL APPLE-IN-DANGER EDITION

- 1. Biography paints unflattering picture of Steve Jobs.** *Shocking revelations: Jobs is a perfectionist! The Apple CEO is a demanding boss! Earth is round!*
- 2. G4 Cube owners angered by visible flaws in computer's casing.** *The other complaint? "This slot on top isn't doing a damn thing to warm up my Egg!"*
- 3. Slow sales hurt Apple's fourth-quarter profits.** *But business is sure to pick up when the iMac's little-known self-destruct feature activates just before Christmas.*
- 4. Apple's stock price plunges 52 percent in one day.** *In these turbulent times, we're glad our nest egg is tied up in something stable—dot-com stocks.*
- 5. The Mac OS X beta is feature rich.** *But some jokers just want to harp on the negative.*

## Product WATCH



### RELEASED

- FireWire-ready external hard drives from Maxtor (800/262-9867, [www.maxtor.com](http://www.maxtor.com)): The **1394 External Storage** drive comes with a 40GB capacity (\$280) or 80GB capacity (\$400).
- An Adobe After Effects plug-in from Alias/Wavefront (800/447-2542, [www.aliaswavefront.com](http://www.aliaswavefront.com)): **Maya Paint Effects** (\$499) lets users apply natural painting effects to full-motion video.
- An Internet security utility from Symantec (800/441-7234, [www.symantec.com](http://www.symantec.com)): **Norton Personal Firewall 1.0** aims to protect Mac users from hackers and security breaches by

blocking connections to the computer. The utility sells for \$70. It will also be included in **Norton Internet Security 1.0**, a \$100 Internet security suite that also features Aladdin Systems' (831/761-6200, [www.aladdinsys.com](http://www.aladdinsys.com)) **iClean 3.5** and the latest version of **Norton AntiVirus**.



### UPDATED

- **Norton AntiVirus 7.0** and **Norton Utilities 6.0**, by Symantec: The \$70 AntiVirus 7.0 (upgrade, \$30) scans e-mail attachments for viruses and offers simplified preferences. The \$100 Utilities 6.0 (upgrade, \$50) offers new data-recovery benefits and custom

optimization profiles. They'll be packaged together in **Norton SystemWorks 1.0**, a \$130 suite.

- CodeWarrior, by Metrowerks (800/377-5416, [www.metrowerks.com](http://www.metrowerks.com)): **CodeWarrior 6.0** is completely Carbon-savvy. The new version sells for \$499; previous users can upgrade for \$249.



### ANNOUNCED

- A countersuit by Macromedia (800/470-7211, [www.macromedia.com](http://www.macromedia.com)) against Adobe (800/833-6687, [www.adobe.com](http://www.adobe.com)): the legal wrangling between the two rivals started with an August lawsuit, filed by Adobe, that claimed Macromedia had infringed on its tabbed-palette technology. The Macromedia suit claims Adobe violated patents on blended elements and sound waveforms.
- A free demo version of game-emulation software from Connectix (800/950-5880, [www.connectix.com](http://www.connectix.com)): the **Virtual Game Station** demo lets users play Sony PlayStation games on the Mac. It lacks some of the features in the \$49 retail product.—Compiled by PHILIP MICHAELS

## COLOR CLASH

### EPSON ADDRESSES PHOTO PRINT PROBLEM

When Epson unveiled new, longer-lasting inks this past summer, the printer maker claimed it had tackled the problem of quick-fading digital photo prints.

The printers that use the inks—Epson's Stylus Photo 870, 875DC, and 1270 models—have held up their end of the bargain. The paper that the printers use has been another story.

Some users—less than 1 percent, Epson says—have reported that the cyan dye used in the inks can fade to orange if left out in the open air.

Epson blames the problem on its Premium Glossy Photo Paper, which "doesn't offer the same level of protection against airborne contaminants" as Epson's other papers, says Keith Kratzberg, the company's director of photo imaging.

So how do you protect your digital prints? By storing them in a picture frame or photo album. For prints that can't be stored that way, Kratzberg suggests using Epson's Photo Paper or Matte Paper Heavyweight.

Epson has released a reformulated version of its Premium Glossy paper. The packaging will state that the paper is intended for stored prints.

There are no announced plans to reimburse customers affected by the color shift, although Epson has set up a phone number (562/276-1311) for customers experiencing problems.

The color shift has been embarrassing for Epson—and irritating to affected users—but Kratzberg sees a bright side to the situation:

"We've learned that long display life is really important to people, and they need that [Premium Glossy] paper for that application."—PHILIP MICHAELS

Now that your hand-coding can be done quickly and easily, Dreamweaver® UltraDev™ presents:

## Your Guide to Re-Entering Society



*Yes, this is actually money.  
It got redesigned a  
couple of years ago.*

*This is your mom and dad. By the way,  
you have a little brother now.  
(His name is Steven.)*



MACROMEDIA® DREAMWEAVER UltraDev 4 software can help eliminate some of the grunt work involved in building data-driven Web applications. Dreamweaver UltraDev allows you to create reusable objects to minimize repetitive tasks. And you can train Dreamweaver UltraDev to write code exactly as you would by hand. In the end, you'll get your work done quicker and, finally, up to your standard. Welcome back. We missed you.

[macromedia.com/ultradev](http://macromedia.com/ultradev)

 macromedia® *what the web can be.™*



*This is your girlfriend. She's dating Mark Warren now.*

*This is the sun. It provides heat for the entire planet. Cool, huh?*



# GET IT

# Y

ou might feel a little

**bit skeptical when you first encounter Microsoft**

**Office 2001.** After all, Office 98 (★★★★; *Reviews*, June 1998) was a powerful and Mac-friendly package. Microsoft Word, Excel, and PowerPoint each has more features than most of us will ever use. Word can handle everything from a shopping list to a Ph.D. candidate's thesis paper. Excel's number-crunching tools analyze baseball box scores and rocket trajectories with equal ease. So how could Microsoft possibly inspire you to upgrade again?

The answer is simple. That is, make Office applications *simple*, make them *easier*, and make them *personal*. With Office 2001 (\$499; upgrade, \$299), Microsoft introduces a new program to the venerable software suite—an e-mail and personal information manager called Entourage 2001. The company has also simplified many existing features and added a smart sprinkling of new features to existing programs. In the process, Microsoft has given the great majority of Mac users who use Office an opportunity to make some New Year's resolutions. The entire suite gives you powerful organizational tools that you can use to become more organized this year; by learning how to use the Office 2001 programs well, you *can* get your work done more efficiently.

So ring in 2001 right. Come with me on a tour of the new Office, and learn how it can help you better do your daily work. (To get even more information about using the new Office to get your life together, check out "Slide Show to Go" and "Organize with Entourage," both in *How-to*, or see our review of Office 2001, elsewhere in this issue.)

# TOGETHER

BY TOM  
NEGRINO

## Take Charge of Your Life with Microsoft Office 2001's New Suite of Programs

### Learning to Share

It's the little things that slow us down. Say you're working in PowerPoint—you've got to open up Word just to look up a synonym. Office 2001 adds features that are shared by all (or in some cases most) of the programs in the suite—great because you no longer have to spend time figuring out which application has the feature you need and switching back and forth.

**Shared Templates** When you start up any of the Office 2001 programs, you'll see the new Project Gallery, a kind of super Open dialog box (see "Create Anything"). From Project Gallery, you can create any blank Office document or choose from Office 2001's extensive collection of templates. This capability blurs the distinctions between programs—making you feel as though you're working in Office World, rather than in discrete appli-





**Create Anything** The new Project Gallery lets you create any kind of Office document from within any of the Office applications. You can choose new blank documents or get a head start by using one of the many predefined document templates.



**Total Recall** Entourage's contact creation page lets you enter detailed contact and personal information; you can even drag in a photo in a number of formats.

and saves you time because you don't have to return to the desktop to create a document with a different Office 2001 program.

**Multiple Clipboards** How many times have you needed to copy and paste more than one item between programs? Now you can cut, copy, paste, and even drag and drop multiple items of text or graphics to and from the Office Clipboard when you're using any Office application except Entourage. Your items remain in the Office Clipboard even after you close an application or restart your Mac.

**Easier Formatting** Easy-to-find features make a program more productive. Enter the Formatting Palette, which replaces Office's Formatting tool bar. You'll find this palette in Word, Excel, and PowerPoint (but not in Entourage). It allows you to view and access many formatting options at once, and its clearly labeled options take away the icon guessing game. If this palette gets in the way, fear not, you can reactivate the Formatting tool bar by choosing Customize from the Tools menu and selecting the Formatting option.

**Improved Dictionary** The entire Office suite now shares the new Encarta World English Dictionary. Just highlight a word and choose Dictionary from the Tools menu (or control-click on the word and choose Define from the contextual menu): up pops a window with a highlighted definition. (Definitions were unavailable in previous versions.)

**Familiar Formats** Another significant feature of all Office programs is compatibility. You can save your Office 2001 documents in the Office 98 format, and you can open Office 98 documents in Office 2001. Office 2001 also reaches across the platform divide, offering full compatibility with Office 97 and 2000 for Windows files. (Microsoft Windows Outlook files, however, are not compatible with Entourage.)

## Entourage Enters Office

E-mail can suck up much of your free time, and I'm not even talking about the time you spend deleting spam—I'm talking about the time you spend switching between different programs, looking for dates and names, searching through old e-mails for important instructions, and keeping track of whom you need to reply to—and when. Office 2001 gives you the ability to change all that, if you choose, with the suite's new personal information manager (PIM), Entourage. If at first glance Entourage seems familiar, that's because it's built upon Outlook Express 5.0, Microsoft's free e-mail program. Entourage's major shortcoming, however, is that it's a single-user program. Unlike Outlook for Windows, you can't share your calendar and contacts with your colleagues over a network.

**What's New** Entourage has a true contact manager, modules for a calendar, a tasks list, and a section for notes. These PIM features bring time management to Office 2001 and make it easier to keep projects on track. You'll use Entourage's e-mail abilities for communication and its PIM features to schedule personal time and tasks.

The other Office programs use Entourage too; from within Word, Excel, or PowerPoint, you can send an open document to a friend or colleague as an e-mail attachment. Those programs also have a new button on their main tool bars, Flag For Follow Up, which lets you create a reminder in Entourage's Calendar—a Reminders box pops up in any open Office program when the time you've set arrives. This integration of time and tasks with your working documents helps you keep projects on schedule. (To learn how, see "Organize with Entourage," *How-to*, elsewhere in this issue.)

*continues*



What inspires the pictures  
that inspire?



**OLYMPUS®**



devachan  
Sal

DEVA BELLA

WALK

Stop  
WRITER

“We all experience it. Those moments when we gasp and say, ‘Oh, look at that!’ Maybe it’s nothing more than the way a shadow glides across a face, but in that split second, when you realize something truly remarkable is happening and disappearing right in front of you, if you can pass a camera before your eye, you’ll tear a piece of time out of the whole, and in a breath, rescue it and give it new meaning.”

– Joel Meyerowitz



**Joel Meyerowitz** | used the Camedia E-10 SLR

Lens: 9mm [35mm equivalent] with 0.8x wide conversion lens for 7.2mm [28mm equivalent], AF mode – normal

Exposure: Spot meter mode, aperture priority (1/160th), aperture f4.8, ISO 80, auto white balance

Light: Natural backlight, midday (no filtration)

**OLYMPUS**

digital

# Presenting the latest in a long series of inspirations.

This is the camera that will change the industry.

With the development of the Camedia E-10 SLR's 4.0 megapixel CCD, even the most advanced lens designs became suddenly outdated. That may sound hard to believe. Until you consider that none were developed with the extra-critical tolerances in mind that such an advanced CCD requires.

As a result, our 14-element, fully multi-coated ED and aspherical glass 4x zoom lens was completely rethought to yield even finer focus and resolution. Combine it with shutter release lag times equal to traditional SLRs, full control and our exclusive TruePic™ technology, and you have a camera like no other.

Would you like pictures like no other? Ask your Olympus reseller all about the E-10 SLR. See what we've done with digital photography. Then go out and see what you can do with it.

<http://e-10.olympus.com>

## The digital E-10 SLR



## The digital E-100 Rapid Shot



The photo you've been trying to take your entire life may have always been buried between frames two and three. To help capture those hidden moments, Olympus created the Camedia E-100 Rapid Shot.

The E-100 Rapid Shot fires in blistering bursts at speeds up to 15 fps. Shutter speeds are as fast as 1/10,000th of a second. We've even developed a pre-capture mode, to make sure you never miss a shot. And it's all done through a 10x Olympus aspherical glass zoom lens (35-380mm equivalent) with image stabilization and a 2.7x digital telephoto (1080mm equivalent).

We encourage you to ask your Olympus reseller about everything this lightning-fast camera offers. It's our hope the E-100 Rapid Shot will help you see photographic opportunities you've never seen before.

<http://e-100rs.olympus.com>

CAMEDIA

## The P-400 photo printer



The finest digital images deserve to be the finest digital prints. The Olympus Camedia P-400 dye sublimation printer offers true photo-quality, continuous-tone prints and enlargements. All in just 90 seconds. Combined with our E-10 SLR or E-100 Rapid Shot, the P-400 gives you rich, stunning, professional-level prints and enlargements.

**OLYMPUS**  
Focus On Life

The Link Maker tool allows you to create links between any Entourage item and any other item or file on your Mac—even if it isn't an Office document. For example, you can link an upcoming appointment's Calendar entry to all of the files that pertain to that appointment, whether they are Word documents, Adobe Photoshop files, or contact information in Entourage's Address Book. A list of linked items allows you to quickly access all of the pieces of a project and helps keep you organized.

Entourage can also synchronize its Calendar, Contacts, Tasks, and Notes to your Palm handheld computer—a lifesaver if your work often takes you away from your desktop.

**What's Better** In terms of e-mail features, Entourage's Address Book is the most noticeable difference from Outlook Express. Instead of the limited Address Book found in Outlook Express, Entourage sports a full-featured contact manager with all the personal-data fields you might want (you can even include a contact's photo), plus a number of customizable fields (see "Total Recall"). If your clients or friends use Office 2001, you can even attach your contact information to an e-mail message and spare them the pain of typing it into their Address Books.

You can also export mail folders from Entourage just by dragging them to your desktop; they end up as text files (in the standard MBOX format), which you can open in word processors or import into other e-mail programs.

**Working with the Web** Entourage adds special Web features that make communication easier. From within the Address Book, a single click opens your Web browser and lets you get maps and driving directions for any contact address. You also have the ability to save a month (or range of months) of your Calendar as a Web page, with your appointments displayed, great if you're going on the road and want to keep track of your appointments from anywhere you have Web access—or as a way to share your calendar with friends and colleagues.

## Word Works Harder

The soul of Microsoft Office has long been its word processor, Word. When Microsoft released Word 6, customers revolted over its more complicated interface. There are plenty of new goodies in Word 2001, however, that will make your work quicker and easier.

**What's New** The new Click And Type feature makes vertical centering easy, letting you double-click



**The Long View** PowerPoint's new Normal view has three panes that make it much easier to create and organize a presentation. You enter the slide text in the outline on the left side, seeing how the slide will look in the preview pane. This is also a good time to add speaker notes, in the bottom pane.

2000 American League Standings				2000 National League Standings			
Team	W	L	Pct.	Team	W	L	Pct.
NY Yankees	56	46	0.548	Atlanta	71	46	0.611
Seattle	52	48	0.520	NY Mets	70	48	0.593
Toronto	50	50	0.500	Pedro	60	59	0.508
Baltimore	44	56	0.442	Houston	51	64	0.442
Tampa Bay	44	56	0.442	Philadelphia	50	68	0.424
Chicago	40	60	0.400	St. Louis	45	54	0.454
Cleveland	35	65	0.350				
Detroit	34	66	0.340				
Kansas City	34	66	0.340				
Pittsburgh	32	68	0.320				
Seattle	24	76	0.240				
Oakland	23	77	0.230				
Anaheim	20	80	0.200				
Texas	17	83	0.170				
	16	84	0.160				
	11	89	0.110				
	7	93	0.070				

**Sliced and Diced Data** Excel's List Manager lets you sort and filter the information by any of the list's columns.

anywhere on a page (in the Page Layout view) and start typing without having to hit the tab or return key dozens of times. Word automatically adds paragraph alignments, tabs, and any other formatting to get your text to go where you want it to. And you no longer have to open a document's header or footer from the View menu to change it; just click where the header or footer would be on the page and start typing.

Word 2001 also gives tables an efficiency overhaul. For example, you can now create nested tables (tables within tables), which translate well to the Web. Header rows can be set to automatically repeat at the top of each page. And tables can now be moved around the page with text reflowing around them.

Doing a mail merge in previous versions of Word was a process best described as tortuous. The new Data Merge Manager doesn't make mail merging a cakewalk, but it does a much better job of walking you through the process in a logical fashion.

*continues*

## Top Features at a Glance

### Office 2001 Shared Features

- Office Clipboard
- Project Gallery
- Flag For Follow Up
- Formatting palette
- Improved picture-editing tools
- Encarta World English Dictionary
- Improved support for Apple technologies (such as Navigation Services and QuickTime)
- Better Save As Web Page features
- File compatibility with previous versions of Office for Mac and Windows



### Entourage 2001 Features

- E-Mail client (POP, IMAP, and Hotmail)
- Junk Mail filter
- Newsgroup reader
- Full-featured personal information manager

### Word 2001 Features

- Click And Type
- Improved spelling checker and thesaurus
- Contacts tool bar
- Nested tables
- Data Merge Manager
- Live Word Count

### Excel 2001 Features

- List Manager
- Formula Calculator
- FileMaker Pro Import Wizard
- Tabular data drag and drop
- Automatic Save As Web Page

### PowerPoint 2001 Features

- Three-Pane view
- AutoFit Text tool
- Improved table tools
- Picture bullets
- Enhanced animation effects
- Save As QuickTime Movie
- Save As Web Page

A small new feature, Live Word Count, is sure to gladden the hearts of writers everywhere. It sits at the bottom of each document window and shows you the total number of words in your document.

**What's Better** Word 2001's new Contacts tool bar is a vast improvement on Word 98's Address Book, and it shares information with Entourage's Address Book. You can automatically insert a contact's name, address, phone, or e-mail information into your Word document or select a name and address in a letter and add it to the Address Book.

The spelling checker, grammar checker, and thesaurus have been revamped in Word 2001. I found that words Word 98 wrongly flagged as incorrect were recognized correctly in Word 2001, and the new thesaurus offered a better selection of synonyms.

**Working with the Web** Word has become a fairly capable Web page editor—for an occasional quick page, it does a surprisingly good job. And that lets you worry about content instead of the vagaries of Web page rendering. The Web Page Preview feature saves your document as HTML and opens the file in your favorite Web browser, so you can see if everything is in place.

## Excel Gets Easy

By making Excel do things the way you want it to, rather than the way a software designer in Redmond thinks it should, Excel's handy new features make the program easier for both novices and pros to use.

**What's New** For all its number-crunching capabilities, most people use Excel primarily for handling simple lists. (You know what I'm talking about. How many of your Excel documents keep track of your CD collection and office phone lists instead of an analysis of last year's profit margin?) List management is usually a database program's job, but Microsoft has wisely decided to help us out by adding the new List Wizard and List Manager (see "Sliced and Diced Data"). The List Wizard helps you create lists; the List Manager allows you to sort a list by any column and filter data as you want.

Lists are more popular simply because spreadsheet formulas are intimidating. But Excel's new Calculator helps you out—the scary-looking formulas haven't gone away, they're just handled by Excel. As you click on the buttons of the familiar-looking Calculator, Excel builds the formula for you. When you're done, Excel inserts the formula into the cell where you've been working.

**What's Better** Excel 2001 now includes the FileMaker Pro Import Wizard. When you drag a FileMaker Pro database onto an Excel worksheet, the Import Wizard starts up and lets you specify the database fields that you want. This makes it easier to apply Excel's superb analysis tools to your sales data, for example.

Excel is also smarter about handling tabular data—data already formatted in rows and columns—from other applications. You can drag and drop or copy and paste tables from a Word document or a Web page, and the information goes neatly into Excel's columns—with little cleanup needed. This allows you to, for example, take stock prices from a financial Web site for further number crunching in Excel.

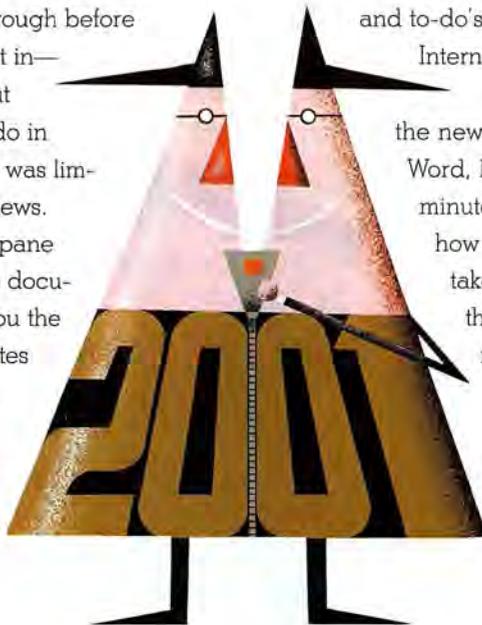
**Working with the Web** If you need to access your kitchen-remodeling budget from anywhere, Excel can save your spreadsheet as an HTML table on an otherwise blank Web page.

You can even set Excel to always save a worksheet as a Web page. If you set the location for the exported file to be your Web server, you can update information on your Web site periodically and automatically. Businesses can use automatic Web updates to send salespeople current information on inventory levels or prices.

## PowerPoint Performs

PowerPoint has always been a powerful—though often clumsy—presentation tool. New and improved features make PowerPoint more elegant and intuitive.

**What's New** Let's face it, many of us don't sit down and think our presentations through before we fire up PowerPoint. We jump right in—writing our slides as we go along. But planning presentations was hard to do in PowerPoint 98 because the program was limited to separate Outline and Notes views. PowerPoint 2001 introduces a three-pane view, in which resizable panes of the document window simultaneously show you the outline, the current slide, and the notes for that slide (see "The Long View"). Having an area for speaker notes readily available while you're building a presentation encourages you to add notes as you go—instead of frantically inserting them an hour before your lecture.



The improved PowerPoint also gives you new ways to add flash to your slide shows. You can now use images as your bullets, and some samples are included in several new PowerPoint templates.

Tables in PowerPoint 98 were bothersome; you had to create your tables in Word or Excel and import them—a real time waster. With PowerPoint 2001's new pencil tool, you just click and drag to draw table boundaries and cells.

**What's Better** Fitting text on a slide has always been a maddening PowerPoint task. No longer. Turn on AutoFit Text in PowerPoint's Preferences menu, and PowerPoint automatically changes the line spacing, font size, or both to make text fit in its placeholder.

Office 98's PowerPoint Viewer, a program that let you run presentations on a machine without Office, has been ditched in favor of a better and more widespread technology: QuickTime. You can now save your presentations as cross-platform QuickTime movies, viewable by anyone with the free QuickTime Player. (See "Slide Show to Go," *How-to*, elsewhere in this issue.)

**Working with the Web** Like the other Office 2001 programs, PowerPoint lets you export to the Web. You can now save a presentation as a Web page and post it for further reference after you give your talk.

## The Last Word

The new Office leaves you no excuses for a disorganized life. With Entourage as your schedule's traffic cop, you'll roll efficiently through your appointments and to-do's. Office's intelligent embrace of the Internet means better communication with coworkers and friends. And the new features and improvements in Word, Excel, and PowerPoint will shave minutes off of everyday tasks. If you learn how to use Office 2001 well—and you've taken the first step here—the price of this software upgrade can buy you the most precious commodity of all: more time. ■

Contributing Editor TOM NEGRINO is the author of *Microsoft Office 2001 for Macs for Dummies* (IDG Books, 2000).



# The Macworld

by Andy Ihnatko and Christopher Breen

# Game Hall

Past and Present Game Columnists



ILLUSTRATION BY ANDREW FAULKNER

# 2000



# of Fame

Pick the Year's Best Games



**D**EEPER AND DEEPER STRETCH the marbled hallways and galleries of the Game Hall of Fame. At this writing it is the start of autumn, and Chris and I, as trustees and board members of the Hall, are accustomed to the rituals that accompany the turning of the leaves in the courtyard outside.

With the fall come new throngs of people to gaze upon the gaming industry's past and current glories. The elementary-school kids here on field trips seek only basic amusement and a change from the daily drudgery of class. The grad students are little better—take that young man in the Foo Fighters T-shirt exam-

ining the Zork Trilogy diorama, for instance: he stands in front of one of the most influential immersive realities in the history of the genre. But I can tell by his posture that he's just desperately trying to come up with a thesis project and to avoid flunking out of his master's program.

Of course, such people are a valued source of sustaining revenue, but we don't operate the Hall for *them*. We do it for the Cub Scout who gets separated from his troop because he can't tear himself away from the Galaxian fresco, which puts him in mind of the Duke Nukem historical reenactment he earlier saw staged in the atrium.



Chris and I smile every time we see it happen, whether it's once a week or once a year. For we know that we're witnessing merely the first step in a process that will end a few years later, as we're shaking that Webelo's hand and inducting his groundbreaking new game into the Hall.

Fall is also, of course, the time when we induct the year's greatest games into the honor roll, but some games we hoped to see this year—games that have been bowling people over in beta form—are missing.

We are as proud of 2000's inductees as we are of any others. But with little exception, the 2000 games' accomplishments were evolutionary ones: great games made greater, or familiar ideas with modern execution. However, 2001 promises to shake things up: revolution *is* coming (see "Next Year's Contenders" for details). **m**

Contributing Editor CHRISTOPHER BREEN recently passed the *Game Room* joystick to Andy Ihnatko and now pens *Macworld's Mac 911*.

ANDY IHNATKO can be found in the *Chicago Sun-Times*, *MacCentral*, *Playboy*, and rummaging through back alleys searching for Atari 2600 cartridges.



**Meddle in Every Detail** The Sims will help you prepare for the day when you have an adult daughter.

## The Sims

★★★★½

**ANDY:** The phone rings at 9:30 a.m. The only people who phone me at that ungodly hour are dental assistants reminding me of an appointment or friends at work whose computers are acting naughty. I pick up and I hear, "Andy! It's John! I got a crisis here! I finished my *Three's Company* Sims house, and just as I *finally* got Jack Tripper a restaurant job, my Mac froze up on me! What do I do?"

I am tempted to say "Get a real life instead of a Simmed one," but instead I advise him that if the mouse still works, he should just wait it out. Ignoring John's excited blabbering about creating a house for the Ropers next, I hang up and go back to sleep.

It's real life, only fake. Control the life of a semi-autonomous Simmed human—how he lives, socializes, eats, works, plays, and everything else—with success or failure metered by your Sim's overall happiness and sense of self-worth. It's finally out for the Mac and infecting player after player.

**CHRIS:** Count me among the infected whose Sim leads a far more fascinating and productive life than his creator.

**What's Cool:** Indifferently wielding the power to control the basic happiness of another human. **Who It's For:** Folks being "Simmed" by their bosses. **From:** Aspyr Media, 888/212-7797, www.aspyr.com; \$50.

## Scrabble

★★★★

**CHRIS:** Many years ago, within the pages of *The Macintosh Bible Guide to Games* (Peachpit Press, 1996), I made the bold pronouncement that Brian Sheppard's *Maven* was the best Scrabble simulation available on the Mac. My mistake. I should have suggested that *Maven* was the best Scrabble simulation available on *any* computer platform. If not, why would Hasbro Entertainment incorporate Mr. Sheppard's *Maven* engine into its own outstanding version of the traditional word game?



**Triple Word Score** What's an eight-letter word for "family fun"? *S-c-r-a-b-b-l-e!*

Now that version of Scrabble has been brought to the Macintosh by MacSoft, and it's a winner. All the elements you'd expect from Scrabble on a Mac are here: the crosshatched board, the salmon-pink Double Word Score squares, seating for as many as four players (comprising both computer and human opponents), a cagey com-

Best Traditional Game

Best Simulation Game

puter adversary, "mini-games" to hone your wordplay, and the ability to dabble at Scrabble with others over a LAN or the Internet.

If you're seeking a great gift for someone with a new iMac, look no further than Scrabble.

**ANDY:** It's easy to laugh at the idea of applying graphics, sound, and animation to a board game as static as Scrabble—at least in Monopoly you can go "vroom-vroom!" when you move the little car around the board—but this Scrabble takes play to another level.

**What's Cool:** A great-looking Scrabble simulation that even the most seasoned wordsmith will find difficult to beat. **Who It's For:** Scrabble and traditional-games enthusiasts. **From:** MacSoft, 800/229-2714, [www.wizworks.com/macsoft/](http://www.wizworks.com/macsoft/); \$30.

## Asteroids



**ANDY:** What could possibly be superlative about a new edition of a Reagan Era game?

Well, sure, it's been kicked up with Y2K sensibilities. While the original was a model of vector-based minimalism, this one has an audio track, fully rendered scenes between levels, and 3-D animation.

But it's still Asteroids—which is to say, though they've expanded the game play with more-sophisticated higher levels, they haven't ruined the chimplike simplicity that's the hallmark of any great arcade game. I don't want problem-solving, characters that I'm meant to truly *feel* for, or the same old Highly Experimental Powerful Weapons whose origins are shrouded in mystery. Just gimme a very basic premise: Your ship skates



**Blow Up Everything** Asteroids is just as you remember it, except the colors aren't hallucinatory.

in two dimensions around the screen. Shoot asteroids and other ships. Die when you are shot or collide with something. I like the mechanisms for play to be so simple that it's chiefly a question of how fast I can route signals from my brain stem to my fingers, without getting them hung up in the tar pits of my cerebrum.

**CHRIS:** If only MacSoft had found a way to import the hilarious sound effects from Ambrosia's wonderful homage to Asteroids, Maelstrom. . . .

**What's Cool:** It's like the Foo Fighters covering a Police song from the early eighties. There's nostalgia, sure, but enough modern credibility to make it fly. **Who It's For:** Parents who want to be beat their nine-year-old kids at *something*. **From:** MacSoft, 800/229-2714, [www.wizardworks.com/macsoft/](http://www.wizardworks.com/macsoft/); \$30.

## Diablo II



**CHRIS:** Because we engrave the Game Hall of Fame statuettes in bulk, it would be helpful if Blizzard, makers of Diablo II, released a new Mac game each year. Then we could save a few dollars by ordering an extra ten awards *continues*

## Special AWARD

### BEST UPCOMING GAMING HARDWARE: Radeon

**ANDY:** We knew that this award would go to a graphics card. What was tough was getting around to a decision: we just hadn't allotted enough time for running naked through the parking lot laughing.

We couldn't believe we'd lived long enough—through ATI's long dare-we-say monopoly on the category—to finally see a choice of manufacturers. At last, 3dfx—a Windows Godzilla—has stepped into the Mac fray.

So why are we giving the honors to ATI's new Radeon card? The Radeon (which should be shipping by the time you read this) will be more influential, with the usual blessings from Apple. And thanks to ATI's long relationship with the Mac, the card will be far more integrated. In game play, 3dfx's new Voodoo 5 card kicks any body part you care to name, but ultimately it's a PC product with Mac drivers—it doesn't work with Apple's DVD player.

**CHRIS:** This one was a real squeaker. Had the PCI Voodoo 5 produced the same smoking frame rates on the Mac as it does on PCs, Voodoo would be in. It didn't.

**What's Cool:** Greater graphics power today means better game play today and intensely insane game play in a few months, when it's fully exploited. **Who It's For:** Anyone interested in playing something more exciting than Scrabble. **From:** ATI Technologies, 905/882-2600, [www.atl.com](http://www.atl.com); \$279.



**The Devil Made Me Do It** Mow down the forces of darkness in Blizzard's Diablo II.

and scrawling "Blizzard" and an upcoming year across the bottom of each, and be done with it. Blizzard's games are that good.

Alas, it takes the company more than a year to give birth to games as remarkable as Diablo II. This third-person-perspective game combines many of the best elements of traditional role-playing, adventure, and hack-and-slash games. As with other Blizzard titles, Diablo II is a visual and aural treat, with dramatic lighting and environmental effects and an evocative sound track. You'll appreciate that Diablo II is so easy on the eyes and ears; with the ability to choose between five different protagonists and challenge Diablo's hellish minions across four vast realms, you can easily get lost in the game for weeks on end.

**ANDY:** Yeah, it's like Dungeons & Dragons, only targeted at people who actually like to have fun. The original left me a bit cold, but Diablo II has me hooked.

**What's Cool:** Addictive hack-and-slash adventure. **Who It's For:** The barbarian within us all. **From:** Blizzard Entertainment, 800/953-7669, www.blizzard.com; \$60.

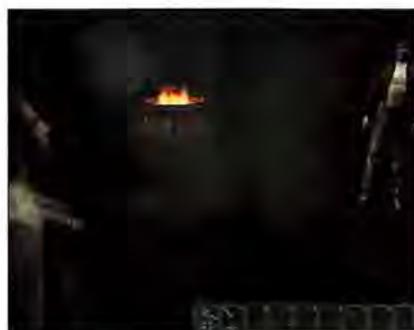


## Deus Ex



**ANDY:** Man alive, there are a lot of walk-around-a-3-D-environment-and-shoot-things games out there. But when Deus Ex shipped, it was a sign that the glut was officially over, that from this point onward developers were not invited to ship a product unless they were willing to do something new with this category.

Deus Ex looks like other games, but beneath the surface it's more like reality. You work with a team and you learn as you go. For one, you wouldn't just pick up a weapon and instantly know how to work it or be a crack shot with it. In Deus Ex, experience counts; but if experience isn't doing



### Feel Better about Ultraviolence

Violating humanity's highest law needn't turn you into an animal. Aspyr Media's Deus Ex adds intellect to injury.

it for you, modifying the weapon might work. Here there are choices: some folks like to shoot, shoot, shoot. Others see a guard toting a shoulder-mounted Patriot missile and think, What the heck, let's just sneak around him and say we killed him, OK? Either option might work.

You have to shoot, but you have to think and learn and work with the other people in the scenario. What a concept. Before, you just had to look at the protagonist's cleavage.

**CHRIS:** As much as I enjoy beautifully rendered shooting galleries such as Quake III and Unreal Tournament, it is refreshing to exercise both mind and trigger finger in a 3-D shooter.

**What's Cool:** Freedom of choice and the fact that every decision matters. **Who It's For:** Shooters who want to think more, and thinkers who want to shoot more. **From:** Aspyr Media, 888/212-7797, www.aspyr.com; \$40.



## Baldur's Gate



**CHRIS:** Just when we thought Advanced Dungeons & Dragons-style role playing games would never again grace a Mac's hard drive, Graphic Simulations brings to the Mac one of the most popular elves-spells-and-magic adventure games found on the PC: Baldur's Gate.

Baldur's Gate remains faithful enough to the old pen-and-paper Advanced Dungeons & Dragons (AD&D) games of yore to earn the grudging respect of traditional players. Still, it's not so choked with gothic arcana that it's likely to turn off the uninitiated. You'll find the requisite jumble of races (including human, elf, gnome, dwarf, halfling, and half-elf), classes, spells, and quests in this



**Quality Quests** Role-playing games return to the Mac with Baldur's Gate, inspired by Advanced Dungeons & Dragons.

expansive adventure. But the interface and rules are approachable enough that players entering the game's Forgotten Realms for the first time won't feel as if they'd been suddenly plunked down in Irkutsk without a phrasebook or a taste for *omul*.

Baldur's Gate is good, but not perfect. Missing from the game as we go to press is network play and an update to squash its most obnoxious bugs.

**ANDY:** Well, to me, role-playing games take already dull and highly technical games and remove the possibility for social interaction. If it were my kid, I'd rather he spent his time trying to become a rock drummer.

**What's Cool:** The finest RPG to hit the Mac in years. **Who It's For:** AD&D fans and those who enjoy computer questing. **From:** Graphic Simulations, 972/386-7575, [www.graphsim.com](http://www.graphsim.com); \$50.

## Fly 2K

★★★★½

**ANDY:** Why is Fly 2K the year's Best Flight Simulation? It's just more flight-simmy than its predecessor. Sim jocks will understand the significance of that development.

Terminal Reality hit it out of the park with its initial release, but now the sim has a certain obsessive-compulsive quality that endears. You've got a working cockpit radio that lets you talk to other pilots in real time, via network. The instrumentation has also been vastly upgraded, allowing realistic simming of fly-by-instrument—which you'll need, thanks to the new engine providing realistic weather and cover conditions.

Why do people stick with flight sims? Particularly those that lack the fun of cannons and missiles? Easy:

to feed the fantasy that when a hysterical flight attendant asks if there are any passengers on board who know how to fly, they can push aside the ones with actual flight experience and bring that sucker in. With Fly's new upgrades, this sim moves into the realm of credible flight training.

**CHRIS:** Fly 2K is a wonderful flight-simulation game, but I can't help wishing that Terminal Reality would

market an AMRAAM/Unguided Ordnance add-on.

**What's Cool:** Detail, detail, *detail*. You're not playing . . . you're *training*. **Who It's For:** Air wonks who are thrilled by staring at dials for 98 minutes. **From:** Terminal Reality, 877/463-4263, [www.terminalreality.com](http://www.terminalreality.com); \$20.

*continues*

# Next Year's CONTENDERS

**R**egular visitors to the Hall know that many of the games we'd proposed as candidates for this year's awards have yet to see the light of day—Oni and Halo from Bungie ([www.bungie.com](http://www.bungie.com)) and Tribes 2 from Sierra (425/649-9800, [www.sierra.com](http://www.sierra.com)) are among the most sorely missed. If these games are released in 2001, their names may yet adorn display cases created in their honor.

**Pedal to the Metal** However, those long-awaited titles aren't the only reason to keep an eye peeled. If all goes according to plan, 2001 will be the year Macintosh racing games finally come into their own. With any luck, the budding Jeff Gordon in your family could unwrap four racing games next holiday season: Aspyr Media's Need For Speed: Porsche Unleashed; MacSoft's Driver; Pangea's (512/266-9991, [www.pangeasoft.net](http://www.pangeasoft.net)) Cro-Mag Rally; and Terminal Reality's (877/463-4263, [www.terminalreality.com](http://www.terminalreality.com)) 4x4 Evolution. Those who prefer air travel can look forward to United Developers' (214/855-5955, [www.uniteddevelopers.com](http://www.uniteddevelopers.com)) release of ParSoft's World War II combat flight simulation, Fighter Squadron: The Screamin' Demons Over Europe.

**The Eyes Have It** Fans of third-person-perspective action games (think Tomb Raider) will welcome Ritual Entertainment's ([www.ritual.com](http://www.ritual.com)) Heavy Metal F.A.K.K. 2. The game, featuring heroine Julie Strain, is built on the Quake III engine and is sure to be a visual treat.

Speaking of which, there may be no more-visually compelling game available in 2001 than Mattel Interactive's (415/382-4400, [www.myst3.com](http://www.myst3.com)) Myst III: Exile. As with Cyan's Myst and Riven before it, Myst III: Exile features lush graphics and sound. But Myst III will provide a more immersive, 360-degree view of each scene. It's the first version not created by Cyan's Rand and Robyn Miller.

With this collection of games on the way, we're hoping 2001 will be a banner year for Mac gaming.



**Myst Again** Myst III: Exile will feature the kind of breathtaking graphics found in its predecessors.



**Go Up-Diddley-Up-Up** Fly 2K's small-aircraft sim is so realistic, up-and-coming rock groups are advised not to play it.

## Star Wars: Episode 1 Racer

★★★★½

**CHRIS:** With any luck, this will mark the last year we fling the garland for the Best Racing Simulation award at a game based on a non-existent mode of transportation. Don't get me wrong, Star Wars: Episode 1 Racer—with its careening pod racers, varied tracks, and imaginative opponents—is worthy of induction to the Hall. It's just that I'd like to see more bona fide, at-least-two-wheels-on-the-ground, skedaddle-your-fuel-starved-tail-into-the-pits auto-racing games come to the Mac.

That said, Racer offers nearly everything a racing-simulation fan could desire. The game includes 25 distinct tracks scattered across eight different worlds, outrageous speeds that often exceed 400 mph, outstanding graphics, and three modes of play. In Tournament Play you tackle the courses in succession. In Free Play you can race on any course you've unlocked in Tournament Play. And in the networked Multiplayer Mode you race against up to eight players on a LAN

Whether you're a Star Wars fan or not, if you have a need for speed, Pod Racer delivers the goods.

**ANDY:** What's wrong with fantasy vehicles? When I want reality, I've got Boston's Southeast Expressway and my *Dukes of Hazzard* sound track. Still, here's to many new racing sims next year.

**What's Cool:** Fast and furious racing action in a year largely devoid of racing of any kind. **Who It's For:** Racing fans and Star Wars devotees.

**From:** LucasArts, 888/532-4263, [www.lucasarts.com](http://www.lucasarts.com); \$20.



**Use the G-Force** Rib-crushing speeds and outlandish vehicles characterize LucasArts' Star Wars: Episode 1 Racer.

## Sid Meier's Alpha Centauri

★★★★½

**CHRIS:** Sid Meier is to world-building simulations what Ray Kroc was to artery-clogging-fast-food outlets—the creator of the Civilization franchise has either built or indirectly influenced the design of dozens of these explore-colonize-build-and-bend-your-neighbors-to-your-will games.

Alpha Centauri, this year's winner for best world-builder, is the sequel to Meier's Civilization II. In this game, the colonists who left their terrestrial home at the conclusion of Civ II have arrived on an alien planet. During the journey the



**Spaceward Ho!** Explore, colonize, and dominate another world in Aspyr's Alpha Centauri.

erstwhile earthlings have split into seven groups with differing ideologies. Your job is to lead the exploration and domination of your newfound home.

While Alpha Centauri maintains many of the elements of a typical Civilization franchise, it's a more refined and flexible game than its predecessors. For example, if you'd rather not micromanage every move in the game, you can prioritize and delegate tasks to governors, who then automatically do your bidding.

Alpha Centauri is a terrific game, but if it doesn't satisfy your desire for domination, you have some options. You can buy Aspyr's \$20 Alien Cross-fire add-on pack from the company's Web site.

**ANDY:** It's actually the first such game I ever got into playing. I respected the others but was put off by the long time it took to get spun up for the game. I think Alpha Centauri puts you in the mood for destroying your fellow man over mineral rights with little fuss.

**What's Cool:** Civilization in space! **Who It's For:** Those with an unquenchable spirit of Manifest Destiny. **From:** Aspyr Media, 888/212-7797, [www.aspyr.com](http://www.aspyr.com); \$30.



# SONNET™

*SIMPLY FAST™*

Don't let another opportunity fly by. Add a Sonnet processor card to your Power Macintosh or PowerBook and instantly work faster. Depend on Sonnet for simply fast upgrade products. To learn more, call 1-800-786-6260 or visit our website at:

[www.sonnettech.com/mwus](http://www.sonnettech.com/mwus)

Visit us at  
**MacWorld San Francisco**  
January 9-12, Booth #535



GO BEYOND PHOTOS WITH  
ADOBE PHOTOSHOP 6'S  
GROUNDBREAKING  
NEW TOOLS



PHOTOSHOP'S  
**new frontier**

by David Blatner

The evidence is out there: Adobe is plotting a conspiracy. **No, I'm not paranoid.** Paranoia would make me imagine that people are trying to harm me. Rather, I've got a profound sense of *pronoia*: the uneasy suspicion that Adobe is trying to make my life better.

Adobe Photoshop had nigh on zero competition—everyone who's anyone already uses it—yet Adobe still came out with Photoshop 6, one of the most innovative upgrades in the app's ten-year history. The company didn't need to work that hard; it has released several upgrades that were only reasonably good but flew off the shelves anyway.

Photoshop 6 blazes new trails by including Adobe Illustrator-like tools and vector type that stays vector type to the end. Version 6 also blurs the lines between Photoshop and Adobe ImageReady and GoLive. Why did Adobe go so

HOW TO

IN THIS SECTION:  
56 ORGANIZE WITH  
ENTOURAGE  
60 STARVING FOR  
STORAGE?  
64 SLIDE SHOW  
TO GO

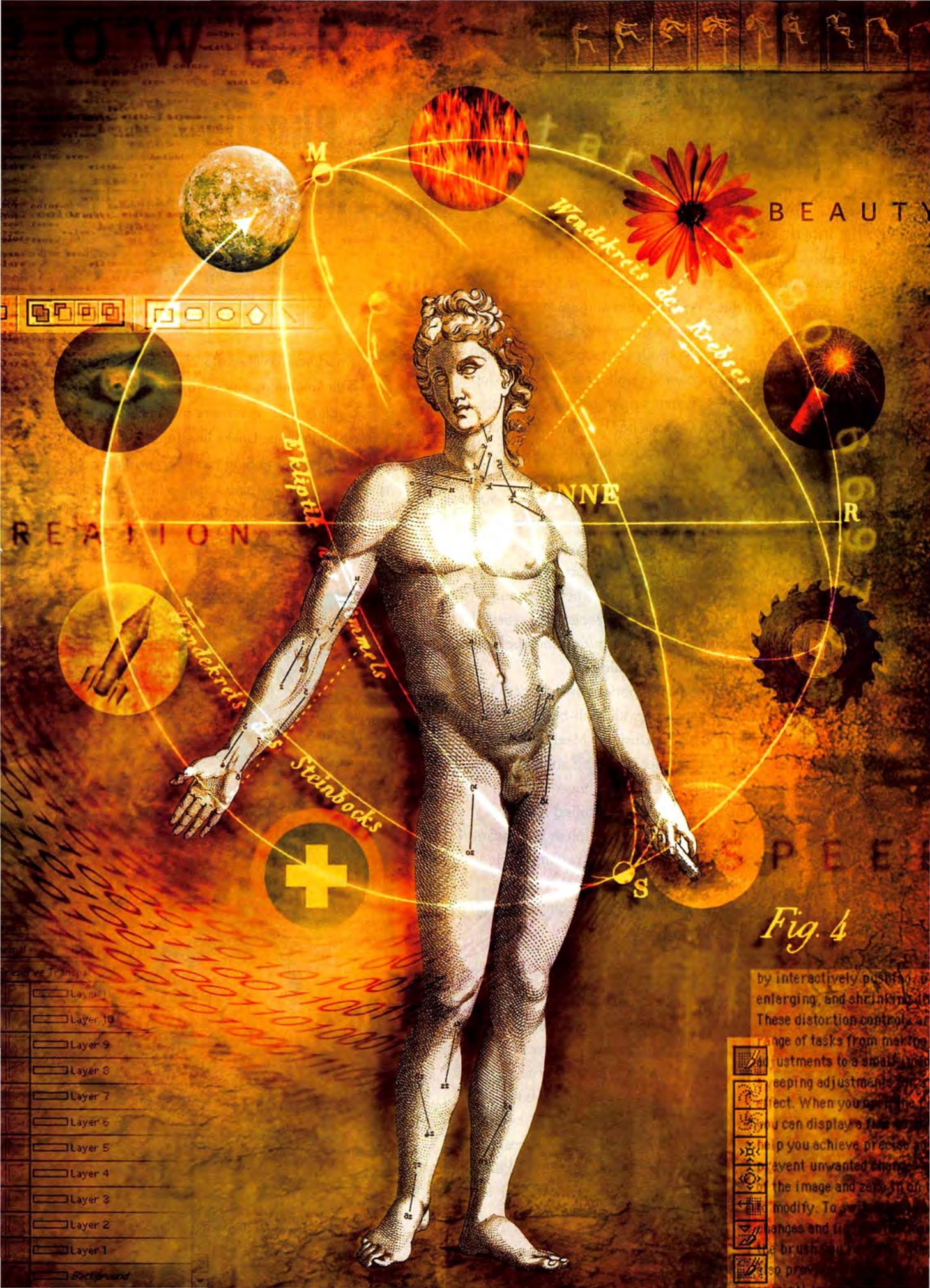


Fig. 4

by interactively pushing, enlarging, and shrinking. These distortion controls a range of tasks from making adjustments to a small, keeping adjustments in effect. When you can display a help you achieve precise event unwanted change the image and zero in on modify. To see changes and fine-tune or brush on a preview

- Layer 1
- Layer 10
- Layer 9
- Layer 8
- Layer 7
- Layer 6
- Layer 5
- Layer 4
- Layer 3
- Layer 2
- Layer 1
- Background

far beyond simply responding to users' wish lists? Why has the company unleashed an upgrade that can make us so much more efficient and open the door to new frontiers of creativity? In a search for the truth, I'll detail the conspiracy feature by feature. (For more on version 6, see *Reviews* elsewhere in this issue.)

## The Interface Cabal

Photoshop 6 includes a host of interface changes that increase efficiency but take almost no time to learn. The new Options bar (which replaces and surpasses the Options palette) offers context-sensitive options depending on the tool you're using (see "Belly Up to the Options Bar"). You can put this bar anywhere, though it fits best at the top or bottom of your screen. If your screen resolution is more than 800 pixels wide, the Options bar becomes a palette well where you can store palettes you use occasionally—just drag the palette on top of the well. However, palettes in the well expand only when you're using them, so store your Color and Swatches palettes here, but not the Info palette.

**A Better Crop** The Cropping tool now provides visual feedback by shading areas you're cropping out. It's a big improvement over the old dashed lines. The Cropping tool can now draw trapezoids, not just rectangles—useful when you need to adjust for keystoneing (the perspective you get when looking up at a tall building).

**High-Bit Color** In another important evolutionary move, Photoshop 6 lets you work with high-bit images in more ways, including applying Unsharp Mask, Gaussian Blur, and Add Noise to these files. High-bit images (16 bits per channel) are more flexible than those with the more common 8 bits per channel (also called 24-bit), especially for adjusting tone and color. Unless your scanner software is better than Photoshop, I'd recommend scanning in high-bit mode.

But these interface tweaks are little fish compared with the real power of this upgrade.

## Lines at Last

Photoshop is a bitmapped editing program, right? Not anymore. Photoshop now lets you combine raster data (pixels) and vector data (Bézier lines) in one image. Because raster data is just a grid of pixels, it always has jaggy or fuzzy edges. The only good way to print a really sharp edge from a high-resolution imagesetter is with a vector, because these mathematical curves always give you the highest resolution possible from your printer. Earlier versions of Photoshop had vector tools for making clipping paths, which let

*continues*

# Photoshop 6 Throws Type for a Curve

Compared with Illustrator 9, Photoshop 6 has both limitations and advantages when you're creating type on a curve and combining it with raster images. Unlike Illustrator, Photoshop 6 doesn't allow you to bind text to an existing path, but its simple-to-use warping function lets you make complex shape envelopes that would take many steps to create in Illustrator.



**БУРАТИНО, БУРАТИНО,  
ЧТО ТЫ ЛЕЗЕШЬ ПОД МАШИНУ?  
ПОДЬ У НАС ДЛЯ ПЕШЕХОДОВ  
ОЧЕНЬ МНОГО ПЕРЕХОДОВ!**

**1** Open a raster image, then click on the image with the Type tool to enter text directly on top of the image. Highlight the text with the Type tool and format it in the Character and Paragraph palettes **A**.



With the type still highlighted, click on the Create Warped Text button **B** on the right side of the new Options bar to envelop the type in a shape **C**.

**2** In the Warp Text dialog box, select the Arc warping style **A**. To tweak the resulting distortion envelope, move the Bend slider **B** to control the shape's twist and the Horizontal Distortion **C** and Vertical Distortion **D** sliders to introduce perspective.

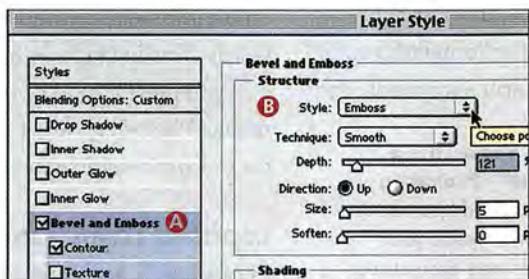


To fine-tune the distortions, you have to convert the type to a vector shape. Select the layer with the Move tool, then go to Layer: Type and choose



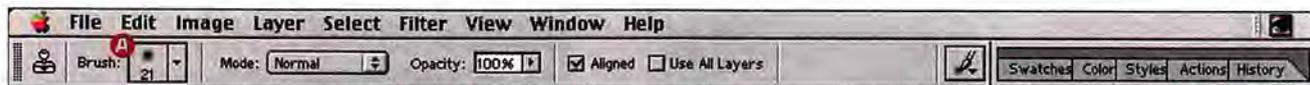
Convert To Shape. Select the same layer with the Move tool and go to Edit: Free Transform. Hold down the  $\mathbb{A}$  key as you drag any handle on the selection border to alter the transformation border until the letterforms follow the contour you need **E**. Press the return key to apply the changes.

**3** Now add raster effects to your vectors. In the Layers palette, double-click on the name of the text shape layer to open the Layer Style dialog box. Select the Bevel And Emboss check box **A**. Choose Emboss from the Style menu **B**; click on OK. To emboss with no fill, click on Blending Options (upper left) and choose either Multiply or Darken from the Blend Mode list at the top of the window.



To ensure that the shapes print as object-oriented vectors and not as pixels, go to File: Print Options. Choose Show More Options at the bottom of the dialog box, and make certain the Include Vector Data option is also selected. Your final image will now output from Photoshop with hard-edged shapes.—RALPH BERGER





you snip off the edges of a bitmapped image to create a clean silhouette. But that doesn't help when you need sharp edges *within* your image.

**Bézier Type** Say you're making a logo, and you start by setting type. In Photoshop 6, the letters are Bézier shapes. You can fill those shapes with raster data (such as a scanned image) or apply layer effects to them (such as Emboss or Inner Shadow), and the inner and outer edges of your logo type stay sharp, even if you composite the type with another raster image or scale it in QuarkXPress (see "It's a Vector, It's a Raster!").

**Tons of Transparency** The debut of vectors in Photoshop also means you can drag line art from Illustrator or Macromedia FreeHand into Photoshop and make it transparent so you can see other layers behind the line art. And because Photoshop can now retain the sharp edges you used to find only in vector drawing programs, we may see many more documents laid out in Photoshop (see "Words, Words, Words" below).

But what really blows my mind is Photoshop 6's ability to place semi-transparent raster data on top of vector shapes. For example, you might be working on a magazine cover with a raster photo of a sports figure partially

overlapping the crisply rendered vector title of the magazine. In previous versions you had to make a clipping path, and the athlete's hair wouldn't blend in with the type. Now, to reach this publishing Holy Grail, you just do some tweaking in the Layers palette.

**Still Basic** But don't throw away Illustrator or FreeHand yet. Photoshop's rectangle, oval, pen, and polygon/star-burst tools are basic—not nearly powerful or intuitive enough to replace a full-fledged illustration program. For example, there's no easy way to mirror, layer, or run vector effects on the paths.

Of course, you can drag and drop artwork between Photoshop and either Illustrator or FreeHand, but I'd like the ability to drag headlines from QuarkXPress or InDesign into Photoshop. Well, maybe next year.

## Words, Words, Words

Photoshop's weak type handling has long been an embarrassment, so Adobe overhauled the whole thing, building a type engine that almost rivals InDesign's. You can now type text directly on screen (instead of in a cumbersome dialog box), and the new Character and Paragraph palettes let you adjust formatting such as kerning, paragraph alignment, and

**Belly Up to the Options Bar** The Options bar not only lets you adjust the settings for whatever tool you're using, it also replaces the Brushes palette, making it easier than ever to choose a brush size **A**.

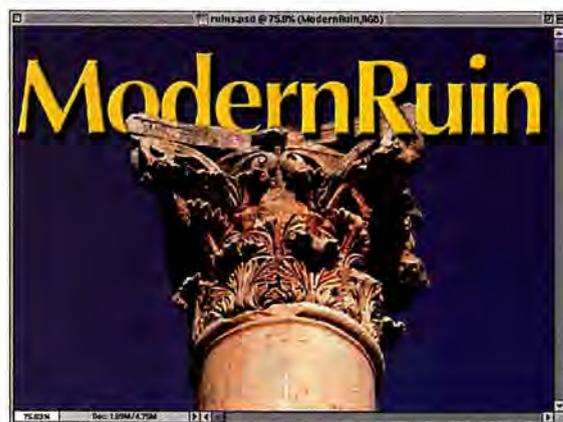
even hyphenation. Following in InDesign's footsteps, Photoshop now has a Multi-Line Composer, too, with a paragraph justification algorithm superior to QuarkXPress's.

**Editable Warps** In some ways, Photoshop's text tools surpass those of QuarkXPress and InDesign. You can stretch, twist, and curve your text into wavy fish eyes while keeping it editable. You can apply effects such as drop shadows, inner shadows, and embossing, and your text is still editable. Best of all, if you save your images as EPS, DCS, or PDF files, the text outlines remain vectors, so you get a crisp edge when you print to a PostScript printer or open your file in Adobe Acrobat (see "Photoshop 6 Throws Type for a Curve").

Realistically, though, because of the way Photoshop saves the text to an EPS file (turning it into long, complicated PostScript paths that can clog a printer's RIP), you should use this vector type feature only with small amounts of text, perhaps one or two words. This limitation—and the fact that you can't import or export text—means Photoshop won't replace your page-layout application anytime soon.

## Loads of Layer Tools

Photoshop 5 had a perfectly functional Layers feature. Photoshop 6 leapfrogs 5 by including *layer sets* (folders in which you can group layers) and fill layers that can fill a layer with a solid color, a gradient, or a pattern. A new adjustment layer, called Gradient Map, actually maps



**It's a Vector, It's a Raster!** Photoshop lets you add true vector (outline) type to your images and even styles such as Emboss and Drop Shadow. Here, the bitmapped image not only sits on top of vector type—but also blends in using semitransparent antialiasing.

the colors of a blend to the colors in your image—a fantastic way to colorize your picture quickly or create psychedelic oddities (see “A Horse of a Different Color”).

Given Photoshop’s new penchant for vectors, perhaps it’s not surprising that you can use vector artwork as a layer mask. Do you want a particular image to show through your logo? Just drag the logo from FreeHand or Illustrator to Photoshop as a path (hold down the **l** key while dragging), then click twice on the Add Mask button in the Layers palette. The first click adds a regular layer mask; the second click adds the vector mask.

**Interface Improvements** The Layers palette is more powerful, and its interface is more obvious. It offers four different ways to lock a layer, the ability to color-code layers (this is especially helpful if you want to see all the layers in a set at a glance), and a pop-up menu approach to applying layer styles such as Drop Shadow, Emboss, and Color Overlay.

When you want to use several layer styles together repeatedly, you can save them as a group in Photoshop’s new Styles palette. Perhaps your Web buttons always have a certain embossing with a certain texture, or your text is always a specific color with a particular amount of glow around it. Just create the style once, and then save it in the palette. I hope future versions incorporate layer styles for filters and adjustment layers as well.

## Color Me escii720.pfl

Nothing the folks at Adobe can do will make color management a pleasant experience. Designers who value predictable color are likely to use device profiles to get consistent color

for scanners, monitors, ink-jet printers, and final press output. These profiles are a big step in the right direction, but they’re still no fun to use. Photoshop 6 goes a long way toward lessening the pain.

**Color Spaces** In a move that’s making service bureaus cheer, Photoshop now gives each image its own working space, so you can keep an sRGB image open at the same time as an image in the Adobe RGB space. (In Photoshop 5, all documents had to conform to one user-defined space.)



Photoshop 6 also shows you what profile (if any) is embedded when you select Document Profile from the pop-up menu in the lower left corner of the document window.

**Better Soft-Proofing** One of the most important benefits of color management is the ability to proof your images on screen (called *soft-proofing*). As more files are printed direct to plate, making a conventional printed proof impossible, soft-proofing is becoming an essential feature. Photoshop 6 has bolstered its soft-proofing capabilities significantly, especially in letting you simulate how your image would look on newsprint or printed by an RGB ink-jet, or by any other printing device

for which you have a profile.

Perhaps best of all for color novices, Adobe has combined all the color-preferences dialog boxes into one and offers several presets. Advanced users (and anyone who wants great color badly enough to learn what the knobs and buttons do) can skip the presets and customize the settings—especially the CMYK working space’s settings for dot gain, ink setup, and so on.

**Don’t Forget to Profile** No matter what Adobe does with its color-management tools, however, only you can take one of the most important steps: creating a custom monitor profile for your screen. There’s no way to see accurate color without this profile. (You can use Adobe Gamma to create a reasonable one quickly, or a commercial suction-cup device to make a great one even faster.)

## A Web of Tools

According to conspiracy theorists, webs bind the CIA, FBI, and NSA. Adobe participates in a web, too—the Web. The company’s Web tools are growing more powerful. Its ImageReady (now at version 3) continues to ship with Photoshop, and it helps you create rollovers, image maps, and GIF animations. However, the distinction between the two programs is becoming clouded. Photoshop 5.5 introduced ImageReady’s Save For Web dialog box to Photoshop users; now the Slice tool appears in Photoshop 6’s Tool palette, too.

Image slicing lets you cut an image into portions that a Web browser can later piece together with an automatically generated HTML table. This way, you can save some

*continues*

slices as JPEGs and others as GIFs to maximize file compression. In the Slice Options dialog box, you can assign <alt> tags, URL links, and even message tags, which show up at the bottom of the browser when you roll over the slice area.

**Automatic Slices** Even better, just leave each section of your Web graphic (type, images, and so on) in its own layer and rely on Photoshop 6's Autoslice feature. That way, when your art director tells you to move all the buttons from one side to the other, the slices update automatically.

## Liquid Assets

Liquify is a completely new ability that lets you push, warp, twirl, and expand an image as if it were fluid. You can edit images in ways that were formerly almost impossible without using Kai's Power Tools plug-ins (now KPT from Corel). But you should use Liquify with great restraint (at least in a professional environment).

Let's say you have an image of a bowl of raspberries, but a few don't look as juicy as you'd like. You could use the Bloat tool in the Liquify dialog box to plump them up, but it's easy to bloat too much and make the whole picture look unrealistic. Fortunately, the Freeze tool lets you apply the effect to one specific part of an image while leaving the rest of the image alone.

The Liquify feature is clearly a work in progress. You can access it only through a separate dialog box. You can't zoom in and out in the dialog box, nor can you use Bézier curves for precise adjustments. And Liquify can't change vector data.

## Output Options

Photoshop 6 lets you save TIFF and PDF images with layers, spot colors,



**A Horse of a Different Color** Gradient Map adjustment layers offer a great way to map a blend to an image. Here the masked effect covers only part of the graphic.

and other "extra" data. Previously, you needed third-party QuarkXTensions to import a TIFF image into QuarkXPress or InDesign and then open it in Photoshop to still see your layers, spot colors, and so on. But while maintaining this information is sometimes helpful, there's a good argument for keeping 100MB layered Photoshop files separate from their much smaller, flattened TIFF or EPS versions, especially when you're sending files to a service bureau. Ultimately, your workflow needs and the size of your removable media should dictate what's reasonable.

Adobe has also strengthened Photoshop's support for the Acrobat PDF file format. In previous versions, Photoshop's PDF files were raster-only. Photoshop 6 can include vector shapes, text, and embedded fonts. You can also tell Photoshop to convert all text to outlines, though I don't recommend it—typically your file size gets enormous.

## The Last Word

Photoshop 6 includes a torrent of other improvements, including better connection with GoLive 5 (for instance, drag-and-drop images you can optimize in GoLive); the ability to add annotations to an image (these

are also visible in Acrobat if you save the file as a PDF); a Print Options dialog box (for previewing before printing); the chance to save Photoshop actions as batch processes called *droplets*; and some extremely tweaky and technical tools to squeeze out every last bit of fat when you're saving Web graphics.

Of course, none of this stuff comes cheap. The upgrade alone is expensive (\$199 from Photoshop 5.X), not to mention the cost of buying more RAM and a larger hard drive. While the minimum requirements aren't too cumbersome—Photoshop 6 requires Mac OS 8.5 or later, at least 64MB of RAM, and hundreds of megabytes of hard-drive space—realistically you want more, faster, stronger, better. For the small-time user, Photoshop 6 might be like using a rock drill to open a walnut. However, if you work in a professional environment (either prepress or Web), the upgrade is a no-brainer. I may not fully understand Adobe's wicked intrigue, but now that I've worked with Photoshop 6 for a while, I'm happy to enter its new territory. **m**

DAVID BLATNER is a coauthor of the upcoming *Real World Photoshop 6* (Peachpit Press).



# Organize with Entourage

## Save Time with Microsoft Office's New Personal Information Manager

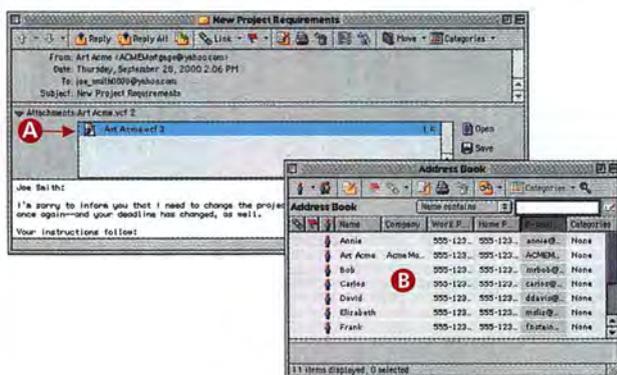
Whether you're managing a small business, a home office, or a household, a well-organized schedule and punctual correspondence can save you time—and money. Microsoft's Entourage (800/426-9400, [www.microsoft.com](http://www.microsoft.com)), the expanded version of Outlook Express that's part of Microsoft's Office 2001 software suite (\$499), is a complete personal information manager that can help keep you on top of even the most demanding agenda. You can combine its many features—E-mail, Address Book, Notes, Tasks, Calendar, and Reminders—to streamline your workflow and organize your life.

Entourage and other Office applications are connected, so you can access information across programs. To increase efficiency, you can create links between e-mail messages, your Entourage Calendar, and Office documents. Entourage's Reminders boxes appear in whatever Office application you happen to have open, and its Address Book is accessible from any program in the Office suite.

Say you're working on a project for a new—and demanding—client (we'll call him Mr. Acme of Acme Mortgage Company). He's changed your project's specifications three times and pushed your deadline up twice. Entourage's integrated information-management tools can help you get the project done exactly as he wants it—and exactly *when* he wants it. Our step-by-step demonstration of Entourage's abilities will help you put this program to work. **m**

**1 Create a New Address Book Entry** A new client should have a new Address Book entry. Entourage allows you to create links between contacts' Address Book entries and their e-mail messages, and you can access Address Book contact information from within Word.

If Mr. Acme uses Entourage and has included a .vcf attachment **A**—a contact-information file compatible with contact managers—in his message to you, that file is his Address Book entry. Simply import it to Entourage's Address Book by opening the Address Book window **B** (⌘-2) and dragging the file from Mr. Acme's message into it.



The result is an entire Address Book entry for Mr. Acme **C**, complete with his address, e-mail, phone number, and photograph (if he's included it)—no typing required.



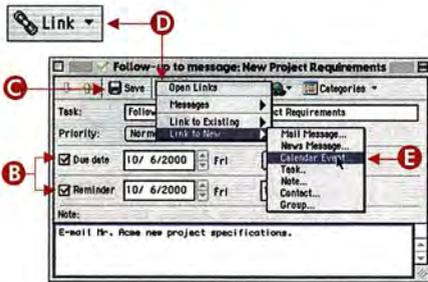
If Mr. Acme hasn't included a .vcf file, or if he's using a different e-mail program, just double-click on his name in the From line at the top of his message to create an address book entry for him.

# 2

**Create Reminders** If you need to remind yourself to reply to an important e-mail message, you can flag the message for follow-up. You can also create a recurring entry in Entourage's Calendar to remind you to work on a project.



Click on the flag icon **A** at the top of Mr. Acme's message, and choose **Flag For Follow-up** from the pull-down menu that appears. The result is a new task—simply defined, a to-do item—linked with Mr. Acme's e-mail message.



Enter the day you're supposed to e-mail your reply in the **Due Date** and **Reminder** fields **B**. An on-screen Reminders box will appear on that date, and the task will be visible in your calendar. Click on **Save** **C**. Click on the **Link** icon **D** and from the pop-up menu choose **Link To New: Calendar Event** **E**.



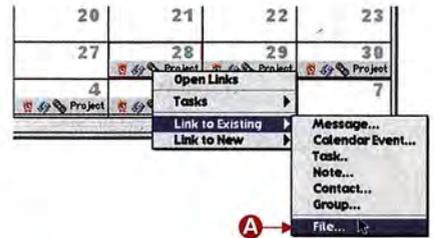
Make sure **All Day Event** is selected **F** and enter the current date **G**. Make the calendar event recur daily for a week by clicking on the **Recurrence** button **H** and then selecting the appropriate information in the window that appears. Save the event.

Your calendar (see 4) now shows the event—and you'll get a reminder every day until your deadline, whenever you open any Office application.

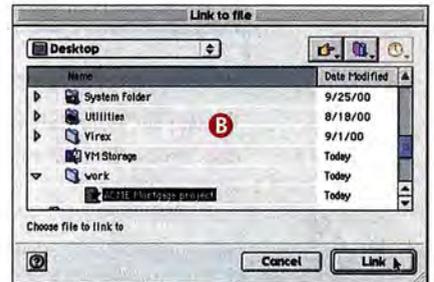
# 3

**Link to Your Project** Links can connect Entourage items to files in any application. In this case, we're linking a Calendar Event to a Word document.

In the Calendar window, click on the link icon in the calendar event, and choose **Link To Existing: File** **A**.



In the **Link To File** dialog box **B**, select your Word document.



Now all the pieces are linked together: Mr. Acme's e-mail message with the instructions you will need is linked to the task; the task is linked to the calendar event; and the calendar event is linked to the Word document. You can navigate easily among these linked items.

continues

# 4

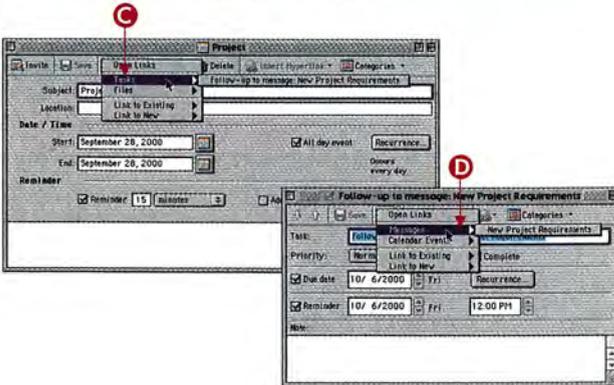
**Get to Work** When a Reminders box appears on your screen, simply use the links you've created to gather the elements you need to work on your project. There's no need to search through all of your files and e-mail messages.



When you see the Reminders box for the calendar event, click on **Open Item** **A** to open that calendar event's window.



To edit your Word document, click on the link icon, choose **Files** **B**, and select the file you want to work on.



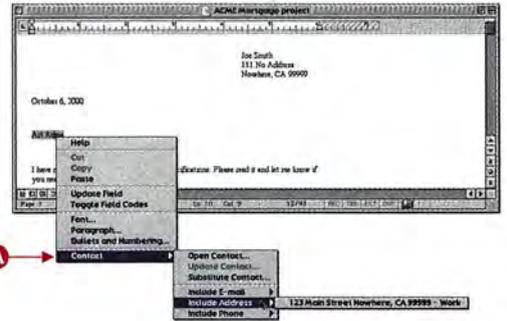
To access Mr. Acme's original instructions for the project, which are in his e-mail message to you, click on the **Link** icon again and open the task from the **Tasks** menu **C**.

In the task's window, click on the link icon and choose Mr. Acme's original message from the **Messages** menu **D**.

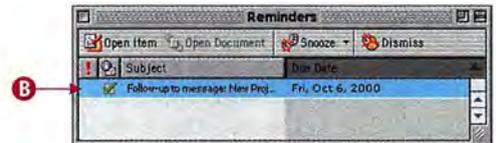
# 5

**Wrap It Up** As you're working on your project within Word, you have direct access to Entourage's Address Book, making it easy to personalize your document without having to look up or retype contact information.

Start typing Mr. Acme's name. Word offers to autocomplete it for you, based on Entourage's Address Book entry. Press the tab key to accept.



If you've entered Acme's snail-mail address in your Address Book, you can add it to the letter just by control-clicking on his name and choosing it from the **Contact** menu **A**.



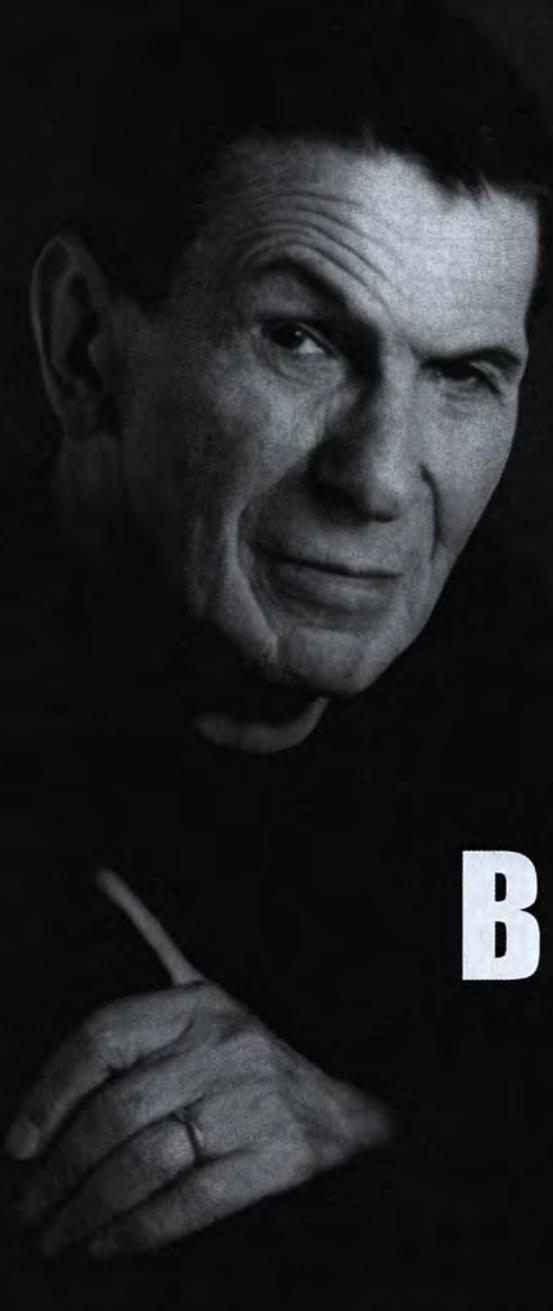
On the due date, the task's reminder to send Mr. Acme your project will appear **B**. Click on **Open Item** to open the task. In the task window, follow the message link to open Acme's message as you did in step 4.



In the message window, click on **Reply** (**⌘-R**). Type your reply, and then click on the paperclip icon **C** (**⌘-E**) to attach your document.

Click on the **Send Now** button **D**, and you're all done.

**SURFING THE INTERNET  
SHOULD BE EASIER  
THAN**



**navigating  
*the*  
BERMUDA  
TRIANGLE**

**G**etting where you want to go on the Internet can feel like being lost in the Bermuda Triangle. But now there's Network - a system of Internet keywords that you can use for a more powerful, personal online experience.

Networks let you bypass useless Web pages and illogical search results to go directly where you want to go on the 'net.

"If you're in search of a bold new way to explore the wonders of the Web, Networks can help. Just go to [www.Network.com](http://www.Network.com) to learn more." - Leonard Nimoy

**Network**<sup>®</sup>

Making the Internet human.

OTC: NTWD

Circle 93 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

[www.network.com](http://www.network.com)

# Starving for Storage?

Add a Second Hard Drive—  
All It Takes Is One Screwdriver  
and Five Minutes

Remember when a gigabyte seemed like an obscenely huge amount of hard drive space? That was before the days of digital video editing, 3-D animation, and CD-quality audio production—tasks that can burn through gigabytes in no time. Given today's data-intensive tasks, even the 12GB hard drives in some of the first-generation G3s and G4s seem puny.

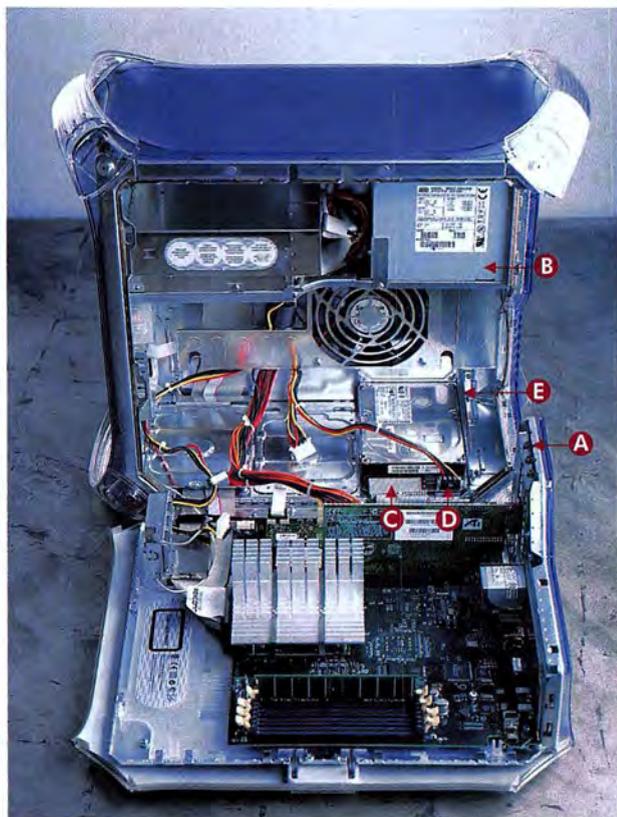
Fortunately, it's easy to add another hard drive to these Macs, giving you plenty of additional storage. Installing a second internal drive on your Mac may seem like more trouble than simply plugging in an external FireWire or USB drive, but consider the advantages: internal drives cost at least \$100 less than their external counterparts, you won't have to make room for another peripheral on your already crowded desktop, and you won't have to untangle any additional cords and cables.

Yes, installing an internal drive will mean poking your fingers inside your Mac's case, but relax—with Apple's more-recent case designs, this is a pretty painless process. Adding a second ATA drive of 20, 40, or more gigabytes, as described in the steps that follow, should take only a few minutes. **m**

JOSEPH SCHORR is a coauthor of the soon-to-be-released *Macworld Mac Secrets*, sixth edition (IDG Books Worldwide).

# 1

**Remove the Original Drive** To install your new hard drive, all you have to do is add it to the carrier that houses your original drive. But first you must remove the carrier from your Mac.



PHOTOS BY MARK JOHANN

After you've unplugged your Power Mac, open its case using the latch on the side panel. Ground yourself by touching the metal on the PCI port covers **A** or the power supply box **B**. (Once you've done this, don't go walking around the room in your socks; stay put until you're done.)

Unplug the ATA **C** and power cables **D** from the internal drive. The ATA ribbon cable should detach easily. The power cable (the one with four wires) may offer resistance. Pull it firmly, but don't yank it. If necessary, use needle-nose pliers to grab the rectangular plug and pull it from the drive.

Remove the drive carrier **E**, which in most Power Mac G3s and G4s is situated in the third drive bay (closest to the rear of the computer, on the floor of the case). Unscrew the single Phillips screw from the front of the carrier and lift the carrier out.

# 2

**Configure the New Drive** Configuring your new drive requires moving or removing jumpers (small square pieces of plastic) from the side panel of your drive. The exact configuration depends on how you'll use the drive, the type of drive, and the type of Mac into which you're installing the drive.



First, locate the small array of tiny pins on the side panel of your drive, between the ATA and power jacks. Some of the pins may already be connected to one another by one or more jumpers **A**.

Specific configuration instructions come with hard drives—and may even be printed on the drive. For example, using your drive as a primary drive in your system may require a jumper on the first pair of pins only. Using the drive as a secondary drive may mean removing all the jumpers.

You can use a sewing needle or a pair of small needle-nose pliers to pop off unneeded jumpers. Once the jumpers are properly set, you're ready to install the drive.

# 3

**Attach the New Drive** Your next task is to screw the new drive to the carrier you removed in Step 1. The new drive should be locked into place just above the original hard drive.



Slip the new drive into the upper portion of the carrier so that it piggybacks on the original drive. On the sides of the drive you'll see four screw holes that correspond to four holes **A** in the carrier itself. Use the screws that came with your drive to attach the drive to the carrier through these holes.

When you're done, the new drive will be attached above the original drive. It's normal for the tabs on the drive carrier to bend inward as you're tightening the screws, but make sure not to overdo it.

**TIP:** Make sure that when you buy your drive, you specify that you'll be adding it to your system as a secondary drive and that you'll need the extra screws to attach it to the carrier. Otherwise, you might not get them with the drive.

continues

# 4

**Hook It Up** Next is the simple matter of screwing the two hard drives into the drive bay and plugging the appropriate cables into your original drive and the newly installed one.

# 5

**Initialize the New Drive** Unless your drive came from the store preformatted for the Mac, you won't see the drive on your desktop when you start up the computer. You must initialize it so that your Mac can recognize it.

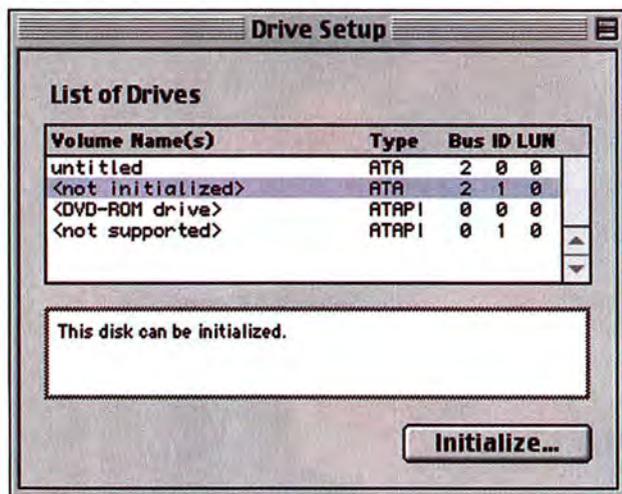


Slide the whole drive carrier into the computer case, lowering the back of the carrier in first **A**. Two metal tabs on the bottom of the carrier line up with slots in the bottom of the computer chassis. Slide the tabs into the slots, and then lower the front of the drive carrier into place. Attach it to the chassis using the Phillips screw you removed earlier.

You must reattach the ATA and power cables to both drives. The ATA ribbon cable has two plugs **B**, one for each drive. Align each plug with a drive and attach them to the corresponding ATA ports. Do the same with the power cables. Push all the cables on firmly. Close the case, plug in your Mac, and start it up.



The new hard drive, in place and plugged in.



Most drives come with their own utility software for formatting a new hard drive, but you can also format a drive with the Drive Setup software that came with your G3 or G4. (If you can't find Drive Setup on your system, you'll find it on the system software CD that came with your Mac.)

Launch Drive Setup. You'll see your new drive listed as "not initialized" in the Drive Setup window. Simply click on the Initialize button to format the drive as a Mac disk. Initializing the disk takes only a few seconds. As soon as the process is done, your new disk will mount, ready for you to fill. And you will fill it—sooner than you think.

"If someone tells you  
it takes only 5 minutes  
to install up to 240GB  
on the network,  
DON'T BELIEVE IT."



#### Ease of Use

- Auto-sensing 10Base-T/100Base-TX Ethernet
- Automatic recognition of network types/clients
- Supports DHCP, BOOTP and RARP
- Configuration via Web browser

#### Features

- Embedded OS (unlimited user license)
- Pentium-class processor
- Ultra ATA hard drives
- RAID 5, 1 or 0
- Easily supports 100 or more clients

#### Compatibility

- Simultaneous support for Windows 2000, NT, NetWare, UNIX, Linux and Macintosh networks and clients across TCP/IP, IPX, NetBEUI and AppleTalk networks

#### Network Backup

- Compatible with Windows and NetWare backup software, including Veritas Backup Exec, Computer Associates ARCserveIT and Microsoft backup software for Windows 95/98/NT/2000

#### Network Security

- Integrates with Microsoft Domain Controllers or local user list

#### Guarantee

- Unconditional 30-day money-back guarantee, plus 3-year parts and labor

#### Price (MSRP)

Model 4100 (240GB).....	\$4,499
Model 4100 (120GB).....	\$2,999
Model 2000 (60GB).....	\$1,699
Model 1000 (30GB).....	\$799
Model 1000 (15GB).....	\$499

"I did it in 43.55 seconds."

Don Knisley, Network Engineer, US Air Force

Snap Servers are engineered for one purpose: file sharing. That's why Don could have a Snap Server 2000 up and running on a LAN in 43 seconds! "If I had the choice of installing an NT server for network storage or a Snap Server, I'd pick the Snap Server," says Don. "It's fast, easy and the browser configuration tool is very intuitive." Visit [www.snapserver.com/install](http://www.snapserver.com/install) to read Don's story and virtually install a Snap Server yourself.

For a fraction of the cost of a file server, a Snap Server easily adds up to 240GB to your LAN – ideal for desktop publishing, multimedia production or as a graphics/image library. According to a recent PC Data report, 4 out of 5 workgroup network attached storage (NAS) servers sold are Snap Servers and they are also the most awarded NAS products on the market today. So go with the Industry Standard. Snap Server.



Supports  
Macintosh right out  
of the box!

**Snap!**  
server™

The Industry Standard.

[www.snapserver.com](http://www.snapserver.com)  
1.888.343.SNAP



# Slide Show to Go

## Turn Your PowerPoint Presentations into QuickTime Movies

Your company, WidgetWorld, just invented the hottest new gadget on the market, and now it's up to you to attract some rich investors. You've spent hours in Microsoft PowerPoint perfecting your sales presentation—complete with fading transitions, captions, and narration—and now you're ready to send your pitch off to potential moneybags across the country. Unfortunately, you don't know whether they actually have PowerPoint on their computers. Of course, you *could* save your work as a Web presentation that would display in their browsers, but this means losing attractive motion effects such as slide transitions and necessitates clicking from one slide to the next.

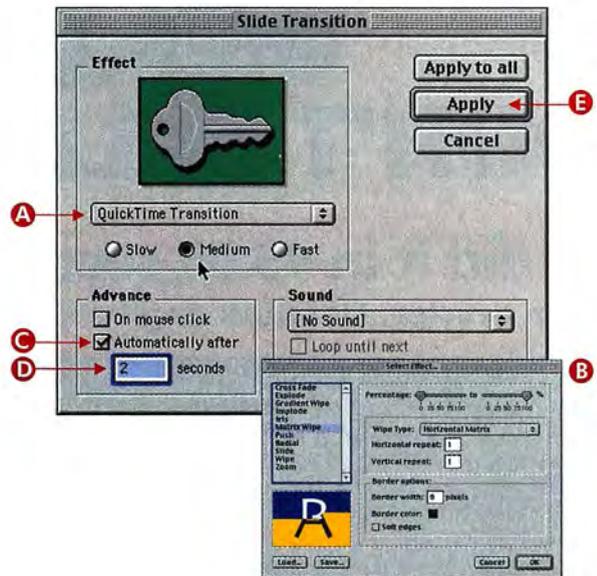
There is another option. The version of PowerPoint in Microsoft's Office 2001 suite lets you save your presentations as QuickTime movies. In contrast to the motionless slide show you'd get with a Web presentation, QuickTime movies can include a soundtrack and transitions such as fades, wipes, or scrolling. And since QuickTime movies run equally well on Macs and PCs, chances are everyone can enjoy the show. Here's how to transform your PowerPoint presentation into a fluid QuickTime movie. **m**

STEVE SCHWARTZ ([www.mediacity.com/~sschwartz](http://www.mediacity.com/~sschwartz)) is a coauthor of the official guide to Office 2001, *Running Microsoft Office 2001 for Macintosh* (Microsoft Press, 2000).

**1 Modify Your Presentation** Although you can turn any PowerPoint presentation into a QuickTime movie, to get the best results, you'll want to design your movie keeping a few limitations in mind.

PowerPoint enables you to generate two types of movies: sprite-based (these support text animations, working hyperlinks, and PowerPoint transitions) and frame-based (these offer only QuickTime transitions). Which one you create depends on which features are higher priority for you. Since QuickTime transitions result in the smoothest playback, we'll focus on creating frame-based QuickTime movies. (Note that if your presentation already contains animations, you don't need to remove them for frame-based movies. They will appear as a static image.)

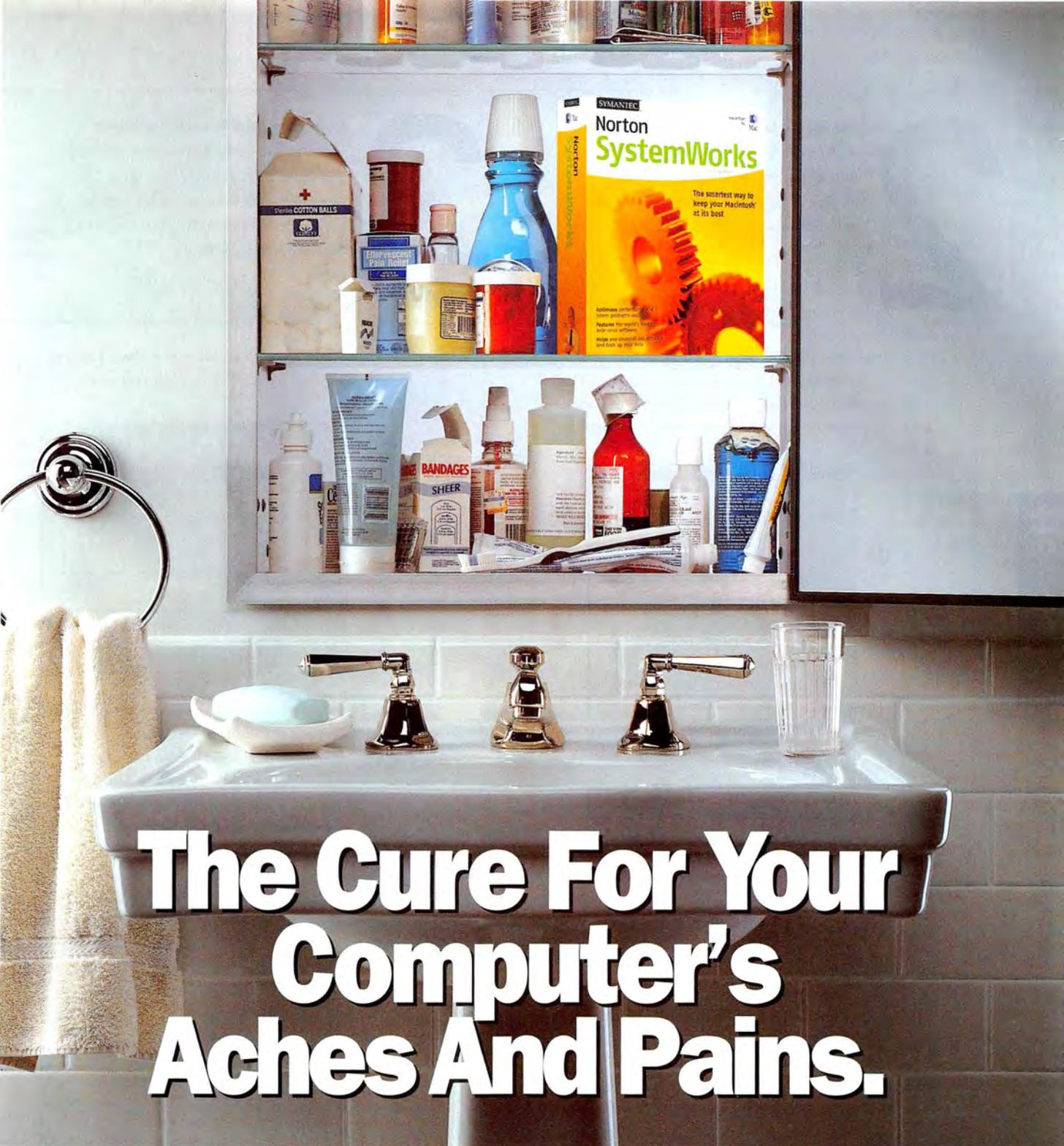
To set QuickTime transitions, select each slide, one at a time; open the Slide Show menu; and select Slide Transition.



In the Slide Transition window, choose Select QuickTime Transition from the pop-up menu **A**. A new window **B** appears, offering a choice of transitions and display options. Click on OK when you've finished making your choices.

Back in the Slide Transition window, set how long each slide will play by selecting the Automatically After option **C** and specifying the number of seconds **D**. Click on Apply **E**.

continues



# The Cure For Your Computer's Aches And Pains.

**H**as your Mac<sup>®</sup> seen healthier days? Maybe it caught a bug. Is badly congested. Or suffers from hardware headaches. Fortunately, there's a simple remedy for such ailments.... Norton SystemWorks<sup>™</sup> for Macintosh<sup>®</sup>.

Norton SystemWorks gives your entire Macintosh a complete check-up. Then, cures what ails it. Plus, it inoculates your computer against

viruses, while preventing it from getting sick in the first place.

So to keep your Mac out of the infirmary, here's our diagnosis: Take the all-in-one cure, Norton SystemWorks for Macintosh. You'll find it over the counter at your nearest software store, or visit [www.symantec.com/mac](http://www.symantec.com/mac).

Compatible with Mac O/S 8.1 or greater.

Circle 126 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

Symantec and the Symantec logo are U.S. registered trademarks of Symantec Corporation. Norton SystemWorks is a trademark of Symantec Corporation. Mac and Macintosh are registered trademarks of Apple Computer, Inc. Copyright © 2000 Symantec Corporation. All rights reserved.

**SYMANTEC**

# 2

**Set Movie Options** Now you're ready to turn your presentation into a QuickTime movie. The settings you choose in the Movie Options dialog box determine the movie's output quality and features.

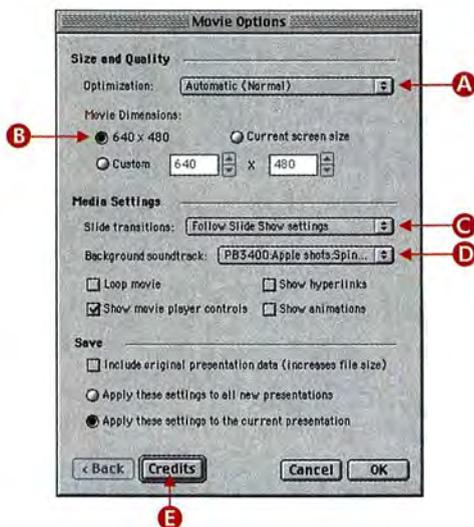
# 3

## Generate and Review the Movie

Once you've chosen the export settings, you're ready to create your movie. (To see samples of finished movies, go to [www.macworld.com/2001/01/howto/powerpoint\\_extra.html](http://www.macworld.com/2001/01/howto/powerpoint_extra.html).)

Open the File menu and select Make Movie. In the Save dialog box that appears, click on the Adjust Settings radio button; then click on Next. This opens the Movie Options window.

When you click on OK in the Movie Options window, the Save dialog box reappears.



Before you click on Save, make sure you click on the Append File Extension check box (A). Adding a .mov file extension not only ensures that Windows users will be able to play the movie, but also prevents you from overwriting the original presentation by mistake. Click on Save to generate the movie.

First choose the optimization level (A). Optimizing for quality will result in smooth playback but a large file. If you plan to put your movie online, however, you'll want to optimize for size. You can increase Movie Dimensions (B) beyond the traditional 640 by 480 pixels, but you may get jumpy playback.



You can now view the movie in QuickTime Player (B) or another QuickTime video application. Since PowerPoint doesn't let you preview your presentation as a QuickTime movie before you export, you may need to return to PowerPoint to fully synchronize your slide transitions and soundtrack and then repeat the export process.

Since you specified your individual slide transitions in step 1, choose Follow Slide Show Settings (C) under Media Settings. (For a sprite-based movie with hyperlinks or text animations, you'll instead need to set Slide Transitions to None, and enable both the Show Hyperlinks and Show Animations check boxes.) For the Background Soundtrack (D), choose any QuickTime-compatible audio file, such as an MP3, WAV, or AIFF file.

Click on the Credits button (E) to add identifying information, such as a cast list, that will appear when viewers choose Get Info in QuickTime Player.

# FireWire with a DIFFERENCE



VST's line of portable USB, FireWire® and PowerBook® peripherals represent the ultimate in performance, ultra-compact, light-weight packaging, and plug-and-play ease of use.

## Taking FireWire beyond the limits

VST's New FireWire RAID Array packs 120GB into the smallest possible space, supports RAID levels 0 and 1 simultaneously, and even operates on a PowerBook Li-Ion battery for up to three hours of on-location use.

VST's New FireWire RAID Array is a powerful tool for demanding professional applications, such as video and audio broadcasting, where large amounts of digital video, graphics and music must be captured and manipulated in real time for storage or editing. For performance and high capacity in FireWire storage VST FireRAID™ is the solution!

Visit us at [www.vsttech.com](http://www.vsttech.com) to learn more about this and other innovative products designed to simplify the digital lifestyle.



Special Offer:  
Sound Jam MP Free  
& Aladdin Software  
included on all Ultra-Thin Drives.

### FireWire Hard Drive

Our amazing, FireWire hard drive provides the world's smallest/fastest portable drive with capacities from 3GB to 30GB.

### FireWire/USB Hard Drive

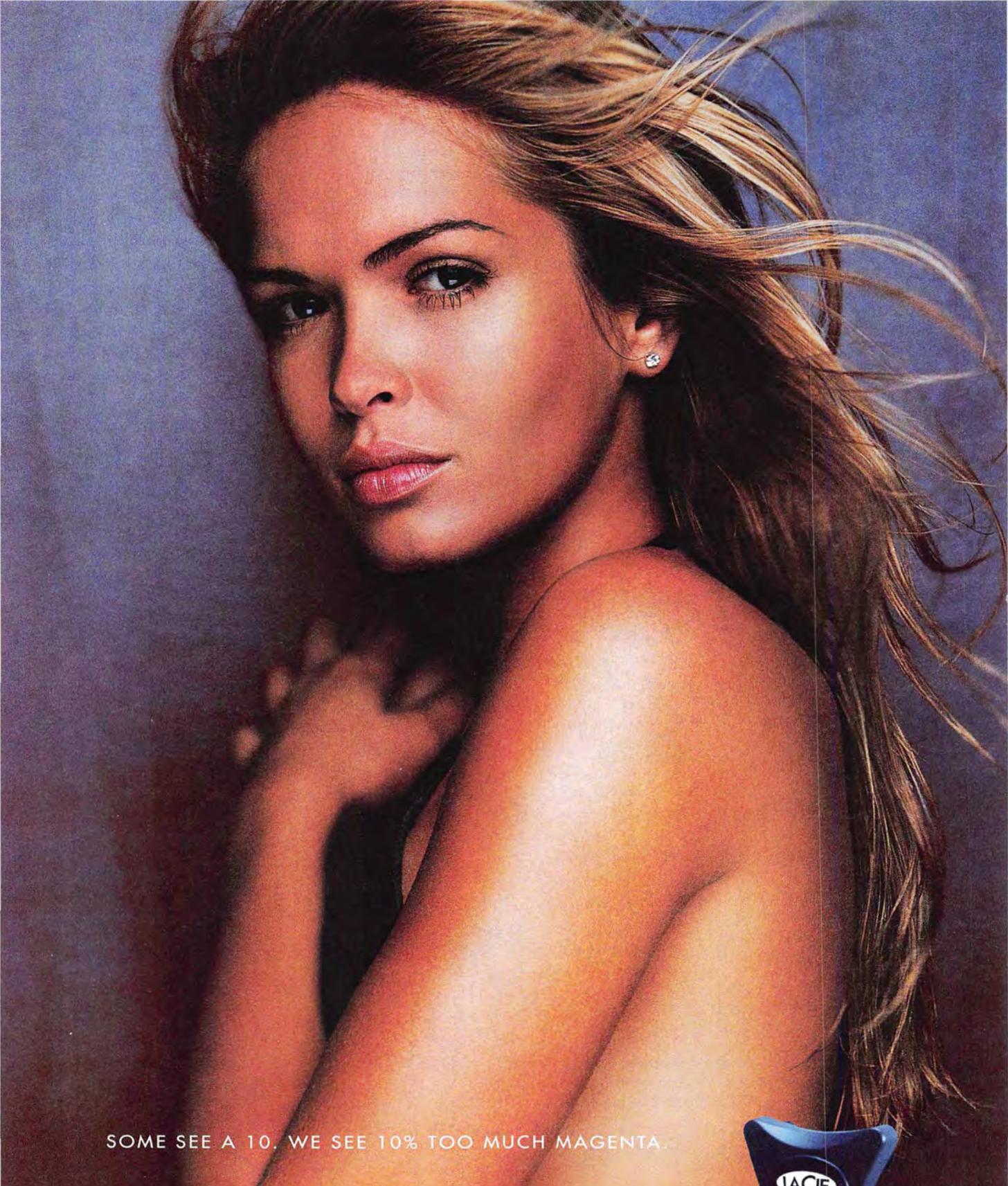
Our combo drive includes FireWire & USB ports for maximum compatibility with capacities up to 30GB.

### Full Height FireWire Hard Drive

With sizes available up to 75GB, the Full Height FireWire Hard Drive is the ideal solution for those looking for high speed desktop storage.

### UltraTek/66

An instant RAID solution for your G4 or G3. SoftRAID provides up to 66MB/sec data transfer with 60, 90 & 150GB of storage.



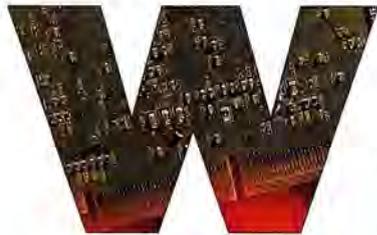
SOME SEE A 10. WE SEE 10% TOO MUCH MAGENTA.

The LaCie Blue Eye™. Enabling a unique two-way connection between the LaCie electronblue™ and the CPU, it's the monitor calibrator that ensures the most accurate, consistent colors and the widest dynamic range possible.



Made for ideas.

# Mac 911



We're moving wholly into the twenty-first century, so I'd like to acknowledge that the year responsible for propelling *Also sprach Zarathustra* back into the charts after a 73-year hiatus also marks the 32nd anniversary of *Sesame Street*. To commemorate this momentous event, we celebrate the letter *S* with questions concerning slide shows, startup disks, and soundtracks.

## Slip-Sliding Away

Our first sibilant inquiry comes from Jeff O'Dea, who e-mails from Japan to tell us he would like to organize his digital photos into a slide show he can display on his Mac. I have several suggestions, so let's categorize them by price: better-than-cheap, cheap, and not-so-cheap-unless-you-already-have-a-copy.

My better-than-cheap solution costs exactly the price of one postcard and a stamp. Not only is Aaron Giles's JPEGView 3.3.1 ([www.macdownload.com](http://www.macdownload.com)) a great utility for viewing JPEG files—the graphics format used by digital cameras—but it also lets you create slide shows in which pictures flip at preset intervals or whenever you press a key on your Mac's keyboard.

My cheap solutions comprise three shareware programs and two commercial applications. The shareware programs are OneApp Slide Show (\$25), from OneApp Software ([www.oneappsoftware.com](http://www.oneappsoftware.com)); GraphicConverter (\$30), from Lemke Software ([www.lemkesoft.com](http://www.lemkesoft.com)); and iView Multimedia (\$25), from Script Software ([www.i-view-multimedia.com](http://www.i-view-multimedia.com)). Offered at a similar price is Totally Hip Software's ([www.totallyhip.com](http://www.totallyhip.com)) commercial slide-show application, LiveSlideShow (\$30). Apple's iMovie2 ([www.apple.com/imovie](http://www.apple.com/imovie)) rounds out the group with a list price of \$50.

OneApp Slide Show and LiveSlideShow were designed specifically to create slide shows; they allow you to add goodies such as soundtracks and transitions.

iView Multimedia is a terrific multimedia asset-management utility with slide show capabilities. And GraphicConverter, an indispensable graphics-conversion utility, also contains some advanced slide-show functions.

Using iMovie2 you can import still images, determine how long each image appears on screen, insert transitions between images, and set the whole mess to music. Best of all, you can play the slide show on any Mac or PC outfitted with a copy of QuickTime Player.

The not-so-cheap-unless-you-already-have-a-copy solutions are Apple's AppleWorks 6.0.4 (\$80; [www.apple.com](http://www.apple.com)) and Microsoft's PowerPoint (\$340; [www.microsoft.com](http://www.microsoft.com)). Although PowerPoint and the presentation component of AppleWorks are intended for more-formal presentations, there's nothing to keep you from using them to stupefy your friends with pictures of your trip to Yellowstone.

## Start Me Up

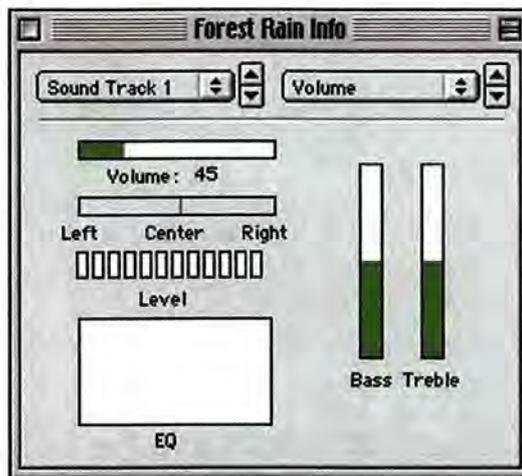
Ken Schneidman, who (perhaps just for the cool cachet) claims to write from Woodstock, New York, would like to create a startup Zip disk for those times when his beloved Mac won't boot. Unfortunately, Ken has a System Folder *continues*

so jam-packed with extraneous gunk that it won't fit on the Zip. He wonders which items to include on such a disk.

Well, Ken, you wouldn't have to worry about getting caught in this particular devil's bargain if you had a recent copy of Iomega's Tools application. Iomega has done most of us a favor by adding a Rescue Disk component to its Tools utility. You just insert a Zip disk and click on the Rescue Disk icon, and Rescue Disk installs a minimal

System Folder on your Zip disk. Rescue Disk will also install a copy of Apple's Disk First Aid or, if you ask the program to do so, transfer a repair utility from your Mac to the Zip disk. If you choose to install a third-party repair utility, however, make sure to include any necessary support files; recent versions of Norton Utilities require the Norton Shared Lib extension, for example. You can find your copy of Iomega's Tools (part of the free IomegaWare) at [www.iomega.com/software/featured/ioware25\\_mac\\_reg.html](http://www.iomega.com/software/featured/ioware25_mac_reg.html).

While everything may be stardust and golden for Ken, others with brand-new, Zip-less Macs—the new iMacs, Cube, and Power Mac G4s—may require a different kind of rescue disk. As we go to press, you can't boot these Macs with recent copies of diagnostic and repair utilities such as Symantec's Norton Utilities, AlSoft's Disk Warrior, and MicroMat's TechTool Pro. Although you should be able to purchase a compatible CD-ROM for all these products by the time you read this, users who



**Rainmaker** You can adjust QuickTime soundtracks individually using QuickTime Player's Volume slider.

have a CD-R burner will find it less expensive to simply create a bootable CD-R and copy their diagnostic and repair utility of choice to it.

### Stormy Weather

Finally, Chris Higgins, of Columbia, South Carolina, is interested in combining three discrete sound effects—rain, wind, and thunder—to create the perfect storm in a QuickTime movie. "Can it be done?" that Chris inquires. "Natch," this Chris replies. If you have Apple's

QuickTime Pro (\$30; [www.apple.com](http://www.apple.com)), it's a cinch.

Launch QuickTime Player to create a new movie. From the File menu, choose Import and select one of the sound effects you'd like to hear throughout the soundtrack—the rain effect, for example. If you want the sound to play longer, press ⌘-A to select the sound, ⌘-C to copy it, and ⌘-V to paste that copy at the end of the soundtrack.

Create a new player window and import another sound file—say, the wind sound. Select and copy this wind sound, then select the window with the rain soundtrack. Click on the point within the rain soundtrack where you'd like to insert the wind sound, hold down the option key, and choose the Add command from the Edit menu. The wind sound is now layered on top of the rain sound. Repeat this process to add the thunder sound.

You can change the volume of each sound individually by choosing Get Info from the Movie menu and selecting the first soundtrack (conveniently labeled Sound Track 1) from the left pull-down menu. Next, choose Volume from the right pull-down menu, and adjust the Volume slider up or down (see "Rainmaker"). Do the same for the other soundtracks until you have a pleasing mix. Save the movie, and you're done. ■

Contributing Editor CHRISTOPHER BREEN offers Mac tips and tricks each business day via the Macworld Daily Tips and iTips newsletters. Visit <http://lists.macworld.com> to subscribe.

Share tips and discuss Mac problems with other Mac users in the Mac 911 Forum ([www.macworld.com/subject/mac911](http://www.macworld.com/subject/mac911)). Also send tips by e-mail to [mac911@macworld.com](mailto:mac911@macworld.com). We pay \$50 for tips selected for publication in *Macworld*. All published submissions become the sole property of *Macworld*.

Shareware and freeware mentioned in *Mac 911* is available from the Macworld Online software library ([www.macdownload.com](http://www.macdownload.com)).

## Tip of the Month

**Apple's Disk Copy** allows you to turn off the Verify Checksum option so that the program never goes through this time-consuming process. But with a simple trick, you can decide whether to verify the checksum for each self-mounting image file you mount: just hold down the option key when mounting a disk image, and Disk Copy will skip the verification process.

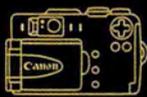
**Remo Del Bello**  
West Hollywood, California

PowerShot  
G1



©2000 Canon U.S.A., Inc. "are you digital yet?", PowerShot, and Canon Know How are trademarks of Canon Inc.

## THE NEXT THING IN DIGITAL PHOTOGRAPHY. PHOTOGRAPHY.



### Digital's Cutting Edge

- High resolution, 3.34 megapixels
- Integrated chip for quicker operation
- 3x optical zoom lens/4x digital zoom



### Control at Every Turn

- Mode Dial features 12 EOS-based picture taking modes
- New Movie Mode with sound



### Adapt Easily with Canon Accessories

- EOS EX-series Speedlite flashes
- A variety of lens converters
- Rechargeable lithium-ion battery

[www.powershot.com](http://www.powershot.com)

Canon KNOW HOW™

# Office 2001

Evolutionary Upgrade to Productivity Suite  
Brings New Application, Welcome Features

## OFFICE 2001

**Overall:**   
**Entourage:**   
**Excel:**   
**PowerPoint:**   
**Word:** 

**Pros:** Tighter integration among applications; many useful new features; more-uniform interface.

**Cons:** No printed or electronic manual; Entourage's calendar needs work; steep upgrade price.

**List price:** \$499; upgrade, \$299

**Company:** Microsoft, 800/426-9400, [www.microsoft.com/mac](http://www.microsoft.com/mac)

## MACWORLD'S BUYING ADVICE:

Although you can find alternatives to all the programs in the Office 2001 suite, they won't benefit from the level of integration this package offers. If you're new to Office—or if you're still limping along with Word 6.0—now is as good a time as ever to jump in. (Keep in mind, though, that Microsoft recommends at least a 120MHz PowerPC.) Current Office users face a tougher decision that boils down to economics—the \$299 upgrade cost is just too steep, especially for the home and SOHO users Microsoft claims it wants to please.



GORDON STUDER

**M**ore than three years have gone by since Bill Gates grinned down upon the Mac faithful and promised to continue releasing new versions of Microsoft Office until at least 2002. No matter how cynically you regard Microsoft's motivations, there's no denying that the company made an excellent start on fulfilling its pledge when it released Office 98 less than a year later. From its drag-and-drop installer to its abundant innovations, Office 98 was a revolutionary, must-have upgrade (*Reviews*, June 1998).

Office 98 presented such a dramatic improvement over its abysmal predecessor that another equally compelling upgrade was probably too much to hope for. Not surprisingly, Office 2001 is a more evolutionary release. Still, the suite's three central

applications—Word, Excel, and PowerPoint—sport many welcome changes geared toward home and SOHO users. But Entourage—a PIM-enhanced version of Outlook Express, Microsoft's free e-mail client and newsreader—feels more like a work in progress.

### Out of the Box

Office 2001 ships in an eye-catching plastic clamshell that contains a CD-ROM but no printed manuals. While Microsoft's commitment to conservation is admirable, new and upgrading users alike will be disappointed to discover that Office has no electronic manual, either. Instead, you have to use the online help system, which feels to us like exploring an intricate cave without a map. (At least the Office help assistant responds appropriately when you ask "What's new?",

describing the new features in whatever application you're using.)

The first change you'll see when you fire up Word, Excel, or PowerPoint is the new Project Gallery, a feature designed to help neophytes get started with their projects. The Project Gallery presents a hierarchical list of project categories; select one, and previews of corresponding document templates appear on the right (see "Project Choices"). If you try to open a template for an Office application that's not already running, Office launches it for you. (The Project Gallery appears by default, but you can turn it off if you don't like it.)

Many Office 2001 features aim to provide a more uniform interface for users who routinely jump back and forth between Word, Excel, and PowerPoint. For example, the new Formatting palette, accessible from all three programs, contains tools that change to suit the object you're editing. If you find the palette obtrusive, you can customize Office's Formatting tool bar with the tools you use most often.

Another feature, the Office Clipboard, lets you copy and paste multiple pictures or formatted text clippings from and to Office documents. Although the Office Clipboard is more versatile than the standard Macintosh Clipboard and Scrapbook, there's no way to transfer items to it directly from non-Office applications, even Internet Explorer. And the Clipboard displays text blocks with formatting intact, so the text can sometimes be too small to read (see "Office Pasteboard").

All four Office applications now share Microsoft's Encarta World English Dictionary, which defines both words and simple phrases. However, only Word and Entourage let you view definitions by control-

clicking on problem terms; accessing the dictionary from PowerPoint and Excel requires additional typing.

If you're already an Office user, or if you need to share files with someone who uses a Windows PC, you'll be relieved to know that Office 2001 is compatible with Mac Office 98 and Windows Office 2000 files.

### A Better Word

The enhancements to Word, Office's flagship application, range from cosmetic to brilliant. Our favorite new feature, Live Word Count, displays a real-time tally of the document's total word count in the status bar, along with the number of words before the insertion point. (If you highlight a block of text, the latter counter changes to show the number of words in the selection.) Although this may seem like a small thing, writers will appreciate being able to keep tabs on their productivity without resorting to the Tools menu.

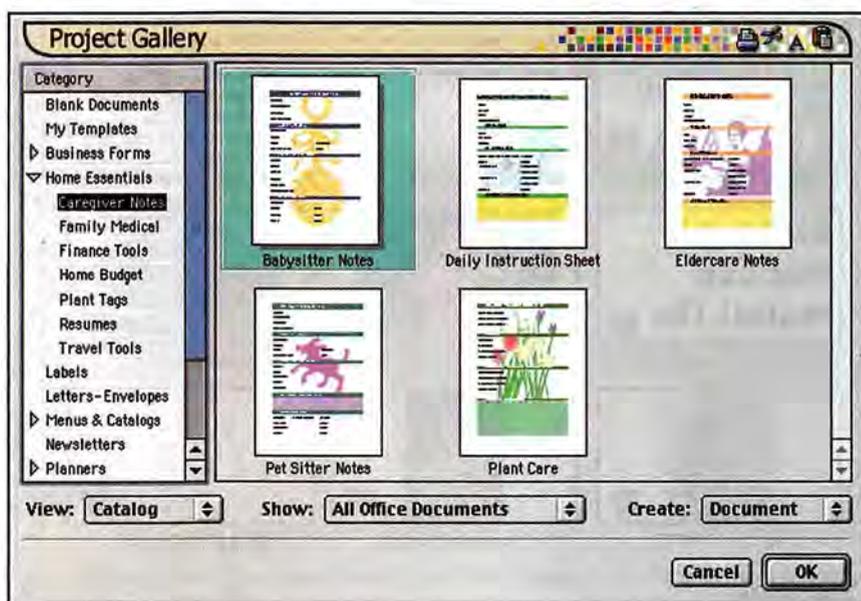
If you've ever struggled with complex document layouts, you'll love Click And Type, which makes it painless to place text in Page Layout view. To insert a title, for example, you sim-

ply point to the middle of the page, double-click, and begin typing—Word inserts extra lines and tabs for you as needed. As you mouse over to the edge or center of the document, the I-beam cursor changes to show whether Click And Type will left-justify, right-justify, or center any new text you type. Word 2001 also lets you edit headers and footers by double-clicking at the top or bottom of the page, another welcome time-saver.

Word 2001's vastly improved table tools let you create tables within tables, and new border styles make it easy to produce tables that look good on the Web. Placing tables is also easier than ever—you can resize and position them by dragging, and text reflows around them as they move.

On the downside, Word 2001 suffers from bugs that range from annoying to nasty. Documents with lengthy tables, for instance, slow Word to a crawl, and printing complex documents isn't as fast as in Word 98. (To Microsoft's credit, representatives of the company's

*continues*



**Project Choices** The Project Gallery—accessible from Word, Excel, or PowerPoint—lets you choose templates for a wide variety of home and business projects.

Macintosh Business Unit have responded to early complaints about Office 2001 in online discussion groups and mailing lists.)

### Spreadsheets for Everyone

With its grid lines, functions, and formulas, Excel has always been the most intimidating of Office's three core applications. Thankfully, several features in Excel 2001 make the program more accessible to first-time spreadsheet users.

Anyone who uses Excel to maintain home inventories or other simple lists will find a lot to cheer about in this version. If Excel senses that you're typing a list, for example, it offers to convert your data into a list object, complete with clickable column headers that can sort data in ascending or descending order (see "Easy Lists"). The List Manager palette offers convenient access to a suite of tools that simplify formatting and customizing existing lists.

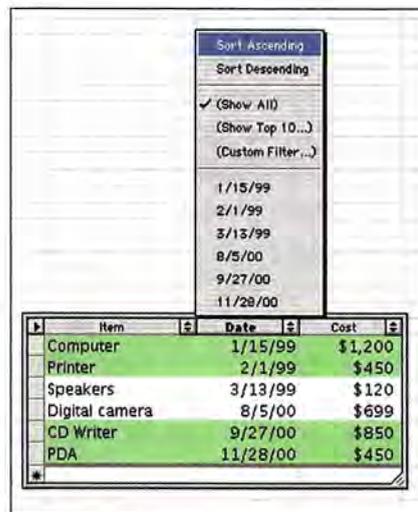
Other new features make it easier to import data from other sources. For example, Excel 2001 lets you open database files created in FileMaker

Pro 3.0 and later. Using Excel's FileMaker Import Wizard, you can even select which fields and records to import. Importing information from the Web is also a snap: to transfer a table of financial data, select it in your browser, then drag and drop it onto your spreadsheet.

One change sure to upset veteran Office users is Excel's suite of keyboard shortcuts, which has been remapped to match Word's. For example, **⌘-B**, which cleared a cell's contents in Excel 98, now sets the text format to bold. We would be happier if Excel allowed the user to remap or customize any keyboard shortcuts, as Word does.

### Faster Presentations

Many of PowerPoint 2001's improvements boost efficiency. Unlike previous versions, this one lets you display a presentation's outline, notes, and slides in a single tripane window so you won't waste time jumping between views. Frazzled users facing tight deadlines will also be thankful for PowerPoint's new Autofit Text feature, which adjusts line spacing, text,



**Easy Lists** Pop-up menus in Excel lists make it simple to sort and filter data.

or both to prevent text from running off the edge of a slide.

PowerPoint 2001 also sports improved design tools. For the first time, you can apply a template to any slide in a presentation without affecting the other slides. Support for graphical and autonumbered bullets is another welcome addition, and you can now create tables in PowerPoint without having to import them from Word or Excel.

Beefed-up animation functions, including exit effects and QuickTime-based slide transitions, will please PowerPoint users who rely on electronic presentations. PowerPoint 2001 also lets you save files as QuickTime movies, now Microsoft's preferred format for sharing presentations with anyone who doesn't have PowerPoint. Unfortunately, some presentations don't translate well to the QuickTime format.

We were also disappointed to learn that Microsoft hasn't rectified a text-editing bug that affected PowerPoint 98. When you try to edit white text on a slide with a graphical background, the entire text block turns white, making it impossible to see what you're doing unless you view the presentation in grayscale. And, like



**Office Pasteboard** The Office Clipboard offers convenient access to text and graphics, but some formatted text is difficult to read in this view.

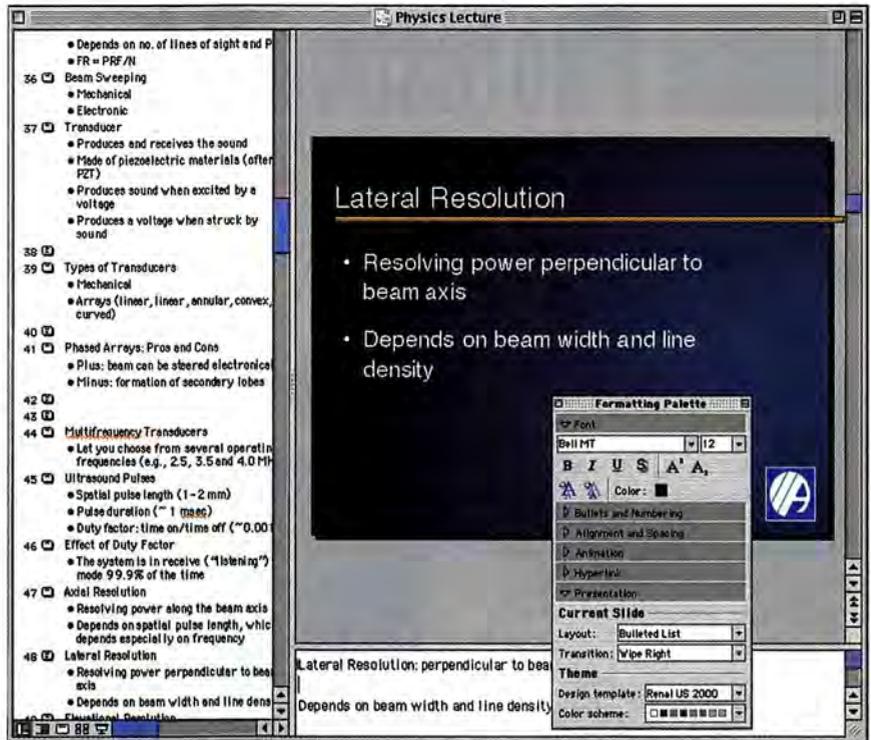
the previous version, PowerPoint 2001 is a memory hog: even some modest presentations refused to run until we boosted PowerPoint's RAM allocation to 30MB, and slide shows containing QuickTime movies often demanded more than twice that amount.

### Entourage: Rough Edges

For many people, written electronic communication has become such an integral part of their daily routine that a single application combining e-mail, calendar functions, and contact management would be invaluable. Alas, while Entourage is on the right track, it still has a way to go.

Entourage offers all the e-mail functions of Microsoft's excellent Outlook Express (🔴🔴🔴1/2; *Reviews*, March 2000), along with several useful new features. For example, it lets you drag mail folders onto the desktop, where they turn into text files in the MBOX format—a quick-and-dirty way to back up or export messages. If you're already using an e-mail program, Entourage provides one-step importing of messages from Qualcomm's Eudora, Netscape Communicator, and Claris EMailer, as well as Outlook Express.

As a newsreader, however, Entourage is no better than Outlook Express. Along with its other failings,

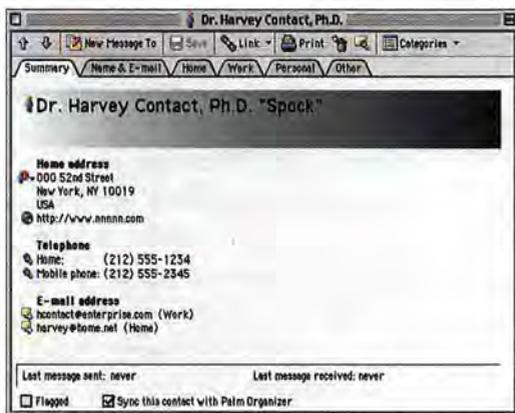


**Great Panes** You can resize PowerPoint's outline, slide, and notes panes by dragging the dividers that separate them.

Entourage insists on sorting message threads alphabetically—a prohibitive annoyance for dedicated Usenet jockeys, who want to see newer postings first. If you spend much time reading newsgroups, you'll probably want to stick with your current newsreader.

Entourage's contact manager is the more polished of its two core PIM modules. An overview window shows all your contacts, with column

headings that sort the list when you click on them. As an added bonus, the Entourage address book integrates nicely with Word; if you type the first few letters of a name from your contact list in Word, for example, the program offers to fill in the rest of the name for you. The thoughtfully designed contact detail view has five panes for personal data and one summary pane (see "Close



**Close Contact** In Entourage's detail view, if the contact has an e-mail address you can compose a message by clicking on the New Message To button.

Contact"). Surprisingly, Entourage lacks autocompletion and capitalization during data entry.

The calendar is more of a mixed bag. Entourage provides day, week, month, and list views, but they're not as feature-complete as those of competing Mac PIMs. For instance, overdue tasks don't appear in the main calendar window—to see them, you have to open the list view. (They do show up if you click on the Office Reminders control strip module, which you can download from Microsoft's Web site.) And while Entourage lets you sync your calendar with Palm OS organizers, you can't specify a range of dates to synchronize, nor does it support categories from DateBk4, Pimlico Software's popular shareware Palm calendar. Although AppleScript-savvy users can program workarounds for many of Entourage's shortcomings, we'd rather see Microsoft make needed changes to the application itself.—FRANKLIN TESSLER

# Adobe Photoshop 6.0

Upgraded Standard Puts Pixel Power  
and Vector Precision in a Slick, Flexible Package

## ADOBE PHOTOSHOP 6.0

**Rating:** ★★★★★½

**Pros:** Strong typographic control; superb integration of raster and vector elements; improved color management; sleek, streamlined interface.

**Cons:** Weak documentation; online help requires Web browser.

**List price:** \$609

**Company:** Adobe Systems, 800/833-6687, [www.adobe.com](http://www.adobe.com)

### MACWORLD'S BUYING ADVICE:

Photoshop 6.0 is a superb upgrade to an application that was already tops in its class. Whether you use it for Web design, prepress production, digital photography, or fine art, you'll find dozens of new features in version 6 that will make you wonder how you managed without them. The best just got a whole lot better.



**Instant Options** The new Options bar presents the options for the current tool—in this case, the crop tool, with the cropped area darkened. The soft-proofing feature shows how this image will print on an Epson 1270 and on Macworld's press.

Where Adobe Photoshop locked in a death struggle for dominance with another image editor, the scope and quality of its latest upgrade would be less surprising. But considering the program hasn't had a serious competitor on the Mac in years, Photoshop 6.0 is much better than it needed to be. It offers a lot of new features, and it puts them in a more comprehensible user interface than ever. Photoshop celebrated its tenth birthday this year, and the new version shows a polish and maturity that younger applications simply can't attain. No matter how you use Photoshop, this is a must-have upgrade. If you haven't used Photoshop before, you'll be pleasantly surprised

by its power and depth: it has something for everyone.

### Beyond Pixels

Photoshop isn't just about pixels anymore. New Shape tools let you create a huge variety of sharp-edged, editable, vector-based shapes, including text. And you can achieve startling effects using vector layers with attached Layer Effects such as glows, bevels, shadows, patterns, and gradients (now grouped together as Layer Styles you can save). Because vectors are much more memory-efficient than pixels, type effects that used to result in multimegabyte files now take only a couple hundred kilobytes.

But the real magic is in the many ways you can integrate vector- and

pixel-based elements. Vector layer masks let you apply a clipping path to a layer rather than to the entire image, hiding the layer content that lies outside the path. You can clip layers with vector shapes, apply layer effects, and use Photoshop's blending modes to quickly make everything from chiseled type to 3-D buttons.

In the new version, you create type directly on the canvas instead of in a modal dialog box. The type remains editable and on its own layer; you can still use Photoshop's sophisticated typographic controls, including a new multiline composer for hyphenation and justification. In fact, Photoshop is now arguably the most typographically sophisticated of Adobe's applications: it lets you do anything with type that you can do with other vector elements, so the range of typographic treatments is enormous.

### Layer It On

But Photoshop's forte is still image editing, and version 6's layer-management enhancements make creating complex, multilayered images much easier. The 99-layer limit is gone, and you can group layers into sets and treat them as a unit. You can also lock a layer's transparent pixels, its nontransparent pixels, and its position. For Web graphics, you can create slices—separate image regions that can have their own HTML code attached—directly in Photoshop. And the program can create slices based on layer content, making it easy to create rollovers, animations, and other Web effects. (You'll still want to use ImageReady to save slices as sets and to create rollover styles, however.)

Support for 16-bit channels got a shot in the arm: you can work in 16-bit-per-channel Lab color mode in addition to RGB, grayscale, and CMYK. The new Gradient Map fea-

ture, which is 16-bit enabled, gives you another way to produce custom grayscale conversions or create the kind of surreal landscapes Dave encountered in *2001: A Space Odyssey*. Some filters—including Unsharp Mask, Gaussian Blur, Median, Dust and Scratches, Add Noise, and High Pass—now work on high-bit images, as do Resize Canvas and the History Brush.

### Control the Power

Photoshop's interface continues to mature, letting you control both old and new features with a minimum of fuss. The most obvious new element is the Options bar, which appears by default under the menu bar and replaces the Options palette. It holds both the options for the currently selected tool and the *palette well*, where you can store palettes with a single click (though they disappear as soon as you click outside them).



**Less and More** You can create this image in Photoshop 5.5, but in 6.0 it's a two-layer, 160K file, and the text is still editable.

Some improvements are subtler. When you use the crop tool, for example, the cropped area darkens, and you can control the color and opacity of that area. But my favorite is the clipping display in Levels—you simply hold down the option key as you move the black-and-white-input sliders to see exactly which pixels are being cropped, without introducing psychedelia to the rest of the screen.

### Color Management Done Right

Adobe has completely revamped Photoshop's color architecture, but in a much less confusing way. For

example, the color settings are now combined in a single dialog box. You can set the color behavior to emulate Photoshop 4 or 5 if you wish, but Photoshop 6 offers "per-document color," which leaves each image in its own color space. This frees you from having to convert all your images to a single working space, and forced color conversions become a thing of the past.

Photoshop 6 keeps track of your profiles and makes it nearly impossible to embed the wrong profile when you save an image. You can preview RGB and grayscale output as well as CMYK, a boon if you're outputting to a photorealistic ink-jet printer. You can even control which profiles show up in Color Settings when you work with the Advanced Mode checkbox turned off—no need to wade through dozens of irrelevant ones.

### Short of Perfect

Photoshop 6 hasn't quite attained perfection. Its integration with ImageReady has improved, but the two still have some annoying interface discrepancies. Support for spot color is still dicey—the only way to tell how a spot color will appear in print is to print it. The documentation is inadequate; for basics such as making color and tonal adjustments, you're referred to the online help. Worse, that online help is in HTML form—you have to run a Web browser in addition to Photoshop, which can cause instability. If you already know Photoshop, the user interface enhancements will help you assimilate the new features pretty painlessly, but new users should prepare themselves for a learning curve.

Nonetheless, Photoshop's shortcomings are quite minor compared with its strengths. This is by far the best version of Photoshop we've seen.—BRUCE FRASER



# Live the *Wild Life*...

## With The SIMS Livin' Large Expansion Pack!



# The SIMS™



TEEN  
COMIC MISCHIEF  
MATURE SEXUAL THEMES  
MILD ANIMATED VIOLENCE



**wastake**  
INTERACTIVE

**MAXIS**  
Maxis™ is a brand  
of Electronic Arts™

**ASPYR™**  
Authorized Electronic Arts™ Distributor

[WWW.ASPYR.COM](http://WWW.ASPYR.COM)

© 2000 Electronic Arts, Inc. EA Games, The Sims, Maxis, the Maxis logo, and Electronic Arts are trademarks or registered trademarks of Electronic Arts, Inc. in the U.S. and/or other countries. All rights reserved. EA Games™ and Maxis™ are Electronic Arts™ brands. The ratings icon is a trademark of the Interactive Digital Software Association. The Aspyr Media logo is a trademark of Aspyr Media, Inc. Macintosh and the MacOS logo are trademarks of Apple Computer, Inc. All other trademarks are the property of their respective holders.

Circle 91 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

# Color Workgroup Laser Printers

Latest Models Deliver Higher Speed,  
Better Image Quality at Reasonable Prices



GIBSON

Color laser printers used to be big, slow, complicated beasts that were difficult to set up and often slow to operate. They're still big, complicated beasts that can be difficult to set up, but today's color lasers are faster than their predecessors and do a much better job of rendering color images.

We took a look at seven color workgroup laser printers ranging from the relatively inexpensive \$1,929 Lexmark Optra C710 to the \$5,549 Hewlett-Packard Color LaserJet 8550N. Though there are differences from printer to printer, all the models in our roundup produced good results—you really can't go wrong with any of them.

## Get Rolling

Color laser printers have always required far more setup time than

monochrome printers. Among the models we tested, the only exception was the Xerox Tektronix Phaser 850DP; because it uses preinstalled solid-ink sticks rather than toner, there's little more to do than plug it in. Fortunately, each printer comes with thorough, easy-to-follow instructions that make the process almost painless.

Most of the models can print at either 600 or 1,200 dpi. The exceptions are the Hewlett-Packard, which can't print at 1,200 dpi, and the Brother HL-2400CeN, which prints at either 600 or 2,400 dpi (though we needed to add another 128MB of RAM to print our Adobe Photoshop image at the higher resolution).

Paper handling is much improved over previous generations of color lasers: with easy-access trays and

*continues*

## MACWORLD'S BUYING ADVICE:

If you're shopping for a color laser printer, you probably need a fast model that can handle a lot of throughput rather than one with exceptional image quality. In that regard, the Hewlett-Packard Color LaserJet 8550N is far sturdier than the competition and delivers good quality. Unfortunately, it's also far more expensive than its rivals. The Xerox Tektronix Phaser 750DP alone produced good output under all conditions, but it too is rather pricey.

With a price in the lower range as well as overall good quality, the NEC SuperScript 4650N emerges as the winner. Although it lacks support for 100BaseT networking and fared poorly on one graphics test, its speed, capacity, and quality make it a solid performer at a very reasonable price.

Reviews

Color Laser Printers

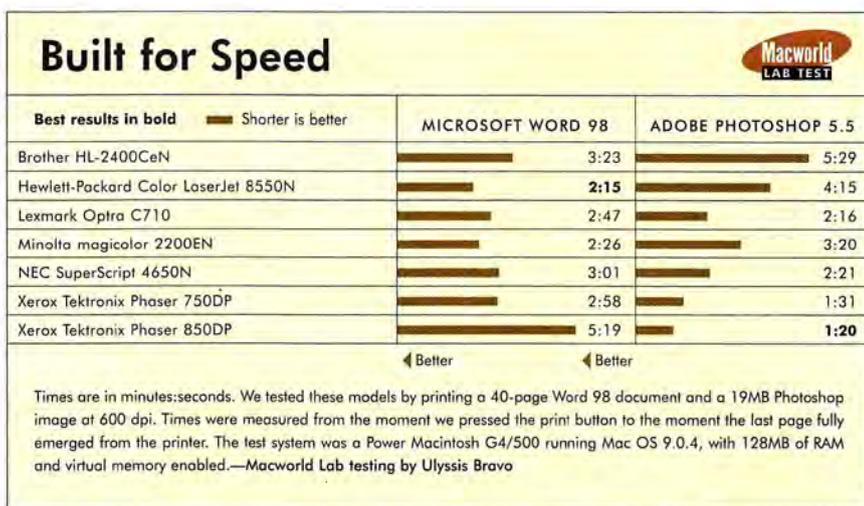


simple icons, these printers make it a snap to load paper and clear jams. The pricey Hewlett-Packard offers the beefiest workgroup support, with an 1,100-sheet paper tray and a 3.2GB internal hard drive. Other than Minolta's magicolor 2200EN, with its 500-sheet tray, the rest have typical 200- to 250-sheet trays.

But the top concerns with workgroup printers are connectivity and speed. All the printers except the NEC SuperScript 4650N support 100BaseT, and all are fast: most clocked in at a respectable 16 text pages per minute, although the Hewlett-Packard had the edge at 24 ppm. When we printed at 1,200 dpi, most of the printers were able to maintain their speed. The Tektronix Phaser 850DP, however, took four times longer to print at the higher resolution than at the lower.

### Smooth Operators

All seven printers we jury-tested did a good job of producing smooth text. At the toner-saving resolution of 600 dpi, most produced perfectly acceptable results, although text was a bit more jagged and overall contrast was lower. Only the Minolta's 600-dpi results were excellent, with sharpness rivaling that of 1,200-dpi output. At 1,200 dpi, output was excellent from



all but the Tektronix Phaser 850DP. And as you would expect, pages from the Brother's super-high 2,400-dpi resolution looked superb, though not phenomenally better than those of the top-testing 1,200-dpi units.

### Clear as Mud

If you've ever printed images on a high-quality color ink-jet printer, odds are you'll be disappointed with color-laser output. With their slightly dull tone, frequent dynamic-range trouble, and occasional artifacts, images printed on color lasers are simply inferior. But the machines do speedily produce prints that are durable and cost-effective, and their image quality is generally good enough for most business applications.

In our Photoshop test, only one printer received an excellent score: the 600-dpi-only Hewlett-Packard. Its images had the best dynamic range, contrast, and detail, although the output still wasn't as good as that of a cheap ink-jet.

The models capable of printing at 1,200 dpi earned "acceptable" ratings, at best. They tended to produce lackluster, often muddy images. The Lexmark fared worst in this category, producing a rather noisy, flat image.

Most models did a fine job of printing a Microsoft Excel 98 graph. Only the NEC (at 1,200 dpi) and Minolta (at 600 dpi) rated "poor"—the former for its low contrast and the latter for its slight graininess.—BEN LONG

## Color Laser Printers Compared

COMPANY	PRODUCT NAME	MOUSE RATING	LIST PRICE	CONTACT	MAXIMUM DPI	PAPER CAPACITY	DUPLEXING	RAM (IN MB)	COMMENTS
Brother	HL-2400CeN	★★★½	\$2,499	800/276-7746, www.brother.com	2,400	250	manual	32	Very good image quality at 600 dpi; horizontal artifacts at 2,400 dpi.
Hewlett-Packard	Color LaserJet 8550N	★★★★	\$5,549	800/752-0900, www.hp.com	600	1,100	automatic	64	Great image quality; huge paper capacity; fast; only 600-dpi output.
Lexmark	Optra C710	★★★	\$1,929	888/539-6275, www.lexmark.com	1,200	250	optional	32	Inexpensive; slow at 1,200 dpi; poor image quality.
Minolta	magicolor 2200EN	★★★½	\$3,299	800/523-2696, www.minolta-qms.com	1,200	500	optional	128	Fast; excellent text quality; poor image and graph quality at 600 dpi.
NEC	SuperScript 4650N	★★★★	\$1,999	800/632-4636, www.nectech.com	1,200	250	manual	96	Excellent price/performance ratio; good image quality; doesn't support 100BaseT networking.
Xerox	Tektronix Phaser 750DP	★★★½	\$4,055	800/835-6100, www.tektronix.xerox.com	1,200	250	automatic	128	Very good image quality; very fast; expensive.
	Tektronix Phaser 850DP	★★★	\$3,710	800/835-6100, www.tektronix.xerox.com	1,200	200	automatic	64	Reasonable output quality; slow; expensive.

Try it before  
you buy it!

TM

# ACDSee

## For Mac

The Perfect Software Solution for  
**Digital Image Management**



Supports over  
**40**  
formats



**Image  
viewing  
at its very  
best**

Visit us at

**Macworld**  
Conference & Expo

January 9-12, 2001 - Hall A Booth 433  
Moscone Convention Center, San Francisco, CA

Download ACDSee For Mac trial version at

**[www.ACDSYSTEMS.com/mw](http://www.ACDSYSTEMS.com/mw)**

**ACD**  
www.ACDSYSTEMS.com

PO Box 36, Saanichton, BC, V8M 2C3  
T1.800.579.5309 F1.866.544.0291



# DV Camcorders

Latest Models Have Smaller Cases,  
Bigger Potential



Clockwise from left: Canon Optura Pi, Sony DCR-TRV11, Canon ZR10

## The Feature Bandwagon

The most welcome 2000-model development is that, on every model except the Panasonic PV-DV200, the camera is now the battery charger. The power cord runs the camcorder when it's on and charges the battery (which stays on the camcorder) when the unit is off. This arrangement may seem obvious—Mac laptops have worked that way for years—but it sure beats the take-the-battery-off-to-charge-it scheme of previous models.

Most of these models come with a remote control, handy for filming yourself or for playing footage on TV. Each offers an LP mode that ekes out an extra 30 minutes from each 60-minute DV tape, a stabilizing feature that irons out small handheld jiggles, and a color LCD screen. Every model also has an array of special-effects and superimposed-text features, which you should avoid at all cost; not only do they permanently mar your perfectly good footage, but they also look Neanderthal next to the gorgeous effects and titling features of iMovie and its ilk.

The ads gush about these camcorders' still-photo features, but it's hard to understand why; in most cases, the Photo button simply freezes the frame for six seconds on the tape. If you've got iMovie, you don't care; it can capture any frame, even from moving footage. Worse, *continues*

### MACWORLD'S BUYING ADVICE:

Choose your version of heaven: at the low end, the tiny, inexpensive Canon ZR10 is nearly irresistible. With their superior pictures and much higher prices, the Canon Optura Pi and the Sony DCR-TRV11 are in a different class. If you have old footage to reincarnate as DV, the Sony's analog converter gives it a substantial edge; if not, go for the Optura Pi's stunning color and noninterlaced stills. Then hook up the FireWire cable—and be glad you're alive to see the dawn of the DV revolution.

**A**pple gave us iMovie, Final Cut Pro, and FireWire jacks, but that's only half of a DV filmmaking setup. Buying the last component—a digital camcorder—is up to you.

Fortunately, the current crop of camcorders is positively drool-worthy—sleeker and more compact than ever. All of them capture life with breathtaking color fidelity and twice the resolution of VHS tape, and all take commands from a FireWire-equipped Mac without a whimper.

For this roundup, we looked at the most recent entry-level mini-DV camcorders from several top manufacturers: Canon, Panasonic, Sharp, and Sony. These competing models have more similarities than differences.

# state-of-the-digital-art



 **Panellink**<sup>®</sup>  
DIGITAL  
**DRIVING DIGITAL**

Panellink Digital powers today's world-class displays. Pristine image quality. Advanced functionality. Future-ready. Panellink also enables next-generation PCs, projectors and TVs. Panellink is digital. And digital is better.

©2000 Silicon Image, Inc. All rights reserved. Panellink and the Panellink logo are registered trademarks of Silicon Image, Inc. in the United States and other countries. All other product names are trademarks of their respective owners

Explore the full range of Panellink-powered digital products at [digitalisbetter.com](http://digitalisbetter.com)

Circle 149 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

when transferred to your Mac, the images have feeble resolution—640 by 480 pixels, tops—and produce the telltale striped effect of standard TV's interlaced video signal. (Canon's Optura Pi at least offers a feature called *progressive scan* that eliminates this unfortunate banding.) Even the cheapest digital still camera takes better pictures than the best digital camcorder we reviewed.

### Ergo, Ergonomics

The Sharp ViewCam VL-SD20U looks like the Sharp ViewCams that came before it: a swiveling two-part box. It lacks an optical viewfinder, so while filming you're forced to watch the 3-inch LCD that fills the back panel. This quirk makes you more aware of your framing, lighting, and other aspects; on the other hand, you worry about scratching that exposed LCD.

The ViewCam offers the biggest, most conveniently placed controls of any camcorder in this roundup. And the price—\$700 on the street—is among the lowest of all DV camcorders. Unfortunately, Mac fans may grow annoyed at the slim black band that shows up at the bottom of the footage when it's transferred to

iMovie; they may also miss an analog input, which lets you transfer your old VHS, 8mm, and Hi-8 footage to a DV tape and from there into the Mac.

The Canon ZR10 has its own radical design feature: at 2 by 3 by 5 inches, it's delightfully tiny. (Note, however, that tininess limits a camcorder's zoom capacity and LCD size.) Surprisingly, it's also inexpensive (about \$750 street) and rich with features, including VCR controls on the side opposite your hand, a crisp-sounding speaker, and analog input.

Canon's Optura Pi (\$1,300 street) is a larger, more expensive, state-of-the-art machine. It offers Canon's exclusive optical image stabilization, which uses a prism arrangement instead of electronics. (The two approaches are nearly indistinguishable, but electronic stabilization can add twitches to very still scenes that have strong horizontal elements.) You can outfit the Optura with a broad array of add-on lenses, filters, lights, and microphones. Its sole design gaffe: you have to open the LCD to get at the VCR controls.

### Top and Bottom

The surprising laggard of our sample

was the Panasonic PV-DV200. It's inexpensive (\$720 street), but the features are so 1999: a tiny 2.5-inch LCD, a battery that must be attached to the AC adapter for recharging, no analog input, and a black-and-white eyepiece. (Another \$100 or so buys you the PV-DV400, which at least has a 3-inch LCD and a color viewfinder.) You do get an 8MB, proprietary multimedia card for still images, but the transfer software is for Windows only.

At the opposite extreme is Sony's DCR-TRV11 (\$1,100 street). Unfortunately, it uses a Memory Stick to hold low-res digital pictures—a feature that's of little value to Mac DV fans. Otherwise, it's beautifully designed and offers most of the juicy specs of its rival, the Optura Pi. The killer difference: the analog input on this year's Sony models. It performs *real-time* conversion of the signal from your older analog camcorder or VCR, pouring DV directly into your Mac—no need to copy it to DV tape first. This breakthrough feature saves Mac moviemakers hours and hours of dubbing time, not to mention the \$400 cost of a Sony Media Converter.—DAVID POGUE

## DV Camcorders Compared

COMPANY	Canon		Panasonic	Sharp	Sony
PRODUCT	Optura Pi	ZR10	PV-DV200	ViewCam VL-SD20U	DCR-TRV11
MOUSE RATING	★★★★	★★★★	★★	★★★	★★★★
LIST PRICE	\$1,799	\$999	\$999	\$999	\$1,399
CONTACT	800/652-2666, www.canondv.com	800/652-2666, www.canondv.com	800/211-7262, www.panasonic.com	800/237-4277, www.sharp-usa.com	800/222-7669, www.sel.sony.com
LCD SCREEN (IN INCHES)	3.5	3.5	2.5	3	3.5
ANALOG INPUT	Yes	Yes	No	No	Yes
MAXIMUM BATTERY LIFE*	3:35	4:25	2:50	3:30	11:30
OPTICAL/DIGITAL ZOOM**	12X/48X	10X/200X	18X/300X	10X/100X	10X/120X
REMOTE CONTROL	Yes	Yes	Optional	Yes	Yes
PROS	Optical stabilizer; no interlacing of still images; big screen.	Tiny and sleek; feature rich; inexpensive; big screen.	Inexpensive; feels nice in spite of bulk.	Dirt cheap; the easiest camcorder to use.	Rock-solid design; real-time analog-to-DV converter; big LCD.
CONS	Odd button placement.	Records its own sound in quiet scenes; picture is weak in low light.	Black-and-white viewfinder; tiny LCD screen.	Hidden DV jack; LCD always exposed; no analog input.	Memory Stick feature is of little value.

\* (in hours:minutes) With purchase of optional long-life battery.

\*\* Optical is the useful number; digital zoom distorts the picture.



.com



.tv

A .tv web address tells the world you're part of the new generation of richer, more engaging online experiences. Visit [www.tv](http://www.tv) and register your .tv domain name today.



FROM THE  
CREATOR OF

**BUGDOM**

TM

# CRO MAG RALLY

THE WILDEST RACING GAME SINCE MAN INVENTED THE WHEEL!



- SUITABLE FOR ALL AGES!
- 11 DIFFERENT VEHICLES!
- 17 DIFFERENT TRACKS!
- 11 TYPES OF POWERUPS & WEAPONS!
- NETWORK & SPLIT-SCREEN BATTLES!

FOR MORE INFORMATION OR TO ORDER YOUR COPY

**WWW.PANGEASOFT.NET**

**PANGEA SOFTWARE**



# Professional Scanners for the New World.

**ArtixScan 6000xy**  
6000 dpi. Enlargement  
capabilities: 35mm to A3.



**ArtixScan 2020**  
Independent scan beds for  
reflective and transparent  
scanning.



**ArtixScan 2500**  
Independent scan beds  
and 1250-2500 dpi.



**ArtixScan 1100**  
1000 x 2000 dpi, true  
42-bit color depth.



**ArtixScan 4500t**  
High-resolution multi-format  
film scanner.



**ArtixScan 4000t**  
35mm film and APS color  
film scanner.



[www.microtekusa.com](http://www.microtekusa.com)

It's a whole new world out there. Turn around time is quicker. Client demands are ever increasing. But, superb quality still remains the order of the day. You really can't afford to compromise on quality or performance. You need color that's dead on. You need razor sharp detail. You need a strong, reliable scanner that is engineered and designed for heavy batch processing.

## **THE SOLUTION:** An ArtixScan scanner from Microtek.

Whether it's a dedicated film or dual lens scanner or an A3-size workhorse, ArtixScan is the intelligent choice. With optical resolutions from 1000 to 4000 dpi, dynamic ranges as high as 3.9D Microtek has you covered. Microtek has a patented dual-platen design for glassless film scans without Newton rings, intelligent electronic board designs and high-grade optics. There's also feature-rich scanning software such as

our proprietary, award-winning ScanWizard™ Pro or ColorQuartet™ for Microtek (for the ArtixScan 6000XY). Each features 16-bit image data processing, LCH device independent color space, selective color control, intelligent ColorSync® workflow color management, parallel processing, and much more.

For more information on all the right tools, CALL US TODAY AT **800-654-4160** or visit our website at [www.microtekusa.com](http://www.microtekusa.com). Get the best tools available for this new world from Microtek. Then get to work.

**MICROTEK**  
Better Images Through Innovation

Copyright © 2001 Microtek Lab, Inc. • All rights reserved • All products mentioned are trademarks or registered trademarks of their respective holders • Specifications and software bundles are subject to change without notice.

# Palm VIIx

## Wireless Handheld Provides More Storage, Better Service Rates

**A**lthough the original Palm VII debuted more than a year ago (*Reviews*, September 1999), the comparatively stocky device is still the only handheld on the market with built-in wireless Internet access. Sure, other units have become slimmer (Palm V) or more expandable (Handspring Visor), but no other offers a pleasant little chirp to indicate that you're online when you lift a flexible antenna. With the recent release of the Palm VIIx, Palm fills out the ahead-of-its-time organizer with more memory, the latest version of the Palm OS, and better pricing plans for Internet access.

### Room to Breathe

With 8MB of memory, the VIIx is in line with the rest of Palm's top-tier handhelds—the Palm Vx and IIIc. This allows you to store more information and more Palm Query

Applications (PQAs), with which you can access Internet data via the Palm.net wireless service. Unlike desktop computers with conventional Web browsers, the Palm VIIx employs these small applications to retrieve snippets of information, called Web clippings. A small collection of PQAs come preinstalled, including those for news and stock prices. You can download others for free from the Palm.net Web site ([www.palm.net](http://www.palm.net)). E-mail access hasn't changed: you can CC your regular e-mail to your Palm.net address, or you can send and receive mail directly from POP e-mail accounts by means of third-party software.

The monthly fee for Palm.net service has come down since the first Palm VII release. Prices range from \$10, for 50K of data (additional kilobytes cost 20 cents each), to \$45, for an unlimited-volume plan, a welcome change for frequent users. The service is provided in 260 U.S. metropolitan areas, so make sure you're on the coverage map before you sign up.

Unfortunately, the Palm VIIx still doesn't include Macintosh software or a Mac cable adapter in the box, so you'll have to purchase Palm's serial adapter (\$15) or USB kit (\$40). However, you can download the Macintosh Palm Desktop software for free.—JEFF CARLSON



**Wireless Freedom** The Palm VIIx gives you mobile access to e-mail and the Web.

### PALM VIIx

**Rating:** ★★★★★

**Pros:** 8MB of memory; Palm OS 3.5; unlimited Internet-access plan.

**Cons:** Service areas still limited; relies on Palm.net for e-mail; no Mac software or adapter included.

**List price:** \$449, plus monthly service fee.

**Company:** Palm, 800/881-7256, [www.palm.com](http://www.palm.com)

### MACWORLD'S

#### BUYING ADVICE:

If you need wireless Internet access in a single, portable device, the Palm VIIx is the handheld to buy. The added memory gives you enough space to store a lot of personal information, Palm Query Applications, and other Palm software.

The Classic Game of World Domination!



# RISK™ II

It is the time of empires and armies, of countries and conquests. The world is at war and you are in command of an army fighting for global domination. Organize your forces in a ruthless campaign to crush your enemies and take their territories in this fast-paced game of strategy, negotiation and luck.



*"...virtually any family member can enjoy the game, it's a must have for strategy fans, and action fans would find it hard to resist Risk II's addictive gameplay."*

— Mac Central —

**MacSoft®**

©2000 Hasbro, Inc. ©2000 Hasbro Interactive, Inc. All rights reserved. MicroProse is a trademark of Hasbro. Published and distributed by Infogrames, Inc. under its MacSoft label. All trademarks and registered trademarks are the property of their respective owners.

[www.wizardworks.com/macsoft/](http://www.wizardworks.com/macsoft/)

Circle 30 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

# Finale 2001

## Powerful Notation Program's New Features Aren't Compelling

Every 18 months or so, Coda Music Technology releases an \$80 to \$120 upgrade to Finale, its venerable music-notation program. Some of these upgrades—the leap from Finale 98 to Finale 2000, for example—have enhanced the program in very significant ways. Others, such as the recently released Finale 2001, offer improvements that look great on paper but are less spectacular in practical application.

Despite the largely lackluster new features, however, Finale remains the Mac's premiere notation application. Whatever type of score you're creating—choral, orchestral, classical, pop, or jazz—Finale is likely to provide all the tools you need (perhaps far *more* than you need) to produce professional-looking results.

### Leader of the Band

Coda has changed few of Finale's notation-creation capabilities in the 2001 edition. The improved Setup Wizard makes it easier to lay out a score's foundation, and Finale is now smarter about fitting music systems onto the page. But most of the

changes introduced in this upgrade focus on getting music into and out of the program.

For example, Finale 2001 includes MIDIScan, an optical character recognition (OCR) component that allows you to import scanned, printed scores as editable notation. But even with uncomplicated scores, the resulting file is a barely recognizable mishmash of notes. Fortunately for those interested in OCR, Finale can import files produced by a more capable program, Musitek's SmartScore (*Reviews*, December 1999).

A more functional new feature is MicNotator, which lets you place notes in a score by playing single pitches into a microphone attached to your Mac. When we used Apple's PlainTalk microphone to record a melody from a recorder, Finale notated it with about 80 percent accuracy. An instrument with less-variable pitch, used in conjunction with a better-quality microphone, would likely produce even better results.

Coda has also added commands for exporting Finale files directly to the Web via Coda's Finale Showcase and the Net4Music Web site, where you can upload your scores for \$7 each. By the time you read this, Coda should be distributing Finale Viewer, a free plug-in for viewing, playing, transposing, and printing Finale files saved as Web pages.—CHRISTOPHER BREEN



**Scant Scanning** The results of Finale 2001's MIDIScan feature leave much to be desired.

### FINALE 2001

**Rating:** ★★★★★

**Pros:** Comprehensive notation program; improved Setup Wizard.

**Cons:** Mostly unexciting new features; MIDIScan feature works poorly.

**List price:** \$545

**Company:** Coda Music Technology, 800/843-2066,

[www.codamusic.com](http://www.codamusic.com)

### MACWORLD'S BUYING ADVICE:

Finale 2001 is a great choice for people seeking the most comprehensive notation application available for the Mac. Finale 2000 users, however, already have the program's best elements and may find the upgrade's new features unnecessary.

QUIRKY E-MAIL PROGRAM BEST FOR LIGHT USE

# Nisus Email 1.0

**Rating:**  4 1/2

**Pros:** Easy mail sending; adds e-mail abilities to almost any program.

**Cons:** Poor addressing; relies on the Finder for mail management; rudimentary filters.

**List price:** \$30

**Company:** Nisus Software, 800/890-3030, [www.nisus.com](http://www.nisus.com)

**Macworld's Buying Advice:**

If you've ever had a burning desire to use your word processor to write all your e-mail messages, and if your e-mail needs are relatively light, Nisus Email is for you. The rest of us, especially those who must deal with lots of mail and many recipients, will find the program underpowered.

Upholding Nisus Software's proud tradition of nontraditional software, Nisus Email 1.0.9 won't be for everyone, but it could build a fanatical following. Nisus Email does not supply the usual mail folders and mail-composition window; instead, a tiny Floating PO window appears in whatever program you're working in. You compose your e-mail message in a word processor or other program and drag it to the window. A new window appears, with icons representing contacts in your address book. When you click on a contact's icon, you're back in your word processor, and the mail is sent. No other program makes sending mail this easy.

But if you have hundreds of contacts, scrolling through icons to find

one is cumbersome. And the program's filters can move incoming mail to a folder only based on keywords; there's no categorization, prioritizing, or other automated actions. Each message is archived as a separate text file in folders you create. Nisus Email depends on the Finder to manage potentially thousands of files—never the Finder's strong suit. To find content in archived messages, you must rely on Sherlock.—TOM NEGRINO



**Mailbox Forest** Finding a contact's icon in Nisus Email can be a challenge.

# DiskWarrior® has than



1999 Macworld Editors' Choice Awards Winner, Utility Software. "DiskWarrior is an excellent ax to add to your disk-repair and -maintenance arsenal. DiskWarrior's ease of use, speed, and new method of fixing disk problems make it a powerful disk-maintenance product."



1999 MacUser Awards Best Utility/Enabling Software. "For providing a new, easier to use, safer, and often more successful alternative to more bloated recovery applications, the judges felt DiskWarrior deserved top billing..."



1999 Apple Design Awards Most Innovative Product, Runner-up Best New Product



5 Out Of 5 Stars "Every Mac on the planet can benefit from DiskWarrior!"

Repairs disk problems such as disks that won't mount, files you  
Now with DiskShield™ to prevent damage to your disks before it

# MindControl 1.1

**Rating:** 

**Pros:** Opens any item from the keyboard.

**Cons:** Limited keystrokes to invoke command list.

**List price:** \$20 (download only)

**Company:** MindVision Software, 402/477-3269,

[www.mindvision.com](http://www.mindvision.com)

**Macworld's Buying Advice:**

Although MindControl is superfluous if you already own a macro utility such as CE Software's QuicKeys (Reviews, April 2000), other Mac users will find it a worthwhile addition.

Fans of keyboard shortcuts will love MindControl, a clever utility that lets you open files and perform other operations without lifting your hands from the keyboard. When you press a defined key combination, MindControl displays a pop-up list of all the commands you've programmed it to carry out. You can cycle through the list using the arrow or tab keys, or you can type the first few letters of any command into a text box at the bottom of the list. When you've highlighted the command you want, press the return key to run it.

You can program MindControl to open nearly any item on your Mac or network; it also lets you open Web pages and compose e-mail. MindControl's repertoire includes basic

functions such as restart and shutdown, and its ability to open AppleScripts further extends its functionality. You can specify the keystrokes that activate MindControl, but you have only four key combinations to choose from.—FRANKLIN N. TESSLER



**Mail Delivery** MindControl lets you open a new e-mail message that has the recipient, subject, and body already filled in.

# won more top awards any disk utility ever.



Mac Today  
1998 Editors'  
Choice  
Awards

Outstanding Disk Rescue Product.  
"DiskWarrior belongs in the arsenal  
of every Mac owner!"



★★★★★

disk problems with zero effort."

MacHome - Five Apples,  
MACnificent Award  
"DiskWarrior is a deceiv-  
ingly simple yet incredibly  
powerful disk repair utility,  
which is able to fix your  
disk problems with zero effort."



"DiskWarrior comes  
to the rescue..."



MacHome 8th Annual  
Home Choice Awards  
Best Utility. "Got lots of votes for  
repairing and preventing damage  
to hard disks so well. DiskWarrior 2.0  
is a quick solution to faster, more stable hard drives."

WWW.ALSOFT.COM

**ALSOFT**

1-800-257-6381

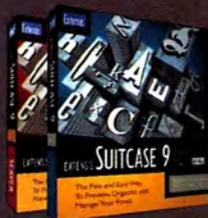
© 2000 Alsoft, Inc.  
Alsoft, DiskWarrior,  
DiskShield are trade-  
marks of Alsoft, Inc.

can't trash, and folders that have disappeared.  
occurs. Visit [www.alsoft.com](http://www.alsoft.com) for details.



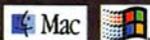
WINDOWS  
VERSION  
NOW  
AVAILABLE

## At least it's easy to control your fonts.



Small workgroups—access the same fonts right away with Suitcase Server's free 3-user license.

*The more fonts you have, the harder they are to control. Suitcase 9 is like obedience school for fonts. It's the fastest, easiest way to preview, organize and control your fonts. Your system will run faster and crash less when you activate only the fonts you need, when you need them. And with Suitcase Server, your workgroup can use the same set of fonts—across the room or around the world. Don't let your fonts go to the dogs. Get Suitcase 9.*



**NEW!** Extensis Suitcase 9

[www.extensis.com/mw](http://www.extensis.com/mw)

800.796.9798

**Extensis**<sup>™</sup>

© 2000 Extensis Product Group. All rights reserved. Extensis and the Extensis logo are trademarks of Extensis Product Group. Suitcase is a trademark of Symantec Corporation. All other trademarks are the property of their respective owners.

Circle 14 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

## BATTERY BACKUP FOR POWER OUTAGES

# Back-UPS Pro 500



KIRK AMYX

**Rating:** ★★★

**Pros:** Provides extra running time when power fails.

**Cons:** Not enough sockets for AC adapters.

**Company's estimated price:** \$180

**Company:** American Power Conversion, 800/800-4272, [www.apc.com](http://www.apc.com)

**Macworld's Buying Advice:**

Like fire insurance, the Back-UPS Pro 500 might seem like a waste of money—until disaster strikes. Then it's worth its weight in gold.

## TURN YOUR IDEAS INTO POLISHED SCRIPTS

# Movie Magic Screenwriter 2000



**Rating:** ★★★★★

**Pros:** Useful tools; intuitive interface; sample scripts.

**Cons:** Requires CD or Internet validation to launch.

**List price:** \$269

**Company:** Screenplay Systems, 818/843-6557, [www.screenplay.com](http://www.screenplay.com)

**Macworld's Buying Advice:**

Movie Magic Screenwriter 2000 is a worthwhile investment for anyone interested in writing for the screen, the stage, or television.

No matter where you live, power failures and brownouts are unavoidable. When the electricity stops, the Back-UPS Pro 500 lets you keep your Mac and as many as three peripherals going for 20 minutes, long enough to let you save your work and shut down safely. Seven grounded power outlets supply automatic voltage regulation and surge suppression; four of them also provide battery backup. (Unfortunately, you can't plug more than one power transformer into a backup outlet without obstructing an adjacent outlet.) If you're running OS 9.0.4 on a Mac with built-in USB, the included control-panel software automatically saves open documents and shuts down your Mac before the battery runs out.—FRANKLIN N. TESSLER

Do you often have great ideas for movies or television shows? Movie Magic Screenwriter 2000 is a word processor with specific commands that format scripts for television, the stage, and the screen. The program is packed with helpful tools, including a character-name bank, a thesaurus, and a chat feature that lets you work with a remote partner. Movie Magic also keeps track of drafts and alerts you if you start working on an old version of your script. The program also includes example copies of produced scripts.

Its only flaw is minor—for copy protection, you must insert the CD-ROM or validate the program over the Internet each time you launch Movie Magic.—ADRIENNE ROBILLARD

# Macworld.com

For these reviews: [www.macworld.com/2001/01/reviews/online.html](http://www.macworld.com/2001/01/reviews/online.html)

LINK

- ★★★ MDCF-FW
- ★★★★ Flash Media Reader
- ★★★★ PC Card CF Reader
- ★★ CF03U
- ★★★★ AVerFotoMate
- Media card readers
- ★★★ Canon Photo Advanced Edition
- ★★★ Color It 4.0
- ★★★★ PhotoGenetics 2.0
- Low-cost image editors
- ★★★★ MyTV/fm
- ★★★½ ProTV Stereo
- TV tuners
- ★★★★ Nike PSA[Play 120
- Portable MP3 player
- ★★★★½ SoundJam MP 2.5.1
- MP3 player and encoder
- ★★½ Kodak PalmPix camera
- Palm camera
- ★★★ goVox
- Palm voice recorder
- ★★★½ FireWire RAID Array
- Portable FireWire storage
- ★★★★ Astra 6400
- FireWire scanner
- ★★½ GoType
- Palm keyboard
- ★★½ PowerFile C200
- DVD changer
- ★★★★½ Vellum Solids 2000
- Industrial design software
- ★★½ Angel Egg
- ★★½ Golden Logres
- Pinball games

### Reviews You Can Trust

- OUTSTANDING: ★★★★★
- VERY GOOD: ★★★★
- GOOD: ★★★
- FLAWED: ★★
- UNACCEPTABLE: ★

RATINGS

Reviews



Tom Clancy's  
**RAINBOW SIX**  
**ROGUE SPEAR**

# MISSED ME?



Team Rainbow is back in full force. Rogue Spear—the sequel to Rainbow Six—immerses you even deeper in the explosive action of an elite, multinational strike force.

Rogue Spear feels so real, you'll be yelling "Tango Down!" in your sleep for weeks. And the multiplayer action is to die for. Remember, when stalking an enemy: Walk softly but strike like a thunderbolt. You only have one shot to save the world.

Eighteen new missions, full sniper support, a new replay feature and terrorists more realistic and lethal than ever!

**Includes 13 Additional Levels with Bonus MISSION PACK: URBAN OPERATIONS**



©1999 Red Storm Entertainment, Inc. All rights reserved. Red Storm Entertainment is a trademark of Jack Ryan Enterprises, Ltd. and Larry Bond. Rogue Spear is a trademark of Red Storm Entertainment, Inc. Rainbow Six is a trademark of Jack Ryan Limited Partnership, Inc. Published and distributed by Infogrames, Inc. under its MacSoft label. All other trademarks and registered trademarks are the property of their respective owners.

**MacSoft**

[www.wizardworks.com/macsoft](http://www.wizardworks.com/macsoft)

Circle 30 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

# The Game Room



With your permission, sensation seekers, this month I'm going to recklessly abuse the power of my office to settle a personal score. Yeah, I don't like it any more than you do. My mandate as a columnist is to serve you, the readers, and until now I've lived a life of such exhausting purity that the Catholic Church keeps sending me junk mail telling me I'm preapproved

for beatification and a Vatican Platinum card with a heavenly introductory APR of 5.9 percent.

(Granted, there was that year I exploited my contacts in the industry to gather insider information about a publicly traded company, information I then parlayed into an enormous financial windfall through a focused campaign of writing misleading and deceptive editorials and articles and spreading strategic disinformation to other insiders and members of the media. But in my own defense, this was back in 1998, for heaven's sake; and if the fact that the Securities and Exchange Commission settled my case without insisting on jail time isn't enough to convince you of my innocence in the matter—well, I don't know what to tell you.)

So I'm going to cash in on that goodwill now and direct this column to one specific reader, a kid I met recently in Ann Arbor, Michigan. I was in town for the MacTechnics user group's annual meeting. For a cozy 90 minutes I inflicted on the auditorium listeners my thoughts about Mac OS X and why all software should embrace the principles of open-source code, and a rundown of my favorite *Babylon 5* episodes, and then I opened the floor to questions.

The kid asked me about the future of Mac gaming. I explained that while we weren't out of the woods yet, for the first time in ten years we finally had very tangible

cause for optimism. He asked, "But what about console games?" And I didn't want to embarrass the boy for his lack of experience and sophistication, you know? So I just said, "Well, what you have to understand is . . . the thing about the PlayStations and the rest . . . um . . . in this sort of marketplace . . . ." and after a thoughtful pause of some minutes, I finally asked if anyone wanted to see my wrist-computer again.

You see, I made the critical mistake of actually thinking about the question, which is always fatal when you do a Q&A. Arrogance, technical acronyms, and speed are all you need, provided you move on to the next question quickly enough.

It was such a good question, though. There are a lot of reasons to think the Mac has a great future in gaming. Year 2001 will mark the arrival of a boatload of next-generation games, such as *Oni*. In 2000 we saw ATI's Radeon card and 3dfx's Voodoo 5 card introduced for the Mac. That's a killer development—not just because of the cards' ability to put pixels on the screen and your bladder's contents on your seat, but also because it means we've finally got real competition in this field.

Here's what 2001 will bring in the realm of console games: Sony's PlayStation II and a new Nintendo box code-named Dolphin. Each one has enough raw

*continues*

graphics-crunching power to suggest you can't play them without setting off garage-door openers and car-security systems all over the neighborhood.

Sony's DVD-based system has a so-called "Emotion Engine" chip similar to those on Silicon Graphics workstations. The basic design is so powerful and flexible that Sony showed off a sort of super-PlayStation at last year's Siggraph show. It'll be a graphics workstation featuring 64 processors in parallel and the ability to render near-cinema-quality graphics in real time at 60 frames per second (fps).

Nintendo has a cube-shape system based on PowerPC technology. The GameCube's chipset is so intimately linked, you could argue convincingly that it's all a single graphics circuit. Gaming site [ign.com](http://ign.com) reports that developers are having no problem getting 9 million polygons at 60 fps out of their seed prototypes. Trust me, that translates to a whole lot of blood and flying body parts.

Which is all very nice, of course. I especially like the idea of Nintendo marketing a digital product that borrows the Cube's name and shape. It's been a while since Apple has made any real money off those Wile E. Coyotes in its lawsuit division. Though it's nearly impossible to compare desktop and console video hardware directly, it's clear that Radeon and Voodoo 5 could hold their own. Consoles benefit from both high-performance silicon and the minimal overhead of a games-only system. Graphics cards benefit from some of the lessons and examples of desktop graphic standards, which are constantly evolving and improving. All told, it's a draw.

But let's say you're sitting here with a G3 or G4 Mac and the desire to make it work as well, in effect, as a console. Well, one of those cards will cost you about \$300. Add another \$50 for a proper game controller (not the least of the PS2 and GameCube's features are powerful controllers with enough buttons, pads, and sticks to kick up any category of game).

So your Cutting-Edge Game Upgrade cost you \$350. Incidentally, you also acquired a boatload of enhancements that will increase performance here and there outside game space—particularly if you're involved in digital video—but let's forget that for now. How much will it

eventually cost just to go out and buy a PS2? Best guess: \$300. A GameCube? Nintendo wants to undercut Sony, possibly by as much as \$100. And the PS2 will do double-duty as a DVD player.

In all honesty, it's just not feasible for a Mac—or a Wintel box, for that matter—to compete with a game console. It's an entirely different culture of hardware and software development, one that focuses all monies and all resources

on ensuring that when blade strikes neck, blood spurts in the most lifelike and satisfying manner possible.

But even when we acknowledge all of that, it's clear that truly sophisticated games require more than raw processing power. They require OS-level resources. Overall, a Mac might not be a better machine if you just want to fly, shoot, hack, and slash. But if you're looking to fly, *think*, shoot, deal with a wholly unexpected development, go off on a seemingly unrelated tangent, and *then* hack and slash, a desktop is tops.

Finally, this is indeed a great time to invest in your Mac as a gaming platform.

Microsoft recently acquired Bungie, and immediately thereafter Bungie announced that it now has enough resources to publish all of its future titles for both the PC and the Mac.

And with the arrival, finally, of a true Mac gaming juggernaut, United Developers has chosen to beef up its

**Cube Envy** Hmm. A cube-shape gaming machine from Nintendo. How interesting.

Mac catalog by acquiring MacSoft.

We have an Apple that is betting on open gaming standards, we have competition in gaming hardware—and at last we have two big companies that are determined to do well in the Mac games market. So hold off on the GameCube, kid. Buy the best controller you can afford right now. Budget for a new graphics card at the end of the year in case the games you play between now and then blow you away to such an extent that it loosens your purse strings. It is a good time to kill and a good time to die. **m**

If ANDY IHNATKO's next-door neighbor were to get a life, he wouldn't be so obsessed with what time it is when Andy plays his stereo real loud.



# ASSIMILATE THIS.



## STAR TREK VOYAGER ELITE FORCE™

SET PHASERS™ TO FRAG



[www.ravensoft.com](http://www.ravensoft.com)

[WWW.ASPYR.COM](http://WWW.ASPYR.COM)

[www.startrek.com](http://www.startrek.com)

TM, ®, & © 2000 Paramount Pictures. All rights reserved. Star Trek, Star Trek: Voyager and related marks are trademarks of Paramount Pictures. This product contains software technology licensed from Id Software, Inc. Id Technology © 1999, 2000 Id Software, Inc. All rights reserved. © 2000 Activision, Inc. and its affiliates. Activision is a registered trademark of Activision, Inc. and its affiliates. All rights reserved. The ratings icon is a trademark of the Interactive Digital Software Association. The Aspyr Media logo is a trademark of Aspyr Media, Inc. Macintosh and the MacOS logo are trademarks of Apple Computer, Inc. All other trademarks are the property of their respective holders.

Circle 91 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

# INDEX TO ADVERTISERS

Interact with the companies whose products and services are advertised in **Macworld**

ADVERTISER	INTERACT	PAGE NO.	ADVERTISER	INTERACT	PAGE NO.
ACD Systems	acdsystem.com/mw	81	MacMall/Creative Computers	800-222-2808	122-129
Adaptec	adaptec.com/mac	13	Macromedia	macromedia.com	28-29
Aladdin Systems	aladdinsys.com	12	MacSoft	gtstore.com	90
Alsoft	alsoft.com	92-93	MacSoft	gtstore.com	96
American Power Conversion	888-289-APCC	17	MacWarehouse	800-355-5841	114-121
Anthro	anthro.com	10	MegaHaus	800-786-1184	134
APS Technologies	800-950-2015	130-131	MicroMat	800-829-6227	26
Aspyr Media	aspyr.com	78	Microsoft	microsoft.com/mac	18-19
Aspyr Media	aspyr.com	99	Microtek Lab, Inc.	800-654-4160	88
Brother	brother.com	9	MYOB	800-322-MYOB	24
Canon USA	powershot.com	71	Nemetschek North America	nemetschek.net	6
CD Cyclone	cdcyclone.com	12	Netword.com	netword.com	59
CDW Computer Centers, Inc.	800-509-4239	132-133	Olympus America	P400.olympus.com	33-36
Creativepro.com	creativepro.com	94	Orange Micro	714-779-2772	14
Creativepro.com	creativepro.com	104	Pangea Software	pangeasoft.net	86
Crucial Technology	crucial.com	C2-1	Quantum	snapsrver.com	63
dot tv	www.tv	85	Silicon Image	digitalisbetter.com	83
GCC Technologies	gcctech.com	4-5	Sonnet Technologies	800-786-6260	47
Interland	interland.com	136	Sony CRT	sony.com/obsessed	55
J&R Computer World	800-221-8180	135	Symantec	symantec.com/mac	65
Kensington	kensington.com	BC	Thursby Software Systems	thursby.com	11
La Cie	lacie.com	68	VST Technologies, Inc.	vsttech.com	67
Mac Zones	maczone.com	105-113	XANTE Corporation	xante.com	C3

# PRODUCT INDEX

Looking for a specific product? Simply use Macworld's product index to find the page or the advertiser of the products which interest you. Then simply log on at [www.macworld.com/getinfo](http://www.macworld.com/getinfo) and receive all the product information you need.

PAGE NO.      ADVERTISER      GET-INFO      PAGE NO.      ADVERTISER      GET-INFO

## ACCESSORIES

### FURNITURE

10      Anthro      —

## HARDWARE

### COMPUTER SYSTEMS

122-129      MacMall/Creative Computers      132

105-113      Mac Zones      72

67      VST Technologies, Inc.      74

### DIGITAL

71      Canon USA      23

### HARD DISK STORAGE

130-131      APS Technologies      56

12      CD Cyclone      127

134      MegaHaus      108

### MISCELLANEOUS

17      American Power Conversion      73

12      CD Cyclone      127

C2-1      Crucial Technology      —

BC      Kensington      1

68      La Cie      —

### MONITORS/ GRAPHICS BOARDS

13      Adaptec      —

83      Silicon Image      149

47      Sonnet Technologies      133

55      Sony CRT      —

### NETWORKING PRODUCTS

63      Quantum      —

### PRINTERS

9      Brother International Corporation      119

4-5      GCC Technologies      47

C3      XANTE Corporation      113

### SCANNERS & DIGITAL CAMERAS

88      Microtek Lab, Inc.      134

33-36      Olympus America      7

14      Orange Micro      61

## MAIL ORDER

130-131      APS Technologies      56

132-133      CDW Computer Centers, Inc.      2

135      J&R Computer World      57

105-113      Mac Zones      72

122-129      MacMall/Creative Computers      132

114-121      MacWarehouse      19

134      MegaHaus      108

## SERVICES

### INTERNET PRODUCTS/SERVICES

94      Creativepro.com      14

104      Creativepro.com      14

85      dot tv (www.tv)      125

136      Interland      11

59      Netword.com      93

## SOFTWARE

### BUSINESS/PRODUCTIVITY

81      ACD Systems      31

18-19      Microsoft      —

24      MYOB      171

6      Nemetschek North America      126

11      Thursby Software Systems      124

### ENTERTAINMENT

78      Aspyr Media      91

99      Aspyr Media      91

90,96      MacSoft      30

86      Pangea Software      148

### GRAPHICS/DTP

28-29      Macromedia      36

### UTILITIES

12      Aladdin Systems      8

92-93      Alsoft      141

26      MicroMat      37

65      Symantec      128

# Macworld

**Conference & Expo**

# *ahead*

To Request  
More Information,  
Visit [www.macworldexpo.com](http://www.macworldexpo.com)!

**Moscone Convention Center**  
**San Francisco, CA**  
January 9-12, 2001

Register Online  
[www.macworldexpo.com](http://www.macworldexpo.com)

Call Toll Free  
**1-800-645-EXPO**

Register by December 11, 2000 for special savings!  
Refer to Priority Code: **A-MW2N**

**World-Class Exposition!**  
Macworld Conference & Expo/San Francisco 2001 is a **One-Stop-Shop** offering discounts not found anywhere else!

- Featuring more than 500 exhibiting companies
- Thousands of new products, software and services
- Hands-on demonstrations
- Test-drive new technologies
- Awards and competitions
- Prizes, drawings, giveaways

### **Special Interest Boulevards**

**Macworld Conference & Expo offers so much for every Mac user!**

Check out the Special Interest Boulevards while you are exploring the exhibit floor to find and compare hot new products for your particular needs. Popular areas include:

- Digital Multimedia
- Music and Audio
- Developer Central
- Net Innovators

**Be sure to visit [www.macworldexpo.com](http://www.macworldexpo.com) for exciting additions!**

**Join your friends  
and colleagues in the Mac community  
at The Largest IT event  
on the West Coast!**

### **Cutting-Edge Educational Programs!**

**Conference sessions for the New, Beginning, Intermediate and Advanced users!**

**Macworld/Pro** features technically in-depth presentations and issues-oriented discussions about professional applications of Macintosh technology. The Pro conference offers **the most sophisticated training available** on Mac networking, digital video, art director/creative management practices, and Mac systems administrations for large organizations.

**Macworld/Users** continues to be one of **the best educational values anywhere.**

The Users conference features industry experts offering skill development on the most popular Mac-related tools and professional development courses for users who rely on Apple technology to gain a competitive advantage.

### **MacBeginnings - San Francisco debut!**

After great success this July in New York, MacBeginnings will make it's debut in San Francisco! These high-energy, informative sessions will provide first-time attendees, new and beginning Mac users a starting point to enter the Mac community. MacBeginnings are free and open to **ALL** registered Macworld Conference & Expo attendees!

**Macworld**  
Conference & Expo  
[www.macworldexpo.com](http://www.macworldexpo.com)

Owned and Managed by  
**IDG**  
WORLD EXPO

Flagship Sponsors

**Macworld**

MACBUY.COM

**Macworld.com**

**MacWEEK.com**

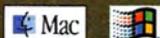
**MacCentral.com**



## Make it this easy for your clients to preflight their own files.



For a free evaluation guide, or to sample Preflight Online, please visit [extensis.com/preflightonline](http://extensis.com/preflightonline).



Preflight Online™ makes it easy for your clients to check their files before delivering them to you. Clients can now simply drag and drop their PDF files onto your Web site. Within moments, a detailed report identifies missing fonts, graphics with the wrong resolution, and over 100 other checks customized by you to match your output requirements. And Preflight Online not only finds any problems, it automatically tells your clients how to fix them—virtually eliminating prepress bottlenecks. It's as close as it gets to a sure thing.

**NEW!** Extensis Preflight Online

[www.extensis.com/mw](http://www.extensis.com/mw)

800.796.9798

**Extensis**™

© 2000 Extensis Product Group. All rights reserved. Preflight Online, Extensis and the Extensis logo are trademarks of Extensis Product Group. All other trademarks are the property of their respective owners. Golf course photo courtesy of Camas Meadows Golf Club.

Circle 14 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)



# macZone

a division of Zones.com

www.maczone.com

# Our Gift To You!



## Mac Zone Exclusive — Your Choice

# \$200

up to

# INSTANT REBATE!

# OR



UP TO \$170 VALUE!

# FREE

up to

# 128MB MEMORY!

Get up to \$200 OFF any computer in this catalog priced over \$800. See schedule below to determine your instant savings. Offer good only for orders made by phone. Only one instant rebate per computer. Not valid with Mac Zone 50% OFF Memory offer or Free Memory offer. Can be used in conjunction with Free Shipping offer and Apple Rebate offer. Available for a limited time only.

Any computer in this catalog priced from	Instant Rebate Amount	Any computer in this catalog priced from	Instant Rebate Amount
\$0 - \$799 <sup>98</sup>	\$0	\$1800 - \$2299 <sup>98</sup>	\$100
\$800 - \$999 <sup>98</sup>	\$20	\$2300 - \$2499 <sup>98</sup>	\$150
\$1000 - \$1799 <sup>98</sup>	\$50	\$2500 - \$3499 <sup>98</sup>	\$200

Model	Memory	Up to Value
iMac DV, DV+, SE	64MB	\$85
iBook	64MB	\$85
G4 Cube, G4/400/20GB	64MB	\$85
G4/450 Dual, G4/500 Dual	128MB	\$170
PowerBook 400, 500/12GB, 500/20GB	128MB	\$170

## Mac Zone Exclusive!

# FREE SHIPPING!

Purchase any Apple computer and a qualifying extended service plan for that computer — on the same order — and receive free UPS Ground shipping on your entire order. Maximum FREE shipping amount is \$50 for ground shipping. Qualifying service plans include ServiceNet and AppleCare Protection Plan. Call for details on plan pricing and to place your order.

## Apple Rebates

# \$300

Apple mail-in rebate on G4 Cube and Apple Studio Display

Rebate applies to purchase of an Apple G4 Cube with an Apple Studio 15" Display (#124924) or an Apple Studio 17" Display (#124923), on same invoice. Rebate expires 12/31/00. Download rebate coupon from Zones.com. See Apple rebate coupon for complete details. Offer valid in conjunction with Mac Zone sponsored promotions.

# \$200

Apple mail-in rebate on select Apple PowerBooks

Rebate applies to purchase of PowerBook 500/12GB, 400/10GB and 500/20GB. Rebate expires 12/31/00. Download rebate coupon from Zones.com. See Apple rebate coupon for complete details. Offer valid in conjunction with Mac Zone sponsored promotions.

# FREE Scooter!

with any Apple CPU purchase over \$800!

Not valid with any other Mac Zone offer. Offer subject to change. While supplies last. Ask for item #121996



\$80 Value!

## Mac Zone Exclusive!

# 50% OFF MEMORY!



Purchase a qualifying Apple computer and receive 50% OFF our already low memory prices. Only memory items listed in 50% OFF promotional box are eligible for this offer. Only one memory module per computer. Offer not valid with Mac Zone Instant Rebate offer or Free Memory offer. Can be used in conjunction with Free Shipping offer and Apple Rebate offer. Available for a limited time only. Call to place your order.

Source Code  
MW011

Order by Phone  
1.800.436.0606

Order Online  
Today!

# Zones.com



**GREAT GIFT IDEA!**

Apple® iMac™  
Starting At  
**\$794<sup>98</sup>**

### New Optical Mouse.

Has no mouseball or rollers to clean, needs no mousepad and has a unique, full-surface button. Available separately, tool #124979 **\$59.99**

### Apple Pro Keyboard.

Features full-size 108-key layout, plus an all-new media eject button.

Now available separately, too. #124980 ..... **\$59.99**



**FREE Bugsdom!**  
\$30 Value!



Included with every iMac One per iMac.

**AppleCare**  
iMac Protection Plan  
**\$149<sup>96</sup>** #722602

## Sure to be on someone's wish list.

The new iMac line is sure to a model that pleases the Mac lover on your gift list. Great, new colors; models priced to fit your budget; faster processors; more memory, expandable to a full gig; bigger hard drives; beefed up 3D graphics – the new line simply offers

more of everything. Plus, every iMac now comes with a full-sized keyboard and a nifty, maintenance-free optical mouse – plus the Harman Kardon Odyssey audio system and quiet, fanless operation that helped make iMacs famous.

### Go wireless.

With optional Apple AirPort technology, you can put your household on a wireless network. Surf the Internet through a solid brick wall or play multiplayer games with someone down the hall!

#115919 Base Station ..... **\$294.98**  
#115920 AirPort Card ..... **\$99.98**



### Capture the holidays with digital video!

Convert your old videos to digital via the analog line-in!

Canon ZR10  
Digital Video Camcorder

**\$899<sup>99</sup>**

#117041 Call for price



Better color and finer tones than ordinary DV!

Canon Elura 2 MC  
Digital Video Camcorder

**\$1599<sup>99</sup>**

#124368 Call for price



3 sensors for phenomenal resolution and color!

Canon GL1 3CCD  
Digital Video Camcorder

**\$2499<sup>99</sup>**

#111853 Call for price



### Stunning graphics.

An 8MB ATI RAGE 128 Pro Graphics card with AGP and Open GL support delivers extreme 3D for work and play.

### Desktop movies.

iMovie 2 makes editing digital video on all the new FireWire-enabled iMacs (DV, DV+, and DV SE models) as simple as the iMac itself is to use.

Discover how fun and easy it is to make a home video blockbuster!

"Film editing software so intuitive that it doesn't have a manual, or need one."

— Chris Taylor, TIME.com

Shoot brighter, sharper video even in the dark!

Sony DCR-TRV900  
Digital Video Camcorder

**\$2299<sup>97</sup>**

#111848



## Pick a NEW iMac that's right for you!

Model	Processor	HD	RAM	Optical Drive	USB	FireWire	AirPort Ready	External Video	FREE Scooter	OR FREE Memory	Item #	ONLY	Lease*
Indigo/350	350MHz	7.0GB	64MB	CD	2 ports	No	No	No	—	—	#124912	<b>\$794.98</b>	—
Indigo DV	400MHz	10.0GB	64MB	CD	2 ports	2 ports	Yes	Yes	Yes	64MB	#124913	<b>\$994.98</b>	—
Ruby DV	400MHz	10.0GB	64MB	CD	2 ports	2 ports	Yes	Yes	Yes	64MB	#124914	<b>\$994.98</b>	—
Indigo DV+	450MHz	20.0GB	64MB	DVD	2 ports	2 ports	Yes	Yes	Yes	64MB	#124915	<b>\$1294.98</b>	\$46
Ruby DV+	450MHz	20.0GB	64MB	DVD	2 ports	2 ports	Yes	Yes	Yes	64MB	#124916	<b>\$1294.98</b>	\$46
Sage DV+	450MHz	20.0GB	64MB	DVD	2 ports	2 ports	Yes	Yes	Yes	64MB	#124917	<b>\$1294.98</b>	\$46
Graphite DV SE	500MHz	30.0GB	128MB	DVD	2 ports	2 ports	Yes	Yes	Yes	64MB	#124918	<b>\$1494.98</b>	\$53
Snow DV SE	500MHz	30.0GB	128MB	DVD	2 ports	2 ports	Yes	Yes	Yes	64MB	#124919	<b>\$1494.98</b>	\$53

\*Business Lease: 36-month, fair-market value lease based on approved credit. Other leasing options available. Leases require a minimum order of \$1000. Call 1-800-611-9751 for details.



Credit cards are not charged until the order is shipped. Most products ship the same day (barring system failure, etc.). Shipping options include Ground, 2nd Day and Overnight delivery. Freight is based on average product weight. Handling extra. Insurance available. Special orders may require special shipping and handling charges. Call for international shipping rates. Prices and product availability subject to change without notice. Specials and promotions may be limited to stock on hand. Not responsible for typographical errors. All products sold by Multiple Zones International (MZI) are third party products and are subject to the warranties & representations of the applicable manufacturers, including but not limited to Y2K compliance. Accordingly, MZI makes no representation or warranty with respect to Y2K compliance of product sold. ©2000 Multiple Zones International Inc. All rights reserved. Unauthorized duplication is a violation of applicable laws. Apple®, the Apple logo, Macintosh® and PowerBook® are registered trademarks of the Apple Computer, Inc.

### Upgrade Your iMac or iBook!

Value RAM BY KINGSTON	For iMac 350/400MHz	Price
#674339	64MB	<b>\$39.99*</b>
#123842	128MB	<b>\$99.99*</b>
#715574	256MB	<b>\$219.99**</b>
For iBook		
#674337	32MB	<b>\$39.99</b>
#715586	64MB	<b>\$39.99*</b>

\*After \$15 mfr. mail-in rebate. Low Zone price: \$54.99.  
\*\*After \$20 mail-in rebate. Low Zone price: \$119.99. \*\*After \$35 mail-in rebate. Low Zone price: \$254.99. Offer expires 12/31/00. Prices subject to change.

# on Your Gift List!

## Cool iMac Stuff

Deep, rich bass sound for CDs, games & DVD  
Harman Kardon iSub Subwoofer



ONLY \$99.99 #116542

Now in graphite Intuos Special Edition 9x12 USB Tablet with 4D Mouse



ONLY \$479.99 #121929

## Removable Storage

ONLY \$179.99 #119675



250MB of removable storage  
Omega USB Zip 250 Drive

FREE 2 pack media with purchase!



ONLY \$89.99 #112789

Use floppies with your iMac  
VST USB Floppy Drive



ONLY \$169.99 #109035

Use floppy disks and add 120MB storage  
Imation USB SuperDisk Drive 2X

\$50 Rebate!



ONLY \$369.99\* #113595

The first 12x10x32 CD-RW - great for making iMovies

\*After \$30 mfr. mail-in rebate. Low Zone price \$399.99. Expires 1/15/01.

Your Choice!  
Mac Zone Exclusive!  
\$50 Instant Rebate!  
On select computers in this ad. Call for details.

OR  
FREE! 64MB Memory \$80 VALUE  
Offers subject to change. While supplies last.

## Game Devices



Free your game control from your desktop  
Macally AirStick USB Motion-Sensing Midair Joystick

ONLY \$34.99 #662246

Plunge into your games  
Macally iShock USB Programmable Game Controller



ONLY \$29.99 #106162

Graphite Cover! 12 ppm Fast - 2880 x 720 dpi  
Epson Stylus 880i InkJet Printer

NEW!



ONLY \$149.99 #124653

Zones Exclusive! 42 bit FireWire scanner  
UMAX 6400



ONLY \$199.99\* #113896

\*With purchase of CPU. Low Zone price: \$249.99. Offer good through 11/30/00.

## Microsoft®

The most Mac-like Office ever made



ONLY \$325.99\* #729142

Microsoft Office 2001 Upgrade  
\*After \$100 mfr. mail-in rebate within 60 days of purchasing Apple iMac/iBook only. Low Zone price: \$425.99. Offer good 9/15/00-12/31/00.

Intuit  
Quicken 2001 #727334 \$39.99\*  
\*After \$20 mfr. mail-in upgrade rebate. Low Zone price \$59.99.

ViaVoice  
IBM ViaVoice Enhanced Edition #122778 \$79.99\*  
\*After \$50 mfr. mail-in upgrade rebate. For owners of Millennium Edition only. Low Zone price \$129.99. Offer good through 1/15/01.

iUPS Power Surge Protection and 11 minutes of back-up battery power  
TRIPP-LITE #111999 \$79.99

Star Trek Voyager Elite Force #741352 \$49.99

## Electronics @ Zones [www.zones.com/electronics](http://www.zones.com/electronics)

Where you can find all this, and much more!

### Executive TV

Panasonic 13" TV/4-Head VCR Combo



ONLY \$239.99 #122029

### MP3 Player

Rio 500 64MB of memory



ONLY \$199.99\* #649033

\*After \$50 mfr. mail-in rebate. Low Zone Price: \$249.99.

### Executive Stereo

JVC FS-S09 Mini System



ONLY \$399.99 #117092

### Personal

Panasonic SL-SW880



ONLY \$169.99 #733681

Shockwave CD Player with Brainshaker Headphones

### Radar

Cobra 9100 9-Band Radar Detector with StrobeAlert™



ONLY \$89.99 #117186

### Phones

Panasonic 2.4GHz DDS Cordless Phone



ONLY \$159.99 #122022

### Top Games!

	Item #	ONLY
The Sims	#702664	\$44.99
Madden NFL 2000	#111576	\$19.99
Scrabble	#735107	\$29.99
Baldur's Gate	#625850	\$39.99
Age of Empires	#111565	\$19.99
Tomb Raider III	#111573	\$29.99
The Big Kahuna	#108263	\$49.99
SimCity 3000	#111560	\$44.99
Scary Movie Trivia	#735001	\$19.99
Total Annihilation Gold	#111567	\$29.99
ChessMaster 6000	#653212	\$34.99
Quake III Arena	#112118	\$44.99
Unreal Tournament	#111907	\$32.99
Bugdom 3D for the Family	#114493	\$29.99
Mac Fun Pack	#675767	\$19.99
Deus Ex	#701823	\$39.99

Corporate bids welcome!  
Fax to 1-888-239-2591

A NASDAQ® COMPANY Ticker Symbol: MZON

Source Code  
MW011

Order by Phone  
1.800.436.0606

Order Online Today  
[www.maczone.com](http://www.maczone.com)

[www.macworld.com](http://www.macworld.com) January 2001 107

## Microsoft®



ONLY  
**\$325.99\***  
#729142

- More Mac-like than ever
- New from the ground up
- Compatible with Office 97/98/2000 and AppleWorks 6
- Powerful and easy to use

\*After \$100 mfr. mail-in rebate, good within 60 days of purchasing iMac/iBook. Offer valid 9/15/00-12/31/00

### Upgrade your iBook!



### For iBook

Processor	Hard Drive	RAM	On-chip Cache	Optical Drive	Ethernet	Ports	Modem	FREE** Memory	Item #	ONLY
#715586	64MB	\$39.99**						64MB	#124939	\$1494.98
#116657	128MB	\$169.99						64MB	#124977	\$1494.98

\*\*After \$15 mfr. mail-in rebate. Low Zone price: \$54.99. Offer expires 12/31/00. Prices subject to change.

### Choose the color that suits your mood



Graphire Tablet



ONLY  
**\$99.99**  
#121927

### Simple, fun & functional



Palm m100



ONLY  
**\$149.99**  
#123695



## Apple® iBook™ SE 466MHz G3. 10GB hard drive.

- FireWire Port!
- DVD-ROM drive!
- A/V output!
- Built-in 12.1" TFT!
- Snow Accents!
- iMovie 2!



## iBook, the next generation.

The new iBooks look great. And each comes with a faster CPU, bigger hard drive, 8MB ATI RAGE Mobility Card, a FireWire port and an A/V port for connecting the iBooks to a big screen TV and your stereo speakers. So, now you can enjoy creating and sharing iMovies, playing the latest 3D games, and more.



## Apple® iBook™ 366MHz G3. 10GB HD.

- FireWire Port!
- A/V output!
- CD-ROM!
- 12.1" TFT!
- Snow Accents!
- iMovie 2!

Processor	Hard Drive	RAM	On-chip Cache	Optical Drive	Ethernet	Ports	Modem	FREE** Memory	Item #	ONLY
Indigo/366	10.0GB Ultra ATA	64MB	256K	24X CD-ROM	10/100BT	USB/FW	56K	64MB	#124939	\$1494.98
<b>NEW! Key Lime/366</b>	10.0GB Ultra ATA	64MB	256K	24X CD-ROM	10/100BT	USB/FW	56K	64MB	#124977	\$1494.98
Graphite SE/466	10.0GB Ultra ATA	64MB	256K	6X DVD-ROM	10/100BT	USB/FW	56K	64MB	#124940	\$1794.98
<b>NEW! Key Lime/466</b>	10.0GB Ultra ATA	64MB	256K	6X DVD-ROM	10/100BT	USB/FW	56K	64MB	#124978	\$1794.98

Business Lease Available: 36-month, fair-market value lease based on approved credit. Other leasing options available. Leases require a minimum order of \$1000. Call 1-800-611-9751 for details. \*\*Your choice of \$50 off select computers in this ad or up to 64MB FREE memory. Call for details.



### NEW controller card supports 4 internal hard drives

Sonnent Tempo Card

USB to IR remote control for DVD, CD, QuickTime or MP3 Player

Keyspan Media Remote

ONLY  
**\$49.99**  
#111113



ONLY  
**\$99.99**  
#119180

### Feast your eyes. Gorge your ears.



Harman/Kardon Soundsticks

ONLY  
**\$199.99**  
#127797

### Go Wireless



ONLY  
**\$294.99**  
#115919

### AirPort Base Station

- Surf the Net or network wirelessly\*
- Up to 150' range lets you and the iBook roam around the home or classroom

#115920 AirPort Card . \$99.98

\*Requires the AirPort Card, Base Station and a computer that is AirPort Card ready.

Play games in mid-air!

Macally Motion-Sensing Mid-Air Joystick



ONLY  
**\$34.99**  
#662246

### Great for iBook users



Mouse-in-Box Optical Pro

ONLY  
**\$39.99**  
#722368



Perfect for iBooks or 14" screen notebooks

Targus LapPac 5 Carrying Case

ONLY  
**\$59.99**  
#503773



Credit cards are not charged until the order is shipped. Most products ship the same day (barring system failure, etc.). Shipping options include Ground, 2nd Day and Overnight delivery. Freight is based on average product weight. Handling extra. Insurance available. Special orders may require special shipping and handling charges. Call for international shipping rates. Prices and product availability subject to change without notice. Specials and promotions may be limited to stock on hand. Not responsible for typographical errors. All products sold by Multiple Zones International (MZI) are third party products and are subject to the warranties & representations of the applicable manufacturers, including but not limited to Y2K compliance. Accordingly, MZI makes no representation or warranty with respect to Y2K compliance of product sold. ©2000 Multiple Zones International Inc. All rights reserved. Unauthorized duplication is a violation of applicable laws. Apple®, the Apple logo, Macintosh® and PowerBook® are registered trademarks of the Apple Computer, Inc.

# iBook in Key Lime!

## SONY. Capture it digitally.

10X optical zoom



ONLY \$499.99 #617980

Sony Mavica MVC-FD73 Digital Camera

Store images on 3" CD-R discs



ONLY \$1299.99 #124357

Sony Mavica MVC-CD1000 CD Camera

Get high-quality photos. 3X optical zoom.

ONLY \$449.99 #117019



\* After \$50 rebate. Low Zone Price: \$499.99. See zones.com for details

Sony Cybershot DSC-S30 Digital Camera

Pro-quality digital SLR camera



ONLY \$999.99 #656055

Sony Cybershot DSC-D770 Digital Pro Camera

## Our Best Selling 17" Flat-Screen Monitors



ONLY \$279.99 #686106

FE700 17" Color (16" viewable)

ONLY \$279.99 #661363

Apple 17" Studio Display (16" viewable)

ONLY \$494.99 #124923

Design and print labels for CDs, jewel case tray liners and book covers



ONLY \$19.99 #625906

Fellowes CD/DVD Labeler Kit



Robust mobile printer HP DeskJet 350C Portable Printer Includes USB-to-Parallel Adapter and Cable.

ONLY \$339.99 #122560

Stores an hour of MP3 tunes



ONLY \$169.99 #701451

Create CDs from any music source Roxio Toast 4 Deluxe



ONLY \$79.99 #658850

Unbelievable quality at an incredible price



ONLY \$199.99 #117397

High-speed, network-ready printer HP 4050N LaserJet Printer



ONLY \$1449.97 #617964



\$30 Price Drop!

ONLY \$89.99 #95251

Easy-to-use storage Iomega Zip® 100 Portable USB Drive



ONLY \$89.99 #99496

Add an external SCSI port to your new Power Mac! Adaptec Internal SCSI Card



ONLY \$109.99 #675033

Scan slides and up to legal-sized documents Microtek V6UPL USB/Parallel (legal size 1200x600 scanner) \* After \$20 mfr. mail-in rebate. Low Zone price \$129.99. Offer good through 12/31/00.



SAVE \$100

ONLY \$199.99 #113867

Built-in PCMCIA card reader Stylus Photo 875DC Printer \* SAVE \$100 when purchased with any digital camera. Low Zone price: \$299.99. Offer expires 12/31/00.



NEW!

ONLY \$199.99 #693295

Epson Stylus 980 \* After \$50 mfr. mail-in rebate. Low Zone price: \$249.99. Offer expires 12/31/00.



NEW!

ONLY \$149.99 #124648

600 x 2400dpi, 36-bit color scanning Epson 640U Perfection USB Scanner

Your Choice! Mac Zone Exclusive!

UP TO \$50 Instant Rebate!

On select computers in this ad. Call for details.

OR

FREE! UP TO 64MB Memory UP TO \$80 VALUE

Offers subject to change. While supplies last.

NEW!

Open Windows Files On Your Mac. Instantly.

DataViz MacLink Plus Deluxe 12.0 #727753 \$49.99\*

HOT, HOT Game!

Diablo II for Mac #117284 \$54.99

\$50 Rebate!

Norton SystemWorks #127129 \$79.99\*

NEW!

Aladdin Stuffit Deluxe 6.0 #127137 \$69.99

\$10 Rebate!

Nova Print Explosion #104517 \$39.99\*

Corporate bids welcome! Fax to 1-888-239-2591

Source Code MW011

Order by Phone 1.800.436.0606

Order Online Today www.maczone.com



### Top 5 Reasons to Upgrade:

- 1 Built from the ground up for Macintosh!
- 2 Complete compatibility with Office 97/2000, Windows and Office 98!
- 3 Seamless integration with FileMaker for database work!
- 4 NEW Entourage for information management!
- 5 Easier than ever to get the results you want!

\*After \$100 mfr. mail-in rebate, good within 60 days of purchasing iMac/iBook. Offer valid 9/15/00 through 12/31/00.



## Power Mac G4 Cube™ Big smallness.

That's right – Apple will send you \$300 CASH BACK when you buy a G4 Cube. One fourth the size of most desktop PCs, the G4 Cube gives you back a good chunk of your desktop real estate for other uses. And though it's quite small, the G4 Cube's full complement of high-performance hardware gives you the raw power you need for any computer task. Achieve your goals more quickly and more easily in such demanding applications as desktop publishing, editing digital video, playing ultra-realistic 3D games, and/or scientific research. Order the G4 Cube today and get \$300 from Apple!

### Get professional video results

Final Cut Pro Certified!



Canon GL1 Digital Camcorder

### 3.34 Megapixel for the highest quality resolution



Olympus C-3000Z Digital Camera

### The power-user's inkjet



HP 970Cse

### High-speed, versatile workgroup printing



HP LaserJet 4050N

## Sound appreciation.

The G4 Cube unique design helps you appreciate the premium audio quality of the Apple-designed Harman Kardon stereo speakers. Designed without a fan, the G4 Cube runs in virtual silence, so you can concentrate on more important things – like enjoying your music.



## 108-key Apple Pro Keyboard.

Includes 15 full-size function keys, document controls, full-size inverted-T cursor keys, audio control keys and a disk-eject key. Included FREE.

## Optical Apple Pro Mouse.

Operates on almost any surface, and the entire mouse is an ergonomic button. Included FREE with the Cube.

Keyboard & Mouse now available separately!



Processor	Hard Drive	RAM Std/Max	Backside Cache	Optical Drive	Gigabit Ethernet	FREE** Memory	Item #	ONLY
G4 Cube/450MHz	20.0GB Ultra ATA-66	64MB/1.5GB	1.0MB at 225MHz	DVD-ROM	No	64MB	#124926	\$1494.98*
G4/400MHz	20.0GB Ultra ATA-66	64MB/1.5GB	1.0MB at 200MHz	DVD-ROM	Yes	64MB	#124920	\$1594.98
G4/Dual 450MHz	30.0GB Ultra ATA-66	128MB/1.5GB	1.0MB at 225MHz	DVD-ROM	Yes	128MB	#124921	\$2494.98
G4/Dual 500MHz	40.0GB Ultra ATA-66	256MB/1.5GB	1.0MB at 250MHz	DVD-ROM	Yes	128MB	#740288	\$3194.98
G4/Dual 500MHz	40.0GB Ultra ATA-66	256MB/1.5GB	1.0MB at 250MHz	DVD-RAM	Yes	128MB	#124922	\$3494.98

\*After \$300 Apple rebate. Must be purchased with the purchase of an Apple Studio 15" or 17" display. Low Zone price \$1794.98.  
\*\*Your choice of up to \$200 instant rebate or up to 128MB FREE memory. Call for details.

Business Lease Available: 36-month, fair-market value lease based on approved credit. Other leasing options available. Leases require a minimum order of \$1000. Call 1-800-611-9751 for details.

### Awesome NEW wireless technology



### Get fast access to 45.0GB of info



### Radeon Chip Set



### Power Mac G4 Memory

- 64MB Upgrade \$39.99\* #674339
- 128MB Upgrade \$99.99\*\* #123842
- 256MB Upgrade \$219.99† #715574

\*After \$15 mfr. mail-in rebate. Low Zone price \$54.99. \*\*After \$20 mfr. mail-in rebate. Low Zone price \$119.99. †After \$35 mfr. mail-in rebate. Low Zone price \$254.99. Rebates valid through 12/31/00.



Credit cards are not charged until the order is shipped. Most products ship the same day (barring system failure, etc.). Shipping options include Ground, 2nd Day and Overnight delivery. Freight is based on average product weight. Handling extra. Insurance available. Special orders may require special shipping and handling charges. Call for international shipping rates. Prices and product availability subject to change without notice. Specials and promotions may be limited to stock on hand. Not responsible for typographical errors. All products sold by Multiple Zones International (MZI) are third party products and are subject to the warranties & representations of the applicable manufacturers, including but not limited to Y2K compliance. Accordingly, MZI makes no representation or warranty with respect to Y2K compliance of product sold. ©2000 Multiple Zones International Inc. All rights reserved. Unauthorized duplication is a violation of applicable laws. Apple®, the Apple logo, Macintosh® and PowerBook® are registered trademarks of the Apple Computer, Inc.

# BACK from Apple!

**\$300**

**Apple Rebate!**

Rebate applies to purchase of an Apple G4 Cube with an Apple Studio 15" Display (#124924) or an Apple Studio 17" Display (#124923), on same invoice. Rebate expires 12/31/00. Call for details.

## Power Mac Dual G4™



Apple Cinema Display 22" \$3999<sup>98</sup> #124925

Add an internal Zip drive ONLY \$99<sup>99</sup> #109997

## Mac Zone Exclusive!

Your Choice!

up to **\$200** Instant Rebate!

On select computers in this ad. Call for details.

OR



Offers subject to change. While supplies last. Call for details.

**FREE!** up to **128MB** Memory up to \$170 VALUE

The world-standard image-editor!



**NEW Version!**

- Streamlined interface
- Paragraph text options
- On-canvas text entry
- New layer management
- Superb vector shape and text support

**BONUS!** Go-Live 30-day FREE trial CD included in box.

Activate full version for only \$99 – a \$200 value! Offer ends 3/31/01.

Save big with Web & print publishing collections



**SAVE OVER \$550!**

ONLY \$999<sup>99</sup> #745220

Adobe Web Collection 3.0:  
• Photoshop • Illustrator  
• GoLive • LiveMotion



**SAVE OVER \$700!**

ONLY \$999<sup>99</sup> #745218

Adobe Publishing Collection 9.0:  
• Photoshop • Illustrator  
• PageMaker Plus • Acrobat

High-impact Web design



ONLY \$649<sup>99</sup> #128340

Macromedia Dreamweaver UltraDev 4 Fireworks 4 Studio

## G4 supercomputing delivers.

Affordable, supercomputing dream machines! Besides amazing CPU performance, the new Power Mac G4 comes with up to a 40-gig hard drive, a 16MB ATI RAGE Pro 128 graphics card, two FireWire ports, and support for up to 1.5GB of RAM. Order the ultimate tool for creative professionals today!

## Apple's newest displays.

Featuring Apple's hallmark, industry-leading design and quality, all connect to the Apple Display Connector on the new Power Mac G4s and Power Mac G4 Cube.

## Professional desktop studio.

Add a 22-inch Apple Cinema Display, and get a viewable area wide enough to view two full pages and to spread out dozens of clips, timelines, tools and previews.



\$300 OFF with Cube purchase!

**SAVE \$300!** + **FREE 128MB**

G4 Cube and Apple Studio 17" Display All for only \$2289<sup>98</sup>\*

#124985 Call for details. \*After \$300 Apple rebate.

Revolutionary interface boosts read & write speeds



ONLY \$249<sup>99</sup> #115183  
QPS 8X4X32X Ext. FireWire CD-RW \*After \$30 mfr. mail-in rebate. Low Zone price: \$279.99. Expires 1/15/01.

Zones Exclusive!

ONLY \$199<sup>99</sup> #113896

Astra 6400 42-bit FireWire Scanner for Mac \*After \$50 Zones Exclusive mfr. mail-in rebate, when purchased with CPU. Low Zone price \$249.99. Offer good through 11/30/00.

Exhibition quality, desktop convenience



ONLY \$499<sup>99</sup> #113866  
Stylus Photo 1270 Inkjet Color Printer

Fast, affordable laser printing

ONLY \$299<sup>99</sup> #654328  
brother HL-1240 12ppm Monochrome Laser



Corporate bids welcome!  
Fax to 1-888-239-2591

Source Code MW011

Order by Phone 1.800.436.0606

Order Online Today www.maczone.com

## The world-standard image-editor



**NEW Version!**

ONLY **\$189.99**  
#117291

### Photoshop 6.0 Upgrade

- Streamlined interface
- Paragraph text options
- On-canvas text entry
- New layer management
- Superb vector and text support

**BONUS!** Go-Live 30-day FREE trial CD included in box.

Activate full version for only \$99 – a \$200 value! Offer ends 3/31/01.



ONLY **\$325.99**  
#729142

## Top 5 Reasons to Upgrade:

- 1 Built from the ground up for Macintosh!
- 2 Complete compatibility with Office 97/2000, Windows and Office 98!
- 3 Seamless integration with FileMaker for database work!
- 4 NEW Entourage for information management!
- 5 Easier than ever to get the results you want!

\* After \$100 mfr.mail-in rebate. Within 60 days of purchasing iMac/iBook. Offer valid 9/15/00-12/31/00.

## 1200 x 2400 resolution, 42-bit CCD

Microtek ScanMaker 4700



**NEW Includes UTA!**

ONLY **\$249.99**  
#119652

## No moving parts to clean!



Kensington Mouse-in-a-Box Optical Pro

ONLY **\$39.99**  
#722368



# Apple® PowerBook™

**\$200 Apple Rebate!**

Rebate applies to purchase of PowerBook 500/12GB, 400/10GB and 500/20GB. Rebate expires 12/31/00. Download rebate coupon from Zones.com See Apple rebate coupon for complete details. Offer valid in conjunction with Mac Zone sponsored promotions.

**AppleCare**  
PowerBook Protection Plan  
**\$329.96** #722604

**Value RAM BY KINGSTON** Upgrade Your PowerBook!  
For PowerBook 400/500

#116658	64MB	\$64.99
#126723	128MB	\$169.99
#116022	256MB	\$429.99
#116023	512MB	\$1299.99

Memory available for other PowerBook models. Prices subject to change.

## Portable power play.

With the new PowerBooks' larger hard drives, powerful G3 processors, up to 10 hours of battery life (with a second Li-Ion battery installed), you get enough horsepower for everything from designing huge graphics spreads in Photoshop to editing professional film projects in Final Cut Pro – even when you're far away from electrical outlets.

With an ultrasharp, 14.1-inch TFT active-matrix display, support for dual displays, and a 24-bit video output port, PowerBooks let you do it all and see it all with exceptional clarity and versatility. Plus, for adding a special touch to desktop movies, the new PowerBooks come with iMovie 2.

## Real expansion potential.

The sleek, sculpted PowerBook connects seamlessly to plug-and-play FireWire (IEEE 1394) and USB devices that you can attach and start using in seconds. Want an external hard disk to store several hours worth of digital video? FireWire drives from VST provide colossal amounts of storage space that fit in a small space.



VST Zip 250MB Drive  
**\$279.99**  
#116684



VST 45GB Ext. FireWire Drive  
**\$670.99**  
#720042



VST 18GB Hard Drive Expansion Bay  
**\$455.99**  
#693462

**SAVE \$570**  
on a PowerBook 500/12GB!

Off original price! **\$200** Price Drop  
**\$200** AppleRebate  
Plus **\$170** FREE 128MB Memory  
**\$570 SAVINGS!**

PowerBook 500/12GB Only **\$3094.99\*** #124961  
\*After \$200 Apple rebate. Low Zone Price: \$3294.99

Processor	Hard Drive	RAM	Backside Cache	Optical Drive	FireWire	Modem	ATI RAGE Graphics	FREE** Memory	Item #	ONLY
New 400MHz	10GB Ultra ATA-66	64MB	1.0MB L2	DVD-ROM	2 Ports	56K	128-2X AGP	128MB	#124941	\$2294.98*
500MHz	12.0GB Ultra ATA-33	128MB	1.0MB L2	DVD-ROM	2 Ports	56K	128-2X AGP	128MB	#116009	\$3094.98*
New 500MHz	20GB Ultra ATA-66	128MB	1.0MB L2	DVD-ROM	2 Ports	56K	128-2X AGP	128MB	#124942	\$3094.98*

Business Lease Available: 36-month, fair-market value lease based on approved credit. Other leasing options available.

Leases require a minimum order of \$1000. Call 1-800-611-9751 for details. \*After \$200 Apple rebate.

\*\*Your choice of up to \$200 instant rebate or up to 128MB FREE memory. Call for details.

Credit cards are not charged until the order is shipped. Most products ship the same day (barring system failure, etc.). Shipping options include Ground, 2nd Day and Overnight delivery. Freight is based on average product weight. Handling extra. Insurance available. Special orders may require special shipping and handling charges. Call for international shipping rates. Prices and product availability subject to change without notice. Specials and promotions may be limited to stock on hand. Not responsible for typographical errors. All products sold by Multiple Zones International (MZI) are third party products and are subject to the warranties & representations of the applicable manufacturers, including but not limited to Y2K compliance. Accordingly, MZI makes no representation or warranty with respect to Y2K compliance of product sold. ©2000 Multiple Zones International Inc. All rights reserved. Unauthorized duplication is a violation of applicable laws. Apple®, the Apple logo, Macintosh® and PowerBook® are registered trademarks of the Apple Computer, Inc.



# BACK from Apple!

**Your Choice!**

**Mac Zone Exclusive!**

Up To **\$200 Instant Rebate!**

On select computers in this ad. Call for details.

**OR**

**FREE!**

Up To **128MB Memory**

Up To \$170 VALUE

Offers subject to change. While supplies last.

## Desktop movies to go.



With built-in FireWire ports, up to 20GB of hard disk space, and speeds of up to 500MHz, the PowerBook makes an ideal mobile digital video platform. Add a DV camcorder and Apple's award-winning Final Cut Pro video editing software, and you have everything you need to create professional broadcast-quality video for everything from special events to films.

**Plus FREE Video Training**  
\$400 Value!



**FREE** video-based, 5 tape training series for Final Cut Pro - a \$400 value!

\*FREE with purchase of Final Cut Pro.

**FREE VCR!**  
with Final Cut Pro 1.2



Ask for item #124976



**\$100 VALUE!**

## Connectivity

**Gigabit**  
Asanté FriendlyNet 7108 8+1 Gigabit Switch

**ONLY \$829.99**  
#102751

**Easily connect USB devices**  
Asanté FriendlyNet USB 4-Port Hub

**ONLY \$34.98**  
#637021

**Lifetime warranty**  
Asanté FriendlyNet 8+2 Switch

**ONLY \$121.99**  
#607707

**Get your entire office online**  
MacSense X-Router MIH-120 Ethernet Router

**ONLY \$199.99**  
#636446

**Connect your Ethernet Macs to LocalTalk devices**  
AsantéTalk 10Base-T to LocalTalk

**ONLY \$89.99**  
#16630



## Processor Upgrades

**Turn your old iMac into a 466MHz screamer**

Newer Technology iMAXpower Processor Upgrade

**ONLY \$499.99**  
#733166

**Supports up to 4 internal ATA drives**  
Sonnet Tempo Card

**ONLY \$99.99**  
#119180

**Sonnet Exclusive**  
Sonnet G3/333MHz PowerBook 1400 Upgrade Card

**ONLY \$299.99**  
#115344

**1st in over a year - NEW Mac video card upgrade**  
ATI 32MB Radeon Upgrade

**ONLY \$279.99**  
#126501



**PowerBook compatible!**

**Get High-Quality Output**

**Mobile, wireless printing!**  
Only 4.5 lbs  
Canon BJC-85

**ONLY \$299.99**  
#687476

**Includes built-in UTA and FireWire**  
UMAX Astra 6450 Scanner

**ONLY \$299.99**  
#113897

**Save on Storage**

**Huge storage capacity, small price**  
QPS External CD-RW FireWire Drive 12x10x32

**ONLY \$369.99\***  
#113595

**Easy to use**  
Iomega Zip 100 Portable USB Drive

**ONLY \$89.99**  
#95251

**Over twice the storage of the original**  
Iomega Zip 250 Portable USB Drive

**ONLY \$179.99**  
#650368

**Create your own CDs**  
USB External CD-RW Drive 4x4x24

**ONLY \$259.99**  
#107014

**Fuji 100MB Zip Mac Disks**

AS LOW AS \$7.99 EACH

#37185 10-Pk Color \$10 rebate \$79.99\*  
#54009 20-Pk Color 4-FREE \$179.99\*\*  
#86292 2-Pk Gray \$3 rebate \$17.98\*  
#35459 5-Pk Gray \$10 rebate \$39.95\*  
#37186 10-Pk Gray \$10 rebate \$79.99\*  
\*After \$30 mfr. mail-in rebate. Low Zone price: \$399.99.  
\*\*After \$10 mfr. mail-in rebate. \*\*\*Free disks by mail. Coupon in box. \*After \$3 mfr. mail-in rebate.

**Fuji 250MB Zip Mac Disks**

AS LOW AS \$14.99 EACH

#109489 Zip - Single \$12.99  
#119680 Zip - 3-Pack \$17.97\*  
#115145 Zip - 10-Pack \$119.99  
\*When purchased in 10-pack. \*\*After \$6 Mfr. Mail-in rebate. Low Zone price \$23.97.

**Fuji CD-RW Discs 74 min**

AS LOW AS \$2.99 EACH

#59704 CD-RW - Single \$2.99  
#108422 CD-RW - 3-Pack \$7.99  
#59772 CD-RW - 10-Pack \$23.90  
#105915 CD-RW - Single w/4 CD-Rs \$6.99

Corporate bids welcome!  
Fax to 1-888-239-2591  
A NASDAQ COMPANY Ticker Symbol: MZON

Source Code  
**MW011**

Order by Phone  
**1.800.436.0606**

Order Online Today  
**www.maczone.com**



# The iMac: Bringing the computer power you need home

Get on to the Internet faster than you can brew a cup of tea thanks to the built-in 56K modem and Ethernet port — so you can surf and research and stay connected with family and friends easily. You can even make movies with your iMac; the iMac DV, iMac DV+ and the iMac DV Special Edition come loaded with iMovie 2 software. The iMac puts you in the director's chair. All you need is a DV camcorder and a concept.

Now get a  
**FREE\***  
**64MB RAM**  
**Upgrade**  
when you buy  
any Apple iMac.  
Ask for item  
numbers AAP1150  
and INSTL10.  
Installation fee required.



MODEL / PROCESSOR	COLOR	SDRAM / MAX.	HDD	CD/DVD DRIVE	MODEM
iMac / G3 350MHz	Indigo	64MB / 1.0GB	7.0GB	24X** CD-ROM	56K
iMac / G3 DV 400MHz	Indigo	64MB / 1.0GB	10.0GB	24X** CD-ROM	56K
iMac / G3 DV 400MHz	Ruby	64MB / 1.0GB	10.0GB	24X** CD-ROM	56K
iMac / G3 DV+ 450MHz	Indigo	64MB / 1.0GB	20.0GB	DVD-ROM	56K
iMac / G3 DV+ 450MHz	Ruby	64MB / 1.0GB	20.0GB	DVD-ROM	56K
iMac / G3 DV+ 450MHz	Sage	64MB / 1.0GB	20.0GB	DVD-ROM	56K
iMac / G3 DV Special Edition 500MHz	Graphite	128MB / 1.0GB	30.0GB	DVD-ROM	56K
iMac / G3 DV Special Edition 500MHz	Snow	128MB / 1.0GB	30.0GB	DVD-ROM	56K

\*Free 64MB RAM upgrade AFTER MacWAREHOUSE \$100 mail-in rebate. Price before rebate is \$129.95. Installation fee of \$29.95 is required. Rebate coupon is available at [www.warehouse.com/ebate/macwarehouse](http://www.warehouse.com/ebate/macwarehouse) or call us at 1-800-390-0706 to request one. Offer not valid on the purchase of any reconditioned iMac. Offer expires 12/25/2000. MacWAREHOUSE reserves the right to terminate this offer at any time.

\*\*Speeds listed are variable, maximum speeds shown.

## Best selling input and output devices: enhance your iMac's productivity



**EPSON**  
**Stylus Color 777 Printer**  
• 8ppm black  
• 6ppm color  
• 2800 x 720 dpi  
**\$99<sup>95</sup>**  
Ask for item #PR16408.



**HP**  
**DeskJet 935c Color Printer**  
• USB compatible only  
• 9ppm blk; 7.5ppm color  
• PhotoREt III technology  
**\$199<sup>95</sup>**  
Ask for item #PR16225.



**VST TECHNOLOGIES**  
**USB Floppy Drive**  
• No external power source needed  
**\$84<sup>95</sup>**  
Ask for item #DR12164.  
**Imation Mac Neon 3.5" Disk**  
10-pack, only \$5.99.  
Ask for item #MED0540.



**KEYSPAN**  
**USB Twin Serial Adapter**  
• Supports up to 1Mps per port  
• Compatible with Apple StyleWriters and personal LaserWriters  
• USB interface  
**\$79<sup>99</sup>**  
Ask for item #DAD1637.



**Canon**  
**Canon ZR-10 Digital Video Camera**  
• 10X Optical/200X Digital Zoom  
• Image stabilizer  
• 2.5 LCD screen  
**\$899<sup>95</sup>**  
Ask for item #IN8604.



**OLYMPUS**  
**Olympus D-460 Zoom Digital Camera**  
• 3X optical zoom  
• Up to 1280 x 960 dpi  
**\$399<sup>95</sup>**  
Ask for item #IN8582.



**UMAX**  
**UMAX Astra 2200 Color Scanner**  
• USB and SCSI interface  
• 36-bit color  
**\$99<sup>95</sup>\***  
after \$20 rebate  
Ask for item #IN8143.  
\*Price AFTER manufacturer's \$20 mail-in rebate. Before rebate: \$119.95. Rebate coupon available at [www.warehouse.com/ebate/umax](http://www.warehouse.com/ebate/umax), or call us at 1-800-390-0706 to request one. Offer expires 1/31/01 or while supplies last.

**Orbit USB for Mac**  
• Designed for iMacs and USB Power Macs  
• Fits the natural shape of your hand  
• Manufacturer's 5-year warranty  
**\$49<sup>95</sup>**  
Ask for item #INP1761.



To place an order now, call your MacWarehouse Account Manager, or if you're a new customer, call one of our Customer Care Specialists who will be happy to help set up an account for your business.

**1-800-434-3036**

[www.warehouse.com/md](http://www.warehouse.com/md)

Order by phone or online 24 hours a day, 7 days a week.

To contact your Account Manager by e-mail or to learn more about our Corporate Sales Division online, click on "Corporate Sales" at [www.warehouse.com](http://www.warehouse.com)

Call for a FREE full color catalog!



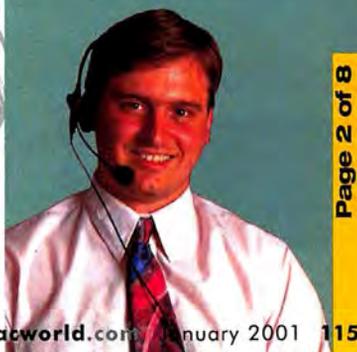
# Selection. Service. Support. Satisfaction.

MacWAREHOUSE has been providing our customers with the Apple products, software and peripheral products they want and need since 1987.

- We feature **leading name brand products** that provide you with the broadest selection possible.
- Our \$2.4+ billion buying power enables us to provide you with the newest products, latest upgrades and best deals.
- Our Web site — [www.warehouse.com](http://www.warehouse.com) — features **side-by-side product comparison** so you can choose the features you want and find the best product for your needs.
- MacWAREHOUSE provides **custom configuration** of your new Apple computer so it will arrive set up to go.
- We offer **customized corporate pricing online** with our Corporate Advantage program.

Prices, policies and item availability are subject to change at any time. CT, IL, NJ, OH and TN residents, please add applicable sales tax. Shipping and handling charges apply. Please refer to our return policy and other terms of sale at [www.warehouse.com/customer-service](http://www.warehouse.com/customer-service) or call and speak to a customer service representative at 1-800-445-9677. Copyright © 2000 Micro Warehouse, Inc. All rights reserved. All product names and images throughout this advertisement are trademarks or registered trademarks of their respective holders.

§ Leases are available to business and education customers with approved credit on product orders where at least one product totals \$750 or more. Payments are based on a 48-month lease. Other leasing terms available. Leasing terms subject to change without notice. Call us toll-free for complete details.



The Apple iMac family delivers all your home computing needs. Loaded with brainy features — like a built-in Harman Kardon® audio system and plenty of software —and blessed with good looks, these desktop powerhouses have been designed with the home user in mind.



PORTS	ITEM #	LEASE <sup>§</sup>	PRICE	FREE MEMORY
2 USB	CPU1649	\$25/mo.	\$799	FREE* 64MB RAM (Ask for item # AAP1150 & INSTL10.)
2 USB/2 FireWire	CPU1650	29/mo.	999	FREE* 64MB RAM (Ask for item # AAP1150 & INSTL10.)
2 USB/2 FireWire	CPU1651	29/mo.	999	FREE* 64MB RAM (Ask for item # AAP1150 & INSTL10.)
2 USB/2 FireWire	CPU1652	38/mo.	1299	FREE* 64MB RAM (Ask for item # AAP1150 & INSTL10.)
2 USB/2 FireWire	CPU1653	38/mo.	1299	FREE* 64MB RAM (Ask for item # AAP1150 & INSTL10.)
2 USB/2 FireWire	CPU1654	38/mo.	1299	FREE* 64MB RAM (Ask for item # AAP1150 & INSTL10.)
2 USB/2 FireWire	CPU1655	44/mo.	1499	FREE* 64MB RAM (Ask for item # AAP1150 & INSTL10.)
2 USB/2 FireWire	CPU1656	44/mo.	1499	FREE* 64MB RAM (Ask for item # AAP1150 & INSTL10.)

## Essential networking: get the most from your new iMac



**CompuCable**  
iDOCK 2 USB MultiPort hub

- Floppy drive
- Swivel Base for iMac
- 4 USB ports
- 2 Serial ports
- 1 ADB port

**\$259<sup>99</sup>**  
Ask for item #DEH4620.



**6 foot USB Cables**  
**\$9<sup>99</sup>** each  
Ask for item #DCA4738.



**KEYSPAN**  
**iMac USB Hubs**

- Color-coordinates with any iMac color!
- Other colors available, call for details

**\$39<sup>99</sup>**  
**White Hub:**  
Ask for item #VW64296.



**Farallon**  
**EtherMac iMac iPrint Adapter with built-in PhoneNet**

- Connects your iMac to LocalTalk printers and other Macs
- Easy plug-and-play installation

**\$94<sup>99</sup>**  
Ask for item #DEP1900.

**Ethernet iPrint Adapter for StyleWriter, only \$74.99.**  
Ask for item #DEP1739.



**PowerLogic**  
**iMac G3 Processor Upgrade**

- 500MHz G3 with 1MB Backside Cache
- Installs in minutes
- iForce utility included

**\$499**  
Ask for item #DRI4150.

*Kerry has been our symbol of superior product selection, personal customer service and certified expert tech support since 1987.*



# MacWAREHOUSE

Providing top name brand computer solutions since 1987

Serving business, government, education and home

# Apple Power Mac G4s: Redefining High-Performance

The dual-processor Power Mac G4s deliver the power you need to burn through even the most complex tasks — rendering large images, constructing dynamic Web sites, performing massive scientific calculations and even professional-level video editing. *Check out these features:*

- PowerPC G4 dual-processors up to 500MHz, strengthened by 1MB Backside Level 2 Cache per processor
- Ultra ATA/66 hard drives of 20, 30, or 40GB
- ATI RAGE 128 Pro graphics card with 16MB of SDRAM
- DVD-ROM or DVD-RAM built-in
- iMovie 2 software included
- Faster Network Connections — Gigabit Ethernet lets you transfer huge files at blazing speeds
- Two 400Mbps FireWire ports, two USB ports, support for up to three internal SCSI drives and two internal ATA drives
- Apple Pro Optical Mouse and Apple Pro Keyboard
- Easy Wireless Networking — Ready for AirPort Base Station (sold separately)

Now get a  
**FREE\***  
**128MB RAM**  
**Upgrade**

when you buy a dual-processor Power Mac G4. Ask for item numbers AAP1155 and INSTL10. Installation fee required.



MODEL / PROCESSOR	SDRAM / MAX.	HD	DVD DRIVE	MODEM	ETHERNET
Single processor / G4 400MHz	64MB / 1.5GB	20.0GB	DVD-ROM	56K	1GB
Dual-processor / G4 450MHz	128MB / 1.5GB	30.0GB	DVD-ROM	56K	1GB
Dual-processor / G4 500MHz	256MB / 1.5GB	40.0GB	DVD-ROM	56K	1GB
Dual-processor / G4 500MHz	256MB / 1.5GB	40.0GB	DVD-RAM	56K	1GB

## New Apple Monitors: the perfect complements to G4 power.



### Apple 17" Studio Display

- 17" (16" viewable) Natural Flat Diamondtron CRT
- 0.25mm aperture grille pitch
- 1600 x 1200 @ 65Hz maximum resolution
- Built-in two port USB hub
- Designed for optimal reproduction of PANTONE colors
- Theater Mode automatically brightens screen for optimal movie viewing
- Compatible with new Power Mac G4 and G4 cube
- Built-in color calibration

**\$499**

Ask for item #MON1094.

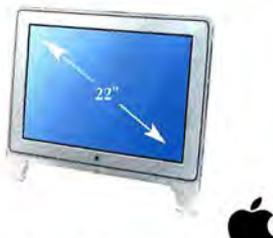


### 15" Apple Flat Panel Display

- 15" viewable display
- 16.7 million colors (maximum)
- 1024 x 768 maximum resolution
- Built-in two port USB hub
- Anti-glare hardcoat
- Theater Mode automatically brightens screen for optimal movie viewing
- Superthin 6.7" (minimum) design
- Compatible with new Power Mac G4 and G4 Cube

**\$999**

Ask for item #MON1093.



### Apple 22" Cinema Display

- 22" viewable display
- 16.7 million colors (maximum)
- 1600 x 1024 maximum resolution
- Displays up to two full pages of text or a widescreen video DVD movie
- Built-in two port USB hub
- Anti-glare hardcoat
- Theater Mode automatically brightens screen for optimal movie viewing
- Superthin 8.3" (minimum) design
- Compatible with new Power Mac G4 and G4 Cube

**\$3999**

Ask for item #MON1095.

## G4 power in an 8-inch cube.



### Power Mac G4 Cube

- 450MHz PowerPC G4 processor
- 1MB of Backside Level 2 Cache
- 64MB SDRAM (exp. to 1.5GB)
- 20.0GB Ultra ATA/66 HD
- Built-in 56K V.90 modem
- DVD-ROM Drive with DVD-Video Playback
- ATI Rage 128 Pro Graphics Card with 16MB of Graphics Memory
- NEW! Apple Pro Keyboard and Optical Mouse
- Harman Kardon Speaker System

**\$1499\***

Business Lease only \$52/mo.\*  
Ask for item #CPU1657.

\*Price AFTER \$300 Apple mail-in rebate, when purchased with qualifying Apple monitor. Price before rebate: \$1799. To qualify for rebate, customer must purchase one Power Mac G4 Cube (CPU1657) and one Apple monitor from the left (MON1093, MON1094, MON1095). Offer valid on purchases made from 10/31/00 through 12/31/00. Offer not valid on purchase of reconditioned equipment. Visit [www.warehouse.com/rebate/apple](http://www.warehouse.com/rebate/apple) for manufacturer's mail-in rebate coupon, or call us at 1-800-390-0706 to request one.

To place an order now, call your MacWAREHOUSE Account Manager, or if you're a new customer, call one of our Customer Care Specialists who will be happy to help set up an account for your business.

**1-800-434-3036**

[www.warehouse.com/md](http://www.warehouse.com/md)

Order by phone or online 24 hours a day, 7 days a week.

To contact your Account Manager by e-mail or to learn more about our Corporate Sales Division online, click on "Corporate Sales" at [www.warehouse.com](http://www.warehouse.com)

Call for a FREE full color catalog!





The supercomputing power of the dual-processor G4 provides all the performance creative professionals need. In the design studio, the G4 races through everyday graphic tasks and makes even the most complex processes — like professional-level video editing, real time data streaming and data conversions — go faster. Quite simply, the G4 will make your work “flow” easier.

ITEM #	LEASE*	PRICE	FREE MEMORY
CPU1646	\$47/mo.	\$1599	FREE† 64MB RAM (Ask for item # AAP1154 & INSTL10.)
CPU1647	\$73/mo.	\$2499	FREE* 128MB RAM (Ask for item # AAP1155 & INSTL10.)
CPU1637	\$93/mo.	\$3199	FREE* 128MB RAM (Ask for item # AAP1155 & INSTL10.)
CPU1648	\$102/mo.	\$3499	FREE* 128MB RAM (Ask for item # AAP1155 & INSTL10.)

†Free 64MB RAM Upgrade AFTER MacWAREHOUSE \$100 mail-in rebate. Installation fee of \$29.95 required. Price before rebate is \$129.95.  
 \*Free 128MB RAM Upgrade AFTER MacWAREHOUSE \$200 mail-in rebate. Installation fee of \$29.95 required. Price before rebate is \$229.95.  
 Visit [www.warehouse.com/rebate/macwarehouse](http://www.warehouse.com/rebate/macwarehouse) for mail-in rebate coupon or call us at 1-800-390-0706 to request one. Offer not valid on purchase of Blowout Power Macs on page 8 of this advertisement, or reconditioned Power Macs. MacWAREHOUSE reserves the right to terminate this offer at any time. Offer expires 12/25/00.

### Essential add-ons: get the most from your new Power Mac G4.



#### Adaptec PowerDomain 2930U Ultra SCSI Adapter

- 20MB/sec. transfer rate
- Internal & external connectors

**\$99<sup>95</sup>**

Ask for item #DRI3165.

#### RAGE ORION Accelerator

- Provides outrageously fast 128-bit 3-D gaming

**\$99\*** after mfr's \$30 mail-in rebate

Ask for item #DRI3234.

\*Price AFTER Manufacturer's \$30 mail-in rebate. Before rebate: \$129. Rebate coupon at [www.warehouse.com/rebate/ati](http://www.warehouse.com/rebate/ati), or call us at 1-800-390-0706 to request one. Offer good 10/1/00-1/15/01.



**Nikon**

#### Nikon CoolPix 990 Digital Camera

- 3.34 Megapixel resolution
- 3x Nikkor zoom lens
- 2048 x 1536 ppi resolution
- USB and serial interfaces

**\$949<sup>95</sup>**

Ask for item #IN8547.

#### COMPACT FLASH CARDS

- Digital film for storing pictures
- Compatible with most digital cameras



#### 48MB Storage Card

Ask for item #MY10017 .....\$99.95

#### PCMCIA Adapter

Ask for item #EX8129.....\$12.95



#### QPS FireWire® CD-RW Drive 12 x 10 x 32\*

- Blazing 12x record, 10x re-write
- FireWire interface

**\$369<sup>95\*\*</sup>** after \$30 rebate

Ask for item #DR13063.

\*Speeds listed are variable, maximum speeds shown

\*\*Price AFTER mfr's \$30 mail-in rebate. Rebate coupon available at [www.warehouse.com/rebate/qps](http://www.warehouse.com/rebate/qps), or call us at 1-800-390-0706 to request one. Offer valid 10/1/00 - 1/15/01.

#### TDK All Speed CD-Rs

- 74 min. • 650MB

**29¢\*** each, in 100-pack spindle, after \$20 rebate

Ask for item #ME8906.

\*Price AFTER Manufacturer's \$20 mail-in rebate. Before rebate: \$49. Coupon available at [www.warehouse.com/rebate/tdk](http://www.warehouse.com/rebate/tdk) or call us at 1-800-390-0706 to request one.



*Kerry has been our symbol of superior product selection, personal customer service and certified expert tech support since 1987.*

A Micro Warehouse Company

**MacWAREHOUSE**

Providing top name brand computer solutions since 1987

Serving business, government, education and home

Selection.  
Service.  
Support.  
Satisfaction.

MacWAREHOUSE has been dedicated to Mac aficionados from the beginning — our very first Apple catalog was delivered 13 years ago.

• MacWAREHOUSE provides outstanding service — our Dedicated Account Managers are the personal link to service for you and your organization; our Customer Care Specialists take care of your needs for product sales, financial services and more.

• We're available for service and support 24 hours a day, seven days a week — by phone or online.

• Our all-inclusive leasing plans offer savvy business customers with the purchasing flexibility they need.

• Our Corporate Advantage provides you with a personalized Web site built to suit your organization's specific needs.

§ Leases are available to business and education customers with approved credit on product orders where at least one product totals \$750 or more. Payments are based on a 48-month lease. Other leasing terms available. Leasing terms subject to change without notice. Call us toll-free for complete details.



# Apple PowerBook and iBook: Power to Go for the career path or the open road



◀ Indigo Graphite Key Lime

On the road, in the studio or at home, creative professionals need computers that combine power and performance. The Apple PowerBook and the iBook deliver the best technology for capturing, editing and delivering digital images, video content and more.

Choose the portable option that's right for you:

MODEL / PROCESSOR	SDRAM / MAX.	HDD	CD/DVD DRIVE
PowerBook/ G3 400MHz	64MB / 512MB	10.0GB	DVD-ROM
PowerBook/ G3 500MHz	128MB / 512MB	12.0GB	DVD-ROM
PowerBook/ G3 500MHz	128MB / 512MB	20.0GB	DVD-ROM
iBook / G3 366MHz	64MB / 320MB	10.0GB	24X" CD-ROM
iBook / G3 366MHz	64MB / 320MB	10.0GB	24X" CD-ROM
iBook / G3 466MHz	64MB / 320MB	10.0GB	DVD-ROM
iBook / G3 466MHz	64MB / 320MB	10.0GB	DVD-ROM

\*\*Speeds listed are variable, maximum speeds shown.

Price AFTER Apple \$200 mail-in rebate. Qualifying PowerBook must appear on invoice. Offer valid on purchases made between 10/13/00 and 12/31/00. Visit [www.warehouse.com/rebate/apple](http://www.warehouse.com/rebate/apple) for mail-in coupon or call us at 1-800-390-0706 to request one. Offer not valid on purchase of reconditioned PowerBooks. Offer good while supplies last.

## Connect to any network with wireless AirPort networking



### AirPort Station & Card

- Wireless networking and Internet access
- Transmits up to 150 feet
- Speeds up to 11MB per second
- Install the AirPort card into its slot in your iBook and you're ready to transmit using the iBook's two built-in antennas.
- Enables several users to be online at the same time — simultaneously checking e-mail, surfing different Web sites and swapping files

AirPort Base Station (shown)

**\$299**

Ask for item #DEB2777.

AirPort Card for PowerBook/iBook

**\$99**

Ask for item #DEC4142.

## Essential peripherals: more options on the go



### Zip 100MB USB Drive

- Hot-Swappable
- \$99<sup>95</sup>**
- Ask for item #DR13202.
- 100MB Zip Disk 10-pack, only \$99.99.
- Ask for item #ME7756.

### Palm IIIxe Connected Organizer

- 8MB memory
  - 2MB Flash memory
  - Hot sync cradle for easy synchronization
  - Free serial kit included
- \$249**
- Ask for item #BND3834.



### Targus Universal Notebook & Printer Case

- Two individual padded compartments that measure 11" x 13" x 2.5"
- \$69<sup>95</sup>**
- Ask for item #AC28478.



### DSC-S30 Cyber-Shot Digital Camera

- 1.3 megapixel optical res.
  - 2" LCD
  - 3x optical/6x digital zoom
  - 4MB memory stick
  - USB interface
- \$499<sup>95</sup>**
- Ask for item #IN8611.



### PowerBook G3 Battery

- Lithium-ion
  - Fits new 1999/2000 models
- \$139<sup>95</sup>**
- Ask for item #ACC3728.
- G3 battery for 1998 models only \$199.95.
- Ask for item #ACC3307.

### New. Finepix 40i digital camera



- Captures pictures, movies and music
  - 2.4 megapixels
  - Tethered remote, headphones, and rechargeable battery kit
- \$699<sup>95</sup>**
- Silver: Ask for item #IN8805.
- Blue: Ask for item #IN8802.

To place an order now, call your MacWAREHOUSE Account Manager, or if you're a new customer, call one of our Customer Care Specialists who will be happy to help set up an account for your business.

**1-800-434-3036**

[www.warehouse.com/md](http://www.warehouse.com/md)

Order by phone or online 24 hours a day, 7 days a week.

To contact your Account Manager by e-mail or to learn more about our Corporate Sales Division online, click on "Corporate Sales" at [www.warehouse.com](http://www.warehouse.com)

Call for a FREE full color catalog!



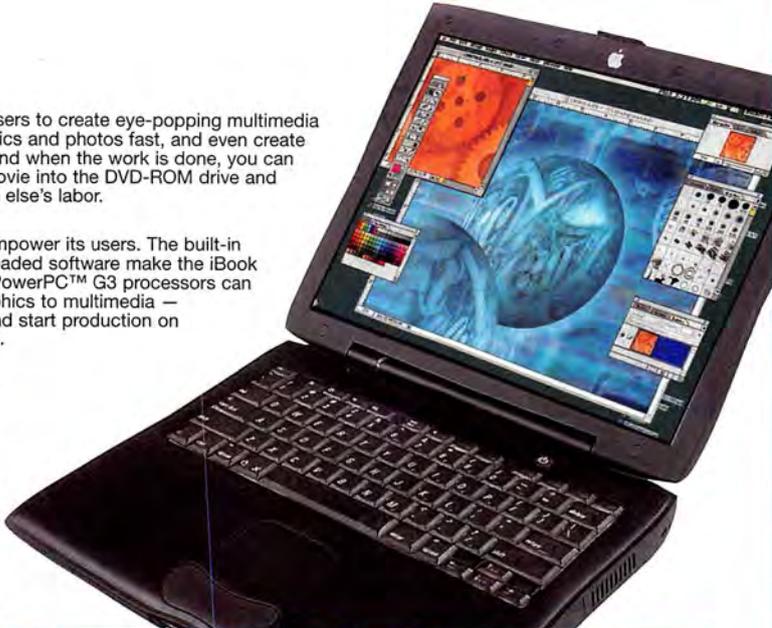
The PowerBook enables users to create eye-popping multimedia presentations, deliver graphics and photos fast, and even create broadcast quality movies. And when the work is done, you can shift into play gear, slip a movie into the DVD-ROM drive and watch the fruits of someone else's labor.

The iBook is powered to empower its users. The built-in 56K V.90 modem and pre-loaded software make the iBook completely Internet-ready. PowerPC™ G3 processors can handle everything from graphics to multimedia — hook up a DV camcorder and start production on professional-looking movies.

Now get a **FREE\* RAM Upgrade.**

- **FREE\* 128MB RAM** with any PowerBook (Ask for item #AAP1156 & INSTL10.)
- **FREE\* 64MB RAM** with any iBook (Ask for item #AAP1157 & INSTL10.)

Installation fee required.



DISPLAY	COLOR	ITEM #	LEASE <sup>1</sup>	PRICE	FREE MEMORY
14.1" active-matrix	N/A	CPU1641	\$73/mo.	\$2299 <sup>1</sup> After rebate	<b>FREE* 128MB RAM</b> (Ask for item # AAP1156 & INSTL10.)
14.1" active-matrix	N/A	CPU1581	96/mo.	3099 <sup>1</sup> After rebate	<b>FREE* 128MB RAM</b> (Ask for item # AAP1156 & INSTL10.)
14.1" active-matrix	N/A	CPU1642	102/mo.	3299 <sup>1</sup> After rebate	<b>FREE* 128MB RAM</b> (Ask for item # AAP1156 & INSTL10.)
12.1" active-matrix	Indigo	CPU1643	44/mo.	1499	<b>FREE* 64MB RAM</b> (Ask for item # AAP1157 & INSTL10.)
12.1" active-matrix	Key Lime	CPU1658	44/mo.	1499	<b>FREE* 64MB RAM</b> (Ask for item # AAP1157 & INSTL10.)
12.1" active-matrix	Graphite	CPU1644	52/mo.	1799	<b>FREE* 64MB RAM</b> (Ask for item # AAP1157 & INSTL10.)
12.1" active-matrix	Key Lime	CPU1659	52/mo.	1799	<b>FREE* 64MB RAM</b> (Ask for item # AAP1157 & INSTL10.)

<sup>1</sup>Free 64MB RAM Upgrade AFTER MacWAREHOUSE \$100 mail-in rebate. Installation fee of \$29.95 required. Price before rebate is \$129.95.  
<sup>\*</sup>Free 128MB RAM Upgrade AFTER MacWAREHOUSE \$200 mail-in rebate. Installation fee of \$29.95 required. Price before rebate is \$229.95.  
 Visit [www.warehouse.com/rebate/macwarehouse](http://www.warehouse.com/rebate/macwarehouse) for mail-in rebate coupon or call us at 1-800-390-0706 to request one. Offer not valid on purchase of reconditioned iBooks or PowerBooks. MacWAREHOUSE reserves the right to terminate this offer at any time. Offer expires 12/25/00.

### More input and output options in the office



**Diamond SupraExpress V.90 56K\* Modem**

- 56K ITU Standard
- 230Kbps throughput
- Voicemail/Caller ID

**\$78<sup>99</sup>**

Ask for item #DMD3503.

\*Capable of receiving data up to 56Kbps. Actual send and receive speeds may vary.



**LEXMARK Z52 Printer**

- 15ppm black, 7ppm color
- Up to 2400 x 1200 dpi
- USB compatible

**\$179<sup>95</sup>**

Item #PR16221.

Black Ink Cartridge, item #PR12829, only \$36.95.



**HP LaserJet 2100M**

- Prints 10ppm
- 1200 dpi resolution
- HP PostScript Level 2

**\$769<sup>95</sup>**

Ask for item #PR14691.

**HP LaserJet 4050N**

- Prints 17ppm
- 1200 dpi max. res.

**\$1479<sup>95</sup>**

Ask for item #PR14947.

**HP LaserJet 5000N**

- Prints 16ppm
- Up to 1200 dpi max. res.

**\$2039<sup>95</sup>**

Ask for item #PR13443.



**MacSense XRouter Cable/DSL Sharing Switch**

- Supports Mac, PC, and Unix
- Built-in 4-port 10/100 Switch
- Connect up to 250 users using one ISP account and a cable/DSL modem

**\$179<sup>99</sup>**

Ask for item #DEB2814.



**HP ScanJet 5370Cse**

- 42-bit color
- 1200 x 2400 optical dpi
- USB or parallel interface
- HP PrecisionScan Pro software

**\$299<sup>95</sup>**

Ask for item #IN8767.

*Kerry has been our symbol of superior product selection, personal customer service and certified expert tech support since 1987.*

A Micro Warehouse Company

# MacWAREHOUSE

Providing top name brand computer solutions since 1987

Serving business, government, education and home

# Selection. Service. Support. Satisfaction.

MacWAREHOUSE has been the reliable computer solutions provider for all Apple products since our first delivery.

- MacWAREHOUSE provides outstanding support — our **Certified and cross-platform Tech Support Specialists** offer personalized IT consulting to help you plan and purchase the right computer solutions — both before and after your purchase — at no extra charge. So you can be certain MacWAREHOUSE backs the products we sell.

- MacWAREHOUSE provides No Deductible Extended Warranty On-Site Plans.

*You get these great service features with any length plan:*

1. Toll-Free Technical Help
2. Fast On-Site Support — uplifts manufacturer's warranty to on-site with 100% coverage for qualifying products
3. Free Replacement if unit cannot be repaired!
4. No Deductible — 100% coverage on parts and labor!
5. 24-, 36-, and 48-Month Coverage — available from date of purchase!
6. Fully Insured — Program underwritten by an "A-Excellent" rated insurer
7. Fully Transferable — Even if you move or sell the equipment, full coverage remains in effect.

Cost of Computer and/or Peripherals	Warranty Price (36 months)	Ask for Item #
\$701 - \$1,200	\$149.99	MW3003
\$1,201 - \$2,000	\$189.99	MW3004
\$2,001 - \$3,000	\$219.99	MW3005

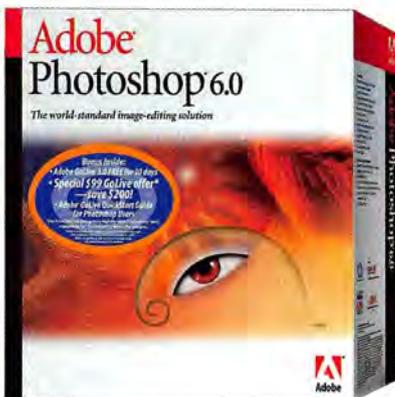
**Business Customers: Call your Account Manager for terms and other pricing options.**

\*Note: This promotion is not a service agreement, but an outline of coverage available through Service Net. Please call Micro Warehouse, Inc. for information and read the complete Service Agreement from Service Net, for exact coverages, terms, and conditions. Coverage begins after a manufacturer limits its warranty in any way. Plan not available on international orders.

§ Leases are available to business and education customers with approved credit on product orders where at least one product totals \$750 or more. Payments are based on a 48-month lease. Other leasing terms available. Leasing terms subject to change without notice. Call us toll-free for complete details.



# Adobe Photoshop: Tools for productivity – and results



## New Version.

- Tighter integration with ImageReady 3.0
- Resolution-independent vector output
- New layer management

Upgrade only

**\$179<sup>95</sup>**

Ask for item #UPG1306.

Photoshop 6.0 Full Version, only \$599.95

Ask for item #GRA3486.



## New. Adobe® Web Collection

(Includes: Photoshop 6.0, GoLive 5.0, LiveMotion, and Illustrator 9.0)

**\$999<sup>95</sup>**

Ask for item #COM1369.

Web Collection only \$699.95 when purchased with any computer.

Both products must appear on same invoice. Ask for item #AAP1159. Offer expires 2/28/01.



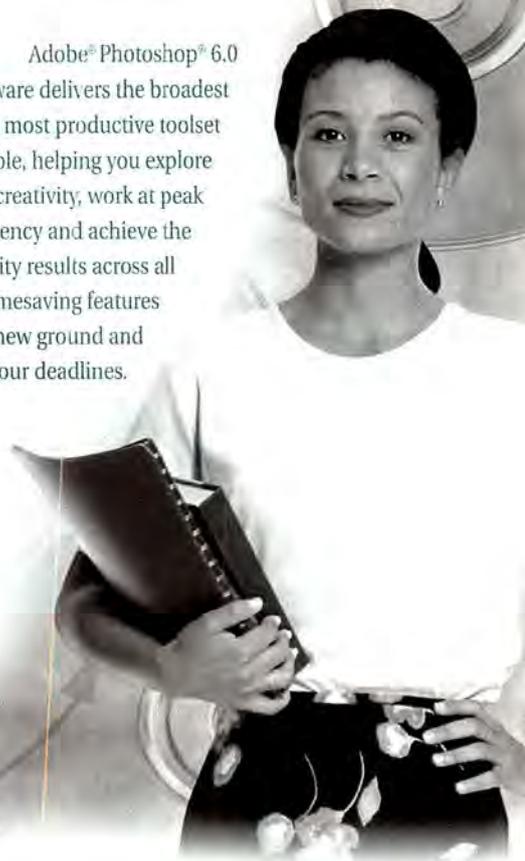
## New. Adobe® Publishing Collection

(Includes: Photoshop 6.0, PageMaker 6.5, Illustrator 9.0, and Acrobat 4.0)

**\$999<sup>95</sup>**

Ask for item #GRA3502.

Adobe® Photoshop® 6.0 software delivers the broadest and most productive toolset available, helping you explore your creativity, work at peak efficiency and achieve the highest quality results across all media. Its timesaving features help you break new ground and still meet your deadlines.



## The ultimate software for great functionality in any Macintosh system.



## Mac OS 9.0.4

- Easily find people, news, and shopping on-line with Sherlock 2
- Easy-to-use, functional interface
- Additional FireWire® and USB support
- Improves audio, video and graphics functionality
- For business and IT professionals, Netboot makes managing your network as easy as managing a single Mac
- For desktop publishers, OS 9.0.4 manages color accurately while saving and restoring color workflow so you can change color management configuration quickly and easily

**\$99<sup>95</sup>**

Ask for item #SYS1068.



## QuarkXPress 4.1

- Zoom to 800%
- Character-based style sheets allow you to quickly assign formats to words, not just paragraphs
- Resize grouped objects
- Flow text along curved paths to create special effects with display type
- Bézier and freehand drawing tools create dramatic boxes, curved lines and text paths

**\$769<sup>95</sup>**

Ask for item #DTP1040.



## New Version. Macromedia Dreamweaver 4

- Coding has never been easier
- Debug client-side JavaScript directly in your browser

Upgrade only

**\$139<sup>95</sup>**

Ask for item #UPG1317.

Full Version only \$279.95.

Ask for item #COM1370.

## New Version. Stuffit Deluxe 6.0

- Expands even more file formats

Upgrade only

**\$24<sup>95\*</sup>**

after \$50 rebate

Ask for item #UTI1734.

\*Price AFTER publisher's \$50 mail-in upgrade rebate. Before rebate: \$74.95. For previous owners of Stuffit Deluxe. Rebate coupon in box. Offer expires 6/01/01.



## Macromedia Flash 5

- Design and deliver distinctive Web sites

Upgrade only

**\$139<sup>95</sup>**

Ask for item #UPG1303.

Flash 5 Full Version, only \$389.95.

Ask for item #COM1360.

## New Version. Norton Utilities 6.0

- Prevents and solves disk problems
- Recovers lost or erased files

Upgrade only

**\$44<sup>95\*</sup>**

after \$50 rebate

Ask for item #UTI1736.

\*Price AFTER publisher's \$50 mail-in upgrade rebate. See complete details in box. Offer expires 3/31/02.



Call for a FREE full color catalog!



To place an order now, call your MacWAREHOUSE Account Manager, or if you're a new customer, call one of our Customer Care Specialists who will be happy to help set up an account for your business.

**1-800-434-3036**

[www.warehouse.com/md](http://www.warehouse.com/md)

Order by phone or online 24 hours a day, 7 days a week.

To contact your Account Manager by e-mail or to learn more about our Corporate Sales Division online, click on "Corporate Sales" at [www.warehouse.com](http://www.warehouse.com)

Office 2001: Mac was designed to make Mac users lives easier and this powerful suite of applications delivers with spreadsheets, presentation tools, e-mail (complete with address book and calendar

functions) and word processing. Working in a cross-platform world has never been simpler.



# Microsoft Office 2001: Tools to make work easier

- Microsoft Word 2001
- Microsoft Excel 2001
- Microsoft PowerPoint 2001
- Plus, Entourage e-mail and personal information manager

**Microsoft Office 2001 Upgrade only**

**\$259<sup>95</sup>**

Ask for item #VW74556

**Microsoft Office 2001 Full Version, only \$429.95**

Ask for item #VW74557

**Save \$100**

when you buy Office 2001 full version within 60 days of an iMac or an iBook!

Visit [www.warehouse.com/rebate/microsoft](http://www.warehouse.com/rebate/microsoft), or call us at 1-800-390-0706 for details.

## Use your own photos to create masterpieces in Photoshop



**SONY**  
MEMORY STICK

### Sony Digital FD85 Mavica

- 1.3 megapixel
- 3x Optical/6x Digital Zoom
- 4x Quick access floppy disk drive
- 2.5" Solar LCD monitor

**\$699<sup>95</sup>**

Ask for item #IN8614.

### New low price. Sony DCR-PC100 video camera

- 10x Optical/120x Precision Zoom

Was: \$1999.95

**\$1799<sup>95</sup>**

Ask for item #IN8595.



**SONY**  
MEMORY STICK

## Power Mac G4s at great prices



### Power Mac G4s

- 400MHz G4 processor**
- 64MB SDRAM (exp. to 1.5GB)
  - 10.0GB Ultra ATA/66 hard drive
  - DVD-ROM • 56K V.90 modem

**\$1299**

**Business Lease only \$38/mo.<sup>§</sup>**  
Ask for item #CPU1574.  
While supplies last.

- 500MHz G4 processor**
- 256MB SDRAM (exp. to 1.5GB)
  - 27.0GB Ultra ATA/66 hard drive
  - DVD-ROM • 100MB Zip drive

**\$2499**

**Business Lease only \$73/mo.<sup>§</sup>**  
Ask for item #CPU1576.  
While supplies last.



### ViewSonic GS790

- 19" (18" viewable image size)
- .22 HOR, 1600 x 1200 @ 76Hz
- Short depth design

**\$419<sup>95</sup>**

Ask for item #MT3318.

### New low price. Macintosh G4 Server with OS X Server Software

- 500MHz G4 Processor
- 256MB SDRAM
- 18.0GB Ultra 2 SCSI HD
- DVD-ROM

**SAVE \$1300: was: \$4199**

**\$2899**

Ask for item #CPU1584.  
While supplies last.



*Kerry has been our symbol of superior product selection, personal customer service and certified expert tech support since 1987.*

A MicroWarehouse Company

**MacWAREHOUSE**

Providing top name brand computer solutions since 1987

Serving business, government, education and home

Selection.  
Service.  
Support.  
**Satisfaction.**

MacWAREHOUSE remains committed to providing our customers with the highest level of selection, service and support. We want to ensure your satisfaction — every time.

### Choose MacWAREHOUSE because:

- MacWAREHOUSE has been the #1 source for Mac computer solutions for 13 years.
- We've been dedicated to Mac aficionados from the beginning. Since 1987, MacWAREHOUSE has been providing our customers with the Apple products, software and peripheral products they want and need.
- We have the products you want.
- We provide expert support and services.
- MacWAREHOUSE's tech specialists are on hand to assist you with a broad range of custom configuration questions, networking issues and integration services. And our Customer Care staff is focused on providing hassle-free service and support every step of the way.
- Whether you order on-line or over the phone, we can get your products to you fast — every business day.

Choose MacWAREHOUSE because it all adds up to one thing: **Satisfaction.**

§ Leases are available to business and education customers with approved credit on product orders where at least one product totals \$750 or more. Payments are based on a 48-month lease. Other leasing terms available. Leasing terms subject to change without notice. Call us toll-free for complete details.



# MacMall

Everything and Anything  
for Your Mac and More!

**Visit our site!**

✓ Featuring all the new  
products from Apple!



**Upgrades for Your Power Mac G4!**



Have your RAM professionally installed by one of our factory-trained technicians for only \$30. Ask for #2214. Visit our Web site: macmall.com for more Viking memory. Prices are valid at time of press & are subject to change due to market fluctuations. Please call for most current pricing.

#813179	64MB SDRAM DIMM	\$106 <sup>99</sup>
#813177	128MB SDRAM DIMM	\$196 <sup>99</sup>
#813178	256MB SDRAM DIMM	\$449 <sup>99</sup>
#S8576	512MB SDRAM DIMM	\$1,199 <sup>99</sup>

**All This...  
And More!**

- ✓ Fastest overnight delivery!
- ✓ 100% Apple Gold Certified, best trained sales staff!
- ✓ \$2 billion in available inventory (over 125,000 products)!
- ✓ Custom configuration—we will build your CPU to your specifications!

**MacMall EZ  
Payment Plan!**

**NEW! Payment terms up to 48 months!**

Now you can have low fixed monthly payments on consumer purchases of \$750 or more with the new MacMall EZ Payment Plan. It's fast and easy to apply for, and there are no application fees or prepayment fees. Call your Account Manager today, or apply online! You can complete your purchase in just minutes—and have your order tomorrow!

Financing available on approved credit arranged through NSU America Bank, N.A. Payment does not include shipping charges and sales taxes if applicable. Estimated monthly payment is based on approximate 48-month term at an Annual Percentage Rate (APR) of 14.99%. Your APR may be higher. There are no transaction fees for MacMall purchases billed directly to your account. There is a transaction fee of 3% of the U.S. Dollar amount of each advance check you write (\$5 min \$50 max), but there is no obligation to use advance checks.

# 64MB RAM FREE!

## With Power Mac G4 Cube Purchase!

At less than one quarter the size of most PC's, the Power Mac™ G4 Cube delivers awesome performance. Make Desktop Movies, play 3D games and watch DVD movies right on your monitor!

- 450MHz PowerPC G4 Processor
- 1MB of backside level 2 cache
- 64MB SDRAM (supports up to 1.5GB)
- 20GB Ultra ATA/66 HD
- DVD-ROM drive with DVD playback
- ATI RAGE 128 Pro graphics card with 16MB of graphics memory
- Built-in 56K modem
- 100 BaseT Ethernet
- Two Firewire/Ports
- Two USB Ports
- Apple Display Connector and VGA Connector



All new Macs come standard with the Apple® Pro Optical Mouse and the Apple® Pro Keyboard.

**FREE Extra  
64MB RAM!**

**No Mail-In Rebate Required!**

Free 64MB RAM upgrade with purchase of Power Mac Cube (#952691). Professional installation fee of \$30 required. Offer expires 1/20/01.

New Apple Power Mac G4 Cube

**\$1,794** #952691

only

**With FREE 64MB!**

Own this Power Mac G4 Cube for as low as \$50/month with the

**New MacMall EZ Payment Plan!**

**Advanced Display Technology!**



Apple 22" Flat Panel Cinema Display  
your price

**\$3,999** #951070



New 17" Apple® Flat Screen Studio Display

your price **\$499** #951071

New Apple 15" Flat Panel Studio Display

your price **\$999**

#950991



**We'll Beat Any Price On Any Computer!  
Call for your best price!**

**Order Any Item in 4 Easy Steps**

1. Go to [www.macmall.com](http://www.macmall.com)
2. Click on "Shopping Cart"
3. Enter part# in "Catalog Express"
4. Click on "Proceed to Checkout"



**macmall.com 1-800-217-9492**

# 128MB RAM FREE! With PowerBook Purchase!

With the PowerPC G3 processor delivering speeds of up to 500MHz and built-in FireWire®, the new PowerBook® gives you the performance and portability you need. It is an ideal choice for creative professionals, educators, and anyone else who needs performance to go.

- 400 or 500MHz PowerPC G3 processor
- 64 or 128MB RAM; 2 SO-DIMM slots support up to 512MB
- 1MB backside Level 2 Cache; 160 or 200MHz dedicated 64-bit backside bus
- 10 or 20GB Ultra-ATA/66 hard drive
- Built in 56K Modem
- 14.1" Active-Matrix Display
- DVD-ROM drive with DVD video playback
- Hot-swappable expansion bay supports CD-ROM, DVD, Zip, SuperDisk or hard drive
- 2 USB ports and 2 FireWire ports
- Built-in 10/100Base-T Ethernet

The new PowerBook lets you capture, edit and deliver digital video content for broadcast, the web or for presentations.



**FREE Extra 128MB RAM!**

**No Mail-In Rebate Required!**

Free 128MB RAM upgrade with purchase of PowerBook 400 (#952730) and PowerBook 500 (#952731). Professional installation fee of \$30 required. Offer expires 1/20/01.

New Apple PowerBook® G3 Series

**\$2,494** only #952730

**With FREE 128MB!**

Own this New PowerBook for as low as \$70/month with the **New MacMall EZ Payment Plan!**

Model	Speed	RAM	HD	DVD	Modem	Networking	Price	or as low as
#952730	400MHz	64GB	10GB	yes	56K	10/100	\$2,494	\$70/mo
#952731	500MHz	128GB	20GB	yes	56K	10/100	\$3,494	\$98/mo

## Hot Peripherals!

Internal Zip Drive for 1999 and New 2000 Model PowerBook G3s

only **\$199<sup>99</sup>**

#57669 with CPU purchase.



Newer FireWire 2 Go

only **\$79<sup>99</sup>** #48032

PowerBook G3 Battery (Apple)

only **\$149<sup>99</sup>**

#47086



PowerPrint Mobile Edition

Print to any printer on the road.

**FREE!** Retracting phone cord, Delorme Street Atlas and Ethernet cable.

only **\$99<sup>99</sup>** #76252

HP DeskJet 350C Portable Printer

only **\$269<sup>99</sup>**

#61359



**VIKING COMPONENTS**

**Upgrades for Your PowerBook G3!**

- #57816 64MB PowerBook FireWire \$129<sup>99</sup>
- #57817 128MB PowerBook FireWire \$249<sup>99</sup>
- #57818 256MB PowerBook FireWire \$509<sup>99</sup>

Have your RAM professionally installed by one of our factory-trained technicians for only \$30. Ask for #2214. See page 7 or visit our Web site: [macmall.com](http://macmall.com) for more Viking memory. Prices are valid at time of press & are subject to change due to market fluctuations. Please call for most current pricing.

Order Any Time! Open 24 Hours! Order Today by 10pm EST—Get it Tomorrow by 10:30am!  
**macmall.com 1-800-217-9492**  
AOL Keyword: MacMall **Mention your Priority Code: #ZMWD0B3**

**MacMall**

## Upgrades for your iMac and iMac DV



Have your RAM professionally installed by one of our factory-trained technicians for only \$30. Ask for #2214. See page 12 or visit our Web site: [macmall.com](http://macmall.com) for more Viking memory. Prices are valid at time of press & are subject to change due to market fluctuations. Please call for most current pricing.

#52913	64MB PC100 SDRAM	\$105 <sup>99</sup>
#52914	128MB PC100 SDRAM	\$229 <sup>99</sup>
#52915	256MB PC100 SDRAM	\$449 <sup>99</sup>
#58576	512MB PC100 SDRAM	\$1,199 <sup>99</sup>

## Microsoft Office 2001!

**Order Today!**

All the essentials made easy! Made for the Mac!

upgrade for as low as **\$254<sup>99</sup>**

#849861



#849861 Office 2001 Upgrade \$425<sup>99</sup>

## Hot Peripherals!

**OLYMPUS**

**D-490 Zoom Digital Camera**  
your price



**\$499** #951256

**QPS Que!Fire 8x4x32 FireWire CD-RW**

your price **\$319<sup>95</sup>**

#52867



**BELKIN**

**USB Video Bus for Mac**

your price **\$78<sup>99</sup>**

#54469



**4-Port USB Mini Hub Plus Graphite**

only **\$37<sup>99</sup>**

#64201



**Airport Base Station**  
only

**\$294**  
#57373



#57369 Airport Card \$99<sup>99</sup>

# FREE Memory with

## 350MHz G3 Processor!

The new iMac has a faster processor and a bigger hard disk so you can quickly surf the Internet, send and receive e-mail, whip out homework assignments and play CDs on its Harman Kardon Odyssey audio system.

### Processor and Memory

- 350MHz G3 PowerPC processor
- 64MB SDRAM; support up to 1GB
- 7GB Ultra ATA hard disk drive
- Slot-loading 24X speed CD-ROM drive
- Built-in 15" (13.8" viewable image size)



**FREE Extra 64MB RAM!**

\*After \$100.00 MacMall mail-in rebate. Applies only to purchases of iMac 350 Indigo (953100) and iMac DV (952680 and 952681) purchased between September 21, 2000 and January 20, 2001 and subject to product availability. Price before rebate of the RAM is \$100.00 plus \$30 installation. All requests must be postmarked 15 days from invoice. Offer not valid with any other offers, rebates, discounts or promotions. Please allow 6 to 8 weeks after claim is received by MacMall to receive your rebate. MacMall reserves the right to amend the rules, alter the rebate amount, or cancel this offer at any time without prior notification. MacMall is not responsible for lost or misdirected mail and illegible entries. Download your coupon by visiting [www.macmall.com/ima2crebate](http://www.macmall.com/ima2crebate) for mail-in rebate coupon.

350MHz iMac  
**\$799\*** #953100 (Indigo only)  
only **With FREE 64MB!**

See details on the new MacMall EZ Payment Plan.  
64MB RAM, 7GB Hard Drive, 24X CD-ROM, 56K modem

# Make Your Own Movies!

## iMac DV—Your Personal Movie Studio!

The era of Desktop Movies has arrived! Assemble an all-star cast from among your friends and family. Then

with your DV camcorder, your new iMac DV and iMovie 2 software, you're ready for action.

**Luscious new colors!**

Ruby or Indigo? It's your choice with the iMac DV Model!

**Includes USB and FireWire ports!**

- 400MHz G3 PowerPC processor
- 64MB SDRAM; Support up to 1GB
- 10GB Ultra ATA hard disk drive
- Slot-loading 24X speed CD-ROM drive
- Built-in 15" CRT (13.8" viewable size)
- Two FireWire and two USB ports



Own this iMac for as low as **\$28/month** with the NEW **MacMall EZ Payment Plan!**

400MHz iMac  
**\$999\*** #952681 (Indigo) #952680 (Ruby)  
only **With FREE 64MB!**

See details on the new MacMall EZ Payment Plan.  
64MB RAM, 10GB Hard Drive, 24X CD-ROM Drive, 56K modem

**Order Any Item in 4 Easy Steps**

1. Go to [www.macmall.com](http://www.macmall.com)
2. Click on "Shopping Cart"
3. Enter part# in "Catalog Express"
4. Click on "Proceed to Checkout"

**CATALOG EXPRESS**

**macmall.com 1-800-217-9492**

# Every iMac!

## Now with iMovie 2!

With the iMac DV+, you can slip the latest DVD title into the slot-loading drive and watch it on a brilliant 15" built-in display.

**Awesome Performance!**

- 450 MHz G3 PowerPC processor
- 64MB SDRAM; support up to 1GB
- 20GB Ultra ATA hard disk drive
- Slot-loading 4X DVD-ROM drive
- Two FireWire ports and two USB ports
- Built-in 15" CRT (13.8" viewable size)
- 10/100Base-T Ethernet

**Now Available at MacMall!**

Upgrade your existing USB Keyboard and Mouse with Apple's New Pro Series.



Apple® Pro Keyboard  
only \$59 #953968

Apple® Pro Mouse  
only \$59 #953969

The Apple Pro Mouse and Keyboard are included with all New Apple PowerMacs and iMacs.

Own this iMac DV+ for as low as \$37/month with the NEW MacMall EZ Payment Plan!

450MHz iMac DV+

only \$1,294\* #952684 (Indigo)  
#952682 (Sage)  
#952685 (Ruby)

With FREE 64MB\*

See details on the new MacMall EZ Payment Plan.  
64MB RAM, 20GB Hard Drive, 4X DVD-ROM Drive, 56K modem

**FREE Extra 64MB RAM!**

No Mail-In Rebate Required!

\*No Mail-In Rebate Required. Free 64MB RAM upgrade with purchase of iMac DV+ (#952684, #952682 and #952685) or iMac Special Edition (#952686 and #952687). Professional installation fee of \$30 required. Offer expires 1/2001.

# The Fastest iMac Ever!

## The NEW iMac DV Special Edition!

For those looking for even more, there's the new iMac DV Special Edition, the fastest, most powerful iMac ever. And it comes with iMovie 2!



Own this iMac DV Special Edition for as low as \$42/month with the NEW MacMall EZ Payment Plan!

**Desktop Movie Studio!**

- 500MHz G3 PowerPC processor
- 128MB SDRAM; Support up to 1GB
- 30GB Ultra ATA Hard Drive
- Slot-loading 4X speed DVD-ROM drive
- Two FireWire ports and two USB ports
- 10/100Base-T Ethernet
- Built-in 15" CRT (13.8" viewable size)
- Integrated Harman Kardon audio system
- Mac OS 9 ● AppleWorks

500MHz iMac DV

only \$1,494\* #952687 (Graphite)  
#952686 (Snow)

With FREE 64MB!

See details on the new MacMall EZ Payment Plan.

128MB RAM, 30GB Hard Drive, 4X DVD-ROM Drive, 56K modem

Order Any Time! Open 24 Hours! Order Today by 10pm EST—Get it Tomorrow by 10:30am!

**macmall.com 1-800-217-9492**

AOL Keyword: MacMall **Mention your Priority Code: #ZMWD0B3**

## Hot Peripherals!

**Palm m100**

Small and light!  
only

\$149<sup>99</sup>

#951523



**EPSON**

**Stylus® Color 880 Printer**

only

\$149<sup>99</sup>

#951949



**Iomega Zip 100MB USB Portable Drive**

only \$89<sup>99</sup>

#34314



**Adobe Photoshop 6.0**

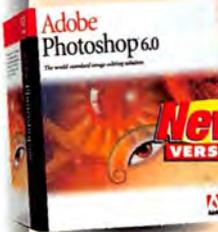
**Photoshop 6.0**

Delivering more power and flexibility than ever before!

**New! upgrade today for only**

\$178<sup>94</sup>

#951597  
Sys. req.: PPC, 24MB RAM, 30MB HD



## MacMall Exclusive!

**USB Digital Camera for only \$79!**

- True 640 x 480 resolution
- Perfect for electronic use
- USB & video connection
- Stores 32 photos
- Built-in flash
- Video enabled
- TV output
- Self-timer



only \$79<sup>99</sup>

Call for details!  
With any \$200 purchase! (after \$20 mfr. mail-in rebate)  
Hurry, supplies are limited! Price of camera and shipping charges do not apply to minimum requirement.

**MacMall**

**Upgrades for Your Power Mac G4!**



Have your RAM professionally installed by one of our factory-trained technicians for only \$30. Ask for #2214. Visit our Web site: macmall.com for more Viking memory. Prices are valid at time of press & are subject to change due to market fluctuations. Please call for most current pricing.

#813179	64MB SDRAM DIMM	\$106 <sup>99</sup>
#813177	128MB SDRAM DIMM	\$196 <sup>99</sup>
#813178	256MB SDRAM DIMM	\$449 <sup>99</sup>
#58576	512MB SDRAM DIMM	\$1,199 <sup>99</sup>

## Hot Peripherals!

**DCR-TRV20 Digital Camera**

**SONY**

only  
**\$1,699** #80282  
Call for current price!



**harman/kardon**

**Soundstick 3-Piece USB Speakers**

only  
**\$179<sup>99</sup>** #952775



**Spessa 10x4x32 Firewire CD-RW Drive**

**SONY**

only  
**\$319<sup>99</sup>** #57282  
While supplies last.



**Now Available at MacMall!**

**Apple® Pro Keyboard**  
**\$59** #953968

**Apple® Pro Mouse**  
**\$59** #953969



## MacMall Exclusive!



**UMAX**



**EPSON**



**Bundle \$149<sup>99</sup>\***  
for only #954279

Complete your system with this great bundle and save on these name brand peripherals when you purchase any new Mac. Supplies are limited so order now! Price reflects \$20 mail-in rebate.

# New Apple Power Mac G4

**With Dual Processors!**

With either single or dual processors, the Power Mac G4 delivers up to twice the fire-power of previous G4 models.

**Supercomputer Performance!**

- 450 or 500MHz dual PowerPC G4 processor(s) depending on configuration
- 128 or 256MB of SDRAM
- Supports up to 1.5GB of PC100 SDRAM
- 30 or 40GB Ultra ATA/66 hard drive
- DVD-ROM drive or DVD-RAM drive

**FREE Extra 128MB RAM!**

**No Mail-In Rebate Required!**

Free 128MB RAM upgrade with purchase of Power Mac 450DP (#952689) and Power Mac 500DP (#952690 & #953099). Professional installation fee of \$30 required. Offer expires 1/20/01.

Order	MHz	RAM	HD	Cache	Drive	Modem	Networking	Price	or as low as
#952689	(2)450	128MB	30GB	1MB	DVD-ROM	56K	Gigabit Ethernet	\$2,494	'70/mo*
#953099	(2)500	256MB	40GB	1MB	DVD-ROM	56K	Gigabit Ethernet	\$3,194	'88/mo*
#952690	(2)500	256MB	40GB	1MB	DVD-RAM	56K	Gigabit Ethernet	\$3,494	'98/mo*

## Single Processor G4!

The newest version of the Power Mac G4 is also available with a single 400MHz processor. It gives you the features of the dual processor models at a lower price: ATI RAGE 128 Pro graphics card, built-in USB and FireWire,

Apple Pro Mouse and Pro Keyboard—and even Gigabit Ethernet!

- 400MHz PowerPC processor
- 64MB RAM
- 20GB Ultra ATA hard disk
- DVD-ROM drive or DVD-RAM drive
- 10/100/1000Base-T Ethernet
- Apple Pro Keyboard and Pro Mouse



Monitor sold separately.

Single Processor G4  
**\$1,594\*** #952699  
starting at

**Own this Power Mac G4**  
for as low as  
**\$45/month** with the NEW  
**MacMall EZ Payment Plan!**  
Call for even lower prices!

Order	MHz	RAM	HD	Cache	Drive	Modem	Networking	Price	or as low as
#952688	(1)400	64MB	20GB	1MB	DVD-ROM	56K	Gigabit Ethernet	\$1,594	'45/mo*



Authorized Reseller



**Own this Power Mac G4**  
for as low as  
**\$70/month** with the NEW  
**MacMall EZ Payment Plan!**

New Apple® Power Mac G4

**\$2,494\*** Monitor sold separately. #952689

starting at  
**With FREE 128MB!**  
**Own this Power Mac G4**  
for as low as  
**\$70/month** with the NEW  
**MacMall EZ Payment Plan!**

**Order Any Item in 4 Easy Steps**

1. Go to [www.macmall.com](http://www.macmall.com)
2. Click on "Shopping Cart"
3. Enter part# in "Catalog Express"
4. Click on "Proceed to Checkout"



**macmall.com 1-800-217-9492**

# New iBooks up to 466MHz!

## Now with DVD!

Slip the latest DVD movie titles into the DVD-ROM drive and watch it on a brilliant 12.1" display, or even on your TV.

### Processor and storage

- 466MHz PowerPC G3 processor
- 256K on-chip level 2 cache
- 66MHz system bus; 66MHz memory bus
- 64MB of PC100 SDRAM; supports up to 320MB of SDRAM
- 10GB Ultra ATA hard disk drive
- 6X DVD-ROM drive

### Loaded with features

- Built-in 12.1" (diagonal) TFT SVGA active-matrix display
- Up to 6 hours of battery life

## iBook's New Features—

**Two New Models:**  
**Indigo/Key Lime 366MHz (CD)**  
**Graphite/Key Lime 466MHz (DVD)**

- FireWire port (in addition to USB)
- New "AV Port" to connect iBook to TV (special cable is included)
- Graphite includes 6X DVD-ROM drive
- 10GB hard disk (instead of 6GB)
- iMovie 2 is included
- 256K ON-CHIP L2 cache
- ATI Rage Mobility 128 with 8MB RAM (instead of ATI Rage Mobility with 4MB)



iBook Special Edition with DVD  
**\$1,794** #953212 Graphite  
 now only #953994 Key Lime

**With FREE 64MB!**

Own this iBook Special Edition for as low as \$50/month with the **New MacMall EZ Payment Plan!**

**FREE Extra 64MB RAM!**  
 No Mail-In Rebate Required!  
Free 64MB RAM upgrade with purchase of Graphite iBook Special Edition (953212), Key Lime iBook Special Edition (953994), Key Lime iBook (953992) and iBook Indigo (953211). Professional Installation fee of \$30 required. Offer expires 1/20/01.

## Now iMac with Movies To Go!

### Processor and memory

- 366MHz PowerPC G3 processor
- 256K on-chip level 2 cache
- 66MHz system bus; 66MHz memory bus

- 64MB of PC100 SDRAM; supports up to 320MB of SDRAM
- ATI RAGE Mobility 128 graphics accelerator with 8MB of SDRAM graphics memory and AGP 2X support

iBook **\$1,494** Indigo #953211  
 now only Key Lime #953992

Own this iBook for as low as \$45/month with the **New MacMall EZ Payment Plan!**



Order Any Time! Open 24 Hours! Order Today by 10pm EST—Get it Tomorrow by 10:30am!  
**macmall.com 1-800-217-9492**  
 AOL Keyword: MacMall **Mention your Priority Code: #ZMWDOB3**

## Hot Peripherals!

### Diamond Rio 500

only **\$274.99**  
 #51368



### KEYSPAN

### Digital Media Remote



only **\$49.99**  
 #51342

### Par Technology Kritter USB Camera

only **\$98.99**  
 #56642



### Airport Base Station



only **\$294**  
 #57373

#57369 Airport Card \$99.99

## Microsoft Office 2001!

### Order Today!

All the Essentials Made Easy! Made for the Mac! upgrade for as low as **\$254.99**  
 #849861



#849861 Office 2001 Upgrade \$425.99



Call for your copy of the latest **Mac Software & Accessories Buyers Guide!**  
Featuring all the new releases from Macworld 2000, New York. Call 1-800-217-9492



## NEW from Macromedia!



### Flash 5 Upgrade

Design and deliver distinctive, low bandwidth Web sites with Macromedia® Flash™ 5, the standard for creating high-impact Web experiences, used by over half a million Web authors worldwide.

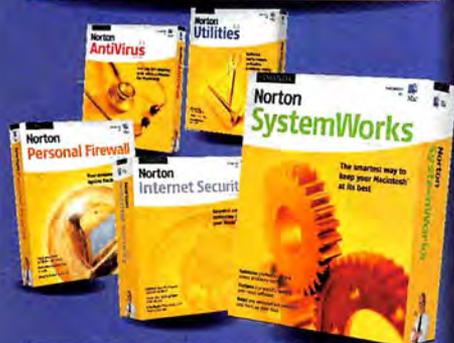
upgrade for only **\$138<sup>99</sup>** #950401

### New! Flash 5 FreeHand 9 Studio Upgrade

Design graphics and site concepts in FreeHand, using industry-leading creative tools, including 3D perspective grids and vector transparency. Then integrate into Flash, fusing vectors, bitmaps, motion, MP3 audio, form input and interactivity.

upgrade for only **\$238<sup>99</sup>** #950405

## NEW from Symantec!



- |         |                              |                    |
|---------|------------------------------|--------------------|
| #852776 | Norton SystemWorks 1.0       | \$69 <sup>99</sup> |
| #852775 | Norton Utilities for Mac 6.0 | \$44 <sup>99</sup> |
| #852774 | Norton AntiVirus 7.0 for Mac | \$29 <sup>99</sup> |
| #852815 | Norton Personal Firewall 1.0 | \$44 <sup>99</sup> |
| #852777 | Norton Internet Security     | \$54 <sup>99</sup> |

\*Price after rebate.

## Hot New Software Titles!

### Techtool Pro 3.0

No other program tests as many different aspects of your Macintosh as thoroughly as Techtool Pro 3.0. The key to maintaining a healthy Mac is to install before you have problems!

only **\$89<sup>99</sup>** #30489



### Adobe GoLive 5.0

Industrial-strength Web design, production and management for professional, dynamic, database-driven Web sites!

upgrade only **\$98<sup>99</sup>** #950150



### ViaVoice for Mac, Enhanced Edition

The most advanced speech recognition technology ever! Includes an innovative, Plug-n-Play, USB microphone!

only **\$74<sup>99</sup>** #841920  
Offer \$50 mfr. rebate.



### Illustrator 9.0

The standard in vector graphics creation software just got better!

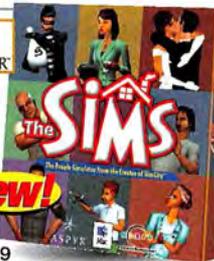
upgrade for only **\$139<sup>99</sup>** #58042  
#58038 Illustrator 9.0 Full version \$389<sup>99</sup>



### The Sims

Build a simulated neighborhood and run or ruin the lives of the people that live there! The fate of a Sim, for better or worse, rests in your hands.

only **\$44<sup>89</sup>** #82299



### Diablo 2

Return to a dark world plagued by evil forces. Face a new series of quests to rid the world of Diablo and his vile brethren forever.

New Lower Price!  
**\$44<sup>99</sup>** #951075



### Mac OS 9.0.4

Make your Mac more powerful and more Internet-friendly than ever. Improves audio, video and graphics performance & more!

only **\$89<sup>89</sup>** #74850  
Sys Req: Power PC, 32MB RAM, 140MB HD Space



### FileMaker Pro Upgrade

Manage your data from desktop to Web! as low as

**\$88<sup>99</sup>** #812611  
After \$50 mail-in rebate. Sys Req: Mac OS 7.6.1 or later, 16MB RAM, 24MB HD



### Stuffit Deluxe 6.0

Open virtually all compressed files on the Internet. Send files faster!

as low as **\$24<sup>99</sup>** #953839  
Price after \$50 mfr. mail-in rebate.



## MacMall Exclusive!

### Stuffit Deluxe 5.5 and Disk Warrior 2.0 Bundle

MacMall Exclusive!  
only **\$89<sup>99</sup>** #953849  
Save over \$43 on these powerful Mac utilities when you buy this bundle.



## Stocking Suffers!

### Myst

This hauntingly beautiful game features stunning 3D photorealistic graphics, a compelling storyline, and mind-bending puzzles!

**FREE!** #41903  
Shipped in promotional packaging. \$3.99 S/H applies.



### Vegas Jackpot Gold

only **\$3<sup>99</sup>** #953714  
Shipped in promotional packaging. While supplies last.

**Order Any Item in 4 Easy Steps**

1. Go to [www.macmall.com](http://www.macmall.com)
2. Click on "Shopping Cart"
3. Enter part# in "Catalog Express"
4. Click on "Proceed to Checkout"

**CATALOG EXPRESS**

**macmall.com 1-800-217-9492**

**Accessories**

**The Best Prices on USB and FireWire Peripherals for the iMac™, iBook™, PowerBook G3, Power Mac G3 and G4!**

**Stylus® Color 777i Printer**

**EPSON**

- 8ppm black, 3ppm color
- 2880x720dpi

**New!**

**\$99<sup>99</sup>**

#953315



**Stylus® Color 980 Printer**

**EPSON**

- 13ppm black, 10.5ppm color

**New!**

**\$249<sup>99</sup>**

#951946



**Lexmark Z52 Color Printer**

**LEXMARK**

- 14ppm black, 6.5 ppm color

**\$179<sup>99</sup>**

#66198



**OfficeJet G85 Printer, Scanner, Copier, Fax All-in-One!**

**hp**

- 12ppm black, 10ppm color
- 36-bit color scan

**\$799<sup>99</sup>**

#63480



**4 Port USB Hub**  
Provides instant expandability that is as simple as plugging in a USB connector!



**\$24<sup>99</sup>**

#54763

**USB**

**Intuos 6" x 8" Special Edition Tablet**



Includes cordless mouse and pressure sensitive pen

**\$317<sup>99</sup>**

#950761

**USB**

**Que! 12x10x32 FireWire CD-RW Drive**



#951639

**\$349<sup>99</sup>**

**1 YEAR**

**USB**

**Sony Spressa 10x4x32 Firewire CD-RW Drive**



#57282

White supplies last.

**D-360L Digital Camera**

**OLYMPUS**

- 1280 x 960 resolution
- 8MB SmartMedia card

**\$299<sup>99</sup>**

#57140



**Coolpix 880 Digital Camera**

**Nikon**

- 3.34 Megapixel CCD
- 3X Zoom-Nikkor lens, plus 4X stepless digital zoom
- One year warranty
- USB interface

**\$699<sup>99</sup>**

#952107



**ZR10 Mini DV Camcorder**

**Canon**



#59847

**\$769<sup>99</sup>**

**USB**

**Perfection 1240U Scanner**

- 1200 x 2400dpi
- 42-bit color
- USB connectivity

**\$199<sup>99</sup>**

#953564

Unit shown with transparency adapter. Available as separate purchase. Call for details.



**ISub Subwoofer for iMac DV**

- Handles low frequencies between 42Hz and 200Hz
- Attaches via USB

**\$99<sup>99</sup>**

#60088



**LaCie 8x8x32 FireWire CD-RW Drive**



**\$349<sup>99</sup>**

#72198

**Best Seller!**

**External USB Floppy Drive with Color Panels**

Hot swappable USB interface; no AC adapter required

**only \$84<sup>99</sup>**

#54835

**VST**

Color panels included FREE!

**100MB Color Zip 12-Pack with FREE ZipMedia Wallet!**

Color code your data with colored Zip disks!

**now only \$99<sup>95</sup>**

#952985



**Great Peripheral Deals for Your Serial and SCSI Macs!**

**LaCie External 12x4x32 SCSI CD-RW Drive!**

Create your own music or data CDs.

- 12X record speed
- 2MB data buffer

**\$329<sup>99</sup>**

#54003

**LACIE**



**UMAX**

**Epson Stylus Color 3000 Printer**

**EPSON**

- Present full-bleed 13" x 19" designs at 1440 x 720dpi
- Includes Adobe PostScript L2
- Optional internal Ethernet, Mac & PC

**\$899**

#43863

Mfr. reconditioned.



**While Supplies Last!**

**1 YEAR**



**EPSON**

**Epson Stylus 850 Printer!**

- 9ppm black, 7ppm color
- Serial interface

**\$139<sup>99</sup>**

#53492

Mfr. reconditioned.

**Omega® Zip® 250MB External SCSI Drive**

**\$149<sup>99</sup>**

#41332

**Omega**



Order Any Time! Open 24 Hours! Order Today by 10pm EST—Get it Tomorrow by 10:30am!

**macmall.com 1-800-217-9492**

AOL Keyword: MacMall **Mention your Priority Code: #ZMWDOC3**

**MacMall**

With APS Tech FireWire Plus, you don't have to choose.

APS Tech is proud to offer a breakthrough interface solution. FireWire Plus technology gives you FireWire (IEEE 1394) and USB support on one device, so you don't have to choose between interfaces. Delivering cross-platform, dual support and automatic configuration, FireWire Plus is the ultimate, universal connectivity solution. Look for APS Tech FireWire Plus products in this ad and order yours today.



**\$369.95**  
APS Pro2

### APS 60GB FireWire plus Hard Drive

- Easiest connections ever – hot-swappable, no terminator or device ID
- Ideal for personal video storage and editing, large-scale imaging/graphics
- FireWire (IEEE 1394) and USB interfaces

#### APS FireWire plus Hard Drives

Model	APS Pro2
APS 20GB 7200 RPM FireWire Plus Hard Drive	\$249.95
APS 40GB 7200 RPM FireWire Plus Hard Drive	329.95
APS 60GB 7200 RPM FireWire Plus Hard Drive	369.95
APS 75GB 7200 RPM FireWire Plus Hard Drive	749.95

## Spacious storage



**\$749.95**  
APS Pro2

### APS 4.7GB DVD-RAM FireWire

- Rewritable DVD discs for archiving or digital video storage
- Back up 4.7GB (9.4GB compressed) with FireWire interface

#### APS DVD-RAM Drives

Model	Price
APS 4.7GB DVD-RAM FireWire Pro2	\$749.95
APS 4.7GB DVD-RAM SCSI Pro2	\$649.95



**\$389.95**  
APS Pro2

### APS CD-RW 16x10x40 FireWire plus

- Speedy CD-RW drive with FireWire (IEEE 1394) and USB interfaces
- Hot-swappable for sharing among workstations



**\$229.95**  
APS Pro2

### APS CD-RW 4x4x24 USB

- Convenient USB interface, perfect for iMacs, G3s, G4s, other USB computers
- Hot-swappable to switch among workstations
- Winner, MacAddict "Spiffy!" Award, July 2000



**\$499.95**  
Internal Configuration

### APS ST 18GB

#### Ultra160 LVD SCSI 15,000 rpm

- 15,000 rpm LVD drives offer you fastest reliability and performance, EVER
- Average seek times as fast as 3.9ms

#### APS Ultra2 Wide / Ultra160 LVD SCSI Drives

Model	RPM	*Internal	APS Pro
APS ST 9GB Ultra160 LVD	7200	\$229.95	\$299.95
APS ST 18GB Ultra160 LVD	7200	339.95	409.95
APS ST 18GB Ultra160 LVD	10,000	449.95	519.95
APS ST 18GB Ultra160 LVD	15,000	499.95	569.95
APS ST 36GB Ultra160 LVD	10,000	699.95	769.95
APS ST 73GB Ultra160 LVD	10,000	1,219.95	1,299.95

Drives listed above carry a five-year warranty.

#### APS Ultra SCSI Drives

Model	RPM	*Internal	APS Pro
APS ST 9GB	7200	\$239.95	\$299.95
APS ST 18GB	7200	349.95	419.95

Drives listed above carry a five-year warranty.

\* Internal configuration does not include a mounting bracket. Intended as a replacement internal SCSI drive.

#### APS CD-RW SCSI Drives

Model	Price
APS CD-RW 12x10x32 SCSI Pro2	\$299.95
APS CD-RW 16x10x40 SCSI Pro2	379.95

#### APS CD-RW FireWire plus Drives

Model	Price
APS CD-RW 8x4x32 FireWire Plus Pro2	\$279.95
APS CD-RW 12x10x32 FireWire Plus Pro2	329.95
APS CD-RW 16x10x40 FireWire Plus Pro2	389.95



**\$189.95**  
APS Pro2

### APS 20GB USB Hard Drive

- Ultimate combination of compatibility and convenience
- Hot-swappable, no SCSI or IDE setup hassles



Drives on these pages are covered by the APS 30-Day Money-Back Guarantee.

Visit our closeout page at:

[www.apstech.com](http://www.apstech.com)

Source Code: MW01

# new FireWire® plus.

## Added insurance

### APS HyperDAT® IV LVD

- Longer, higher density tape for effective corporate network backup
- DDS-4 20GB native capacity



**\$1,099.95**

APS Pro2 case with Retrospect software for Mac and PC

### APS AIT Plus Ultra Wide Pro

- 35GB (native), 70GB (compressed) backup for video, 3-D, graphics workstations
- Fast transfer speed of up to 3.6MB/s (native)



**\$1,649.95**

APS Pro case with Retrospect software for Mac and PC

## Images of perfection

### Canon Elura2 Digital Video Camcorder

- 10X optical/40X digital zoom lens
- IEEE 1394 (FireWire) terminal
- Analog line-in for preserving originals, making copies



**\$1,599.95**

(Call for current price)

### Sony CyberShot DSC-S50

- 2.1 megapixel Super HAD™ image sensor
- 3x optical zoom, 6x precision digital zoom



**\$599.95**

### Digital Cameras\*

Model	Price
Sony Digital CyberShot DSC-S30	\$499.95
Sony Digital CyberShot DSC-S50	599.95
Sony Digital CyberShot DSC-S70	799.95
Nikon Coolpix 800	549.95
Nikon Coolpix 950	799.95
Nikon Coolpix 990	899.95
Canon PowerShot S10	499.95
Canon PowerShot S20	699.95

### LaCie electron19blue II

- 1600 x 1200 @ 85Hz with 0.24mm dot pitch
- Advanced flat screen technology completely eliminates distortion



**\$599.95**

### APS Tape Backup

Model	Price
APS HyperDAT® III (DDS-3) LVD Pro2	\$799.95
APS HyperDAT® IV (DDS-4) LVD Pro2	1,099.95
APS DLT8000 LVD	3,899.95
APS AIT PLUS Ultra Wide Pro	1,649.95
APS AIT II LVD Pro	3,299.95
APS AIT Autoloader Ultra Wide	3,199.95
APS AIT II Autoloader LVD	5,299.95
APS DDS-4 Autoloader LVD	3,499.95

Ships with Retrospect software for Mac and PC

### Printers

Model	Price
EPSON Stylus 900 Color Printer	\$399.95
EPSON Stylus Photo 1270 USB Color Printer	499.95
EPSON Stylus 1520 Color Printer	499.95
EPSON Stylus 3000 Color Printer	1,249.95
EPSON Stylus Pro 5000 Color Printer	2,999.95

### Power Management

Model	Price
APC Surge Station Pro 8	\$32.95
APC Surge Station Pro 8 w/ 2 Tel	37.95
APC Net 8 Surge Station	33.95
APC Net 8 Surge Station w/ Net P	47.95
APC Line Conditioner, R-600 APC	99.95
APC Line Conditioner, R-1250 APC	129.95
APC BackUPS Pro 280S APC	134.95
APC BackUPS Pro 420S APC	229.95
APC BackUPS Pro 650S APC	269.95
APC BackUPS Pro 1000S APC	389.95
APC BackUPS Pro 1400S APC	499.95

\* These products are not covered by the APS 30-Day Money-Back Guarantee. Products are covered by their manufacturer's warranty.

Mac OS, FireWire and the FireWire logo are registered trademarks of Apple Computer, Inc. APS and APS Tech are registered trademarks. Other brand or product names are registered trademarks or trademarks of their respective holders.

- 30-day money-back satisfaction on all APS brand drives and accessories. Your risk is the cost of shipping. Monitors and 3rd party products carry warranties from their respective manufacturers.
- SCSI cables may be purchased separately.
- APS' warranty is a pass-through of the mechanism manufacturer's warranty which will be served by APS for one year. APS warrants APS branded enclosures, brackets and power supplies for a period of one year from the date of purchase and will, at its discretion, replace or repair products found to be defective according to the specific terms of the warranty accompanying the product.
- Refused orders subject to 20% restocking fee.
- International customers must pay for all shipping charges.
- Prices and specifications are subject to change without notice.
- Not responsible for typographical errors.
- Your APS Drive unit may contain one or more components that were in prior use, but which have been inspected and repaired or rebuilt as necessary. These components, if any are covered by the same warranty provisions, exclusions and limitations to the same extent, and on the same terms as otherwise "new" components.
- © 2000, APS Tech. All Rights Reserved.



Advanced tools for digital visionaries™

**Call 800 - 874 - 1434**

Corporate Sales (800) 395-5871 • International (503) 844-4600  
5am - 10pm, Monday - Friday, 6am - 8pm Saturday - Sunday, Pacific Time



Circle 56 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

[www.macworld.com](http://www.macworld.com) January 2001 131

# Envision your future



Make any vision into a business reality with the latest and greatest products from CDW. Your dedicated account manager will be there to help you choose the right products to inspire innovative ideas. Call today, or visit us on the Web at [CDW.com](http://CDW.com), and initiate the future visions of your business.

## Inspire Innovation

### Apple® iBook™

- ▶ 366MHz PowerPC G3 processor
- ▶ RAM: 64MB std., 320MB max.
- ▶ 10GB hard drive
- ▶ 12.1" active-matrix display
- ▶ 24X Max CD-ROM drive
- ▶ Mac® OS 9
- ▶ Includes: Apple iMovie 2 Software

Indigo **\$1495.00** CDW 245225



### Apple® iBook™ Special Edition

- ▶ 466MHz PowerPC G3 processor
- ▶ RAM: 64MB std., 320MB max.
- ▶ 10GB hard drive
- ▶ 12.1" active-matrix display
- ▶ 6X Max DVD-ROM drive
- ▶ Mac® OS 9
- ▶ Includes: Apple iMovie 2 Software

Graphite **\$1795.00** CDW 245226

### Apple® PowerBook®

- ▶ 400MHz PowerPC G3 processor
- ▶ RAM: 64MB std., 512MB max.
- ▶ 10GB hard drive
- ▶ 14.1" active-matrix display
- ▶ 6X Max DVD-ROM drive
- ▶ Mac® OS 9
- ▶ Includes: Apple iMovie 2 Software

**\$2495.00** CDW 245222



### Apple® PowerBook®

- ▶ 500MHz PowerPC G3 processor
- ▶ RAM: 128MB std., 512MB max.
- ▶ 20GB hard drive
- ▶ 14.1" active-matrix display
- ▶ 6X Max DVD-ROM drive
- ▶ Mac® OS 9
- ▶ Includes: Apple iMovie 2 Software

**\$3495.00** CDW 245224

CDW carries the full line of Macintosh and Macintosh compatible products.  
Call your CDW account manager or visit us at [www.cdw.com](http://www.cdw.com) for more information.



Authorized Reseller

# Establish originality



## Apple iMac DV

- ▶ 400MHz PowerPC™ G3 processor
- ▶ RAM: 64MB std., 1GB max.
- ▶ 10GB hard drive
- ▶ 24X Max CD-ROM drive
- ▶ 56K modem
- ▶ 10/100BASE-T Ethernet port
- ▶ AirPort ready

**\$995.00**

Indigo CDW 235688  
Ruby CDW 235689

## Apple iMac DV+

- ▶ 450MHz PowerPC G3 processor
- ▶ RAM: 64MB std., 1GB max.
- ▶ 20GB hard drive
- ▶ 4X Max DVD-ROM drive
- ▶ 56K modem
- ▶ 10/100BASE-T Ethernet port
- ▶ AirPort ready

**\$1295.00**

Indigo CDW 235690  
Ruby CDW 235691  
Sage CDW 235694

## Apple iMac DV Special Edition

- ▶ 500MHz PowerPC G3 processor
- ▶ RAM: 128MB std., 1GB max.
- ▶ 30GB hard drive
- ▶ 4X Max DVD-ROM drive
- ▶ 56K modem
- ▶ 10/100BASE-T Ethernet port
- ▶ AirPort ready

**\$1495.00**

Graphite CDW 235696  
Snow CDW 235698

## Epson Stylus Color 880

### Color ink jet printer

- ▶ 4-color (CMYK) drop-on-demand Micro Piezo ink jet printing
- ▶ Resolution: 2880 x 720 dpi black and color
- ▶ Print speed: up to 12 ppm black, 9 ppm color
- ▶ Paper handling: 100-sheet/10-envelope multipurpose tray
- ▶ Parallel and USB ports
- ▶ 1-year limited parts and labor warranty

**\$149.00**

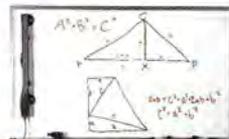
CDW 239677



## mimio™ for the Mac

### Turn any whiteboard into a digital whiteboard

Attach mimio to any whiteboard and eliminate the need to take notes in meetings, classes or presentations—everything you write and draw is captured to your iMac in color and real-time. Distribute ideas with one-touch print, e-mail, drag, drop or file conversion with mimio for Mac.



**\$599.00** CDW 229562

## Apple Power Macintosh® G4

- ▶ 400MHz PowerPC™ G4 processor
- ▶ RAM: 64MB std., 1.5GB max.
- ▶ 20GB hard drive
- ▶ 4X Max DVD-ROM drive with DVD-video playback
- ▶ 56K modem
- ▶ 10/100BASE-T Ethernet connection

**\$1595.00** CDW 235684



## Apple Power Macintosh G4 Cube

- ▶ 450MHz PowerPC™ G4 processor
- ▶ RAM: 64MB std., 1.5GB max.
- ▶ 20GB hard drive
- ▶ 4X Max DVD-ROM drive
- ▶ 56K modem
- ▶ 10/100BASE-T Ethernet connection
- ▶ AirPort ready with built-in antennas

**\$1795.00** CDW 235622



Authorized Reseller

VIRTUAL INK™

EPSON®

All pricing subject to change. For all prices and products, CDW® reserves the right to make adjustments due to changing market conditions, product discontinuation, manufacturer price changes or typographical errors in advertisements. All products sold by CDW are third party products and are subject to the warranties and representations of the applicable manufacturers. Please refer to www.cdw.com for additional terms and conditions.  
©2001 CDW® Computer Centers, Inc. 200 N. Milwaukee Avenue, Vernon Hills, IL 60061 MW6583AB 1/01



Computing Solutions  
Built for Business®  
www.cdw.com  
800-509-4239



Here's this month's hot features. Check out more at [www.megahaus.com/mac](http://www.megahaus.com/mac)

## Monitors

### ViewSonic

**18" Pro**  
 "Plug N Play"  
 (PF790) \$509



See our complete selection on our website under the "Monitors" listing.

## Digital Cameras

### SONY

- Hi-speed auto focus, floppy storage, 640 x 480 pixels (MVC-FD73) \$495
- LCD display, 6X Digital Zoom lens, floppy storage, 1280 x 960 pixels (MVC-FD85) \$695



## USB & 1394 Stuff

- USB 4x4x6 CD Rewritable for PC or Mac (CRX100E/X2) \$309
- USB 250MB Zip Drive w/Software (ZIP250USB) \$169
- USB to SCSI Adapter (USBSCSI) \$69
- USB External Hard Drives w/Cable:
  - 10GB or 15GB (USB10/15GB) \$165/\$179
  - 20GB or 30GB (USB20/30GB) \$205/\$229

- 1394 PCI/MAC BOARD KIT (70HTL13941) \$89
- 1394 HUB (70HTL00030) \$89
- 1394 Repeater: (70HTL00020) \$45
- 1394 15 Ft. Cable: 6pin to 4pin (70CAB13943) \$28
- 1394 15 Ft. Cable: 6pin to 6pin (70CAB13942) \$30

## Hard Drive

### Quantum

- 18.4 GB \$409
- SCSI Ultra 160 Ext. \$539
- Int. (TY318400LW) (TY318400LWX)



## CD-Rewritable Drive

### YAMAHA

- 8x8x24 SCSI CDR-W w/Mastering Soft. & 1disk
- Int. (YCRWB824S) \$215
- Ext. (5 disks + ISA controller) (YCRWB824SX) \$255



## Hard Drive

### Seagate

- 9.2 GB \$259
- SCSI Ultra 160 Ext. \$389
- Int. (ST39204LW) (ST39204LWX)



## 250MB ZIP Drive

- 250MB ZIP Ext. iomega Drive Just \$149
- 250MB disks \$17 each (ZIP250C)
- SCSI Mac or PC



## HARD DRIVES

### Quantum

ULTRA 160 SCSI (Call for deals on our externals) Int.

9.1GB	7200	4MB	XC399100LW	\$189
9.2GB	10,000	8MB	TY309200LW	\$265
18.3GB	7200	4MB	XC318400LW	\$323
18.4GB	10,000	8MB	TY318400LW	\$409
36.7GB	7200	4MB	XC335700LW	\$589
36.7GB	10,000	8MB	TY336700LW	\$645
73.4GB	10,000	8MB	TY373400LW	\$1195

IDE ULTRA ATA/66

10.0GB	4500	128K	QML10000LD	\$Call
10.2GB	7200	2MB	QMP10200LD	\$102
15.0GB	7200	2MB	QMP15000LD	\$113
20.0GB	4500	128K	QML20000LD	\$Call
20.5GB	7200	2MB	QMP20500LD	\$129
30.0GB	4500	128K	QML30000LD	\$Call
30.0GB	7200	2MB	QMP30000LD	\$169
40.0GB	4500	128K	QML40000LD	\$Call

Call about new ATA-100 Drives!

IDE Ultra ATA/100

9.1GB	7200	4MB	07N3120	\$233
9.1GB	10,000	4MB	07N3220	\$239
18.2GB	7200	4MB	07N3110	\$353
18.3GB	10,000	4MB	07N3210	\$355
36.4GB	7200	4MB	07N3100	\$589
36.4GB	10,000	4MB	07N3200	\$575

IDE Ultra ATA/100

15.0GB	7200	2MB	07N5637	\$112
20.0GB	7200	2MB	07N5638	\$133
20.5GB	5400	512K	07N3924	\$98
30.0GB	7200	2MB	07N5639	\$159
45.0GB	7200	2MB	07N5640	\$219
61.4GB	7200	2MB	07N3933	\$375
76.8GB	7200	2MB	07N3935	\$495

## WESTERN DIGITAL

IDE Ultra ATA/100

10.0GB	5400	2MB	WD100EB	\$92
15.0GB	5400	2MB	WD150EB	\$103
20.0GB	5400	2MB	WD200EB	\$118
30.0GB	7200	2MB	WD300EB	\$169
40.0GB	7200	2MB	WD400EB	\$198

WD Firewire and other Firewire products on our web!

## FUJITSU

IDE Ultra ATA/66

10.2GB	5400	512K	MPF3102AT	\$92
10.2GB	7200	2MB	MPF3102AH	\$98
15.3GB	5400	512K	MPF3153AT	\$99
20.4GB	5400	512K	MPF320AT	\$107
20.4GB	7200	2MB	MPF320AH	\$129

## Maxtor

IDE Ultra ATA/100

20.0GB	2MB	7200	MS2049H4	\$119
20.4GB	512K	5400	MS3029H3	\$103
30.0GB	2MB	7200	MS3073H6	\$155
30.7GB	512K	5400	MS3074H4	\$123
40.0GB	2MB	7200	MS4098H8	\$199
61.4GB	2MB	5400	MS6147H8	\$249
81.9GB	2MB	5400	MS8196H8	\$311

## HARD DRIVES

### Seagate

ULTRA SCSI (Call for deals on our externals) Int.

9.2GB	7200	2MB	ST39216N	\$229
18.4GB	7200	2MB	ST318416N	\$339

ULTRA WIDE SCSI (Call for deals on our externals)

9.2GB	7200	2MB	ST39216W	\$229
18.4GB	7200	2MB	ST318416W	\$339

Ultra 160 SCSI (Call for deals on our externals)

9.2GB	7200	2MB	ST39236LW	\$219
9.2GB	7200	4MB	ST39236LWV	\$235
9.2GB	10,000	4MB	ST39204LW	\$259
18.2GB	10,000	4MB	ST318404LW	\$373
18.4GB	7200	2MB	ST318436LW	\$333
18.4GB	7200	4MB	ST318436LWV	\$348
18.4GB	15,000	4MB	ST318451LW	\$499
36.7GB	10,000	4MB	ST336704LW	\$605
36.7GB	10,000	16MB	ST336704LWV	\$645
73.4GB	10,000	4MB	ST173404LW	\$1099
73.4GB	10,000	16MB	ST173404LWV	\$1109

IDE Ultra ATA/66

10.2GB	7200	2MB	ST310210A	\$93
15.3GB	7200	2MB	ST313320A	\$104
20.4GB	7200	2MB	ST320420A	\$119
30.6GB	7200	2MB	ST330630A	\$165

Visit our website under megahaus.com/sea for the latest deals on Seagate hard drives and tape drives.

## 2.5" IDE LAPTOP

6.0GB	9.5mm	Toshiba	MK6014MAP	\$125
10.0GB	9.5mm	Toshiba	MK1016GAP	\$159
20.0GB	9.5mm	Toshiba	MK2016MAP	\$263

5.0GB	9.5mm	IBM	07N4391	\$119
10.0GB	9.5mm	IBM	07N4390	\$152
20.0GB	9.5mm	IBM	07N4388	\$269
30.0GB	12.5mm	IBM	07N4392	\$415
32.0GB	12.5mm	IBM	07N4138	\$479

6.0GB	9.5mm	Hitachi	DK23BA60	\$125
10.0GB	9.5mm	Hitachi	DK23BA10	\$159
20.0GB	9.5mm	Hitachi	DK23BA20	\$245

## MAKE IT REMOVABLE



Turn your drives into removables with these high quality DataPort™ drive cartridges and frames. Ultra Security.

**DataPort VI - COMPLETE KIT - Platinum Finish**  
 Includes 1 frame, 1 cartridge, mounting screws, & 2 keys.

Ultra SCSI	\$108	(DP2200ISM)
Ultra Wide SCSI	\$128	(DP2200IWM)

**Extra Cartridge/Frame**

Ultra SCSI	\$61/\$54	available in
Ultra Wide SCSI	\$75/\$61	available in

*Kits also available in a Black Finish*

We also carry DataPort IV, V, VII and VIII. Call or visit our website at: [megahaus.com/dataport](http://megahaus.com/dataport)

With all the talk about drive shortages, you'll probably find it at MegaHaus - so call us - we are #1 in the US!

We have more than 90 power backup solutions and can create custom configurations to suit your networking and data backup needs. CALL US.



## CD ROM

• SCSI Internals • Call About Our Externals

Teac	CD532S	32X	85ms	\$72
Plextor	PX32CS (caddy)	32X	85ms	\$130
NEC	CDR3010	40X	85ms	\$69
Toshiba	X3M401B	40X	85ms	\$64
Plextor	PX40TS	40X	85ms	\$89
Kenwood	UCR41S	52X	90ms	\$143

• WIDE SCSI •

Plextor	PX40TSUW	40X	85ms	\$99
---------	----------	-----	------	------

• IDE •

Teac	CD540E	40X	85ms	\$43
NEC	CDR3000	40X	75ms	\$43
Mitsumi	CRMCFX48X	48X	65ms	\$41
Creative	SBCD52	52X	100ms	\$40
Kenwood	UCR41Z	52X	90ms	\$79
Kenwood	UCR421	72X	90ms	\$110

• CD CHANGER •

Pioneer 24 X6 Disc Ext. SCSI (DRM6324X)	\$395
---	-------

## TAPE BACKUP

Capacity	Native/Compressed	Max. Speed	Back Up Be Safe!	
2.4GB	66MB/min	Seagate STD2000N	4mm DAT •	\$413
4.8GB	30MB/min	Seagate STT2800N		\$215
4.8GB	66MB/min	Seagate DDS-2 STD2800N		\$509
4.8GB	90MB/min	Sony SDT7000AI		\$419
4.8GB	60MB/min	HP C159AI		\$495
12.24GB	14MB/min	Sony DDS-3 SDT9000AI		\$579
12.24GB	120MB/min	HP DDS-3 C1554AI		\$689
20.40GB	28MB/min	Sony DDS-4 SOT11000AI		\$819
48.96GB	66MB/min	Seagate DDS-2 STL496000N		\$1599
72.144GB	120MB/min	HP 6 tape load DDS-3 CS648A		\$1599

• EXABYTE 8mm DAT •

7.44GB	120MB/min	ELIANT820		\$1169
20.40GB	360MB/min	EXB8900		\$1879
140.28GB	180MB/min	EZ175WK		\$4499

• QUANTUM DLT •

20.40GB	180MB/min	DLT4000		\$1285
40.80GB	600MB/min	DLT8000		\$3659

Visit [www.megahaus.com](http://www.megahaus.com) for unbeatable deals on tape media!

## ZIP, JAZZ & OPTICAL

1000MB Zip Int. SCSI/Ext. USB	\$899/\$99
250MB Zip Ext. SCSI for PC or Mac	\$149
2GB Jaz Internal SCSI	\$299
2GB Jaz External SCSI	\$339
1GB Jaz disk 2-4/5-9/10+	\$807/775
2GB Jaz disk 2-4/5-9/10+	\$858/807/7

Sony Magneto Optical

5.2GB SCSI-2 Int. 4MB buffer (SM0F551)	\$1399
5.2GB SCSI-2 Ext. 4MB buffer (SM0F551X)	\$1539
5.2GB Optical drive (SMASX5) 1-4/5-9/10+	\$83/807/7

Para Llamadas en Español:  
**1-800-786-1174**

## CD MEDIA

Nobody Beats MegaHaus on CD Media Pricing... NOBODY!

**CD RECORDABLE MEDIA**

12X Max Speed	5/20/50/100 Pack
[CDR74WB-5/20/50/100]	\$5/\$18/\$42/\$78

**80 MINUTE MEDIA**

12X Max Speed	5/20/50/100 Pack
[CDR80-5/20/50/100]	\$4/\$13/\$32/\$59

**CD REWRITABLE MEDIA**

4X Max Speed	Budget 5/20/50/100 Pack
[CDR74WB-5/20/50/100]	\$6/\$24/\$56/\$104
4X Max Speed	5/20/50/100 Pack
[CDR74W-5/20/50/100]	\$12/\$45/\$107/\$199

**CD-R PRINTABLE SURFACE MEDIA**

12X Max Speed	Budget 5/20/50/100 Pack
[CDR74PB-5/20/50/100]	\$4/\$15/\$35/\$66
12X Max Speed	5/20/50/100 Pack
[CDR74PC-5/20/50/100]	\$7/\$26/\$62/\$115

**CD REWRITABLE PLATINUM MEDIA**

12X Max Speed	5/20/50/100 Pack
[CDR74PA-5/20/50/100]	\$6/\$24/\$57/\$106

## SCSI CDR-W's

Yamaha 8x8x24 ReWritable • Packet write, 4MB buffer, tray loading.

Int. [YCRWB824S] / Ext. [YCRWB824SX] \$219/\$269

Sony 10x4x32 ReWritable • Packet write, 4MB buffer, tray loading.

Int. [CRX145S] / Ext. [CRX145SX] \$275/\$335

Cendyne 12x4x32 • Packet write, 4MB buffer, tray loading.

Int. [CD1C00028] / Ext. [CD1C00028X] \$309/\$369

Hewlett Packard 12x8x32 ReWritable • Packet write, 4MB buffer, tray loading.

Int. [C4506A] / Ext. [C4506AX] \$329/\$389

Plextor 12x10x32 ReWritable • Packet write, 4MB buffer, tray loading.

Int. [PXW1210TSB] / Ext. [PXW1210TSBX] \$335/\$395

## SOFTWARE

Macromedia Dreamweaver V3.0 for Mac OS 8.1 or later (DWM30D01) \$295

Macromedia Flash V5.0 for Mac OS 8.5 or later (FLM50D01) \$369

Macromedia Dreamweaver 3.0 w/Fireworks 3.0 Studio for Mac OS 8.1 or later (WBM30D01) \$399

Macromedia Director V8.0 w/Shockwave Studio for Mac OS 8.1 or later (WDM80D01) \$995

This is just a small sampling of the software we carry. Call or visit our website for complete listings.



## Omega Zip Drives



**100MB USB Zip Drive**  
Easy to connect—plug & play without turning off your computer • Uses 100MB disks • USB connection  
For Windows • 98 USB-enabled PC & Mac computers  
• Zip disks sold separately

**\$84.99** (BER ZIP100USB)  
Get a J&R \$15 Instant rebate

**50MB Zip USB Drive**  
USB port for PC or Mac (BER ZIP250USB) **\$159.99**

**50MB Zip Disks - 4-Pack**  
For Mac (BER MAC250APACK) **\$49.99/4-pack**

## CD-ReWritable Drives



**QPS® Que! FIRE DRIVE**  
4x4x32x External CD-ReWritable Drive with FireWire® Interface  
• Max: 8x-write/4x-rewrite/32x-read • 2MB buffer memory • Store to 650MB data/74 min. audio  
• For iMac DV, G3/G4 & IEEE 1394-equipped PCs  
• Software: TOAST for Mac, Easy CD Creator for PC  
• Carrying case • Bondi blue

**\$279.99** (QPS RW432FEMG3)  
Get a mfr. \$30 mail-in rebate thru 1/15/01

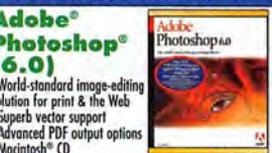
**Apple® iMac™ DV 4x4x8 Ext. CD-ReWritable Drive**  
with FireWire® Interface  
• Max: 4x-write & rewrite/8x-read • USB

**\$239.99** (DPS QP448IMAC)  
Get a mfr. \$20 mail-in rebate thru 1/15/01

**Apple® iMac™ DV 4x4x8 Ext. CD-ReWritable Drive**  
Max: 4x-write & rewrite/8x-read • USB

**\$229.99** (DPS QPDR448)  
Get a mfr. \$20 mail-in rebate thru 1/15/01

## Macintosh Software



**Adobe® Photoshop® (6.0)**  
World-standard image-editing software for print & the Web  
• Superb vector support  
• Advanced PDF output options  
• Macintosh® CD

**\$599.99** (DM PHOTO6-C)  
Adobe

**Office 2001 Macintosh Edition**  
• Microsoft® (MSIN OFFICE2K1-C) **\$429.99**

**LASH 5**  
• Macromedia® (MMN FLASH5-C) **\$359.99**

**CodeWarrior® (Version 6.0)**  
• Metro Works (MMW CODEWAR6-C) **\$359.99**

**Video Home Edition**  
• Canon (CAN VIDEO-C) **\$39.99**

**MacLink® Plus (Version 12) for iMac™**  
• Data Viz (DAM LINK12-C) **\$44.99**

## Mac Entertainment



**Allegro**  
Easy, fast & powerful music notation • Everything needed to compose, playback & print your music • Designed for the performing musician • Notates as you play • Full MIDI features • CD for Windows/Mac

**\$129.99** (CDO ALLEGRO-C)

**Age of Empires**  
• MacSoft (GTA AGEOFEMP-C) **\$16.99**

**Aspyr® (ATA DEUSEX-C)** **\$39.99**

**Aspyr® (ATA THESIMS-C)** **\$44.99**

**Blizzard Entertainment (BLZ DIABLO2-C)** **\$49.99**

**National Geographic: 111 Years**  
• Broderbund (BRN NALGEO111-C) **\$99.99**

# J&R COMPUTER WORLD



**WALK IN**  
Park Row  
NYC



**PHONE IN**  
800-221-8180  
ANYTIME



**LOG IN**  
www.jandr.com  
AOL Keyword: J&R

## Apple® Macintosh® G3 & G4 Computers!



The luscious new iMac™ models in Indigo, Ruby, Sage, Graphite and Snow can get you online and surfing the Internet in 10 minutes!

### Apple® G3 iMac™ /350 64/7GB/CD All-in-One Computer

• 350MHz PowerPC™ G3 processor • 64MB SDRAM • 7GB HD • 24x max. CD-ROM • 10/100Base-T v.90 modem • 15" color display • Mac OS 9 • Indigo **\$799.99** (APP M7667LL/A) INDIGO

**Apple® G3 iMac™ DV/400 64/10GB/CD All-in-One Computer** (APP M7639LL/A) INDIGO (APP M7706LL/A) RUBY **\$999.99**

• 400MHz PowerPC™ G3 processor • 64MB SDRAM • 10GB HD • 24x max. CD-ROM • Digital Video • 10/100Base-T v.90 modem • 15" color display • Mac OS 9

**Apple® G3 iMac™ DV+/450 64/20GB/DVD All-in-One Computer** (APP M7647LL/A) INDIGO (APP M7652LL/A) RUBY (APP M7676LL/A) SAGE **\$1299.99**

• 450MHz PowerPC™ G3 processor • 64MB SDRAM • 20GB HD • 4x max. DVD-ROM • Digital Video • 10/100Base-T v.90 modem • 15" color display • Mac OS 9

**Apple® G3 iMac™ DV Special Edition/500 128/30GB/DVD All-in-One Computer** (APP M7651LL/A) GRAPHITE (APP M7709LL/A) SNOW **\$1499.99**

• 500MHz PowerPC™ G3 processor • 128MB SDRAM • 30GB HD • 4x max. DVD-ROM • Digital Video • 10/100Base-T v.90 modem • 15" color display • Mac OS 9

**3-Year AppleCare® Protection Plan for iMac™ computers** • Comprehensive service and support program that includes 3 years of telephone support (extended from the 90 days included with the product); 3 years of service coverage (two years beyond the limited warranty); Tech Tools Deluxe by Micromat diagnostic CD; access to 24-hour-a-day Internet support (APP M7812LL/B) **\$149.99**

### The PowerMac™ G4 Cube. A Very Expandable Supercomputer In An 8" Cube, Suspended In A Crystal-Clear Enclosure!

**Apple® PowerMac™ G4 Cube/450 64/20GB/DVD** (APP M7642LL/A) **\$1799.99**

• 450MHz PowerPC™ G4 processor w/Velocity Engine™ • 64MB SDRAM • 20GB HD • DVD-ROM • 16MB VRAM • v.90 modem • 10/100BASE-T • Mac OS 9 • Monitor sold separately

Get a mfr. \$300 mail-in rebate with the purchase of the PowerMac™ G4 Cube plus a qualifying Apple® Display thru 12/31/00

### Apple® Studio Display Monitors

**Apple® 17" Studio Display** • 16" VIS • 0.25mm aperture grille pitch • Up to 1600 x 1200 pixels at 65Hz • Virtually flat • ColorSync™ • 2-port self-powered USB hub **\$499.99** (APP M7770ZM/A)

**Apple® 15" Flat Panel Studio Display** • Ultra-thin • 15" active-matrix LCD • Up to 1024 x 768 pixels • Touch-sensitive buttons with visual feedback • 2-port self-powered USB hub **\$999.99** (APP M7928ZM/A)

**Apple® 22" Cinema Display** • 22" viewable image offers a panoramic view—enough to see as much as 2 full A4 pages of text, edit DVD movies in their native HDV1 format • Active-matrix LCD • Up to 1600 x 1024 pixels • Wide viewing angle of 160° horizontal & vertical • Anti-glare screen • Support for 16.7 million colors • 2-port self-powered USB hub **\$3999.99** (APP M8058ZM/A)

**Apple® iBook™ Special Edition G3/466 64/10GB/DVD Notebook Computer** (APP M7720LL/A) **\$1799.99**

• 12.1" TFT SVGA • 466MHz PowerPC™ G3 processor • 64MB SDRAM • 10GB HD • 6x max. DVD ROM • 8MB VRAM • v.90 modem • 10/100BASE-T • Graphite

**Apple® iBook™ G3/366 64/10GB/CD Notebook Computer** (APP M7721LL/A) **\$1499.99**

• 12.1" TFT SVGA • 366MHz PowerPC™ G3 processor • 64MB SDRAM • 10GB HD • 24x max. CD ROM • 8MB VRAM • v.90 modem • 10/100BASE-T • Indigo

**Apple® Macintosh® PowerBook™ G3/400 64/10GB/DVD** (APP M7711LL/A) **\$2499.99**

• 14.1" TFT XGA • 400MHz PowerPC™ G3 processor • 64MB SDRAM • 10GB HD • DVD-ROM • 8MB VRAM • v.90 modem • 10/100BASE-T • 2-FireWire®/2-USB ports

**Apple® Macintosh® PowerBook™ G3/500 128/20GB/DVD** (APP M7712LL/A) **\$3499.99**

• 14.1" TFT XGA • 500MHz PowerPC™ G3 processor • 128MB SDRAM • 20GB HD • DVD-ROM • 8MB VRAM • v.90 modem • 10/100BASE-T • 2-FireWire®/2-USB ports

Get a mfr. \$200 mail-in rebate with the purchase of either of these Apple® Macintosh® PowerBook™ Computers thru 12/31/00

PowerPC and the PowerPC logo are trademarks of International Business Machines Corporation, used under license therefrom.

## Order from www.jandr.com AOL Keyword: J&R

### J&R CORPORATE SALES BUSINESS LEASING: No Money Down, No Payments for 30 Days!

\*Call J&R Corporate Sales for details at 1-800-221-3191 or 1-212-238-9080



## Olympus



**USB For MAC®/PC!**

### Olympus Camera E-10 SLR Digital Camera

• 4 megapixel • Up to 2240 x 1680 • 4x pro glass zoom lens • 1.8" color LCD • SmartMedia™/CompactFlash™ slot • NTSC out capability • USB • Windows/Mac® **\$1999.99** (OLA E10SLR)

**Camera E-100 RS SLR Digital Camera** • Up to 15 fps • 5.1 megapixel • Up to 1368 x 1024 • 10x zoom/2.7x digital lens • 1.8" color LCD monitor • SmartMedia™/CompactFlash™ slot • USB • Windows/Mac (OLA E100RS) **\$1499.99**

**C-2100 Ultra Zoom Digital Camera** • 2.11 megapixel • Up to 1600 x 1200 • 10x-optical zoom/2.7x digital zoom • Image stabilizer • 16MB buffer • 1.8" TFT LCD • 0.55" TFT EVF-SLR viewfinder • USB/serial (OLA C2100ULTRA2) **\$999.99**

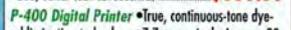
**P-400 Digital Printer** • True, continuous-tone dye-sublimation technology • 7.7 megapixel • Approx. 90-sec. print speed • 16.7 millions colors • USB port • Windows/Mac compatible (OLA P400) **\$999.99**

## CANON Digital Camcorder



**Canon GL1 Digital Camcorder** • 3CCD image sensors • 20x Fluorite-optical/100x-digital zoom • Optical stabilizer • 2.5" LCD view screen • Color viewfinder • IEEE 1394 **CALL FOR PRICE!** (CAN GL1)

## SONY Digital Camcorders



**Sony DCR-TRV11 Digital Camcorder** • DSC function with 4MB Memory Stick • 3.5" SwivelScreen™ • 10x-optical Carl Zeiss®/120x-digital zoom • Color viewfinder • SteadyShot™ • i-LINK™ **CALL FOR PRICE!** (SON DCRTRV11)

**DCR-TRV820 Digital & Digital Handycam™** • Built-in color printer • DSC with Memory Stick • 4" SwivelScreen™ • 25x-optical/450x-digital zoom • Color viewfinder • SteadyShot™ • i-LINK™ • Super NightShot™ • Photo mode (SON DCRTRV820) **CALL!**

**DCR-PC100 Digital Handycam™ Camcorder** • 1,070K pixel CCD • 10x-optical/120x-digital zoom • 2.5" SwivelScreen™ • Color viewfinder • NightShot™ • Digital photo mode • i-LINK™ (SON DCRPC100) **CALL!**

## Scanners



**NEW! FOR PC & MAC!**

**Canon N656U CanoScan** 42-Bit Color USB Ultra-Slim Flatbed Scanner **\$129.99** (CAN N656U)

**UMAX® Astra 4000U 42-Bit Color Scanner** • USB for Mac or PC (UMAX ASTRA4000U) **\$199.99**

Get a \$20 MFR Mail-in Rebate—Thru 12/31/00!

**Microtek ScanMaker® 4700 Flatbed Color Scanner** (MTX SCANMK4700) **\$239.99**

Get a \$20 MFR Mail-in Rebate—Thru 12/31/00!

**HP ScanJet 5370Cse 42-Bit Color Flatbed Scanner** • 1200-dpi color • Transparency adapter • USB/Parallel • Mac/PC (HP C8472A) **\$299.99**

**EPSON Perfection™ 1200U PHOTO Flatbed Color Scanner** (EPS 1200U PHOTO) **\$299.99**

## All Major Credit Cards Accepted

**Overnight Delivery Available!**

**Order Code: MWM0101**

(Prices Good Until 01/15/2001)

To Order Toll Free and Receive a Free Catalogue

24 Hours, 7 Days, Anywhere In The USA **800-221-8180**

PARK ROW • NEW YORK • NY • 10038 FAX: 1-800-232-4432

Not responsible for typographical or pictorial errors. Merchandise is brand-new, factory-fresh & 100% guaranteed! • Except where noted! Some quantities may be limited.

Circle 57 on card or go to www.macworld.com/getinfo

# Go Ahead. Host Your Web Site With Another Company. It's Your Money.

## Making Money On The Web Begins By Not Wasting Money On The Web.

Unless you've got money to burn, Interland is the way to go. Our complete solutions include everything from shared hosting to dedicated and high-availability hosting to Web site design, all at an unbeatable value.

That's why we're rated #1 by *PC Magazine* and *Windows NT Magazine*. So whether you're already on the Web or ready to get started, call us to learn how we can make the Web work for you today, and grow with you well into the future.

### The Interland Standard

- Unconditional 30-day, money-back guarantee
- E-mail accounts for your Web site
- 150 MB starting at \$19.95
- 24/7 toll-free support
- 99.9% uptime

Call Today Toll Free  
**877.472.7189**  
[www.interland.com](http://www.interland.com)

NASDAQ: ILND

**@interland**  
We make the Web work for you.™

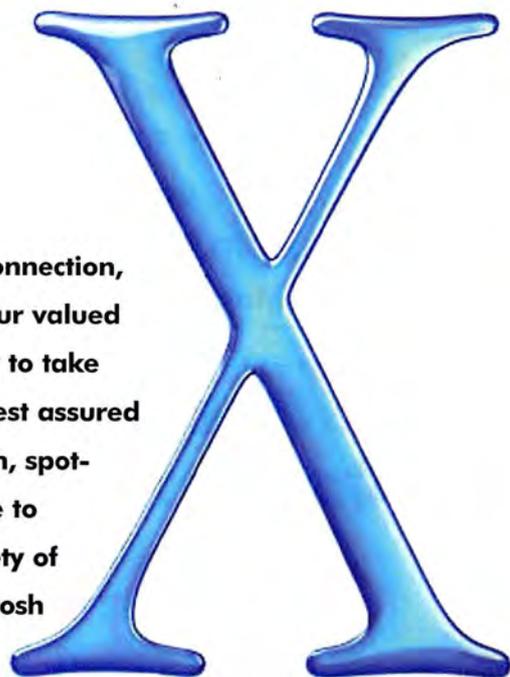


December 1, 1999 September, 1999

© Copyright 2000 Interland, Inc. All rights reserved.

Circle 11 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

# Welcome to the Apple OS X Showcase



Macworld magazine, in conjunction with the Apple Developer Connection, built this very special Mac OS X Showcase section to keep you, our valued reader, apprised of the hottest products built especially to take advantage of Apple's new operating system. You can rest assured that this new section will grow with each passing month, spotlighting the coolest new products for Mac OS X. Be sure to check the Mac OS X Showcase monthly for a wide variety of new and innovative solutions that will make your Macintosh and Mac OS X experience as enjoyable as possible.



## Sharing the Internet was never easier or faster.

Asanté's new FriendlyNET™ routers are ideal for sharing high-speed Internet connections in your home or office. Just connect multiple Macs and PCs to share your cable modem or DSL Internet service. Advanced firewall security with integrated 4-port 10/100 switch gives you the power and flexibility to start or expand your network.



FriendlyNET Cable/DSL Routers  
Models FR3004LC and FR3004

**Act now and save! Asanté is offering FriendlyNET Routers at a special introductory price for Mac customers. Call 800-566-6680 or visit our website at [www.asante.com/mac](http://www.asante.com/mac)**





Visit [www.hp.com/go/mac-connect](http://www.hp.com/go/mac-connect) for HP Mac OS X information

## Are you Carbonized?

Place your ad in the OSX Showcase today.

Call Now!  
1-800-597-1594

# FUNNELWEB

now for the Mac OS X



Any Server, Any Platform, Any Time

Speed, intuitive user interface, accuracy and in-depth analysis have always made Funnel Web the intelligent choice for Web site analysis.

New features:

- pdf Output
- Incremental Analysis
- Cluster Analysis
- Streaming Media Analysis
- Clickstream Analysis
- Solutions available from **\$399**

For further information or to download a free 30 day demo visit our web site:

Toll free 1800 551 5282

[www.activeconcepts.com](http://www.activeconcepts.com) [info@activeconcepts.com](mailto:info@activeconcepts.com)

# Illustration never looked so good.

Eye-catching illustration, isn't it? And yes, despite the glistening highlights, the realistic textures, the subtle shading, and the soft air-brushed effects, this is a completely vector illustration. And it's only possible with Canvas 7.

Match pinpoint precision with painterly strokes through Canvas 7's exclusive Sprite technology. Blur vector lines, paint transparency effects, apply image filter plug-ins to vectors, text and images. It's hard to believe that you can draw like this - never mind in one, attractively priced program. When you're done, prepare your creative visions for print or web with an incredible array of over 40 file format filters.\*

Feast your eyes on Canvas 7 today, and get a whole new outlook on illustration software.

Now available in Professional and Standard Editions



Get Canvas 7 today!

Professional Edition	\$375
Competitive Upgrade	\$199.95
Standard Edition	\$99.95

[www.deneba.com/macworld](http://www.deneba.com/macworld)  
800.7DENEBA

# CANVAS 7

No comparison.

© 2000 Copyright Deneba Software. This ad was created using nothing but Canvas 7. \*40 file formats available in Canvas 7 Professional Edition only.

## Macworld Showcase Featured Advertisers

### Developer Showcase

Keyspan	keyspan.com
Formac	formac.com
Ratac Systems	ratocsystems.com
Century Global	centuryglobal.com
Contour Design	contourdesign.com
Dr. Bott	drbott.com
ADS Technologies	adstech.com
Mace Group	macally.com
ADS Technologies	adstech.com
Griffin Technology	griffintech.com
EZQuest	ezq.com
Aten	aten-usa.com
Marathon Computer	marathoncomputer.com
Lind Electronics	lindelectronics.com
Strydent	strydent.com
Momentum	momentumus.com
Pilot Technologies	pilottech.com
Adesso	adesso.com

BellStor	bellstor.com
On A Dime	onadime.com
iProof Systems	iproofsystems.com
Biomorph	biomorphdesk.com
POS Direct	posdirect.com
Openlink Software	openlinksw.com
Music Industries Corp.	musicindustries.com
IntelliTech	maclabel.com
RedLightRunner	redlightrunner.com
Worth Data	barcodehq.com

### Services Showcase

Presentation Services	imagers.com
Copy Craft	copycraft.com
Creative Juices	bigposters.com
Postcard Press	postcardpress.com
Show and Tell	show-tell.net
Mac Academy	macacademy.com
Action Front	datarec.com
Total Recall	totalrecall.com

Drive Savers	drivesavers.com
Lazarus	lazarus.com
Microcom	data-master.com
Silicon Valley CD	svcd.net
NetNation	netnation.com
Modern Postcard	modernpostcard.com

### Direct Showcase

Academic Superstore	academicsuperstore.com
Creation Engine	madaboutmac.com
Software Showcase	softwareshowcase.com
Musitek	musitek.com
Journey Educational Mktg.	journeyed.com
MacGlobal	globaldeals.com
MacPro	mac-pro.com
Digital Prepress	prepresssystems.com
Mac Solutions	macsolutions.com
Liquidation Station	liquidationstation.com
Mega-Watts	megamacs.com
MacMart	macmart.com
Granite Digital	scsipro.com

Innovative Computers	icni.com
MCE Systems	powerbook1.com
Shreve Systems	shrevesystems.com
Data Tech Remarketing	datatech-rmkt.com
Mac of all Trades	macofalltrades.com
Mac Power	macpowerinc.com
Compu America	compu-america.com
PowerMAX	applemugstore.com
PowerOn Computers	poweron.com
MacResQ	macresq.com
Image & Business Sol.	imagesolutions4u.com
Infinity Micro	infinity-micro.com
Memory World	memoryworld.net
Data Memory Systems	datamem.com
UpgradeStuff	upgradestuff.com
Tahoe Peripherals	tahoeperipherals.com
Memory Masters	18004memory.com
LLB	llb.com
Mac Solutions	macsolutions.com

For more information contact Niki Stranz or Carol Johnstone at (800) 597-1594.

# Add High Speed FireWire to your Mac, PC or Laptop

Includes QuickTime Pro Video Editing Software



### Keyspan FireWire Cards

- PCI: Add 3 FireWire ports to your Mac or PC (\$89)
- CardBus: Add FireWire to Your Laptop (\$99)
- Works with Sony, Canon and other DV camcorders
- Includes QuickTime Pro & FireWire Cable



### USB Twin Serial Adapter

- Add 2 Mac serial ports to your USB Mac (\$79)
- Use with tablets, modems, cameras & many printers
- Two ports for the price of the single port solutions!



### USB PDA Adapter

Connect Palm organizers to your USB Mac or Win98 PC (\$39)

### Digital Media Remote

USB remote control for PowerPoint, DVD, CD, & MP3 software players (\$79)

### USB-Parallel Printer Adapter (\$39)

### USB 4-Port Hub (\$39)

### 2-Port PCI USB Card (\$39)

www.keyspan.com  
(510) 222-0131



Circle 170 on card or go to www.macworld.com/getinfo

# Shop Formac!

Visit our website for the easiest and most convenient way to buy the best products for your Mac. Or call us at 1-877-4Formac.



**Formac**

[www.formac.com](http://www.formac.com)

## Form+Function Line

### Formac dvdram **New!**

The FireWire DVD RAM Solution for your Mac

- Incredible 9.4 GB data capacity at lowest cost per megabyte. Up to 100,000 ReWrite cycles!
- Ideal for desktop publishing, multimedia archiving and presentation
- FireWire interface, hot-swappable and bus powered
- Maximum data transfer rate of up to 22 MB per second makes it a removable hard drive!



See our website for the lowest price!

FDD 1010-0



### Formac cdrw **New!**

The FireWire CD-RW Solution for your Mac

- High performance 16x/10x/40x drive
- Burns complete 650MB disc in under 5 minutes!
- FireWire interface, hot-swappable and bus powered
- Fully compatible with all CD and DVD drives, and audio players
- Includes Adaptec Toast 4.11



See our website for the lowest price!

FDR 1010-0



## Professional Line

### ProFormance 3 plus

The Fastest PCI Graphic Accelerator for your Mac. Now with ProCyber 3D Virtual Reality Glasses!

- Industry leading graphic acceleration for Macintosh platform only!
- Supports up to 2000 x 2000 True Color Resolution
- Optimized by DDC2B, ratio 4:3, 16:10, 16:9
- 300 MHz maximum pixel frequency
- Port connectivity with Open LDI SGI Flat Panel Module
- Supports QuickDraw, QuickDraw 3D, QuickTime, Open GL, MPEG and motion compensation for MPEG2
- Unique FontCache feature

### Holiday Special!

Bundled with ProCyber 3D Glasses



Only \$229

PNGA 94-3C



### Award Winner!

More than 10 in the last year:

- "Gives PhotoShop users a boost!" - 4Mice MacWorld 12-99
- "The best-value graphics card on the market!" - MacUser 8-99
- "The fastest card in the test. Test winner!" - MacUp 7-99
- "By far the fastest 2D card I've ever used!" - MacGamers Ledge 4-00
- "Amazing Performance. Its power will keep you happy!" - MacAddict 11-99

### ProTV Stereo **New!**

The TV/FM Tuner and Video Capture PCI Card for your Mac

- Capture sound files, stills and QuickTime movies up to 30 frames per second
- Receive up to 125 TV channels while surfing the web or working on your finances
- Connect easily via antenna, cable, S-Video or Composite
- Includes Adobe Premier LE



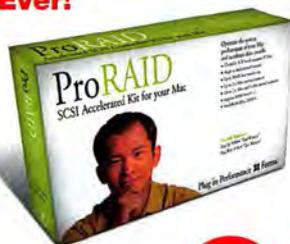
Only \$139

PNTV 42-0

### ProRAID **Lowest Price Ever!**

16-bit Ultra Wide SCSI PCI Adapter for your Mac

- Superior Data Transfer Speed — Up to 80 MB with ProRAID III!
- Software optimized for Active Termination
- Bootable — Improve Start Up Performance



Only \$69

PDAC 10-0

### Award Winner!

- "Very Good! Best Price Performance!" - MacUp 9-98
  - "Four Mice" - MacWorld 8-99
- (See our website for complete award list.)

© 2000, Formac Electronic, Inc. Formac, Shop Formac, Formac dvdram, Formac cdrw, ProFormance 3, ProFormance 4, ProTV Stereo, and ProTV Stereo are registered trademarks of Formac Electronic, Inc. and its subsidiaries in the US and in other countries where Formac products are sold or distributed. Other brands and names are the property of their respective owners.

Also available through mail order at ClubMac, MacWarehouse and Outpost.com; or at CDW, ComputerWare retail stores; and through Ingram. See our website for Education Institution prices.

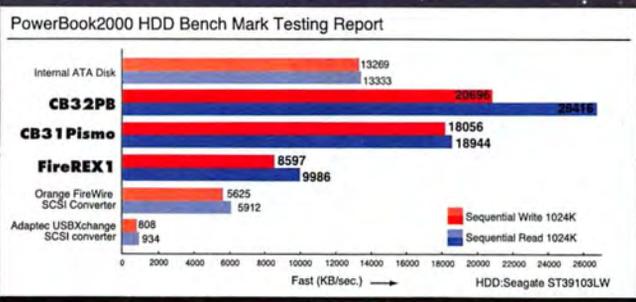
Circle 189 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

# Need FireWire? Hook up SCSI to FireWire Mac!



## FireWire to Ultra-SCSI Converter FireREX1

- Cute and Cool! Just fit to High-density 50P SCSI-II port.
- Support Ultra-SCSI(up to 20MB/Sec.)
- Two 400Mbps FireWire ports. Enable Daisy Chain.
- Change SCSI device to FireWire device instantly. Compatible SCSI device.
- HDD, CD-R/W, and Removable storage device
- ORB, Jaz, MO,
- Radiologic StorageMaster 1.8.2 included.



## Need Speed? Ultra Wide/Ultra SCSI PC Card for PowerBook2000/G3.

**Allow Ultra Wide(40MB/Sec.),  
Ultra(20MB/Sec) performance to PowerBook.  
Support HDD,Removable device,  
CD-RW,Scanner and Film Scanner.  
Get SoftRAID RAID software with free  
after User Registration.**



- J&R [www.jandr.com](http://www.jandr.com) 800-221-8180
- MCE PowerBook [www.powerbook1.com](http://www.powerbook1.com) 800-5000-MAC
- ClubMac [www.clubmac.com](http://www.clubmac.com) 800-260-8549
- APS Tech [www.apstech.com](http://www.apstech.com) 800-395-5871
- Smalldog Electronics [www.smalldog.com](http://www.smalldog.com) 802-496-7171

- Advanced Micro Systems [www.amsus.com](http://www.amsus.com) 310-357-4400
- Outpost.com [www.outpost.com](http://www.outpost.com) 877-688-7678
- FireWireShop [www.firewireshop.com](http://www.firewireshop.com) 408-955-9229
- EMJ(Canada) [www.emj.ca](http://www.emj.ca) 800-265-7212



Distributed by **INGRAM MICRO**



See [www.ratocsystems.com](http://www.ratocsystems.com) to learn more information phone **408-955-9400**

## The Best FireWire Drives for DV Professionals!

### Slim FireWire External Hard Drive



Perfect for:

- DV Editing.
- DTP.
- Data Archiving.
- MP3 Music Jukebox.

Key Features:

- 5 Capacities to choose 20G, 30G, 45G, 60G, 75G.
- Daisy Chain up to 63 devices.
- Hot swappable.
- No device IDs or termination.

30G FireWire External Hard Drive for **ONLY \$249**

While Supplies Last!

9"x5.25"x1.75"

### FireWire/USB 2.5" Combo Drive



Why not have the best of both worlds? Now you can have both FireWire and USB ports in this one mini drive! How convenient!

- 6G, 12G, 20G, 30G available.
- FireWire/USB in the same drive.
- Ultra-portable, Ultra-slim.
- Hot-pluggable between different computers.

It's Portable! 5.67"x3.23"x1.14"

**\$299**

### FireWire 2.5" Mini Drive



CGI now provides you with the ultra-slim, portable IEEE-1394/FireWire Drive. It's fast and easy to use. No IDs setting required.

- 6G, 12G, 20G, 30G available.
- IEEE-1394/FireWire
- Ultra-portable, Ultra-slim.
- Hot-pluggable between different computers.

It's Portable! 5.67"x3.23"x1.14"

Not responsible for typographical or pictorial errors. The FireWire® logo is a trademark of Apple Computer, Inc., used under license therefrom. All other product names mentioned herein are trademarks or registered trademarks of their respective owners. ©2000 Century Global, Inc. All rights reserved.

## Storage/Memory Upgrade Center

### Internal Hard Drives



#### IBM Ultra 160 SCSI

Size	RPM	Cache	Model no.	Price
4MB	10,000	4MB	DYST09170U	\$231
18.3G	10,000	4MB	DYST18350U	\$360
36.6G	10,000	4MB	DYST36950U	\$588

#### IBM IDE Ultra ATA/100

Size	RPM	Cache	Model no.	Price
20G	5400	512K	DTLA-305020	\$98
20G	7200	2MB	DTLA-307020	\$135
30G	7200	2MB	DTLA-307030	\$159
45G	7200	2MB	DTLA-307045	\$201
60G	7200	2MB	DTLA-307060	\$309
75G	7200	2MB	DTLA-307075	\$499

#### Maxtor IDE Ultra ATA/100

Size	RPM	Cache	Model no.	Price
20.4G	7200	2MB	DM52049H4	\$120
20.4G	5400	2MB	VL32049H2	\$97
30.7G	5400	2MB	DM53073H6	\$117
30.7G	7200	512K	VL33073H4	\$209
81.6G	5400	2MB	M98198H8	\$315

Call for SCA Drives!



### 2.5" IDE Hard Disk Drive

TOSHIBA	Size	RPM	Cache	Model no.	Price
	6.0G	4200	256K	6015MAP	\$120
	10G	4400	1MB	1016GAP	\$155
	12.4G	4200	1024K	1214GAP	\$168
	6.0G	4400	1MB	2016GAP	\$279

### Memory Upgrade



IBM	Size	RPM	Cache	Model no.	Price
	6.0G	4200	512K	DARA-206000	\$130
	10G	4200	512K	JSA-210	\$162
	12G	4200	512K	DARA-212000	\$168
	20G	4200	2MB	DJSA-220	\$329

G4 Cube/G4 Dual Proc/Mac DV and above 350MHz (PC-100, 100MHz SDRAM 168pin DIMM)	Powerbook FireWire/Y2K/Book Special Edition/Book 450MHz "New" (PC-100, 100MHz SDRAM 144pin SO DIMM)
32MB	\$30
64MB	\$54
128MB	\$108
256MB	\$216
512MB	\$381

\*All the prices include 3% cash discount.  
 \*Prices and specifications subject to change without notice.  
 \*Non-defective returns are subject to a 15% restocking fee.  
 \*Shipping charges are non-refundable.  
 \*For complete terms & policies see our web-site.

**FireWire HDD CD-RW Case [CG-3525E] \$139**

- Accommodate 3.5" or 5.25" IDE/ATAPI drives such as HDD, Zip and CD-RW.
- Plug and play, hot swappable capability.
- No jumper pins or ID setting.
- Built-in 50W power supply; universal auto-switching 90-240V.
- Built-in 40x40 mm fan. (Note: drives are sold separately)

**PCI FireWire Card [CG-1394HC2] \$39**

- Add two FireWire ports to your Mac or PC.
- OHCI compliant.
- Support serial bus data rate up to 400 MBits/sec.
- Peer to peer communication structure.

**iBook Sling-Bag \$39**

- Specifically engineered for iBook users!
- Designed to easily carry and protect your investment whether the iBook is in use or in transport.
- Zip to easily close and protect belongings.
- Carry iBook by hand or by shoulder strap.
- Truly a 24 hour standby carrying case.
- Design allows room for necessities such as: power adapter & power cord.

**www.centuryglobal.com**  
 (Mon-Fri 8am-6pm PST)  
**TOLL FREE #: 1-877-608-1394**  
 Resellers inquiry are welcome.



## Rise Above the

MSRP \$24.95

### All New G-Riser™

Heavy-duty legs designed to raise G3's & G4's four inches off of the floor, which reduces dust intake and improves airflow. Perfectly complements the style and look of the computer enclosure, the G-Riser not only adds value to system operation, but adds an air (no pun intended) of distinction to the platform's architecture.

Check out our other G3 & G4 products  
[www.contourdesign.com](http://www.contourdesign.com)

G3 and G4 are registered trademarks of Apple Computer, Inc. The G-Riser is a trademark of Contour Design, Inc. © Copyright 2000 Contour Design, Inc. ALL RIGHTS RESERVED.

## Dr. Bott

### Resellers, Imagine a Mac friendly distributor focused on your needs!

- Pricing competitive with major distribution.
- No hidden handling fees or surcharges.
- No minimum orders.
- Low dealer demo pricing.
- Exclusive products like the iBookBag and MoniSwitch KVM.
- A sales staff that use the products they sell.

BTI Farallon ADS  
 Griffin Macsense IREZ WEST RIDGE DESIGNS

**www.dr bott.com • 877-611-2688**

What you DO with it is YOUR business.

**PYRO 1394**

**WebCam**

the fastest &  
clearest images  
on the Net



FireWire technology offers the best image quality over the Internet. Unlike USB cameras that compress the video stream, PYRO Web Cam has ZERO compression & utilizes a high-quality Sony® CCD so you can make the best possible impression. Also includes: ArcSoft Video Impression; Photo Fantasy 2000 and Video Link Pro .



Available at: Fry's, MAC Connection, Microcenter, Tiger Direct, Comp USA, Cicut City, ...and more!

800.888.5244 • 562.926.1928  
[www.adstech.com](http://www.adstech.com)

**PYRO BasicDV - PYRO 1394DV For Notebooks - PYRO Web Cam**

Circle 151 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

macally

**webkey**

USB Wireless Multimedia Keyboard



macally  
**AirStick**



macally  
**loptinet**

PCI FireWire/USB



macally™

Macally is proud to bring you the latest USB and FireWire peripherals for Mac users. Our full line of products are specifically designed for your Mac to improve your productivity. Please visit our website to see what Macally has to offer for all your peripheral needs. We work hard to provide you with the best peripherals for your Mac.

Call us for dealers near you 1-800-644-1132 or visit us at: [www.macally.com](http://www.macally.com)

All trademark or registered trademarks are the property of their respective owners

Circle 159 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

# Out of DV storage? Break out of the box!



## CONVERT YOUR DRIVE TO AN EXTERNAL FIREWIRE® DRIVE FOR LESS

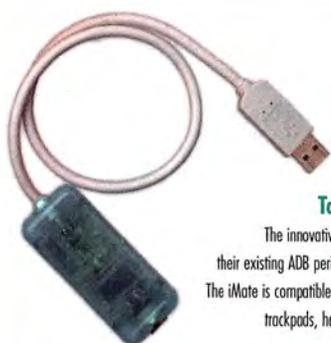
Digital video production is the hottest thing to hit the personal computer, but storing data-intensive DV files can burn up hard drive space. With the **PYRO FireWire®/1394 Drive kit**, convert any IDE hard drive, CD-ROM or CD-RW to an external FireWire® drive simply by installing it into the enclosure. Plug & Play, Hot Swappable, stackable, & chainable FireWire® storage at a price that won't incinerate your wallet.



800.888.5244 • 562.926.1928  
[www.adstech.com](http://www.adstech.com)

Available at: Fry's, J&R, MAC Connection, Microcenter, CDW  
...and more!

Circle 151 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)



## iMate

UNIVERSAL ADB TO USB ADAPTER

Easily Connects Any ADB Device  
To USB-Equipped iMac or PC Computer

The innovative iMate USB to ADB adapter allows users to easily connect their existing ADB peripherals to iMacs, Macs with USB cards, and PCs with USB. The iMate is compatible with any ADB device including mice, keyboards, trackballs, trackpads, hardware dongles, and AppleVision displays. Retail price \$39

80 Fesslers Lane • Nashville, TN 37210  
615.255.0990



[info@griffintechology.com](mailto:info@griffintechology.com)  
[www.griffintechology.com](http://www.griffintechology.com)

The gPort universal serial adapter is the perfect companion for your new blue G3 computer. Designed from the ground up with the G3 in mind it supports every serial device that works on your older Macs.



- Easy to install
- Economical
- Cost Effective

With the new G3s Apple has made a bold move to faster and more universal i/o interfaces. The gPort provides a great transition for people with existing serial equipment. Retail price \$49

# gPort

THE SERIAL SOLUTION



FireWire • USB • SCSI  
CDR/W's & Hard Drives  
[www.ezq.com](http://www.ezq.com)



**MiniView™**  
USB KVM CONNECTIVITY

**IOGEAR**  
www.iogear.com

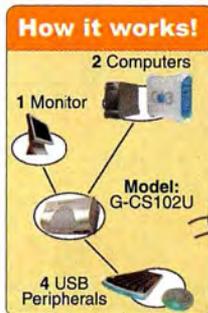


Control **Macs and PCs** with a single mouse, keyboard, and monitor!



Connectors are located in front for convenient access.

Our two-port MiniView™ USB allows two computers to share a monitor and four USB devices. Combine two PCs, two Macs or one of each! The MiniView™ USB is complimented with IOGEAR's patented Video Signal Enhancement technology, which provides ultra-high resolution. Use it with your mouse, keyboard, scanner... anything with USB!



Visit our website for more exciting connectivity products.

[www.iogear.com/macworld](http://www.iogear.com/macworld)



**3 YEAR WARRANTY**

Customers outside the U.S. can contact us at (949) 250-1260. Toll Free: 1-888-999-2836 email: sales@iogear.com

## RACKMOUNT YOUR G4



(or your G3)

[mwd@marathoncomputer.com](mailto:mwd@marathoncomputer.com)  
[www.marathoncomputer.com](http://www.marathoncomputer.com)  
800 · 832 · 6326

Circle 164 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

# LIND

Lind Electronics, Inc. 6414 Cambridge Street Minneapolis, MN 55426



**Auto Air Power Adapters for Apple G3 PowerBooks™ and iBooks™**



Order Online at:  
[www.LindElectronics.com](http://www.LindElectronics.com)  
or Call to Order at  
#800-897-8994

Give your printer a PostScript upgrade,  
and see the improvement for yourself

## StyleScript

Adobe PostScript 3 RIP

Never worry about jagged edges spoiling your graphics again. StyleScript turns your inkjet into a genuine Adobe PostScript 3 printer.

Documents created in applications like Adobe Illustrator®, PageMaker® InDesign® and QuarkXpress® will look more stunning than ever. StyleScript prints PostScript documents and fonts crisply and cleanly at any size and orientation, at your printer's maximum resolution.

For just \$99, StyleScript 5.0 delivers:

- Accurate and fast PostScript printing
- Reliable color matching
- A convenient and simple interface
- Support for USB, serial and Ethernet printing

**NEW!**  
StyleScript 5.0  
supports EPSON  
inkjet printers

**EPSON**

Epson Stylus Color  
740, 740i, 760, 860, 900,  
900N, 900G, 1160



Adobe PostScript 3™

This EPS image was  
printed on a color inkjet  
**WITHOUT** StyleScript.

This EPS image was  
printed on a color inkjet  
**WITH** StyleScript.

**STRYDENT**

STRYDENT SOFTWARE,  
formerly Infowave's Imaging Division

Order now at 1.888.842.5312 or  
on-line at [www.stylescript.com](http://www.stylescript.com)



Can  
**uConnect™**

UNIVERSAL  
Mac & PC  
connectors

uConnect

uConnect  
extreme

ALL IN ONE  
3 uConnects + extra usb port

to your  
**iMac?**

(877) 381-1400  
[www.momentumus.com](http://www.momentumus.com)

## BookEndz® Docking Stations for PowerBook's

Convert your PowerBook to a desk-  
top system (or back) in seconds!

- Models for 2000 and 1999 PowerBook's
- No more file synchronization problems
- Attach your peripherals once
- Dock or undock in 2 seconds
- No more damaged connectors
- Supports all rear ports
- No assembly required
- Eliminates cable confusion
- Lighted power/docked indicator
- Insert or remove PC cards while docked
- Adds only 3" to rear of PB while docked
- Eliminates the need for a separate desktop computer
- Will not interfere w/ IR port, security slot, or media bays



[www.photo-control.com](http://www.photo-control.com)

Photo Control Corporation, Minneapolis MN

Tel: (763) 537-3601 Fax: (763) 537-2852

Toll Free (US): (800)-787-8078

We welcome Reseller & Distributor inquiries

BookEndz is a registered trademark of Pilot Technologies, Inc.  
All other trademarks are the property of their respective owners.

**ADESSO**

Input Specialists

# KEYBOARDS

----- and a whole lot more!!



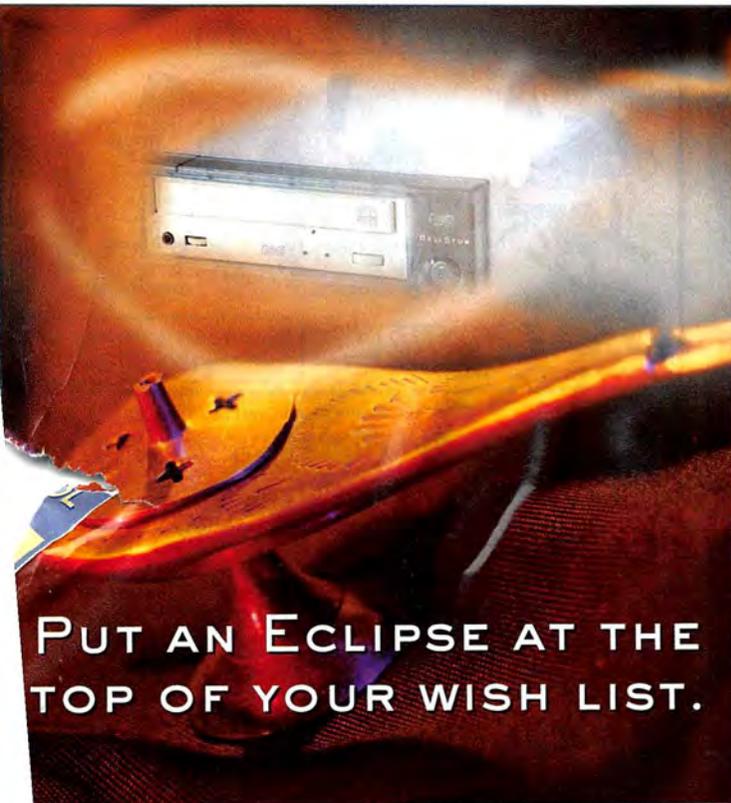
- **USB Ergo Keyboard**
- **USB Mini Keypad**
- **USB Scrolling Mouse**
- **USB Optical Mouse**



Visit us at [www.adessoinc.com](http://www.adessoinc.com)

See us at Macworld San Francisco, booth #1047

Circle 166 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)



PUT AN ECLIPSE AT THE  
TOP OF YOUR WISH LIST.

**ECLIPSE FROM BELLSTOR**, the first simple high-performance storage solution. Featuring the high speed FireWire interface, the BellStor Eclipse is available in Hard Disk, Tape and CD-RW models.

- Data transfer rates up to 400 Mbps
- Simple Plug & Play installation
- Hot-Pluggable
- Auto-configuring
- No device ID's or termination

"...if you're craving a FireWire CD-RW drive, put this one at the top of your list."

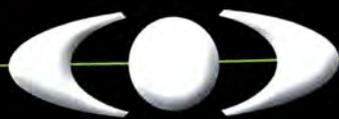
BUZ ZOLLER  
Mac Addict, July 2000

**BELLSTOR**  
SIMPLIFYING STORAGE SOLUTIONS



[www.bellstor.com](http://www.bellstor.com) • (800) 800-1513

See the Music. Real-time Music & Visual Arts Software for MacOS  
Download your free Onadime Player  
or Onadime Composer demo today!  
[www.onadime.com](http://www.onadime.com)



# ONADIME COMPOSER

The Live Digital Medium

CD's  
movies  
mp3's  
pictures  
live music  
live video  
quicktime...  
color shapes  
live MIDI  
real-time fx  
mouse  
QT...MIDI  
tablet  
fractals



[www.onadime.com](http://www.onadime.com)

**More accurate than a  
\$300,000 proofing system!**

PowerRIP 2000 makes



Your Proof = Your Press

Proof and Print PostScript

- See your color traps with the ability to combine separations
- Recognizes named spot colors in print jobs, such as PANTONE, and selects the best CMYK match for your printer
- Includes new and improved ICC profiles for Epson, HP, and iProof's PressProof papers
- Includes SWOP, FOGRA profiles
- Accepts color matching ICCs
- Network printing included
- Drives Epson and HP ink jet printers

Add the **PowerRIP PDF** option to generate Web or print-ready PDFs from the same PostScript or EPS files used for PowerRIP 2000

Available at MacWarehouse or directly through iProof Systems  
Tel: 321-254-4401 • Fax 321-254-6899 • [www.iproofsystems.com](http://www.iproofsystems.com)

**one touch sit to stand!**



**biomorph<sup>®</sup>**  
interactive desk

[biomorphdesk.com](http://biomorphdesk.com)  
catalog 888 302-DESK

Circle 161 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

**POINT OF SALE • INVENTORY CONTROL**



Multi Flavored  
Scanners Shipping

Software & Hardware for:

- Retail/Wholesale
- Mail Order
- Internet Commerce
- Rentals/Service/Repair
- Kiosk Development
- FileMaker/4D Tools
- Credit Card Auth. SW
- Full USB Support

Fully Integrated Accounting  
Multi-Site • Cross Platform • Receipts  
Printers • Barcode Readers/Printers • Cash  
Drawers • Mag Stripe • Ribbons • Paper •  
Labels • Developer Integration Support  
New Visor Laser Scanners  
Touch Screens



[www.posdirect.com](http://www.posdirect.com)

(800) 622-7670 • [sales@posdirect.com](mailto:sales@posdirect.com)  
(618) 985-8237 vox • (618) 985-3014 fax



New Free CD R  
v.4.0 Now Ship

Circle 165 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

## Great @xpectations for XML and E-business?

Introducing OPENLINK VIRTUOSO 2.0, a "CROSS PLATFORM" E-business Integration Server that implements File System functionality via WebDAV, Native XML Storage, SQL to XML Transformations in real-time, SQL-92 based Data Management, WebDAV based content management, SOAP based messaging, Free Text Indexing, HTTP 1.1 based Web Server functionality, SMTP based Mail Server functionality, and Heterogeneous access to Legacy databases in a single software package. **Download a Free, Fully Functional Non-Expiring Copy from our Web Site Today.**

[www.openlinksw.com](http://www.openlinksw.com)

**OPENLINK**  
SOFTWARE  
Universal Data Access Without Boundaries™

● **DATABASE ENGINE SUPPORT:**

OpenLink Virtuoso, Oracle, Microsoft SQL Server, Progress, Informix, Sybase, DB/2, CA-Ingres, and other ODBC compliant databases.

● **OPERATING SYSTEM SUPPORT:**

MacOS X, Windows 95/98/NT/2000, UNIX (all flavors), and Linux (all flavors).

© 2000 OpenLink Software. All rights reserved. All trademarks and tradenames are the property of their respective owners. OpenLink Software, Inc. 10 Burlington Mall Rd. Suite 265, Burlington, MA 01803, U.S.A.

## FOR SALE WILL BUILD TO SUIT\*



Choose  
**Plastic Table Top  
or upgrade to glass**



**iStand™**  
Computer  
Workstation

is designed and made in Italy by a team of superior craftsmen. The frame has an electrostatic powder-coated, textured grey finish and computer arc-welded joints for strength and durability. It is available in all five iMac™ Fruit Flavors, G3™ Blueberry, plus Original Bondi Blue, Graphite, and Neutral.

\*Modular workstation design and available optional add-on components let you customize your iStand to suit your needs.

\*\*iMac and G3 are registered trademarks of Apple Computer.

**1-800-431-6699**  
Contact your i Representative Today

**www.iStand.net**  
iStand@musicindustries.net

Want to Print  
Bar Code  
Labels?

**maclabel.com**  
LABEL PRINTERS  
USB  
Ethernet  
Appletalk  
HP PCL5, L3/JII  
IntelliTech  
INTERNATIONAL  
PH: 800-694-3034  
iii@intellibar.com

Great Gifts for Mac Fanatics!



**REDLIGHTRUNNER.COM**

## Call Us Toll Free 800-345-4220

Broadest Selection of Bar Code Products in the Industry

- Technically superior products direct from the manufacturer
- Toll free technical and pre-sale support
- 24-hour turnaround on repairs
- Free UPS Blue shipping in U.S.
- 30-day money back guarantee
- Portable & non-portable Batch Readers
- Cordless interactive R/F Terminals
- Wand, Laser, CCD, Magstripe or Slot Badge
- PostScript bar code fonts

or visit our website at  
**www.BarCodeHQ.com**  
for a complete catalog and bar code primer



Call for Free Catalog & Bar Code Primer

Worthington Data Solutions  
is now...

**WORTH**  
data



Phone: 831-458-9938 • Fax: 831-458-9964

Circle 154 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

# Digital Solutions!



- INSTANT Online Quotes
- OVERNIGHT Services
- Submit Jobs Online
- Online Tech Help
- A Price You'll Like!

Send PC/Mac files by FTP or Priority Air Express to Imagers and for most output services, your finished work is in your hands the very next morning.

- Digital Short-Run Printing
- High-Res Film Scanning
- Digital Posters/Banners
- Fuji Digital Photo Prints
- Digital Color Lasers
- Slides & Overheads
- New Media Services



Hours...  
Monday to Friday  
8:00am to 8:00pm  
East Coast Time



We guarantee our work!  
1575 Northside Dr. Ste. 490 Atlanta 30318

www.imagers.com

800.398.5816/404.351.5800

Circle 155 on card or go to www.macworld.com/getinfo

## BIG POSTERS & HUGE DISCOUNTS FROM YOUR COMPUTER FILES

HIGHEST QUALITY PRINTS AT THE BEST VALUE ANYWHERE • STATE OF THE ART EQUIPMENT • UP TO 800dpi

24" x 36" Full color print on 7 mil high or low gloss paper	36" x 48" Full color print on 7 mil high or low gloss paper	48" x 72" Full color print on 7 mil high or low gloss paper
<b>\$25</b>	<b>\$50</b>	<b>\$125</b>
NO MINIMUMS VOLUME DISCOUNTS	NO MINIMUMS VOLUME DISCOUNTS	NO MINIMUMS VOLUME DISCOUNTS

FOR MORE INFO & PRICING VISIT OUR WEBSITE  
www.BIGPOSTERS.com  
CREATIVE JUICES PRINTING & GRAPHICS INC.  
(In New York) Tel: 516-820-4533 Fax: 516-820-4534 • 14 Woodcut Rd., Levittown, NY 11750

1-888-880-HUGE

177 on card or www.macworld.com/getinfo

## Digital Imaging

- Slides & Negatives \$3.75
- 4x5 Transparencies/Negs \$30
- Large Posters & Displays \$45
- Scanning: Hi & Lo Res
- Kodak Photo-CD Scans
- Short Run Color Printing
- Show & Tell 39 W 38th St., NY, NY 10018

www.show-tell.net  
212 840-2912 212-840-7953 (fax)  
showtel@ibm.net • shotel@aol.com

219 on card or www.macworld.com/getinfo

## 1000 Full Color BizCards - \$60!



Preferred by over  
8,000 professionals!

- Superthick Stock
- Glossy UV
- No film charge
- Friendly Service
- Free Samples

## 1000 Color Postcards \$145

black imprint on back

**FREE!**

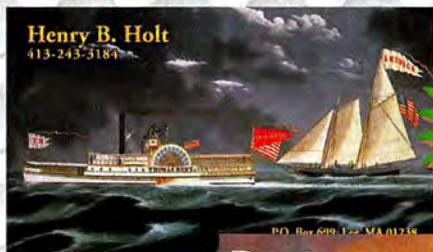


Postcard Press  
1-800-957-5787  
www.postcardpress.com

# WHOLESALE WATERLESS COLOR PRINTING FROM YOUR COMPUTER FILES

**1000 FULL COLOR BUSINESS CARDS FOR \$100** Sug. retail price \$179  
**1000 FULL COLOR POSTCARDS FOR \$149** Sug. retail price \$249

Printed waterless at 300 line screen from your computer files on Super Premium 10Opt. Kromekote with our FREE scratch-resistant aqueous coating.



Now offering up to 40 inch WATERLESS 300 Line Screen Printing!

Rest easy ...

Your Trade Association has the answers to your problems!

- BUSINESS CARDS
- POSTCARDS
- CD INSERTS
- CD TRAY LINERS
- BROCHURES
- BOOKLETS
- NEWSLETTERS
- POSTERS & MORE



## FEATURING 300 LINE SCREEN WATERLESS OFFSET PRINTING

Rates for Brochures, Booklets and Flat Sheets are also available.

**4-COLOR WATERLESS SPECIAL**

### 1,000 24" x 36" POSTERS

24" x 36" 4-Color Posters printed 4/0 from your computer files at 300 line screen on 100 lb. Gloss Text. Price includes full bleed and FREE aqueous coating. Get 2,000 for only \$1,999

**\$1,699**  
SUGGESTED RETAIL \$2,294



Se Habla Español

GRAPHIC ARTS AVAILABLE

PRINTERS, INC.

4413 82nd Street • Lubbock, TX 79424 • FAX: 806.798.8190

Email your requests for printing quotes to request@copycraft.com

**1.800.794.5594**

CALL TODAY FOR A FREE COPY OF OUR NEW 32-PAGE FULL COLOR CATALOG

Visit www.copycraft.com for more Specials...in English or Spanish!

Circle 223 on card or go to www.macworld.com/getinfo

MacWorld **Get info**

www.macworld.com/  
getinfo

**NEED TRAINING?**  
Computer Training on  
CD-ROM & Video at  
www.macacademy.com

MacAcademy

**ALSO IN CALIFORNIA** **DATA RECOVERY**  
For **MAC** - (Hard Drives, Opticals, Removables)

By Nick Majors' **DATA RECOVERY LABS**  
"The Best Data Recovery Service available  
- Anywhere - at any Price!"

Dedicated in-house MAC specialists are available to work  
on your emergency data recovery. Complete facility with clean  
rooms and full MAC capabilities.

Free evaluations. All recoveries are 100% satisfaction  
guaranteed. Complicated / top priority projects are  
our specialty.

USA • Canada • Japan **1-800-563-1167**  
www.datarec.com

Datarec.com  
DATA RECOVERY LABS

**PROFESSIONAL DATA RECOVERY** HARD DRIVES • REMOVABLE DISKS  
MOST OPERATING SYSTEMS

**Miracles.** (performed daily)

800.743.0594

**TOTAL RECALL**  
THE DATA RECOVERY COMPANY™

2462 Waynoka Road • Colorado Springs, CO 80915  
(719) 380-1616 • Fax (719) 380-7022

For online quotes & forms visit: [www.totalrecall.com](http://www.totalrecall.com)

While we do lay hands on each and every disk that arrives, it actually doesn't take a miracle to get your data back. ..just know-how and good old-fashioned experience. We have lots of it at Total Recall, just ask one of the thousands of customers we've served in the last 14 years. Lose some data? Call us for your miracle today.

Circle 199 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

**DATA RECOVERY: 800-440-1904**

7 good reasons to choose DriveSavers:

1. Fastest, most successful data recovery service available.
2. Recommended and certified by all drive companies to open the drive and maintain the warranty.
3. Advanced, proprietary recovery techniques.
4. 24-hour, onsite, and weekend service available.
5. Retrieve recovered data instantly with DATAEXPRESS™ over secured Internet lines.
6. Featured in Mac-World, Mac Addict, MacWeek, Popular Mechanics; also by CNN, BBC, Forbes, and many others.
7. Federal and State Contracts.

**DRIVESAVERS**  
DATA RECOVERY

Since 1985  
www.drivesavers.com

"We Can Save It!"

**www.drivesavers.com**

©2000 DRIVESAVERS, INC. 400 BEL MARIN KEYS BLVD., NOVATO, CA 94949 INTL: 415-382-2000 FAX: 415-883-0780

Circle 211 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

**Data Recovery in hours.**

- Over 10 years of experience with clients worldwide including Apple, NASA, HP, and FedEx.
- We've recovered more than half-a-million megabytes of Mac Data alone.
- You only pay when there's a recovery.
- Express One-Day Service is available.
- Call 24 hours a day.

415-495-5556 • FAX 415-495-5553 • RESTRICTIONS MAY APPLY  
381 Clementina Street • San Francisco, California 94103

**LAZARUS**  
DATA RECOVERY  
Working at the speed of business.

**800-341-DATA**

Circle 217 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

**data recovery**  
www.mcrecovery.com

When you absolutely, positively have to get your data back...

- 24hr. Emergency Data Recovery
- Worldwide Services

**MICROCOM**  
20802 Plummer St. Chatsworth, CA 91311 • 818 718-1200  
**800 469-2549**

## CALL SILICON VALLEY CD

FOR CUSTOM SILKSCREENED BLANK CD-R DISCS, AND...



CD/DVD MANUFACTURING  
AND PACKAGING



SHIPS IN THREE DAYS!  
CD-R DUPLICATION WITH  
CUSTOM PACKAGING



BusinessCardCD™  
OPTICAL BUSINESS CARDS

Why use Silicon Valley CD? Listen to a satisfied customer:

*I wanted to take a moment out of my day to thank you for the excellent service...you have put us a day ahead of schedule and it will make a world of difference.*

Dennis Purdy, Purchasing Manager  
Ricoh Silicon Valley, Inc.  
August 30, 2000

**CALL TODAY!**  
**800-255-4020**  
**WWW.SVCD.NET**

**FAST** Turnarounds  
**EASY** Ordering



ORDER BLANK CD-R DISCS AND  
SUPPLIES IN OUR ONLINE STORE!



SILICON VALLEY  
CD since 1992

990 Richard Avenue #103, Santa Clara, CA 95050 Tel: 408-486-0800 Fax: 408-486-0809

full color  
Postcards

\$95 for  
500 copies

modernpostcard.com

use our own exclusive  
**PRO DESIGNER™**  
& FTP your files. We'll  
print your postcards  
& even mail them  
for you!

Modern Postcard™

1-800-959-8365

© 1999 Modern Postcard. All rights reserved.

Macworld  
SHOPPER

# When Things Get Rough, a Good Host Thinks of Everything.



## Trust NetNation to keep your web presence afloat.

No matter what stage your business is at, we can help. From the first step of registering your own dot.com to hosting your web site on the net, we provide you with the essential technical services to help you succeed in today's online marketplace. At NetNation, we not only provide you with industry knowledge and technical expertise, our customer service representatives are on hand 24 hours a day, 365 days a year. We offer an extensive product line and we are with you every step of the way. That's why customers in over 130 countries trust us to power their web sites. Get your business online! Call us toll-free at 1.888.277.0000 or visit us at [www.netnation.com/mw](http://www.netnation.com/mw)

**NetNation™**  
Communications Inc.

San Diego | London | Vancouver

[www.netnation.com/mw](http://www.netnation.com/mw)

Web Hosting | ASP/AIP | E-commerce | Domain Name Registration  
Nasdaq: NNCI

©1997-2000 NetNation Communications, Inc. All rights reserved. Offers subject to change without notice. NetNation and the NetNation logo is a trademark of NetNation Communications, Inc. All other trademarks are property of their respective owners.

# ACADEMIC DISCOUNTS

Great Savings for...  
Students, Teachers  
and Schools!



Your Adobe back to school publishing tools are here:

- Acrobat • After Effects • Framemaker  
Golive • Illustrator • Indesign  
Pagemaker • Photoshop • Premier  
Type Manager • Web Bundles

Macromedia Web Design Studio  
Dreamweaver 3, Fireworks 3,  
Flash 5, & Freehand 9. **\$198**

New: Office 2001 for Mac  
The latest from Microsoft is  
now available at an incredible price. **CALL**

Adobe	Call	Filemaker Pro 5	\$148	Photoshop 6 NEW	Call!
Coda Finale 2001	\$199	Fireworks 3	\$98	Painter 6	\$199
CodeWarrior Pro 6	\$109	Flash 5 NEW	\$98	Sibelius	\$229
DenebaCAD	\$249	Flash + Freehand	\$144	TechTool Pro 3	\$79
Director 8	\$329	FormZ 3.6	\$825	Vectorworks 8.5	\$329
Dreamweaver 3	\$98	Freehand 9	\$98	Iomega	Call!
Dreamweaver 3 +		Lightwave 6	\$789	Wacom 6x8	\$284
Fireworks 3	\$144	Mathematica 4	\$129	(PC titles available!)	
Electric Image	\$639	Norton Utilities	\$59		

**Monthly Special!**  
**Adobe Bundles**  
Save hundreds on the  
Web, Publishing, and  
Design Collections  
Call or visit Online for pricing!



Visit AcademicSuperstore.com for...  
on-line ordering & thousands of products!

CALL FOR YOUR FREE CATALOG  
**1-800-333-8571**

Fax PO's and ID's to 512-450-0263

**ACADEMIC SUPERSTORE** www.AcademicSuperstore.com

Circle 180 on card or go to www.macworld.com/getinfo

# ACADEMIC DISCOUNTS on CREATIVE DIGITAL TOOLS

www.creationengine.com  
800.431.8713

explore our web site!

- product info
- academic prices
- online ordering
- reviews
- tutorials
- art gallery
- quote builder
- site licensing prices



Students, faculty, and schools can save up to 70% on the  
hottest creative software from over ninety companies including  
Adobe, Macromedia, Discreet, Newtek, and Hash.



www.madaboutmac.com  
Macintosh resources for teachers and students!

CREATION ENGINE, LLC

# Savings for Students & Teachers

FREE CATALOG!  
Save on over 5,000 Titles!!

**Web Design Studio**  
Includes: Dreamweaver 3.0  
Flash 5.0  
**\$199** Fireworks 3.0  
Freehand 9.0

**Final Draft 5.0**  
Premiere Professional  
Screenwriting  
Software **\$149**

**FileMaker Pro 5**  
Leading Relational  
Database  
Software **\$159**

**Flash 5.0**  
Professional Web  
Animation  
Software **\$99**

Up to...  
**80% Off**

We will beat any advertised price!!

Boris FX 5	\$339
Chromatica	\$75
Coda Finale 2001	\$249
Director 8.0	\$349
Dreamweaver 3.0	\$99
ElectricImage 3D 2.9	\$739
EndNote 4.0	\$105
Eye Candy 3.0.1	\$79
FLIGHTCHECK 3.79	\$199
FileMaker Pro 5.0	\$159
Flash 4.0	\$99
HyperStudio 3.3	\$149
Inspiration 6.0	\$79
Kal's Power Tools 6.0	\$89
LightWave 3D 6.0	\$889
MacLinkPlus 11 Deluxe	\$75
Mask Pro 2.0	\$99
Mathematica 4.0	\$139
Nisus Writer 5.1.3	\$79
PhotoGr. Edges 10,000	\$139
Screenwriter 2000	\$139
TechTool Pro 3.0	\$85
Vectorworks 8.5	\$339
Wacom Intuos 6x8	\$285
WebSpice 2,000,000	\$59
WordPerfect 3.5.1	CALL

**(800)699-1836**

Visit our WebSite for \$10 Off online orders.

Software Showcase Inc.  
1775 Rt 34 South D#12  
Farmingdale, NJ 07727  
Phone # (732) 556-0400  
Fax# (732) 556-0408  
info@softwareshowcase.com

www.softwareshowcase.com

Circle 168 on card or go to www.macworld.com/getinfo

Precision Music  
Scanning and  
Scoring!

**SMARTSCORE**

NOW  
SmartScore  
PIRME EDITION  
Just  
**\$149<sup>00</sup>**

www.musitek.com

MUSITEK  
Music Imaging Technologies  
800-676-8055

153 on card or www.macworld.com/getinfo

# STUDENTS!

Save up to 75% OFF  
popular software!

STUDENT SOFTWARE GUIDE  
Save up to 75% Off on Popular Software!

Adobe  
Microsoft  
Discreet  
Microsoft  
MetaCreations  
Macromedia  
AliasWavefront  
Softimage  
Autodesk  
Extensis  
Alien Skin  
Digitation  
Symantec  
Corel  
ADAM  
Wacom  
Many  
More!!

Order Software from JourneyEd.com  
**1-800-874-9001**  
www.journeyed.com

THOUSANDS OF TITLES AVAILABLE!  
**FREE CATALOG!**

Serving students & schools since 1990  
**1-800-874-9001**

**JourneyEd**  
Journey Education Marketing

174 on card or www.macworld.com/getinfo

**Mac Global**  
SYSTEMS AND PERIPHERALS SALES AND SERVICE

- Powermacs
- G3 Upgrade
- Powerbooks
- Printers
- i-macs
- Network Hubs
- Clones
- Ram
- Hard drives
- 24 Hour Repair

\*We Buy and Trade, Upgrade

For more product information and prices call, or visit  
[www.globaldeals.com](http://www.globaldeals.com)

15466 Los Gatos Blvd. #109-265, Los Gatos, CA 95032  
Tel. (408) 265-6653  
Fax (408) 265-6660  
**1-800-722-8864**

178 on card or [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

**MAC-PRO**.com  
Systems & Software .com

Buy • Sell • Upgrade • Repair • New • Used

**We have It All In Stock!**

- iMac, G3, G4
- PowerBooks



**Everything Mac!**

Any Ad is a Mac Pro Ad  
**800-525-3888**  
sales@mac-pro.com Fax 408-369-1205

192 on card or [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

**DIGITAL PREPRESS SYSTEMS**

**Rebuilt Imagesetters**  
(714) 892-5290  
Fax: (714) 892-4361  
**www.prepresssystems.com**  
email: prepress77@hotmail.com

**SAPHIR SCANNERS**      **SILKSCREENING**

**HOWTEK DRUM CANNER**      **PROCESS COLOR SYSTEM**

**HARLEQUIN RIP**      **PLATEMAKING SYSTEM**

**USED MACS & POWERBOOKS**

**WANTED!**  
**WE BUY USED MACS!**  
**TOP \$\$\$ PAID**

Any Quantity  
FedEx check delivery  
Fax a list for a quote  
310 966-4433

**MAC Solutions**  
11933 Wilshire Blvd.  
W. Los Angeles, CA 90025  
sales@macsolutions.com  
**(800) 80-WE-BUY**

**CHEAP MACS!**

**LIQUIDATION STATION**

[www.liquidationstation.com](http://www.liquidationstation.com)  
**800-382-6246**

152 on card or [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

**MEGAMACS.COM**

- Adobe GoLive 5.0 \*\*\*\*\* \$149
- OS 8.1 / Toast 4.0.1.1 \$29/\$39
- Norton AntiVirus 6 / Utilities 4 \$19/\$9
- OmniPage 7.0/8.0 \$45/\$129
- RayDreamStudio5.5orTimbuktu \$79
- 17 inch .26 Digital Color Monitor \$ 139
- Apple 4x/24x int. SCSI CD ROM \$19/\$99
- Ext. 56K Modems Serial or USB \$39
- 1GB Ext. SCSI Drive w/ cable & term \$59
- PowerBook Batteries from \$29
- Logitech QuickCamVC COLOR \$39
- Ricoh Ext. SCSI CDRW w/toast \$149
- Iomega PCI SCSI 2 Card \$25

Get FREE software with orders placed on our website  
**918-664-MACS (6227)** WE BUY MACS!  
fax: 918-663-6340 Prices reflect 3% Cash Discount

**Shop here for new equipment!**

**MacMart**  
SYSTEMS AND PERIPHERALS

**POWERBOOKS**

- G3/266 14.1" 64-6GB-CD-56K (R) \$1575
- G3/400 14.1" 64-10GB-DVD-56K \$2389
- G3/500 14.1" 128-20G-DVD-56K \$3349

**PRINTERS / SCANNERS**

- Canon BJC-85 USB Portable Color \$285
- Epson Stylus 860 1400x720 DPI \$139
- Epson Stylus 1160 Up To 13x44" Paper \$295
- Epson Stylus 2000P Photo Repor. Quality \$799
- Epson Stylus 3000 Up To 17x44" Paper \$1199
- HP DJ 970CXI Up To 2400x1200DPI \$385
- HP Laser 2100M Up To 2400x1200DPI \$745
- HP Laser 4050N 17 ppm w/Ethernet \$1395
- Tektronix Phaser 750N USB/Ethernet \$2275
- Epson Perfection 610 36bit 600x2400dpi \$119
- Epson 2000 Scans, Prints & Copies \$145
- Epson Perfection 1200 36bit 600x2400dpi \$185
- Microtek 4700 600x2400dpi 42bit \$259
- Nikon D660U w/35MM Film Adapter \$139
- Umax Astra 3450 w/Transparency Adapter \$147
- Umax Astra 4000U Includes Photoshop \$239
- Umax Powerlook III Professional Series \$575

**DRIVES**

- Iomega Internal Zip Drives \$65
- Seagate 30 Gig Barracuda 7200 Rpm Int. \$175
- USB External 32x4x4 w/Toast \$249
- SCSI 24x8x4 External w/Toast \$299
- Firewire 12x10x32 External W/Toast \$449

Knowledgeable & Friendly  
Staff Ready To Assist You

**POWERMACS**

- G4/400 64 MEG -10GB-DVD-56K \$1165
- G4/400 64 MEG -20GB-DVD-56K \$1445
- Cube/450 64MB -20GB-DVD-56K \$1689
- Cube/500 128MB -30GB-DVD-56K \$2149
- G4/450 DP 128-20GB-DVD-56K \$2399
- G4/500 DP 256 MEG-27GB-DVD-RAM \$3349

**Pre-Owned MACS**

- 7300/200 16 MB - 2 GB - CD \$379
- 3400C/200 16 - 2 - CD -mdm -Floppy \$725
- 9600/200 32 MB - 4 GIG - CD - VID \$799
- G3/300 64 MB - 6 GB - CD \$875
- G3/400 64 MB - 6 GB - CD - ZIP \$949
- G3/400 128 - 20 - DVD - ZIP - 56K \$1199

**MAC PARTS**

- LogicBoard 7100/80 ... 7200/90 \$135 ... \$149
- LogicBoard 8500 ... 9500 \$479 ... \$499
- PowerSupply 7300 ... 72/75/7600s \$159 ... \$110
- PowerSupply 85/9500s ... G3s \$199 ... \$225
- Apple CD 2x ... 4x ... 8x \$25 ... \$45 ... \$55
- Apple SCSI HDs 800MB ... 2GB \$59 ... \$89

**CARDS**

- Bootable SCSI Card 2x faster than Mac Original \$45
- PCI Firewire Card 3 Ports \$69
- SCSI / Serial Combo with 2 Serial Ports \$97
- G3 & G4 CPU UPGRADE CARDS \$AVE

\* Brand Names are Trademarked with their respective holders • Prices listed are c.o.d • Price & Availability subject to change • Returns Subject To Restocking Fee \*

Visit Our Web Site & Enter To Win  
**A FREE 128 Meg Module**  
**GUARANTEED LOW PRICES**

If We Don't Have It - Chances Are Nobody Does

**VIDEO / DISPLAYS**

- Apple Studio Display 17" (Graphite) \$299
- Apple 15" Flat Panel Display \$945
- Apple Studio Display 17" \$449
- Princeton 19" 22dp 1600x1200 85HZ \$289
- NEC 21" 25dp 1600x1200 76HZ \$335
- Formac ProTV TV Tuner & Video Capture Card \$675
- ATI Rage Orion 16 Meg 1600x1200 32 Bit \$95
- ATI Xclaim 3D 8 Meg PCI Perfect 2nd Card \$85
- 3DFX 5500 Voodoo-5 32 Bit Super Fast \$299

**MEMORY**

- SDRAM PC100 - For G3, G4 Computers, Cube & ImageTVs  
64M ... 128M ... 256M ... 512MB \$45 ... \$85 ... \$189 ... \$399
- SO-DIMMs - For G3 PowerBook, iBook & iMac  
64M ... 128M ... 256MB \$49 ... \$99 ... \$199
- 72 PIN SIMMs - 32 MB ... 64 MB \$89 ... \$99
- 168 PIN DIMMs - 32M ... 64M ... 128MB \$69 ... \$179 ... \$219

**macmart.com**  
Proud Member of the Better Business Bureau  
**Order Toll Free in the USA**  
**1-800-600-2708**  
International & Dealers 818-904-1400  
Sales@macmart.com or Fax Us 818-904-1410

## Custom ULTRA-3 SCSI LVD 160MB/s - Ultra 66 IDE - Firewire 1394

If you want Ultra SCSI Performance use our Quality Cables & Active Terminators. High Performance Solutions for Ultra66 IDE and Firewire Improves Performance

### SCSIVue™ Active Terminator

Ultra-160 LVD



From: **\$59**

Seven models available with optional Remote LED Pak. These are the finest terminators available, they fix SCSI problems and improve reliability.

Benefits:

- Improves SCSI Bus Performance
- Less Errors; More Reliable Data Transfer
- Diagnoses Problems • Analyzes Signal Quality

Features:

- Active Regulation • Fast 50 & Fast Wide 68
- Status Indicators • Gold Contacts

### SCSIVue™ Gold Diagnostic Cables

Ultra-160 LVD 160MB/s



From: **\$39**

Benefits:

- No Loss Of Important Data
- Faster Performance
- Test Cable Integrity

Features:

- Diagnostic Indicators • Large Ferrite Filters
- Triple Shielding (Unique Design)
- Double Gold 20u" Plated Connectors
- Extra Heavy 26 Gauge Wire • 100 Styles in Stock

### LVD-TPO Teflon™ Internal Cables

Teflon is a registered trademark of DuPont



From: **\$39**

Benefits:

- Less Errors, Ultimate Performance
- Silver Wire Improves Signal Quality

Features:

- Perfect 90 or 132 Ohm Impedance • Custom in 1 Day
- Triple Pronged Connector • Gold contacts Silver Wire

### External Ultra SCSI Cases

Ultra SCSI Custom Teflon Cable Available

Custom Enclosures in 1 Day for Raid & Arrays



From: **\$99**

NEW! 1 Bay Tower

2 Bay Tower

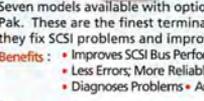
Temperature ALARM!

Automatic Monitor & Control

14 & 29 Bay

Ultra SCSI Towers

### Hot Swap Powered Terminator



From: **\$69**

Now you can safely remove any SCSI device from a SCSI chain by simply clicking a switch. Optional Power Supply can provide termination power to portable setups or when termination power is not being supplied by other devices.

### Gold VHD Ultra SCSI Cables



From: **\$109**

Features:

- New 8mm Ultra 160 LVD SCSI Connector
- Triple Shielding (Unique Design)
- Double Gold 20u" Plated Connectors
- Diagnostic Indicators • Large Ferrite Filters

### SCSI Cable Tester - LED Readout



Special Package of all 3: **\$99**

This Digital SCSI Cable Tester can test all the popular cable styles for opens, shorts, and unreliable operation. Battery powered for easy use on

Three models to choose from: • 50 IDC • 50 Cen • 68 MD

### Options:

- Ultra LVD Cable Kit
- Dual Redundant PS
- Bay Coolers W/ Brk
- Temp Alarm System

From: **\$999**

### Gold Diagnostic Adapters



From: **\$39**

Both 50 pin and 68 pin (all combinations)

Gender Changer

- 68 Pin Drive to 50 Pin IDC (runs wide drive as narrow)

80 Pin SCA Drive to 68 Pin (converts SCA to 68 SE or LVD)

Ultra-160

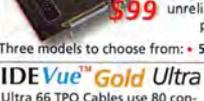
### FireVue™ Gold Firewire 1394 Cables



From: **\$29**

Diagnostic LED monitors power on the Firewire cable. Gold Connectors, Ferrite Beads, and perfect cable characteristics. Lengths up to 32', both 4 and 6 pins.

### IDEVue™ Gold Ultra 66 TPO Cables



From: **\$29.95**

Ultra 66 TPO Cables use 80 conductor cable and special 40 pin connectors. The best you can buy.

### Bay Cooler Kit

keeps those HOT Ultra SCSI Drives COLD as ICE!

Dual Fan & Bracket **\$29**

HOT SWAP Pull Out Bays Compatible with all 50 pin & 68 pin SCSI Buses up to Fast SCSI 2. From: **\$79**

### Drive Bus Changer



From: **\$39**

68 Pin Drive to 50 Pin IDC (runs wide drive as narrow)

### FireVue™ Firewire 1394 to Cardbus



From: **\$159**

The perfect solution for any PC/MQA Laptop or Portable computer. This card is both Mac and PC compatible. Gives you two 1394 6-pin Firewire connectors. Supports up to 400Mb speed. Optional Power Supply

### IDEVue™ Ultra 66 Hot Swap Bay



From: **\$39.95**

The IDE Ultra66 Hot Swap Bay works with hard drives and removable drives. Includes cooling fan, key lock, and 96 pin high reliability interconnection. LED indicators for Power and HDD Activity.

### Active Digital SCSI Repeater



From: **\$99**

- Models for all SCSI types
- Fixes SCSI Cable Problems
- Doubles Cable Length (up to 18')

### Ultra-160



For Adaptec Ultra Wide Cards

- Adapters with partial termination built in for 68 to 50 converters (converts Host Adapter) or 50 Pin Micro Adapters

### FireVue™ Firewire 1394 to PCI Host



From: **\$159**

Gives you four 1394 6-pin Firewire connectors. IEEE Standard compliant with auxiliary power connector on card. Supports up to 400Mb speed. Both Mac and PC compatible.

### IDEVue™ Ultra 33 Raid Controller



From: **\$445**

Speeds up to 55MB/s! 1/2 of a Support Terabyte with today's new larger capacity drives. Cost effective and fast. Linux, Win 98, NT, 2000

### FREE Technical Support!!!

Available to everyone, customer or not.

Granite Cables Are The Best Because They're Engineered Right.



Granite "The Solution Company" 3101 Whipple Rd. Union City, CA. 94587 Ph: 510-471-6442 Fax 510-471-6267

Circle 186 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

## ICN

INNOVATIVE COMPUTER & NETWORKING INC.

PowerMac 8500  
180MHz/64/2GB/CD  
**\$399**

PowerBook G3  
250/64/4GB/CD/Modem  
**\$1269**

PowerBook 3400  
200MHz/16MB/2GB CD/Mod  
**\$649**  
Add 32MB Memory for only \$39

PowerMac G3  
400/64/6GB/DVD  
**\$979**

PowerMac 9600  
300/64/4GB/CD/Zip  
**\$949**

### IMac 350MHz

64MB/6GB CD/Modem  
**\$629**

## www.allapplemac.com

Huge Parts Inventory Over 28,000 Items In-Stock

### POWER BOOKS

G3 500 MHz /128MB/12GB/DVD	\$2949
G3 400 MHz /64MB/6GB/DVD	\$2198
G3 333 MHz /64MB/4GB/CD*	\$1690
G3 266 MHz /64MB/6GB/CD*	\$1490
G3 250 MHz /64MB/4GB/CD*	\$1269
G3 233 MHz /32MB/2GB/CD*	\$929
3400 / 200 MHz /16MB/2GB/CD/Mod*	\$649
5300ce / 117 MHz /16MB/1GB*	\$429
3400 / 240 MHz /16MB/3GB/CD	\$789
iBook 300 MHz/32MB/3GB/CD/56K/ETH\$1029	
iBook 366MHz/64MB/6GB/CD/56K/ETH \$1490	

### POWER MACS

G4 500 DUAL /256MB/40GB/DVD/KB/56K\$3339	
G4 500 MHz /256MB/27GB/DVD	\$2295
G4 450 DUAL /128MB/30GB/DVD/KB/56K	\$2379
G4 450 MHz /128MB/20GB/DVD	\$1790
G4 450 Cube /64MB/20GB/DVD/KB/56K	\$1749
G4 400 MHz /64MB/20GB/DVD/KB/56K	\$1549
G4 400 MHz /64MB/10GB/DVD	\$1249
G3 400 MHz /64MB/6GB/DVD	\$1049
G3 350 MHz /64MB/6GB/CD/DVD	\$929
G3 266 MHz /32MB/4GB/CD/[SCSI]	\$790
9600 300 MHz /64MB/4GB/CD/Zip	\$949
9600 200 MHz /32MB/4GB/CD	\$689
9500 180 MHz /32MB/2GB/CD	\$429
8600 200 MHz /32MB/2GB/CD	\$499
8500 180 MHz /64MB/2GB/CD	\$399
7600 132 MHz /16MB/1GB/CD	\$269
7300 200 MHz /16MB/2GB/CD	\$379
7200 120 MHz /16MB/1GB/CD	\$229

### MONITORS

APPLE 21" Studio*	\$979
APPLE 20" 850 Vision*	\$499
APPLE 1710 Vision*	\$109
APPLE 17" Studio* (Graphite)	\$239
APPLE 16" Hires	\$49
APPLE 15" Multi	\$89
APPLE 15" Flat LCD	\$49

### HARD DRIVES

HD 1GB SCSI	\$39
HD 2GB SCSI	\$59
HD 4GB SCSI	\$89
HD 9GB SCSI	\$145

### CD & DVD

32xCD-ROM IDE For G3, G4	\$55
24xCD-ROM For iMac	\$85
DVD For G3, G4	\$139
8xCD-ROM SCSI	\$39

### IMACS

IMac 233MHz /32/4GB/CD/Modem*	\$549
IMac 333MHz /32/6GB/CD/Modem*	\$599
IMac 350MHz /64/6GB/CD/Modem	\$629
IMac 400MHz /DV/64/10GB/DVD/Modem	\$839
IMac 450MHz /128/20GB/DVD/Modem	\$1285
IMac 500MHz /128/30GB/DVD/Modem	\$1479

### Canon PowerShot S100 Digital Elph

- 2.11 megapixels
- Quality Zoom lens
- Plug-and-play USB
- Mac and PC

**\$315**

ICN has the largest inventory of Apple & Toshiba parts USB & FireWire Peripherals.

Prices Subject to Change Without Notice • All Prices reflect 3% Cash Discount • \* Refurbished ICN Is Not An Authorized Apple Dealer • All Trademarks Are Property Of Their Respective Companies.

1.800.472.4921 Tel: 310-445-6600 Fax: (310)445-6611 FAX TOLL FREE/JAPAN: 00-31-114211 11755 Exposition Blvd. Los Angeles CA 90064



## MCE USB FlexLight

Don't get caught in the DARK with your PowerBook!  
Conveniently lights up your keyboard and surrounding paperwork!  
Powered by the PowerBook's USB port.



\$19.99

## MCE DataShuttle Xtreme

The world's most VERSATILE Storage Device!

PC Card, FireWire, or USB



You have the Power to Choose:  
FireWire for high-speed video capture  
USB for compatibility with iMac and iBook  
PC Card for compatibility with PowerBooks

30GB	20GB	Kit
FireWire \$629	\$429	\$139
USB \$599	\$399	\$119
PC Card \$579	\$379	\$99

Turn your old internal PowerBook drive into an external drive!

## COMPLETE POWERBOOK STORAGE SOLUTIONS by MCE Mac

### MCE MobileStor

THE BEST Internal Hard Drive Upgrade Kits for your PowerBook!

For use in PB 2000, iBook, PB G3 Series, G3, 3400, 2400 & 1400\*

MobileStor 6G	6GB	3yr wty	\$179
MobileStor 10G	10GB	3yr wty	\$199
MobileStor 20G	20GB	3yr wty	\$299
MobileStor 30G	30GB	3yr wty	\$499

Included FREE in every MCE MobileStor hard drive upgrade solution is the complete MCE PowerBook Hard Drive Installation Kit which includes an illustrated installation manual, and all of the appropriate tools and brackets needed for the proper installation of your new MCE MobileStor hard drive kit.

### MCE Xcarét Pro

#### Expansion Bay Hard Drives

Ultra Fast! • Hot Swappable • Bootable  
Compact • Protective MCE Carrying Case  
Kit is perfect for your old internal PB drive!\*

Perfect for audio & video recording & editing.

multimedia tuned	32GB	30GB	20GB	10GB	Kit
160 min.†	150 min.†	100 min.†	50 min.†		Turn your old internal PowerBook drive into an expansion bay drive!
\$699	\$649	\$449	\$349	\$149	

\*approximate FireWire DV Video Capture time in minutes • See web site for details.

### MCE Xcarét Pro

#### Expansion Bay CDRW Drives

For PowerBook G3 Series 98 or PowerBook G3 99/2000

4x Record  
4x Re-Write  
20x Read

• Bootable! • Hot Swappable  
• Fast Backup or Data Transfer  
• Adaptec Toast™ Software  
• Protective MCE Carrying Case

NEW LOW PRICE!  
**\$399**

Ultra-DMA Drives!

## CUSTOM POWERBOOK CONFIGURATIONS ASK ABOUT OTHER CUSTOM CONFIGURATIONS & BUNDLES!

### Apple PowerBook 2000

- 400MHz/1MB L2 cache
- 20GB MCE Hard Drive
- 14.1" Display
- 128MB SDRAM
- 2 FireWire Ports
- 2 USB Ports
- DVD-ROM Drive
- AirPort Ready

**\$2799**  
compare to \$2999\*

w/30GB HD†...\$3099  
†in place of 20GB HD, compare to \$3299\*

### Apple PowerBook 2000

- 500MHz/1MB L2 cache
- 30GB MCE Hard Drive
- 14.1" Display
- 128MB SDRAM
- 2 FireWire Ports
- 2 USB Ports
- DVD-ROM Drive
- AirPort Ready

**\$3599**  
compare to \$3799\*

w/extra Micro-AC Adapter & Battery...\$3799  
compare to \$3997\*

### Apple PowerBook 2000

#### Media Developer Bundle

- 500MHz/1MB L2 cache
- 30GB MCE Hard Drive
- MCE Expansion Bay CDRW Drive
- 512MB SDRAM • DVD-ROM Drive
- 14.1" Display • 2 USB Ports
- 2 FireWire Ports • AirPort Ready

**\$4999**

w/MCE 30GB Expansion Bay Hard Drive...\$5599

\$200 mail-in Rebate on PowerBooks! through 12/31/00

Audio & Video Developer PowerBook Bundles

### MCE CardBus Upgrade Service

opens up the possibilities for USB, FireWire, 10/100 Ethernet, expanded Video

for PB 2400 & 3400/G3

### RATOC Systems

High-speed PC Card adapters for audio/video data transfer on your PowerBook!

CBFW2 FireWire CardBus PC Card	\$129
CB31PB Ultra SCSI CardBus PC Card	\$129
CB32PB UltraWide SCSI CardBus PC Card	\$259

### WORLD'S SMALLEST POWERBOOK AC ADAPTER!

FOR PB 2000, iBOOK, PB G3, 3400, 2400, 1400 & 2300

SMALLER THAN APPLE'S SMALLEST ADAPTER!!

Micro-AC Adapter only **\$85**

Save space and weight in your carrying case!

### MADSONLINE

PowerBook Auto/Air Adapter charges PB in the car or plane! **\$80**

PowerBook G3 Series Carrying Cases  
Slimline Case...\$99  
Productivity Case...\$139

### IREZ

TURN YOUR POWERBOOK OR IBOOK INTO A VIDEO POWERHOUSE!

CapSure Card \$119

Kritter USB Camera \$119

CapSure/Kritter SV BUNDLE DEAL \$239

Kritter SV Camera \$139

### VST TECHNOLOGIES

Expansion Bay Zip Drives 100MB starting \$199 at 250MB \$279

Portable Drives 6GB \$369 18GB \$635

Charger, Battery & AC Adapter Bundle \$299

### PRO AUDIO EQUIPMENT FOR POWERBOOKS

Stannberg VXpocket Professional ANALOG AND DIGITAL audio interface for your PowerBook! **\$699**

USB-2-Midi Interface \$99

### PowerBook & iBook Memory Upgrades!!

See our web site for latest pricing!!

### Apple Computer

High-Capacity Li-Ion Batteries!

PowerBook 2400 Battery \$249

PowerBook G3 99/2000 Battery \$139

### macally

iMouse Jr. USB for iBook \$29

CardBus to USB Adapter \$79

### iHub Jr.

3 Port USB Hub \$39

USB Floppy Drive \$69

### MCE Expansion Bay Device Carrying Case

Convenient protection for expansion bay devices! **\$19**

### MCE USB Mobile Mini Mouse

**\$29**

### Klear Screen

PowerBook Screen Cleaner

three 6-packs **\$25**

### Kensington

Notebook MicroSaver Security System **\$43**

### Canon

BJC-85 Portable USB Bubble Jet Printer **\$299**

Great stocking stuffers!

WE BUY MACS AND MAC STUFF  
(318) 424-9791

WE STOCK MAC PARTS!

SHREVE SYSTEMS

1-800-227-3971

For all of this and more check out our website!  
<http://www.shrevesystems.com>



FAX (318) 424-9771 Technical Support (318) 424-7987  
Customer Service (318) 424-9791 Purchasing (318) 424-9791  
1200 Marshall St Shreveport, Louisiana 71101

**PowerBook 5300cs**

- Supports ext. video
- 24MB RAM
- 750 Hard Drive
- 100-MHz 603e
- Dual-scan color
- Refurbished



ADD 56K PCM/CIA MODEM  
FOR ONLY \$100 MORE!

**Macintosh LC580**

Internet Ready! **\$249**

- 33-MHz MC68LC040
- 8MB of RAM
- 800MB Hard Drive
- 28.8 Motorola Modem



\$299 with internal 4XCD

**Color LaserWriter 12/600PS**

- 600-dpi
- 12 ppm
- Color Photograde
- LocalTalk, Ethernet
- Mac, DOS, Unix or Windows
- Toner included



Refurbished ... **\$1299**

**FLOPPY DRIVE BLOWOUT**

**1.44 Super Drives STARTING AT \$19!**



PART # 661-0474

NO EXCHANGE REQUIRED!

**HP Deskjet 890 ONLY \$249**



**The Vintage Mac Superstore!**

ONLY \$299



**Apple 17" Studio Display**



**PowerComputing 17" Monitor**

ONLY \$169!

Factory Refurbished



**Voxon 14" and 15" Monitors**

See our line items below for other monitor blowout specials!

**Blue & White G3's**

**NEW! ON SALE!**

ONLY \$1,249



- 450-MHz PowerPC
- 128 MB RAM
- 9 GB Ultra Wide SCSI HD
- CD
- Keyboard & Mouse
- 16 MB ATI Rage Pro Video Card

**BRAND NEW!**

**MacAlly Extended Keyboard**



**NEW! \$19**

**NEW! Genuine Apple ADB Mouse II \$49**



**ClarisWorks 3.0 CROSS-PLATFORM FOR MAC OR PC**

**ONLY \$19!**

1-800-227-3971

**PowerMac 6100 Bundle**

- \*Includes 13" Monitor
- \*8 MB Ram
- \*250 MB Hard Drive
- \*2X CD
- \*modem
- \*keyboard & mouse
- \*Free ClarisWorks 3.0 Internet Ready



**ONLY \$199**

**We stock parts for new and vintage Macs!**

**We also specialize in digital audio recording! Call for the best prices on Alesis, Akai, Tascam, Digidesign and Mark of the Unicorn!**

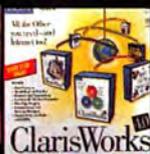


AKAI DPS 12 v2

**FINALLY! A REAL PERSONAL HOME STUDIO THAT YOU CAN AFFORD!**

**AS LOW AS \$699**

Check out our website at [www.shreveaudio.com](http://www.shreveaudio.com)



**ClarisWorks 4 Internet Edition**

**ONLY \$39! NEW!**

**System Bundles SALE!**

7100/60	5200	4400	5400/120	8500/120	7250/120	7200/75
24/350/CD/13" Monitor	24/350/CD/15" Monitor	32/2GB/CD	16/1.6GB/CD	16/1GB/4X	32/2GB/8XCD	0/0/0
<b>\$349</b>	<b>\$399</b>	<b>\$499</b>	<b>\$699</b>	<b>\$699</b>	<b>\$499</b>	<b>\$199</b>
refurbished	refurbished	refurbished	refurbished	refurbished	NEW	refurbished

**PowerMac CPU SALE!**

PRINTERS	MACINTOSH LOGIC BOARDS	MONITORS	NUBUS ADAPTERS
Apple 11x17 Color Inkjet Printer NEW, #M9500 ... \$249. G3 logic board, No Processor, No ROM ... \$399.	Apple 17" Studio Display NEW ... \$299	Apple 14" A/V refurbished ... \$179.	Quadra 660AV NuBus Adapter ... \$79.
HP Deskjet 890 CM, NEW ... \$249	7200/90 logic board, refurbished ... \$179.	Apple 14" Multiscan, refurbished ... \$119.	Isi NuBus adapter with math co-processor ... \$49.
Apple StyleWriter 1200, refurbished ... \$129.	LC logic board, refurbished ... \$49.	Apple 15" Multiscan, refurbished ... \$119.	<b>VIDEO CARDS</b>
Apple StyleWriter 1500, factory refurbished ... \$149.	LC II logic board, refurbished ... \$149.	Apple 15" AV, factory refurbished ... \$199.	ATI XClaimVR RAGE II 2MB with FREE TV Option ... \$149.
Apple StyleWriter 2400, refurbished ... \$129.	Mac LCIII logic board, refurbished, exchange ... \$149.	Apple MultiScan 17", refurbished ... \$179.	E-Machines DoubleColor SX NuBus Card NEW ... \$29.
LaserWriter IInt, refurbished w/Toner ... \$199.	Performa 630, No Processor, refurbished ... \$49.	Apple 20" Multiscan, refurbished ... \$599.	RasterOps 24MX NEW, 24-bit NuBus ... \$149.
LaserWriter III w/SMB RAM, refurbished ... \$549.	Quadra 950 logic board, refurbished ... \$179.	Radius IntelliColor/20e, factory refurbished ... \$999.	*PowerMac HPV Card (1MB) ... \$79.
LaserWriter IIg w/5MB RAM, refurbished ... \$649.		Voxon 14" Multiscan NEW ... \$99.	*PowerMac A/V Card (2MB) ... \$199.
Texas Instruments Micro Laser Pro E NEW ... \$449.		Voxon 15" Multiscan NEW ... \$129.	
<i>Laser toner cartridges sold separately</i>		Power Computing 15" refurbished ... \$119.	
<b>IMAGING PRODUCTS</b>	<b>APPLE PC COMPATIBILITY CARDS</b>	Power Computing 17" refurbished ... \$159.	
Apple QuickTake 150 refurbished ... \$149.	Pentium 100-MHz, refurbished ... \$149.		
Apple QuickTake 100 refurbished ... \$99.	Pentium 166-MHz, 12" PCI card, refurbished ... \$299.		
	586 100-MHz, 7" PCI card, refurbished ... \$99.		
	486 66-MHz for 6100 series, NEW ... \$29.		

1-800-227-3971

[www.shrevesystems.com](http://www.shrevesystems.com)

# Save on Reconditioned Macs & Peripherals

**POWERMACS**

7200/120 24/1G/CD	\$199
7300/180 32/2G/CD	\$399
7500/100 24/1G/CD	\$299
7600/132 24/1G/CD	\$329
8500/120 32/1G/CD	\$299
9500/132 32/2G/CD	\$349
9600/200 32/2G/CD	\$599
G3/233 DT 32/4G/CD	\$849

All CPUs include mouse  
More products @ [www.datatech-rmkt.com](http://www.datatech-rmkt.com)

**MONITORS**

14" Apple Trinitron	\$99
15" Apple MultiScan	\$99
15" AV MultiScan	\$129
17" Apple MultiScan	\$149

**POWERBOOKS**

5300c 16/750	\$349
1400c/133 16/1G/CD	\$599
3400c/200 32/1G/CD	\$849
G3/233 32/2G/CD	\$1199

To ORDER CALL  
**1-800-281-3661**

**DataTech**  
REMARKETING, INC.

Ask about the 6-month warranty.  
VISA & MasterCard accepted.

Tel: 615-860-4422 Fax: 615-860-0390  
471 Myatt Dr., Madison, TN 37115

Corporate names and trademarks are the property of their respective owners.

# macs for rent

from DataTech Remarketing

Rent what you need now—  
for as long as you need it.

log on & inquire  
[www.macsforrent.com](http://www.macsforrent.com)  
or call 1.800.281.3661

macforalltrades.com  
Fax: 408.355.4461  
200 Bishop Street Suite E3 Alhambra Ca 90018

**800.304.4639**

@ used MACS  
A new way to  
LOOK  
www.macforalltrades.com

MAC OF ALL TRADES

**Mac POWER**  
Sales & Service, Inc.

BUY • SELL • TRADE  
UPGRADE • REPAIR

New • Used • Refurbished

- Powrbooks
- PowrMacs
- Performas
- Quadras
- MacII-LC
- Monitors
- Printers
- Peripherals
- Ram
- Parts

[www.macpowerinc.com](http://www.macpowerinc.com)

**888-275-POWER**  
Fax: 408-448-6132  
San Jose, California, 95123

**LOOK HERE FOR ALL YOUR MACINTOSH SERVICE NEEDS!**

**COMPU AMERICA**  
"The Computer Specialist"

# 1-800-533-9005

We are open Mon-Fri, 8am-6pm PST

Fax Bids: (310) 475-7744 or email at [SALES@COMPU-AMERICA.COM](mailto:SALES@COMPU-AMERICA.COM)

10435 Santa Monica Blvd., Los Angeles, CA 90025

Check out our Web!

[WWW.COMPU-AMERICA.COM](http://WWW.COMPU-AMERICA.COM)

Government, University and Fortune 1000 P.O.'s are welcome!  
Business Leasing is Available!  
International Orders Please call tel: (310) 446-1771

**POWERMACS**

Starting at \$849

**I-MACS**

Starting at \$629

**G3 POWERBOOKS**

Starting at \$999

**G3/350**

Minitower  
128MB SDRAM  
12GiG HD  
24XCD & Zip

Super Deal \$949

**WORKGROUP SERVERS**

G4/500 ... 256/18G/DVD/SHARE ... 3099  
G4/400 ... 128/20G/DVD/SHARE ... 1899  
G3/450 ... 256/2-9G/24K/SHARE ... 1599  
CALL FOR OTHER WORKGROUP SERVERS.

**All Flavors Are In Stock!**  
(Blueberry, Strawberry, Grape, Lime, Tangerine.)

Call for the CUBE & other new products.  
Visit Our New Site for the latest pricing.

**Call for all other PowerBooks.**

**I-BOOKS**

Starting at \$1149

12.1 Active TFT Color Screen, 20xCD, 56K Modem

I-BOOK G3/300 64/6G Graphite ... 1499  
I-BOOK G3/300 64/6G Blueberry ... 1399  
I-BOOK G3/300 32/3.2G Blueberry ... 1149  
I-BOOK G3/300 32/3.2G Tangerine ... 1149

**ViewSonic**

Starting at \$169

**SONY**

Starting at \$189

**SONY LCD Displays**

NS0 15" M151/M151 BQ 15" ... 1329  
L181/L181A ... 2499/2499

**SONY Digital Cameras**

Cybershot DSC-D770 ... 649  
MAGICA FD73/FD85 ... 399/599  
MAGICA D95 ... 869  
MAGICA CD1000(WITH CDR) ... 1149

**EPSON**

Starting at \$69

**HP**

**HEWLETT PACKARD**

**ioemga**

Starting at \$69

**Panasonic**

Digital Camera  
PVDC-2590 Palm Cam

Special \$299

8MB Flash Card  
Motion Recording  
1.8 Color LCD  
1280 x 960 Res. • Modem Included

**IBM**

**IBM T85A 18" DISPLAY**

18.1" LCD Flat Panel  
1280x1024 Res.  
Super Deal \$1699

# YOUR #1 COMPUTER SUPERSTORE!

newer technology VST Seagate Quantum GCC AGFA Ibtektronix NEC

All prices are cash discounted. \*\*\* denotes a refurbished product. Not responsible for any typos. Apple, the Apple logo, Mac, PowerMac, PowerBook, iMac, iBook, WorkGroup, G3, G4, & iCube are trademarks of Apple Computer, Inc., registered in the U.S. and other countries. All other names & logos are trademarked by their respective owners. We are Not Apple Authorized.

# CALL THE MAC EXPERTS!

Your one-stop source for Apple® Macintosh® — over 30,000 items on sale at better than mail order prices!  
It's pretty simple: we know a lot about Mac® stuff, and we care about our customers.

## Blowouts & Specials

## Apple® "Open Box"

Panzer General & Angel Devoid.....\$2.00	Printer Cass. for LW 300&4/600...\$19.00
US Atlas/Space Shuttle Bundle.....\$5.00	Face-up Output Tray for 12/640...\$19.00
Fun & Learning Game Bundle.....\$9.00	LocalTalk Option for StyleWriter...\$19.00
Contour Design Mouse Tray.....\$9.00	Envel or Xtra Feeder for LW 8500...\$19.00
Toast 4.0 OEM for Mac.....\$29.00	AC Adapter for PowerBook G3.....\$59.00
Logitech Cordless Mouse.....\$29.00	Apple® Battery for Pwbk 3400/G3...\$59.00
Used Radius Full Page Display...\$39.00	Apple® Battery for G3 Pwbks.....\$88.00
Norton Antivirus 6.0.....\$39.00	Apple® FireWire Kit.....\$149.00
Gravis Firebird ADB Joystick.....\$39.00	
Disney's Sketch Board.....\$45.00	
Mac OS® 8.1 Full Retail.....\$49.00	
MacroMedia Freehand 8 Upg.....\$49.00	
Norton Utilities 5.0.....\$55.00	
Altec Lansing 3 pc Sound Syst.....\$59.00	
Internal 1 Gb SCSI Drive.....\$99.00	



64/20/DVD

Incredible value for the latest in Apple's iMac™  
Factory refurbished by Apple, 3 year AppleCare warranty is available.

Indigo or Ruby  
iMac™ DV 450™  
only \$1088 — Save  
over \$200!

Dealin'  
The Cube!  
\$1449



G4 Cube 450 Mhz with 64 MB  
RAM, 20 Gb HD, DVD, 56k

New  
G4/400  
\$1249



Special config w/ 64  
MB RAM, 10 Gb HD, DVD

New  
G3/450  
\$1199



With 128 MB RAM,  
9 Gb UW HD, CD  
Modem extra

## Pre-Owned Macs at the lowest prices ever! Save Your Peripherals! Great price/performance!

<b>Fully configured pre-owned iMacs™</b>	Beige G3 Desktops, starting at.....\$939
6100 series, starting at.....\$98	Blue & White G3's, starting at.....\$949
6200 series, starting at.....\$169	G4 Graphites, starting at.....\$1049
6400 series, starting at.....\$299	PowerBook® 5300's, starting at.....\$399
7100 series, starting at.....\$118	PowerBook® 1400's, starting at.....\$749
7200 series, starting at.....\$148	PowerBook® 3400's, starting at.....\$799
8100 series, starting at.....\$239	PowerBook® G3's, starting at.....\$1388
7500 series, starting at.....\$278	
7600 series, starting at.....\$309	<b>Factory Refurbished iMacs™</b>
6400 series, starting at.....\$349	iMac G3 233 32/4/24x CD.....\$679
7300 series, starting at.....\$388	iMac G3 266 32/6/24x CD.....\$699
8500 series, starting at.....\$449	iMac G3 333 32/6/24x CD.....\$719
9500 series, starting at.....\$489	iMac G3 350 64/6/24x CD.....\$739
9600 series, starting at.....\$849	iMac G3 400 64/10/DVD.....\$888
	Graphite iMac 128/13/DVD.....\$1088
	iBook® 300 32/3.2/CD.....\$1249
Umax 5900 Towers, starting at.....\$429	Graphite iBook® 366 64/6/CD.....\$1369
PowerBase Towers, starting at.....\$279	PowerCenter DT's, starting at.....\$1429
PowerCenter DT's, starting at.....\$239	PowerBook® G3 233 32/2/CD.....\$1429
PowerTower Pros, starting at.....\$499	PowerBook® G3 266 64/4/CD.....\$1699
StarMax Desktops, starting at.....\$299	PowerBook® G3 500 128/12/CD.....\$2899
	Blue/White G3 400 64/6/DVD.....\$999
iMacs™ starting at.....\$639	G4/400 64/10/DVD 0 mod.....\$1249
iBooks™, starting at.....\$1149	G4/450 128/20/DVD.....\$1799

## The PowerMax™ "No Bull!" Bundles

- No complicated reseller rebates • No special terms or conditions • No "get this if you buy this"
- No hidden charges • No hooks, installation fees or, well, any other bull!

### The G4 Bulldozer Bundle

New 4/400 upgraded to 128 Mb of  
RAM, 0 Gb Drive, DVD-ROM, 56k  
modem, 17" Apple Graphite display,  
Canon BJC-2100 Inkjet printer.  
**\$1699**  
After Canon  
printer rebate

### The iMac™ Bullseye Bundle

Refurbished Blueberry iMac™  
upgraded to 128 mb of RAM, 6 Gb  
Drive, CD-ROM, 56k, Canon  
BJC-2100 Inkjet printer.  
**\$799**  
After Canon  
printer rebate

### The iBook™ Bullfighter Bundle

Refurbished Graphite iBook™ upgrad-  
ed to 128 mb of RAM, 6 Gb Drive, CD-  
ROM, 56k, Graphite iBook Carry Case,  
Portable Canon BJC-85 Inkjet printer.  
**\$1699**

### The PowerBook™ Bulldog Bundle

Refurbished PowerBook® upgraded to  
192 mb of RAM, 12 Gb Drive, DVD-ROM,  
56k, Graphite iBook Carry Case,  
Portable Canon BJC-85 Inkjet printer.  
**\$3099**

## TradeUp



We'll take your Mac® OS  
computer in trade toward  
the purchase of new  
product. Call one of our  
expert Mac® consultants  
for full details!

• Call us — or visit

**WWW.POWERMAX.COM**

• Over 200 Mac models to choose from

• Knowledgeable, non-pushy salespeople • Great tech support • No  
voice mail (during office hours) • We consult on all Mac hardware &  
software • no games, no hidden charges...no bull!

• Personal Financing • Fast P.O. Approvals • Business  
Leasing • Weekly specials on our web site

• Order on line or call one of our experts!



Authorized Reseller



# POWER MAX 800-613-2072



Local: (503) 624-1827 • Fax (503) 624-1635  
email: sales@powermax.com

Prices subject to change without notice. Prices reflect cash discount. Credit card orders  
strictly verified against fraudulent use. With use of credit card as payment customer acknowl-  
edges that some products are subject to final sale. Many prices are limited to stock on hand.  
All brand or product names are registered trademarks of their respective holders.

G4s & Cubes | DV iMacs™ | iBooks™ | PowerBooks® | Blue & White G3's | Beige G3's | Software

## Sign on. Save Big. Have Fun.



Macintosh User Group members enjoy access to a very special Apple-  
sponsored web site featuring super deals on the latest Apple products as well as  
factory refurbished and discontinued Macs, and much more! Not a member?  
Find out how you can get these great deals by calling PowerMax at 800-689-8191.



Apple Specialist

**www.applemugstore.com**



Authorized Reseller

The MUG Store. A cooperative venture between Apple and PowerMax to bring MUG members exclusive deals  
on the latest Mac® products and special offers on discontinued and \*factory refurbished computers.

PowerMax is a division of Computer Stores NW, Corvallis, OR.

Circle 208 on card or go to www.macworld.com/getinfo



# 800-673-MACS

916-652-1880 fax 916-652-1881 800-673-6227

WE SHIP ANYWHERE IN THE WORLD. CHECK OUT OUR WEEKLY WEB SPECIALS <http://www.poweron.com>

## iMac DV G3/400 Mhz

includes DVD CDROM

**\$899<sup>99</sup>**

64 MB RAM • 10 GB HD • USB  
returnished FireWire • Ethernet • 56k V.90  
Apple DVD CDROM included!

### MORE IMAC DEALS

iMac 333 326 GB CD/DVD/56k ..... 619.99  
iMac 350 646 GB CD/DVD/56k ..... 699.99  
iMac 400 DV SE-128/3 GB DVD/DVD/56k 1099.99

## PowerMac 5200

**\*Special\***

**\$179<sup>99</sup>**

### INTERNET READY

24 MB RAM • 500MB HD • CDROM  
EtherNet or Modem • Floppy Drive  
Keyboard • Mouse • Built-in Monitor

## SuperMac S900 Bundle

16/2GB/CD/Vid/Ethernet  
& Apple 14" MS

**\$449<sup>99</sup>**

New/OEM  
Tower, 6 PCI Slots  
EtherNet, Serial & SCSI

S900 Base Config 16/0/0/0 604e ..... 299.99  
S900 604e 16/2GB/CD/Vid/EtherNet ..... 499.99  
S900 17" Monitor Bundle  
604e 24/2GB/CD/Vid/EtherNet ..... 549.99

## iBOOK G3/300 Mhz

**\$1249<sup>99</sup>**

returnished 32 MB RAM • 3.2 GB HD  
USB • Ethernet • 56k V.90

### MORE iBOOK DEALS

iBook 300 646 GB CD/DVD/56k ..... 1359.99  
iBook 366 SE-646 GB CD/DVD/56k ..... 1549.99

## Apple Original HARD DRIVES

Quantum or IBM

**2GB \$99<sup>99</sup>**

### External Drives w/cables add \$50

1 GB SCSI Hard Drive-Internal (P) ..... 69.99  
2 GB SCSI Hard Drive-Internal (N) ..... 99.99  
4 GB SCSI Hard Drive-Internal (P) ..... 119.99  
External Zip Drives-no cartridge (P) ..... 69.99  
USB to EIDE External Cases (N) ..... 89.99  
27 GB EIDE Hard Drive-Internal (N) 149.99

## Apple Original CDROM

CDROM Drives are Mac OS Bootable  
and use Apple Original Driver Software

**8X SCSI \$59<sup>99</sup>**  
**CDROM**

### MORE CDROM DEALS

2x SCSI CDROM Drive-Internal (P) ..... 29.99  
24x SCSI CDROM Cyberdrive-Int (N) 89.99  
24x SCSI CDROM Cyberdrive-Ext(N) 109.99  
iMac CDROM Rev. B (266-333) (N) ..... 119.99  
6x ATAPI DVD CDROM -Internal (N) 149.99  
32x ATAPI CDROM Drive-Internal (N) 99.99

## APPLE MONITOR DEALS

**Apple 14" Multiscan \$59<sup>99</sup>**

Apple 17" Multiscan \$129<sup>99</sup>

**\*Special\* Apple 20" Multiscan \$299<sup>99</sup>**

## ix3d DUAL MONITOR VIDEO CARD

Supports TWO Additional Monitors

250MHz RAMDAC  
1920x1200 max  
128 bit 2D/3D  
Twin Turbo  
**\$99<sup>99</sup>**

ixMicro Game Rocket 16MB VRAM  
Voodoo Banshee, 250Mhz - PCI (N) - 99.99  
Radius Thunder TX 1152 (16 MB)  
12MB RAM + 4VRAM - PCI (N) ..... 59.99  
Radius Thunder 3D (32 MB)  
24MB RAM + 8VRAM - PCI (N) ..... 89.99

## Mac OS 8.1 System Software (U)

Full Packed Full Installation NEW CD

**\$29<sup>99</sup>**

## External 56k v.90 Modem (N)

OEM Packed Mac Ready Includes Cables

**\$69<sup>99</sup>**

# www.poweron.com

sales@poweron.com Check Out Our Complete Inventory Online

Discover Master Card VISA

## PowerON

Computer Services

4323 Anthony Ct. #1 Rocklin, CA. 95677

Gov't & School PO's Accepted CALL for EDUCATIONAL Quotes

Mon-Fri 7-6, Sat 10-5

All Prices include 3% cash discount. All items are Used or Refurbished unless otherwise indicated. ALL SALES FINAL

Circle 198 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

## Blue & White Blowout!

# Only \$999!

PowerMac G3 Blue & White 400 Mhz  
64 / 6 Gig / DVD / Keyboard-NEW!  
Special! Add 128 MB For Only \$99!

**G3 All In One Systems**  
233 Mhz 32/4/CD: \$699  
333 Mhz 32/4/CD: \$799

Mac OS 8.1 In Stock!

Thousands Of Parts In Stock For Your Mac!

iBooks! 64 / 6 Gig / CD Only \$1299!

3400c \$799! G3 PB \$1199! PM 8500's \$399! BW G3's \$899! iMac's \$599! Beige G3 \$799!

# 888-447-3728

See All The Rest At: [MacResQ.com](http://MacResQ.com)

**bizrate.com** customer certified

**MR** Mac-Res-Q

Circle 191 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

### Software Specials QuarkXpress4\$649

Apple Mac OS 7.6.0.1/8.5/8.6 \$49/55/59/79  
Act V2.8/ Acrobat V3/V4 \$129/\$99/\$189

AntiVirus/SAM V4/Apple Utilities CD \$49/29  
Byte3D/4/3D Suites \$99/125\* \$79  
Claris EMailer/DRAW/Calendar/Maker \$69 ea.  
Claris Works V4/5/AppleWorks \$49/\$59/89  
Claris Impact/Organizer/HomePage \$69 each  
Corel DRAW 8 / WordPerfect V3.5 \$199/\$75  
Director V5/Studio6/Studio5 \$199/\$389/489/589  
DeBabelizer V3/ Dantz Retrospect4.1 \$199/99  
Extensis MaskPro2/PortFolio 199/109  
Extensis Preflight Pro/ PhotoGraphics \$269/99  
Extensis PhotoTool/OXTool4 \$129/129  
FileMaker Pro V2/4/1/Server3 \$49/99/169/589  
Final Cut Pro/FlightCheck/Upg. \$949/\$355/85  
Flash 4/ Freehand 8/DreamWeaver2 \$249 ea.  
Fontographer V4/Freehand V5 Studio \$199 ea.  
Freehand V8 Full Ver. only \$149  
FrameMaker V5/V5.5/FW/9 CD Tool \$389/489/339  
FWB Hand Disk Tool Kits PEV 3 \$39/89  
GoLive4/Infiniti-D V4/4.5 \$199/369/439  
Illustrator V5.7/8/9/Design \$89/189/249/489  
Kai's PowerTool LE/V3/V5 \$29/69/95  
Microsoft Office4.2/97Pro.2001 \$149/199/399  
Microsoft Office98/99/2000 \$99/199/349  
MediaCleanerPro4/QuarkXpress4 \$389/649  
Norton Utilities/Anti-Virus Bundle \$79 both  
Norton Utilities V3.5/4 NetObject \$39/49/89  
Painter3/4/5.5/FrontPage \$69/99/149/229/99  
Pantone Color Drive/Color WEB \$69 each  
PageMaker V5/6.5/PhotoFlash \$189/289/89  
Persuasion V3/V4 PowerPoint98 \$99/189/189  
PhotoFrame Vcl V2 \$89 ea. \$149 both  
Premiere LE/V3/V4/PhotoDux \$89/189/289/25  
QuarkXpress4/4.1 \$649/699  
Quick Book Pro V4/Quicken 7 \$179/35  
RayDream 3D/Studio V5.5 \$89/189/289  
SuiteCase3/9 Stuffit Deluxe 5.5 \$25/\$79/59  
SoundEdit16-DEC II/SwingSmart CD\$199/249/29  
StrataStudioProV2.5/VirtualPC \$489/635/149

### Apple G4(Dual Pro.) - \$2289

G3/266 DT/MT-SCSI/Floppy/Serial/\$989/1489  
G4-DualProcessor 450/500MHz \$2289/3289

**JAZ/ZIP, Hard DR. & CDR**  
400MB/1GB/2GB/3GB \$69/99/149/179  
4GB/6GB/9GB/18GB \$199/219/249/369

**Manager Specials**  
\*UMAX PowerLook 3000  
W/Transparency \$4889  
\*UMAX Mirage 11X17 \$795  
Apple 3000 Color Printer  
- Color Proof return\* \$989

Jaz ext. Dr. 1GB/2GB \$159/\$339  
Zip Dr. w/Cart. Int. / Ext. \$79/\$99  
Roch 4X2/8X w/Toast \$249  
Plexor CD-RW 12X/10X/32X /FWire \$389  
Apple DVD-ROM Dr. w/MPEG Decoder \$399  
DVD-RAM 5.2GB SCSI \$699

**COMBO Drives:**  
9GB + CD-RW Ext. SCSI \$599  
18GB AV + JAZ + CD-R \$999  
JAZ + ZIP \$249

**Tape Ext. Drive**  
SDT2000/4000/5000 \$199/399/499  
SDT7000/9000/10000 \$599/799/899  
DLT 30/40/60GB \$1189/1489/1989  
USB Drive - 30/45/60GB \$229/289/349

**Super RAID- Quantum/Seagate**  
**SCSI Case HH/FF \$29/49\***  
• 6GB/18GB RAID - \$329/369  
• 36GB/54GB RAID - \$589 / \$1289  
• 72GB / 108GB RAID - \$1489/\$1799  
• 144GB/216GB RAID - \$2089/\$3989  
• 288GB RAID - \$4499

### lomega

1.0GB Jaz \$75  
Zip \$10\*

**100MB SyDisk**  
44MB/88MB \$45/55  
200/230MB \$49/59  
E7135/230 \$29/39  
SyJet 1.5GB \$95  
**M.O. Cart.**  
128/230MB \$8/12  
640/650MB \$29/34  
1GB Tahiti \$89  
1.2/1.3GB \$49/59  
2.0/4.6GB \$149/189

**Close-Out**  
\*Targa 2000 Pro  
W/FinalCutPro3388  
\*Apple 1710 Color  
Monitor \$289\*  
\*128/256MB  
PC100 - \$149/289  
\*SyQuest 270/200MB  
Ext. Drive \$199/199  
\*Fujitsu 230MB MO /  
WANG DAT \$199 ea.  
\*SONY 650MB/1.3GB  
M.O. Dr. \$699/989  
\*AUTOCAD 14 \$889  
\*Comes V5-V6 \$249/339  
\*Conflict Catcher V3/4/8  
\$39/\$57  
\*M.S. Windows 98 Project  
98 \$69/99/289  
\*M.S. Words V5/V6/98  
\$89/189/269  
\*WordPerfect 3.5/Win  
dows 98 \$75/95

**Fax: 310-782-5974**  
<http://www.imagesolutions4u.com>  
E-Mail: [Imagesol4U@AOL.com](mailto:Imagesol4U@AOL.com)  
2443 208th Street #3 • Torrance, CA 90501

**Image Solutions**  
New Address  
208th St.  
Torrance

**800-352-3420**

**Infinity Micro**  
800-589-1234

**\$1799.**  
PowerBook  
G3/333

**\$1195.**  
iBook  
G3/300

**\$789.**  
iMac  
G3/350

**\$2195.**  
CUBE  
G4/500

**(800) 589-1234**

<http://www.infinity-micro.com>  
email us at: [Sales@infinity-micro.com](mailto:Sales@infinity-micro.com)

Mon-Friday 8AM-6PM. 24 HR. Online Ordering. 10917 W. PICO BLVD. LA, CA. 90064 Int. (310) 470-9426, Fax: (310) 470-4956

**PowerMacs**

DUAL G4/450 128/30GB/DVD/56K	2325
DUAL G4/500 256/40GB/DVD/56K	3049
CUBE G4/450 64/20GB/DVD/56K	1649
CUBE G4/500 128/30GB/DVD/56K	2095
CUBE G4/500 256/40GB/DVD/Radion	2495
G4/500 256/27GB/DVD/ZIP	2325
G4/450 256/27GB/DVD/ZIP	2095
G4/450 128/20G/Dvd/Z/56K/ZIP	1735
G4/400 128/20GB/DVD/56K/ZIP	1595
G4/400 64/10GB/CD/56K	1195
G4/400 64/10G/DVD/56K	1299
G4/400 64/20GB/DVD/56K	1499
G4/350 64/10GB/DVD/56K	1295
G4/350 64/10GB/DVD/56K	1099
G3/400 128/12G/24XCD/ZIP	1195
G3/400 64/6GB/DVD	985
G3/266DT 32/4G/24X	CALL
9600/233 32/4GB/CD	CALL
8600/300 32/4GB/CD/ZIP	795
7300/200 32/2G/24X*	345
4400/200 32/2GB/CD *	349
7200/120 32/1.2/8xCD*	349

**PowerBooks**

G3/500 128/20GB/DVD/14.1/56K	3399
G3/500 128/12G/DVD/14.1/56K	2895
G3/400 64/10GB/CD/56K/14.1"	2295
G3/400 64/6G/DVD/56K/14.1	2195
G3/333 64/4G/24X/56K/14.1	1795
G3/300 64/8G/DVD/56K/14.1	1695
G3/300 64/8G/CD/56K/14.1	1699
G3/266 64/4G/20X/56K/14.1*	1495
G3/233 32/2G/20X/56K/14.1*	1399
3400C/240 16/3GB/CD/MDM*	999
3400C/200 16/2GB/CD/MDM*	799

**iBooks**

G3/466 64/10gb/dvd/56 Graphite	1695
G3/366 64/10gb/cd/56K Indigo	1449
G3/366 64/6GB/Graphite	1495
G3/300 32/3.2GB Tangerine	1195
G3/300 32/3.2GB Blueberry	1195
G3/300 64/6GB/Blueberry	1395
G3/300 64/6GB/Tangerine	1485

**ViewSonic**

VPD150/VG151	
VE150/VG150B	
VGA-150/VE150B	
VG150/M50	
E655/Q55	
4492A/500XA	
447X5/447XPXO	
E773/Q75	
PF77/PF775	
GS773/G773	
PS775/44721	
E771/Q71	
EF70/800XA	
VG181/VPD180	
PF790/PS790	
E790/E790B	
GS790	
Q95/445PRO	
Q115/G5815	
445ZA/446XPXO-V	
800PRO +	
44721	

**Sony Dsc-D770**

895/995	
895/949	
995/995	
895/189	
169/159	
215/1099	
379/539	
259/299	
395/359	
299/289	
349/349	
229/219	
299/2895	
2595/2895	
495/399	
395/429	
449	
349/1095	
695/849	
895/749	
3099	
349	

**SONY**

E100/E210/E200L	199/359/349
E400/E500	529/1039
A200/G200	349/399
G400/G500	629/1099
CPDL181A/M151	2645/989
FW900/500PS	2399/1049

**3Com**

PALM IIIc	349
PALM VX	399
PALM VII	399
Palm VIIx	429

**EPSON**

Stylus Pro-XL 11x17	89
EPL5700I/LQ570E	389/279
Stylus 2000/3000	115/1049
Stylus 2500/2500PRO	295/379
Stylus 740/860	129/139
Stylus 850NE/900	439/249
Stylus 900G/760	239/139
Photo 1270/2000P	495/829
Photo 750/870	169/299
Photo 875dc	379
Pro 5000/5000f	2499/6395
Pro 7000/9000	3795/7495
Pro 9000Fiery	12499

**AGFA**

Duoscan HID/T1200	2395/675
Photo 780c	239
Snapscan 1212U/E40	99/179
SnapScan E50/Touch USB	99/109

**EPSON**

EXP. 1600/1600PRO	799/1299
EXP. 1600PROFB/SEFB	1039/745
1640XL/1200S	2179/295
1200U/1200UPHOTO	199/289
610/636U	109/99

**iMacs**

G3/500 SNOW 128/30GB/DVD/56	1489
G3/500 DVSE 128/30GB/DVD/56	1489
G3/450 DV+ Indigo 64/20GB/DVD	1289
G3/450 DV+ Ruby 64/20GB/DVD	1289
G3/450 DV+ Sage 64/20GB/DVD	1289
G3/400 DV Indigo 64/10GB/CD/56K	975
G3/400 DV Ruby 64/10GB/CD/56K	975
G3/400SE 128/13GB/DVD/56K	1095
G3/400 64/10GB/DVD/56K*	899
G3/350 64/6GB/24xCD	799
G3/333 32/6G/24XCD*	699
Server G3/350 128/20GB/DVD/A	1699
Server G3/450 256/2x9G/24X/A	1895
Server G4/500 256/18GB/DVD/A.S	3195

**18" LCD Monitor**  
\$1895.00

MAG INNOVISION LT530C 15" LCD \$ 875.00

**Apple 15" LCD**  
\$749.00 M7612LL/A  
\$899.00 M7928ZM/A

(\* ) reflects reconditioned products. Visa, MC and American Express Frature 500, Universities, Government & corporate p.o.'s are welcomed. Prices listed are cash discounted & are subject to change with out notice.!

Circle 202 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

**Got Memory?**

**MEMORY**

**512 MB \$429**  
Full Range Of G4s, iMacs 350/400, DV + 450/DV, SE 500

**256 MB \$209**  
Full Range Of G4 & PM G3s,  
PowerBook G3 400 FW,  
500 FW iBook /SE

**128 MB \$109**  
Full Range Of G4s and  
Power Mac G3s

**64 MB \$139**  
POWER MAC 6400 - 9600

**1-800-839-5762**  
For Latest Prices visit:  
[www.memoryworld.net](http://www.memoryworld.net)  
Mention this ad for FREE SHIPPING

**MEMORY**

**DATA MEMORY SYSTEMS - CALL 800-662-7466**

**Lifetime Memory Guarantee - 30 Day Money Back**

**AC Adapters**  
**Batteries**  
**Cables**  
**Camera Memory**  
**DIMMs**  
**MacCPU Upgrades**  
**Imega Stuff**  
**Modems**  
**Monitors**  
**Networking**  
**PowerBook Memory**  
**Printer Memory**  
**SDRAM**  
**SIMMs**  
**Storage Drives**  
**Surge Suppressors**

**Memory**

- PC66 SDRAM
- PC100 CL2/CL3
- PC133 SDRAM
- ECC & EDO

**Networking**

- Client/Server Systems
- Ethernet Cards & Conns.
- Hubs
- CAT5 Cabling

**DMS has all you need to network your business**

**Since 1986, DMS has provided customers with the best memory prices, guarantee and service anywhere!**

**Nothing has changed...**  
Secure Online Shopping  
[www.datamem.com](http://www.datamem.com)

**DMS DATA MEMORY SYSTEMS**  
24 Keewaydin Dr.  
Salem, NH 03079  
Fax: 603-898-6585

Circle 213 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

### Be a rocket scientist!

Some people think upgrading your Mac is rocket science. Well, become a rocket scientist, then! Astound your PC-using friends and neighbors by just upgrading



your own computer. It's easy, and you can do it yourself. We'll leave it up to you to tell them you had a little bit of help from us. After all, you did the actual work.



206 on card or [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

## MEMORY SPECIALISTS

- Printers
- Monitors
- Supplies
- Scanners
- Media
- Hard Drives
- Modems
- Software
- Accessories
- Cables/Adapters
- Mice/Input Devices
- Keyboards
- Network Products
- Hubs/NICS

Serving Mac User's Since 1991. We sell only NEW, Grade A Full MFG Spec Ram

Low Prices & Personalized Service



**Tahoe** Peripherals

5301 Longley Lane, Suite A-2, Reno, NV 89511 • Fax 775-823-2200  
[www.tahoeperipherals.com](http://www.tahoeperipherals.com)

**800-307-3434**

212 on card or [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

## WHY IS THE COMPETITION SHAKING?

BECAUSE  
**1-800-4-MEMORY**  
IS HERE

WE CAN **BEAT** ANY QUOTED PRICE ON ANY MEMORY FOR ANY COMPUTER (NOTEBOOK, DESKTOP, PRINTERS) ANYWHERE . . . PERIOD!

- LIFETIME WARRANTY
- FREE TECH SUPPORT
- NO CREDIT CARD SURCHARGE
- MOST ORDERS SHIPPED SAME DAY

CALL AROUND THEN CALL US

CHECK OUR WEB SITE FOR SPECIALS  
[WWW.18004MEMORY.COM](http://WWW.18004MEMORY.COM)

MacWorld **Get** info

[www.macworld.com/getinfo](http://www.macworld.com/getinfo)

# The LLB Company Inc.

1-800-848-8967

MEMORY MADNESS FROM THE LLB COMPANY

DIMMs	
<b>\$107</b> 128MB	
BEIGE G3- PC 66	
32MB4x64.....\$37	
64MB8x64.....\$55	
128MB16x64.....\$107	
256MB32x64.....\$270	
512MB64x128.....\$560	
<b>\$190</b> 64MB	
168 PIN EDO 3.3VOLT	
16MB2x64.....\$45	
32MB4x64.....\$89	
64MB8x64.....\$190	
<b>\$190</b> 64MB	
168 PIN EDO 5 VOLT	
16MB 2x64x.....\$44	
32MB 4x64.....\$90	
64MB 8x64.....\$190	

DIMMs	
<b>\$52</b> 64MB	
G4/BLUE/WHITE G3- PC100	
64MB8x64.....\$52	
128MB16x64.....\$104	
256MB32x64.....\$265	
512MB64x128.....\$549	
<b>\$80</b> 32MB	
168 PIN FAST PAGE DIMMS	
32MB4x64.....\$80	
64MB8x64.....\$190	
128MB16x64.....\$250	
<b>\$94</b> 32MB	
72 PIN FAST PAGE SIMMS	
8MB2x32.....\$22	
16MB4x32.....\$42	
32MB8x32.....\$94	

### IOMEGA

Zip Drive USB	*145
ZIP 100 disk	*10
ZIP 100 disks -3-pk	*28
ZIP 100 disks -10-pk	*89
Jaz 1GB disk	*89
Jaz 1GB disks - 5-pk	*405
Jaz 1GB disks - 20-pk	*1524

### NEWER TECHNOLOGY

For the PowerMac 6100 Series	
Maxpowr G3 210MHz/512K Cache	*250
Maxpowr G3 240MHz/1MB Cache	*299
NEW For the PowerMac 7500/8500/ Etc.	
Maxpowr G3 400MHz/1MB Cache	*414
Maxpowr G3 500MHz/1MB Cache	*549
NEW For the PowerMac G3 Series	
Maxpowr G3 400MHz/1MB Cache	*419
Maxpowr G3 500MHz/1MB Cache	*539

### Powerbook

WALL ST./ iMAC	iBOOK	PB 500 SERIES	PB3400 G3
256MB \$256	256MB \$256	32MB \$111	128MB \$208
128MB \$128	128MB \$128	16MB \$62	64MB \$125
64MB \$56	64MB \$56	8MB \$45	32MB \$75
32MB \$42	32MB \$42	4MB \$40	16MB \$60
PB PISMO SERIES	PB 5300 SERIES	PB1400 SERIES	PB 2400 SERIES
256MB \$252	48MB \$150	48MB Kit \$180	64MB \$135
128MB \$126	32MB \$120	24MB \$90	32MB \$95
64MB \$56	16MB \$60	16MB \$59	24MB \$80
32MB \$42	8MB \$55	8MB \$52	16MB \$75

### COMPARE OUR LOW SHIPPING RATES

E-Mail: [sales@llb.com](mailto:sales@llb.com)  
PO's accepted upon approval  
No surcharge on credit cards  
• Returns subject to restocking fee  
• Prices subject to change, not responsible for errors  
• International orders welcome  
Mail PO's to:  
2791 152nd Avenue N.E.  
Redmond, WA 98052

[www.llb.com](http://www.llb.com) International: 425.881.1880 Fax: 425.881.1930

Circle 209 on card or go to [www.macworld.com/getinfo](http://www.macworld.com/getinfo)

## Classifieds

**CD-ROM Replication by Oasis.** ISO-9002 certified manufacturing. Minimum quantity 200 CD's. Unique packaging options including Oasis Jewel-Free™ Box. [www.oasiscd.com](http://www.oasiscd.com) 888-296-2747

**DUST COVERS - KEYBOARD SKINS - CARRYING CASES.** Complete selection for the iMac and G-4. **800-872-1946** [www.abcomcorp.com](http://www.abcomcorp.com)

**POWERBOOK GUY - The premier source for powerbooks, parts, & accessories!** [www.powerbookguy.com](http://www.powerbookguy.com) (510) 533-5500

**APPLE MAC REPAIRS - Sales, Service, Parts.** Speak with a **LIVE REP!** **510-581-1370** or visit our website, [www.applemacrepairs.com](http://www.applemacrepairs.com)

**FREE MAC NEWS - Apple discounts, industry trends, new products!** [www.macdirectory.com/pages/newsdaily.html](http://www.macdirectory.com/pages/newsdaily.html)

**MacTreasures - Macintosh software not found on retail shelves.** URL: [www.mactreasures.com](http://www.mactreasures.com) (408) 227-1645

**ROLL CALL CHURCH MANAGEMENT SOFTWARE, ONLINE BIBLE BY THE BOOK** [www.bythebook.com](http://www.bythebook.com) or dial (800) 554-9116

**Macintosh web hosting & QuickTime streaming - Host your site on secure Mac servers - Publish your FileMaker database on the web - Access like an iDisk! - Stream QT Movies - Plans start @ \$100/year w/50MB of space.** [www.macserve.net](http://www.macserve.net)

Niki Stranz ([niki\\_stranz@macworld.com](mailto:niki_stranz@macworld.com))

Carol Johnstone ([carol\\_johnstone@macworld.com](mailto:carol_johnstone@macworld.com))

(800) 597-1594 or (415) 243-3600.

continued from page 164

with the chaos of multiple open windows. For this reason, your new Car OS X vehicle only lets you look out of one window at a time.

If you've been looking through the windshield, you can look out a side or back window simply by double-rapping on it. The windshield will disappear, and the window you rapped on will become available. (TIP: By pressing the option pedal as you double-rap a window, you can look through more than one at a time.)

### Driving Car OS X

You'll discover that Car OS X gives you an extremely smooth ride; in fact, because it's based on a powerful BSD 32-valve engine, it features full crash protection. Even if bad paving causes another car on the road to crash, you can continue driving Car OS X, unaffected.

Note, however, that Car OS X is crash proof only when you drive on roads that have been specially repaved (*Carbonized*). Over 200 municipalities worldwide have announced that they'll Carbonize selected streets for Car OS X compatibility.

But you're not limited to driving on Carbonized roads. Our engineers have built a special Classic Car chassis, right into your vehicle, that allows you to drive on any existing road—even those that haven't been updated for Car OS X compatibility.

To use this feature, simply drive your vehicle onto any older road. You may experience a considerable delay as Car OS X prepares the new chassis, which sits on top of the Car OS X chassis. Bear in mind that, on these non-Carbonized roads, you won't enjoy Car OS X advantages such as crash protection: if a pothole or drunken driver destabilizes your car, your vehicle may well crash. Even then, however, you don't have to buy a new car; you'll just find yourself back in your Car OS X vehicle, at the intersection from which you first turned onto un-updated roads.

### Expiration Date

Thank you for participating in the public test of Car OS X. Please note that Car OS X expires May 15, 2001—if you haven't expired first. ■

DAVID POGUE ([www.davidpogue.com](http://www.davidpogue.com)) is the author of *Mac OS 9: The Missing Manual* (Pogue Press/O'Reilly, 2000).

Opinion

The Desktop Critic

# MEMORY

OnLine Discounted Memory Pricing available only at [www.macsolutions.com](http://www.macsolutions.com)

## BEST PRICES!

MEMORY	mb	16	32	64	128	256	512	SPECIALS!!
G3/G4		- \$29	\$39	\$78	\$180	\$390		Mac® OS 8.1 CD only 25
iMac™ 350		- \$29	\$39	\$78	\$180			Norton Utilities 4.0 29
iMac™ 233-333		- \$29	\$39	\$78	\$180			FireWire 30gb 7200rpm ExtHD 329
iBook™		- \$29	\$39	\$78	\$180			FireWire 45gb 7200rpm ExtHD 399
PowerBook G3(98/99)		- \$29	\$39	\$78	\$180	\$390		FireWire 60gb 7200rpm ExtHD 599
168 pin DIMMs	\$21	\$42	\$84	\$144				
72 pin SIMMs	\$18	\$38						
30 pin SIMMs	\$17							

All prices are subject to change without notice. Not responsible for typographic errors. Limited to stock on hand.  
\*New Macs available for Walk-In sales only.

Authorized Dealer   Apple Specialist   Authorized Service Provider

MacSolutions, Inc. Fax: (310) 966-4433  
11933 Wilshire Blvd, West Los Angeles, CA 90025  
University & School P.O.'s Welcome. Ad code 1018

Call 800-873-3RAM or Order Online at [www.macsolutions.com](http://www.macsolutions.com)



DAVID POGUE

# Welcome to Car OS X Public Beta

PAY TO TRY AN  
UNFINISHED PRODUCT?  
JUST WAIT TILL OTHER  
INDUSTRIES CATCH ON

**C**ongratulations! Welcome to the public test drive of Car OS X. As you know, we at Apple Automotive generally work the bugs out of our new car designs on a private track with crash-test dummies. But now, for the first time, we've decided to let you—our living, breathing public—pay to help us discover the design defects in this brand-new concept car.

We think you'll find Car OS X, even in its prototype form, to be the most attractive, speedy, and stable vehicle available today. If this new design proves successful, we have no doubt that Microsoft Motors will be scrambling to imitate it for years to come.

Before you begin your test drive, read this booklet to learn how Car OS X differs from the cars you're used to (henceforth called *Classic* cars).

## Parking Tips

Do not attempt to park Car OS X until you are sure you can meet the minimum storage and fuel requirements. Car OS X should be filled with 128 gallons of gas, and it requires a garage with at least 5,000 square feet. (TIP: You can keep your old car in the same garage, but only if you first partition the garage using the Home Depot Temporary Wall utility.)

## Inside the Car

You may notice that the interior of Car OS X is strikingly clean and bare. We've done away with confusing storage cubbies such as the glove compartment, trunk, cup holders, and side pockets.

Instead, whenever you'd like to use an object inside Car OS X (such as a map, soda can, or food wrapper), simply drag it down onto what's called the *Floor*. Your belongings will remain fully visible on the Floor at all times.

As you put more and more items onto the Floor, previously Floored items move aside to make room. If the Floor gets very cluttered, your belongings will shrink to fit within the Floor's space. (TIP: If you're having trouble identifying an individual object when your Floor has become full, simply slide your foot through the items on the Floor. As you disturb the other items lying there, you can rotate the object in question enough to read its label, if available.)

## The Car OS X Window-Control Scheme

When he unveiled Car OS X at the Carworld Expo in Detroit last year, Apple Automotive's visionary Chief Design Officer Steve Jobs described the confusion most car owners feel when confronted



continues on page 163

The  
New!

# XANTÉ ColourLaser™



## Serious Color.

**Photo Quality Color • True Adobe® PostScript® 3™ • Up to 13" x 19" output • Starting at \$3,995**

The new XANTÉ® ColourLaser™ provides rich, full color and crisp text with resolutions up to 1200 x 1200 dpi on a wide range of media.

Combine oversize full bleed capabilities of 13" x 19" with true Adobe® PostScript® 3™, fast RISC processing, and sophisticated color management/matching capabilities and you've got the perfect color printing and proofing solution. Ranging from business printing to

high end graphics for the color conscious designer - XANTÉ has the right color printer to fit your needs.



Call 800-926-8839 ext.2167

fax 334-473-6503

[xante.com/mw6](http://xante.com/mw6)



Adobe® PostScript® 3™



©2000 XANTÉ CORPORATION. XANTÉ and XANTÉ ColourLaser are trademarks or registered trademarks of XANTÉ CORPORATION. Adobe, PostScript, PostScript 3 and the PostScript logo are trademarks of Adobe Systems Incorporated. PANTONE Fan Chip Logo and other Pantone, Inc. trademarks are the property of Pantone, Inc. XANTÉ CORPORATION. Post Office Box 16526, Mobile, AL 36616-0526, USA. Phone: 334-473-6502, Fax: 334-473-6503. [www.xante.com](http://www.xante.com)

# Yeah, we're one of those obnoxious over-achieving families.



**Turbo Mouse:** Runs successful Internet start-up.



**Orbit:** Handsome champion surfer.



**Mouse-in-a-Box:** Attending Yale this Fall.

You know the kind. Good at everything. Got it all. Loathed by everyone on the block. But our family's a little different — people can feel good about our success. Because for every generation of Mac® computers — from the venerable Mac Classic to the brand new Power Mac G4 Cube, we've created an equally dynamic generation of input devices people love. Our latest family is the first and only to offer USB and ADB connectivity. Whether you choose our entry level Mouse-in-a-Box®, the Orbit® trackball, or the more advanced Turbo Mouse®, you'll find yourself working smarter and more comfortably than ever. Who knows? Maybe you'll end up inspiring a little envy, too. Find out more about our input devices at [www.macfamily.kensington.com](http://www.macfamily.kensington.com).

**KENSINGTON**

Smart design at work.