A Redgate Publication

The Macintosh Buyer's Guide

Spring 1986 $5.00 U.S.

SPECIAL DESKTOP PUBLISHING SECTION:

Desktop Publishing Proves Beneficial

Images And Desktop Publishing

Electronic Publishing With PageMaker

Reviews Of ReadySetGo, MacPublisher II, Silicon Press, And Word

PLUS: More Than 800 Product Listings And Descriptions

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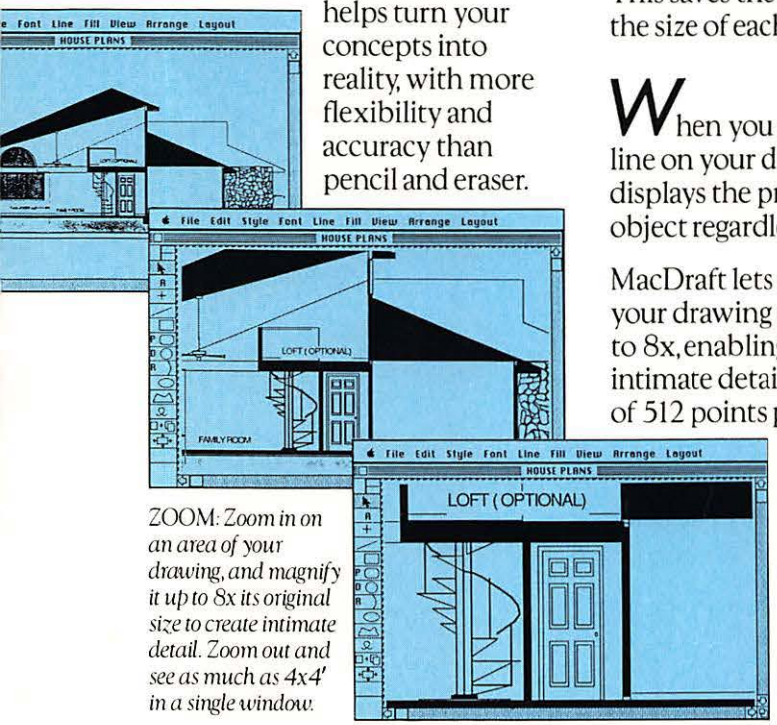
74470 19435 4

Presenting the end of drafting as we know it: MacDraft™ from idd

Now anyone can generate professional quality drawings quickly and easily with MacDraft from idd. Its ease of use will attract the most casual user, yet its sophistication will impress the professional as well.

This extraordinary Macintosh™ software lets you create scaled drawings so accurate, they can be used for construction or manufacturing applications. MacDraft helps turn your concepts into reality, with more flexibility and accuracy than pencil and eraser.

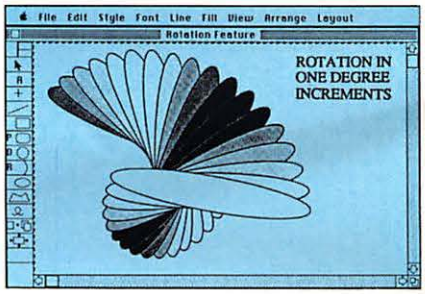


ZOOM: Zoom in on an area of your drawing, and magnify it up to 8x its original size to create intimate detail. Zoom out and see as much as 4x4' in a single window.

MacDraft offers a full complement of commonly used scales. Each has its own grid network. You create a library of frequently used shapes in any scale, copy and paste those shapes from one scale to another. Sizes will automatically be adjusted to the new scale. Work in decimals, fractions or metrics. Line lengths and angles are displayed to scale throughout the drawing process. This saves the task of computing the size of each object.

When you place a dimension line on your drawing, MacDraft displays the proper size of the object regardless of the scale.

MacDraft lets you zoom in on your drawing and magnify it up to 8x, enabling you to draw in intimate detail. With a resolution of 512 points per inch, you draw with amazing precision. Zoom out and see as much as 4x4' in a single window. You maintain full drawing capabilities at any view.



ROTATE: Turn objects the way you want them, 1° at a time, through a 360° cycle.

Objects can be rotated singly or in groups, 1° at a time, through a full 360°. This allows you to place objects anywhere on the document with incredible precision.

MacDraft allows you to automatically distribute multiple objects along a line—even if those objects are not the same.

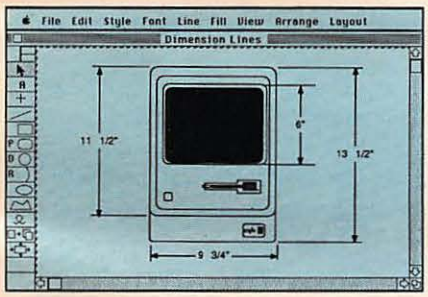
Create rectangles with rounded corners. The corners are in proportion to the rectangle's size to prevent distortion. Dynamically change the radius of these corners to any size, based on scale.

Draw circles in one of two easy ways. To project between two points, choose circle by diameter. To project about a center point, choose circle by radius. Draw arcs in 2 ways: 1—Define the length

MacDraft runs on a Macintosh™ 512K or XL and is compatible with the LaserWriter.™ MacDraft is a trademark of Innovative Data Design, Inc. MacDraw, MacPaint and LaserWriter are trademarks of Apple Computer, Inc. Macintosh is a trademark licensed to Apple Computer, Inc.

of the radius and project the arc to the desired angle; 2—Define any three points the arc passes through.

For irregular shapes use MacDraft's polygon and freehand drawing tools, including dynamic editing and automatic closure. MacDraft will smooth your polygon or freehand shape to give you a contoured effect. Add line segments to your polygon or extra points to your freehand shape after each has been created.



DIMENSION LINES: MacDraft will display the proper size of the object, regardless of the scale of the drawing.

The continuous drawing mode allows you to maintain the flow of drawing. If you draw beyond the current viewing window, MacDraft will automatically scroll in that direction.

MacDraft offers 9 different line styles including thick, thin and even --- dashed. Sophisticated text-editing lets you type letters, numbers and punctuation. These can be displayed in a variety of types and sizes.

MacDraft conforms to the Macintosh™ concept of copy and paste, allowing you to paste in objects from other applications such as MacPaint™ and MacDraw.™

Incredibly, MacDraft is only $239. A good old-fashioned value that just may convince you to put away your drafting pencil. Forever!

Fill pattern and line style indicators.

Pointer selects, edits, moves objects

Text editing and insertion mode

Draws horizontal or vertical lines

Draws diagonal lines

Draws square-cornered rectangles

Draws rounded-corner rectangles w/proportional or constant radii

Draws circles by diameter or radius

Draws arcs by radius or 3 points

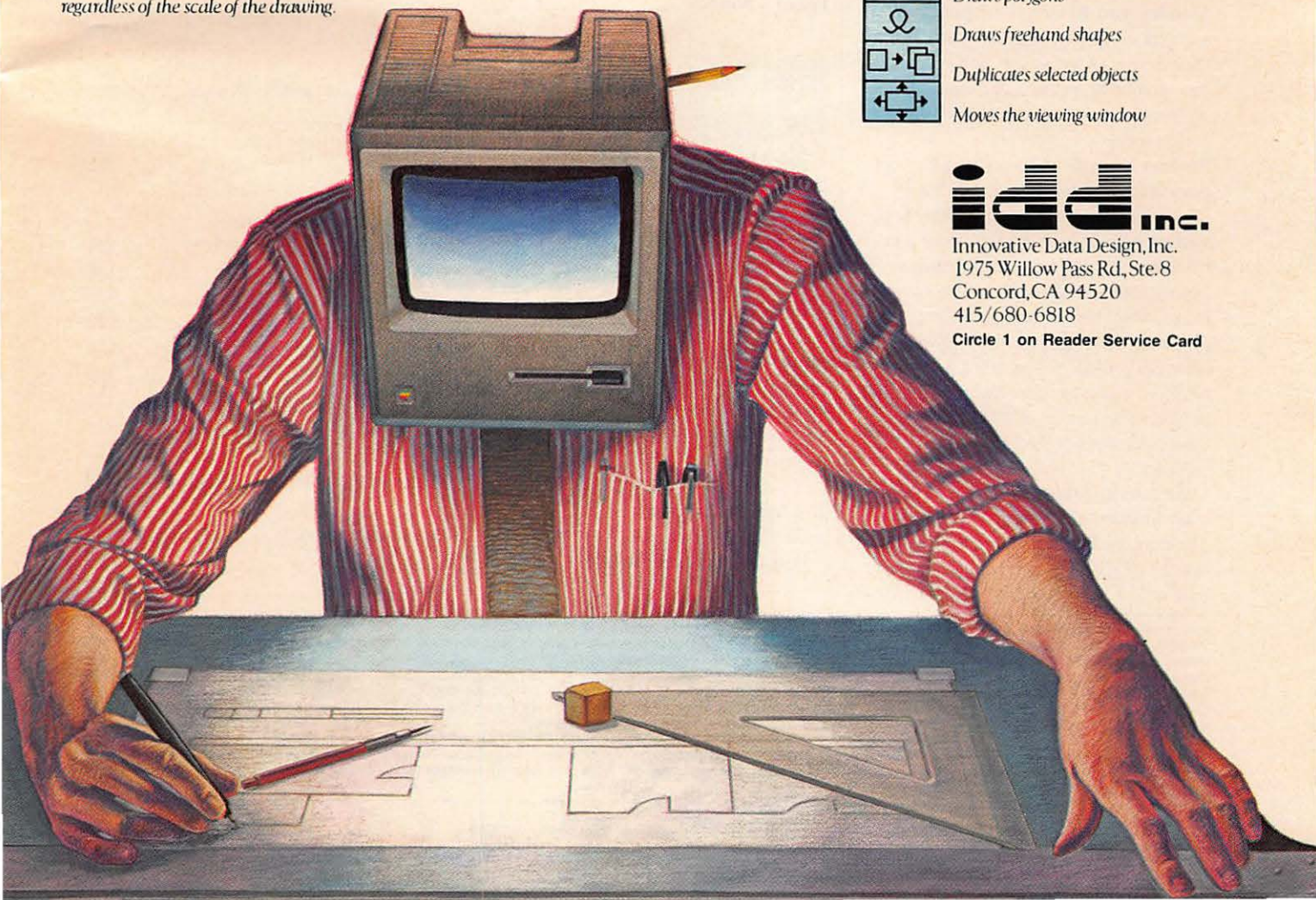
Draws ovals

Draws polygons

Draws freehand shapes

Duplicates selected objects

Moves the viewing window



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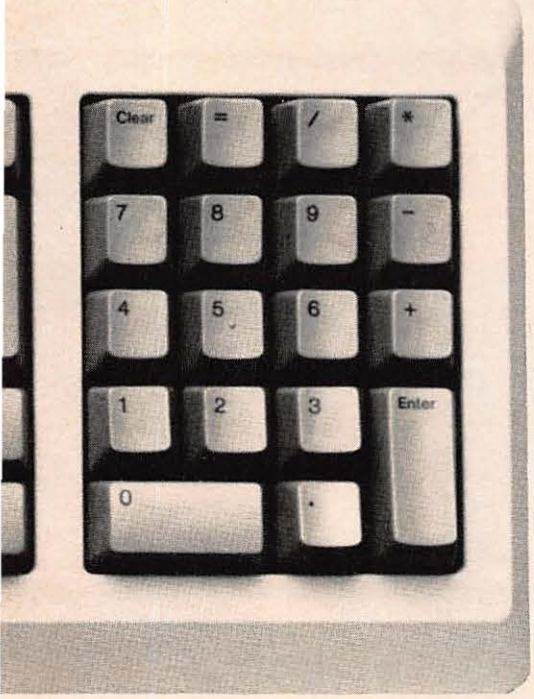

About This Guide...

Articles And Reviews: Articles in this issue were written on assignment and reflect the expertise of the writers. Software reviews were written by independent writers and Macintosh users and are *not* based on information supplied by vendors.

Product Directory: This section includes every Macintosh product for which we received a response from our mailing to all Macintosh product developers in our data base. The products are listed by category and are listed alphabetically within categories, primarily by product name. *Note:* An exception to product-name headings will occur whenever a single vendor has a number of products within the same category. In these instances, the heading will be the name of the vendor and not the names of the products.

The "Product Directory" also includes many products identified with a box (■). These are Macintosh products that are either new or are simply being listed for the first time in *The Macintosh Buyer's Guide.* These descriptions may be longer than the others and may contain photos or screen images when available.

Disclaimers: Product descriptions, prices, availability and other information in the "Product Directory" were supplied by manufacturers and vendors and do not constitute an endorsement by the publishing company, Redgate Communications Corporation. The publishing company does not assume any responsibility for the accuracy of these product descriptions nor the suitability of any product for specific tasks.

Software reviews and articles reflect the opinions of the writers and do not necessarily reflect the opinions of the publishing company.

Redgate Communications Corporation recommends that the reader make no purchasing decisions based solely upon the information in *The Macintosh Buyer's Guide.* Any decision to buy should be made only after careful personal evaluation of the product, the manufacturer and the dealer involved.

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THE WORLD OF HELIX EVOLVES

you believed in the promise,
because you could almost taste it;
a technology with a new feel—
dynamic, personal, and powerful.
now, for you,
the world of Helix has evolved...

NOW YOU BUSINESS CAN DO MORE

The Helix environment from Odesta Corporation is based on the idea that, above all, systems should be responsive to the needs of the people they serve. That whatever stands between you and the information you need is an obstacle, not a feature. That technology should narrow the gap—enabling you to do what you do best, and to get it done quickly.

Helix is a data-based applications environment, since the core of any business system is most properly a data-based foundation.

Helix has evolved—in response to a year of learning what you have been doing with Helix; from listening to you tell us what you want next; through exploiting opportunities afforded by advanced technology.

Helix is an active, evolving environment. Today, Helix addresses the full range of business needs. Double Helix—development of tailored, secure applications. MultiUser Helix—sharing information in a multiuser network. RunTime Helix—runtime generation for applications publishing. Remote Helix—off-site access to the corporate information base.

ODESTA HELIX

Helix is a complete data-based information management and decision support system. It provides a data-based "pool" into which you can put all kinds of information—text, numbers, pictures or ASCII data-communications.

Helix—the system solution
Once information is entered, it is then just as easy to examine from any angle, and use in any application. From reports, lists, and mail merge letters to analyses and interactive searches. All within Helix.

Programming not required
You don't have to learn a query language, spreadsheet formulae, report formatting or data-base algebra. You don't have to know a programming language or battle with command codes, modes, or imposed structure.

All you need with Helix is the desire to improve your business management and administrative systems.

$395

ODESTA Double HELIX

Custom menus and more
Now you can develop and then customize even more new, powerful applications. To the Helix environment, Double Helix adds subforms, the fast creation of custom menus, password protection, data validation, extended data import and export capabilities, and optimized performance characteristics. Of course, anything already built with Helix version 2.0 may be automatically updated to Double Helix.

Build it up, lock it down, keep the key
Double Helix lets you design a complete system to run a small business, medium office, or large departmental project. Custom menus then make the whole system easy to use by clearly associating forms with functions. Password protection lets you lock it down to prevent unauthorized changes. Yet, since one of the main features of the Helix environment is its ability to change as conditions change, you or your key users can easily make modifications on an as-needed basis.

$495

A system that you can mix and match, and that expands as your needs grow. For cor

AND YOUR OF WHAT YOU DO BEST

MultiUserHELIX

The promise of a network
The idea of running a business using shared information in a direct and affordable way has been one of the premises and promises of the "computer revolution" since it began. In a number of important respects, MultiUser Helix is the first fulfillment of that promise.

Just plug it in
You don't have to worry about a "file server" or other special hardware or software. MultiUser Helix turns any hard disk into the host for a whole network. Just by using the "visit" command, you can be working within a dynamically interactive network, in which all windows are updated automatically.

The benefits of a breakthrough
With MultiUser Helix, everyone within a company or department can work from common project, inventory, customer, ordering or financial information. The direct benefits from both an operational and management perspective are dramatic.

$695-$2500

RunTimeHELIX

Now, you can publish your own Helix applications with RunTime Helix. Any application built with Double Helix can be run through the runtime generator, creating a stand-alone program for sale or distribution.

Start a whole new business
If you are an existing VAR, or an up-and-coming entrepreneur, here is the opportunity to leverage the dynamic attraction and functionality of Helix applications into a wide range of new business.

The birth of applications publishing
Or you can easily provide a variety of applications to others within your organization — from expense reports to sales tracking; from departmental phone lists to project coordination.

By offering an organizational site licensing program for RunTime Helix, Odesta helps you bring a new dimension to the concept of "desktop publishing" — the in-house publishing of specialized applications.

$500/10 applications
(site license available)

REMOTEHELIX

Close the circle with Remote Helix — the way to communicate with your central Helix information base from the field, home, or satellite office — anytime.

A modem, and then magic
You can modem straight into your "central" Helix, and be immediately on-line...as if you were working directly in your main office. And, if you are running a MultiUser Helix environment, Remote Helix will log you on as a live member of the network.

System access from anywhere
Receive orders from, or transmit information to, your sales force in the field; tie sites together for communication and coordination; or have 24-hour access to the heart of your business, no matter where you are. With Remote Helix, global telecommunication becomes an information management tool for you to use, now.

$150

e departments, small business/professional services, independent consultants, research establishments...

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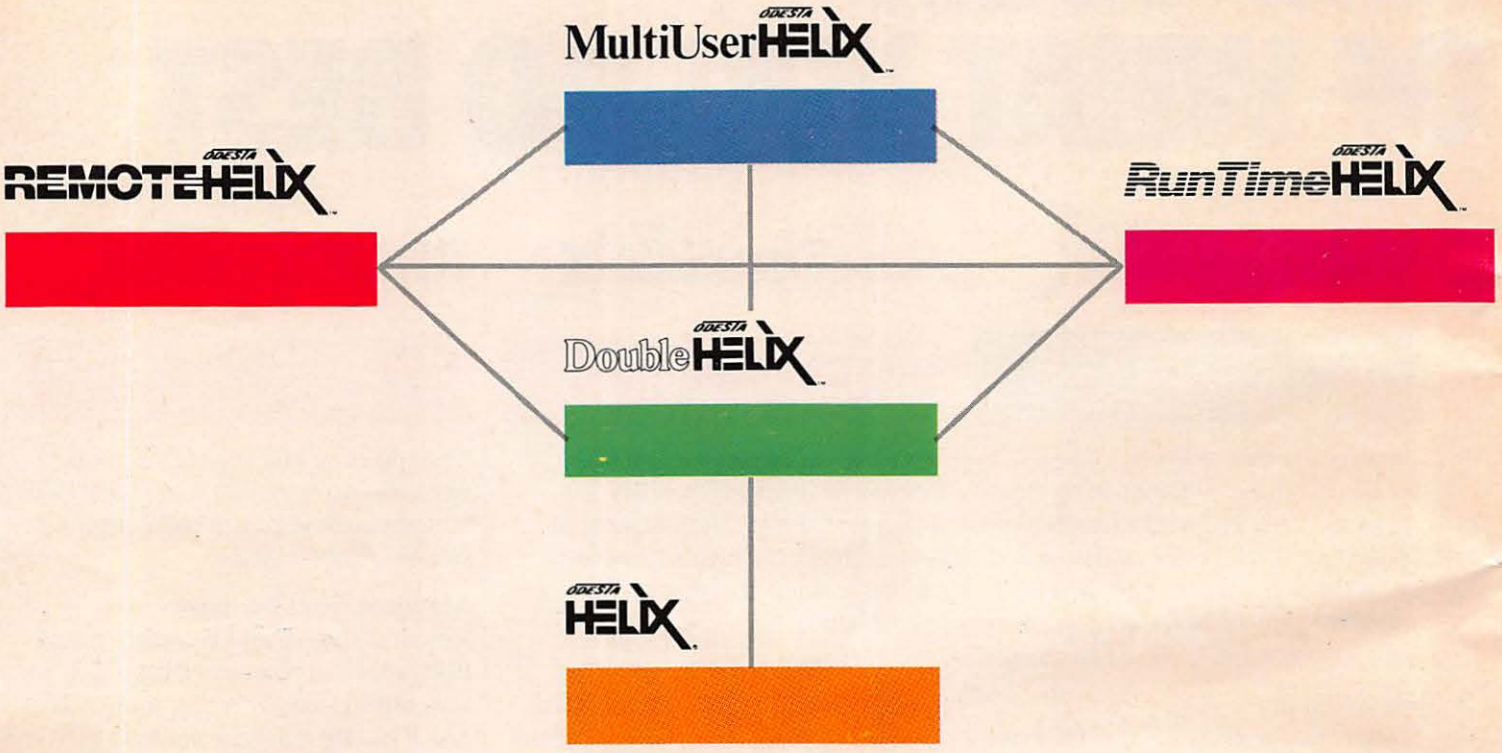
MAKE THE NATURAL SELECTION



Why choose Helix?
The Helix environment is a unique system solution addressing the full range of business needs.

Within the Helix environment you can design and develop applications, share them in a Helix-based multiuser network, publish them, and communicate with them from remote sites. This cannot be said of any other product or product line.

Whatever you built with Helix version 2.0 can be updated to a Double Helix application. The Double Helix application you work on today can be stamped out as a RunTime Helix application tomorrow, or may be used by a number of people with MultiUser Helix when you are ready. Remote Helix bundled with RunTime or Double Helix offers both log-on and local capabilities.

Why choose Helix?
The Helix approach is the alternative to the past. It takes you beyond outmoded design concepts. It takes you beyond aggravating restrictions and absurd limitations. It makes it unnecessary to know anything about schemas, data dictionaries, fileservers, semaphores or protocols. It even lets you mix and match its different variations according to your changing needs.

Odesta Corporation
4084 Commercial Avenue
Northbrook, IL 60062 U.S.A.
800-323-5423 (IL: 312-498-5615)

Why choose Helix?
- Take the hands-on knowledge you have of your business now.
- Combine it with a powerful software and hardware technology that requires very little training and almost no support.
- Then receive the real benefits of computerization—efficiency, organization, and the ability to manage, share, evaluate, and communicate information.
- Now you have a system that magnifies your strengths and deflects the thousand arrows of distracting detail and lack of up-to-date information that lead to continuous crisis management and lost opportunities.
- And you can easily develop and change that Helix system faster than you can change the paper forms you now use. So that changes in products, personnel, production, procedures, projects and pricing are made as you need them.

The Macintosh Buyer's Guide

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A New VisiCalc?

They said it couldn't be done, but Apple has produced a new horizontal application for personal computers.

"It's the *Visicalc* of the 80s." Those are the words of John Scull, product marketing manager at Apple Computer, Inc., when he talks about the desktop publishing concept. For those who don't remember the early days of personal computing, there wasn't much for an ordinary person to do with these strange machines. Only those with strong technical abilities and those interested in programming could make the personal computer do anything worthwhile.

Then came *Visicalc,* the first electronic spreadsheet, and everything changed. Suddenly an ordinary person could do simple or complex financial planning and crunch numbers at breathtaking speed—and all without any programming skills. At the same time, Apple Computer, Inc. was producing the first personal computer that anyone could use—without any technical skills.

The combination and the timing were perfect. *Visicalc* gave Apple Computer its big chance in the market, and the rest is history.

So, when Scull talks about the *Visicalc* of the '80s, he's not talking about another spreadsheet. He's talking about the effect desktop publishing will have on ordinary people and companies and, of course, the effect it will have on Apple Computer.

We agree with Scull's analogy. In the first place, everyone who puts out printed information of any kind will appreciate the benefits of having a complete, computerized typesetting and layout operation on the top of an ordinary office desk, at the same price as some fancy copiers. This means big business for Apple Computer, because the number of people and companies putting out printed information is in the millions.

Second, to continue the analogy, Apple has just introduced some new hardware—the Macintosh Plus and Laserwriter Plus. These make the easy-to-use Macintosh family even more attractive for users in this huge market. See the Hardware section of this issue for complete descriptions of these products.

And third, there is tremendous software support for the concept. At least three page-makeup programs of varying sophistication have been released, and more are sure to come. Several additional fonts are now available for the Laserwriter from Apple and other vendors. And, as you'll see inside this issue, many other products are on the market or will soon be available to broaden the appeal and utility of desktop publishing.

The analogy is complete—a new concept, software and technology for ordinary folks, all of it easy to use and to afford. In this issue, we've tried to provide you with solid information on the technology in the form of articles, reviews, a case history and product descriptions.

On top of our coverage of the desktop publishing theme, we have included our usual comprehensive listing of Macintosh products. Included are products from vendors who responded to our quarterly questionnaire. We get the product information you find in our directory by mailing a product-listing form to every vendor in our data base, compiled from all issues of this magazine and from several other sources.

The purpose is to provide you with only the most current information. We do not list any products from vendors who do not respond.

If you have any comments about the usefulness of *The Macintosh Buyer's Guide,* please get in touch with us. Many of the changes you see from issue to issue are a direct result of reader suggestions.

And please send us article ideas for our next edition, which will concentrate on communications uses of the Macintosh. Perhaps you know of some unusual or particularly successful application in that area.

—Tom Kempf
Managing Editor

Desktop Publishing Is Proving Itself Beneficial

This new application is already reaching into every corner of personal and corporate computing, providing thousands of ordinary users with advanced publishing capabilities.

Every time someone in the computer industry claims to have a revolutionary new application, nearly everyone scoffs. They look at the idea with a suspicion similar to that of kids checking out a new kid in the neighborhood—guilty until proven innocent, weak until proven tough, chicken until proven brave.

So, when John Scull, product marketing manager at Apple Computer, Inc., says, "Desktop publishing is the "*Visicalc* of the '80s," more than a few eyebrows go up. The skepticism in the industry and among users is understandable, since most people could not imagine that there could ever be another horizontal application such as word processing, spreadsheets and data bases. "Prove it," they said.

And prove it, Apple did. Before we begin delving into the details, however, let's see if we can define desktop publishing for those who are still unsure.

Desktop publishing is a computer-driven application that allows typeset-quality documents and graphics to be quickly and entirely produced with equipment that fits on an ordinary desktop, costs less than $10,000 and can be operated by anyone—even corporate presidents.

Now let's see why desktop publishing has caught on so fast. First, it's a real application. It exists. People today are buying, using and adding to their desktop publishing operations. Thousands of individuals, small businesses, corporate departments and just about any other entity you can think of are finding uses for the technology. On top of that, people keep finding more to do with their equipment once they begin using it.

Second, it's practical. People and businesses are saving money and time by doing much—or all—of their typeset documents in-house. On the screen, a user can move graphics around, switch page 3 with page 5, move an article from here to there and generally experiment endlessly. Even after the document is printed, it's a small matter to call it up, make changes and print it again.

Third, the products available now are of high quality, are readily available at reasonable prices and are nonthreatening. This means that people can see themselves actually creating documents on the system. They can see themselves affording it, too. And they can see themselves creating high-impact materials that will stand out in the avalanche of paper that buries every one of us every day.

And finally, Apple Computer, Inc. has made a major company commitment to the technology. "It's a market that didn't even exist before 1985," says Scull, "and Apple can take credit for its existence today. The Macintosh computer and Laserwriter printer made it all possible."

The company's commitment is further enhanced by its determination to assure that existing Macintosh software is compatible with the Laserwriter printer and desktop publishing software. All it takes is a simple installation program, provided by Apple, to make existing software ready for use in the desktop publishing environment.

"Here's what it takes to set yourself up in desktop publishing," says Scull. "A Macintosh 512K or Plus, a Laserwriter or Laserwriter Plus and the appropriate software. We recommend buying a second disk drive or a hard disk for speed and efficiency of operation."

Basic software is usually a word processing program such as *Macwrite* or *Microsoft Word;* a graphics program such as *Macpaint, Macdraft, Microsoft Chart* or any of several others; a page-makeup program such as *Pagemaker, Readysetgo* or *Macpublisher;* and the specific software you need for your applications.

There are many software programs that are particularly useful for desktop publishing in a multitude of applications. Among these are forms generators such as *Megaform,* font collections such as those from Adobe Systems

M.I.S. REPORT

An information resource for data processing professionals

Volume 1; No. 6

EXECUTIVE ROUND TABLE

MIS Budget Trends For 1986

■ *M.I.S. Report* recently talked to a group of MIS executives from a cross section of major U.S. companies about the budgeting picture for 1986. Most report slight increases in ov... numbers while several are looking at d...

"Our expenditu... is year, bu... amount will no... Bill Dimoulas ... r the Chemi... ill be on pr...

... Mc- ... ement a... s incre... w... , direct... inf... & Joh... he's ... y a four p... in 1986...

Cost-cutti... easures

Executives from two of the companies i... are decreasing MIS expenditures in 1986. Ja... director of technology and development for He... says while the overall corporate budget will be up... has been able to lower his costs in both office automation and telecommunications areas. He says that a buy out of rental equipment can be an effective cost-cutting measure.

The likely demise of the investment tax credit contributed to Kocher's savings. "It added impetus for swapping one computer for another," he explains. "We were able to get a better deal, since the people who were lending money wanted to make sure they got the tax credit."

Bruce Curry, director in charge, Computer Resource Department, Peat Marwick, says his firm

(Continued on page 4)

TRENDS AND FUTURE

A Voracious Appetite For Personal Computers

the... than... volum... compute... third of the... installed co...

Desktop Publishing

and Century Software and clip art management systems such as *Picturebase.* These and many others will surely be collected by most users of desktop publishing, as the potential becomes evident to each of them.

And, should a user need highly sophisticated typesetting programs to use on the Macintosh, they are available. *Micro Tex,* from Addison-Wesley, and *Justext,* from Knowledge Engineering, are two examples of command-driven, typesetting-style programs.

Another interesting software product is *Filemaker,* from Forethought, Inc. It not only allows the design of forms on screen, but also allows the user to fill them out and file the information in a data base. *Filemaker* provides a report generator and graphics, for dynamic and impressive output.

In addition to many software choices, the user has hardware-output options. Even though the Laserwriter provides excellent quality for most desktop-publishing applications, higher resolution output can be obtained using the same disk and program.

This is made possible because the Laserwriter is driven by Postscript, a typesetting language also used by more sophisticated equipment. The result is that without modification—and with the same cable—the Macintosh can plug directly into high-end, Postscript-compatible phototypesetters such as the Linotype Linotronic 100 and 300. Quality, then, is no longer an issue—it's an option.

One important part of deciding whether or not desktop publishing fits into your work style is to study the various ways other people use the technology. One vital use is for important correspondence. A personalized letter will have tremendous impact if it looks like it has been typeset.

Another major use of desktop publishing is for documentation. This is the publishing of manuals, newsletters, data sheets, price lists, brochures, magazines and small books—anything that is several pages long. One real advantage is that data is easy and fast to change when necessary, and you still have professional looking documents.

With desktop publishing, it's possible for a company to have a new typeset price list every week—if prices change often—without the expense and inconvenience of going to the print shop. The alternatives are to accumulate price changes and reprint price lists less often—and lose money—or to distribute typewritten pages that don't look first class—and lose image.

Forms design and printing is also a popular use for desktop publishing. Consider the number of different forms you use every year, and how much you wish you could make minor changes without reprinting all the forms. You can also print an original and only duplicate a small number of a form that doesn't get used often, and create forms on a one-at-a-time basis. If you think about it, this use alone can justify the cost of the system for many businesses.

One high-visibility use of desktop publishing is in making business presentations. A company or individual can quickly create an array of impressive materials for sales presentations, business meetings or any time data must be presented to clients or groups of people.

These materials can include overhead transparencies, slides from plotter output, printed documents that include color graphics and illustrations, output from 35mm film recorders and more. Flip charts used by salespeople can be professionally created and easily updated when information changes or new ideas emerge.

Still another use for desktop publishing is in the creation of original art or in the production of art for commercial purposes. The ability of the computer to create, remember, forget and change graphic data at the operator's will is a creative and timesaving advantage that has sent thousands of artists to their local computer stores to buy a Macintosh.

Today's scanners can take any artwork or other graphic—even objects—and create electronic images that the Macintosh user can manipulate and use in other documents. For example, there are video scanners that will turn anything that can be placed in front of the lens into a Macintosh image. Another digitizer replaces the ribbon cartridge on an Imagewriter printer and scans anything that can be rolled through. Newest on the scene is the Abaton Scan 300, a high-resolution scanner that reproduces with remarkable clarity the images rolled through its innards.

Some scanners and printers join forces to print in color, as well. This market is just beginning to explode, and more amazing capabilities are sure to be available soon.

Commercial design is a major artistic field that has found hundreds of uses for the Macintosh and its graphic abilities. Floor plans, landscaping, placement of furniture, exterior design and a multitude of other practical activities come easy to the designer using a Macintosh.

"Most desktop publishing uses have one basic element in common," says Scull. "They all benefit from the fact that an individual or business can make immediate changes in any typeset material. They can maintain high quality and high impact at low cost, all under control of the user. This alone will encourage many to clear a desktop and start publishing."

Let's look at a few specific business types and see how they are using desktop publishing to enhance their images and improve their efficiency.

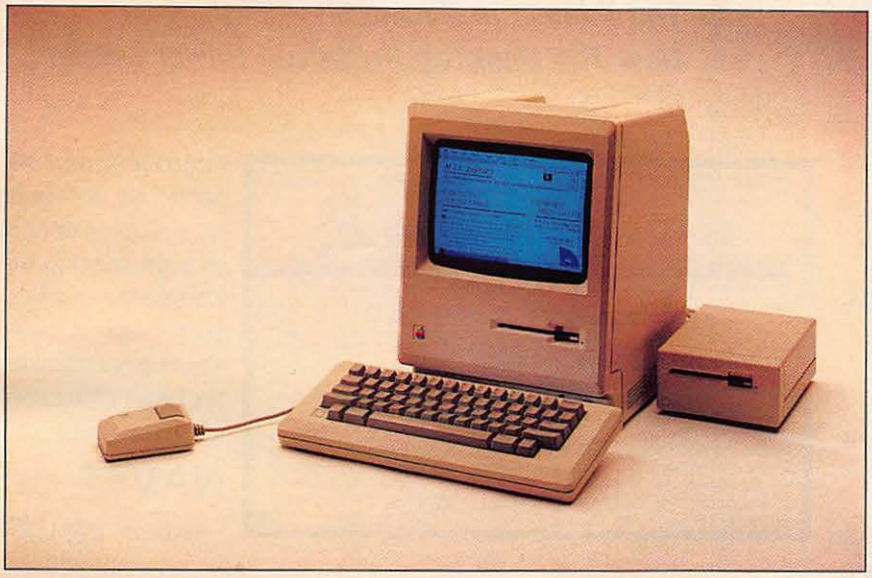
Communications firms make up a large group of users. These include advertising agencies, public relations firms, publishers, graphics houses, printers and even quick-copy centers. Several chains of quick-printing stores such as Alpha Graphics, Sir Speedy and Kinkos, have set up do-it-yourself design centers using the Macintosh. Customers come into the stores, create their own documents and have them reproduced on the spot.

There are services like this that use the high-resolution, professional typesetters, too. This means that anyone who owns a Macintosh has direct access to the highest quality typesetting services available.

News weeklies, shopping guides and other tabloid-type, private publications are saving large percentages of their production costs with desktop publishing technology. They now find it much faster and better to produce ads, change copy, edit and generally produce their editorial and advertising products.

Corporations make up another large user group for desktop publishing. Sales and marketing departments use the technology to produce sales flyers, price lists, proposals and all of the many printed communications and forms they use. Human resource areas use it for training, overhead transparencies and to make employee forms of all kinds. Technical documentation is also easier. It includes product literature and specification sheets, instruction booklets and parts lists.

We find another large group of desktop publishing users in education, government and nonprofit organizations. They use the



technology for curriculums, teaching, presentations, reports, bulletins, administrative tasks and much more. The government has a tremendous need in this area because of the necessity to provide updated information in a timely way. All of these organizations are under pressure to hold costs down, and desktop publishing fills the bill there, too.

Others have created a business out of the technology. Their ads tell Macintosh owners to produce documents at home and then send them or bring them for output on the laserwriter or other typesetting equipment. Many of these new companies will also help a user create material on the Macintosh—for a fee, of course. Others will provide the use of a Macintosh in their offices, for those who don't have one at home.

The latest network technology also makes desktop publishing more attractive for many businesses. Not only does the Appletalk Personal Network bring together many Apple computers to share expensive peripherals such as the Laserwriter, but there are also products to bring the IBM PC and other computers onto the network. These allow other PCs to gain access to the Appletalk network, share text and data files and access peripherals. Other products allow 5¼-inch MS-DOS disks to be read into *Macwrite*.

The availability of reliable networking products will certainly expand the use of desktop publishing in thousands of large companies.

"The reason desktop publishing will become an inevitable choice in business," says Scull, "is that we, as a society, are drowning in information. We are subject to information overload because the volume of information we produce is now doubling every two years.

"In this environment we must learn how to communicate more effectively at all levels—regardless of organization type or size. Coming up with an idea isn't enough. It must be communicated with real impact. All of this must take place in a time when we have smaller budgets and less time in which to communicate these ideas.

"Desktop publishing is a big part of the solution. It doesn't matter how small or large the company, desktop publishing's low cost, timesaving features and control capabilities have got to be attractive. At some point most organizations will need to get involved."

The message here is that if you can make practical use of desktop publishing capabilities, don't wait. It's already a proven technology. Individuals and businesses are using it today all over the world, and everything you need to get started is on the shelf at hundreds of computer stores and other outlets. It's an offer you can't refuse.

—Tom Kempf

The author is managing editor of The Macintosh Buyer's Guide.

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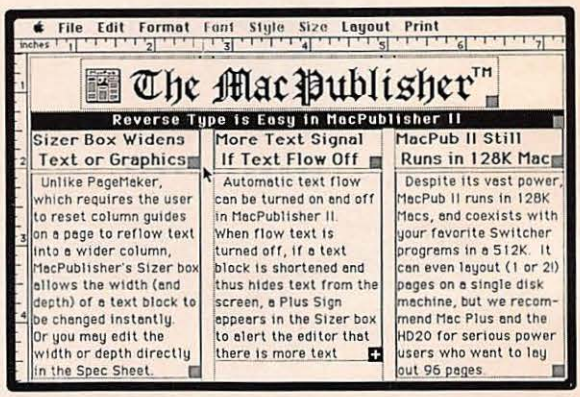

Page Designers seeking perfection in their display type require Kerning to change spacing between letterpairs – making them even touch or over–lap. Kerning is critical to control LaserWriter spacing idiosyncracies.

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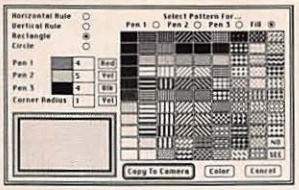

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MACPUBLISHING COMPETITION

	MacPublisher II $195.00	ReadySetGo 2.1 $195.00	PageMaker 1.1 $495.00
Text Editing			
Open MacWrite	YES	NO	YES
Open Microsoft Word	YES	NO	YES
Open Text Files	YES	YES	YES
Save Edited Documents	YES	NO	NO
Graphics Editing			
Open MacPaint/MacDraw	YES	NO	YES
Crop/Resize/Scale Pictures	YES	YES	YES
Rules	100's	SOME	15
Borders	100's	SOME	13
Shades of Gray	9	4	5
Fill Patterns	99	NO	8
Special Features			
Display Page Sizes	10	2	5
Auto Column Grid	48	NO	10
Master Repeating Items	YES	NO	YES
Page Margins	YES	NO	YES
Alternate L/R Format	YES	NO	YES
Snap to Guides	YES	NO	YES
Flow Text	YES	YES	YES
Swap Pages	YES	NO	NO
Auto Page Numbering	YES	NO	YES
Auto "Cont on page" Lines	YES	NO	NO
Auto Table of Contents	YES	NO	NO
Auto Save Work	YES	NO	NO
Command Key Equivalent	32	10	17
Line Justification	Letter Space	Word Space	Word Space
Depth Justification	YES	NO	NO
Discretionary Hyphens	YES	NO	YES
Kerning (Auto/Manual)	YES	NO	NO
How Position Items	Mouse/Edit	Mouse/Edit	Mouse
Telecommunications	YES	NO	NO
Specifications			
Memory Required	128K	512K	512K
Maximum Number Pages	96	40	16
Color on ImageWriter II	YES	NO	NO
Support Cursor Keys MacPlus	YES	NO	NO
Support Downloadable Fonts	YES	YES	NO

Images

And Desktop Publishing In The Communication Age

The Macintosh has given wings to Alvin Toffler's prophetic comments in The Third Wave, *as follows: "The communications revolution gives us each a more complex image of self. It speeds the very process by which we "try on" different images and self...and, in fact, accelerates our movement through successive images. It makes it possible for us to project our image electronically to the world...in no previous civilization have we ever had such powerful tools. We increasingly own the technology of consciousness."*

Recently, we have begun to recognize the limitations that the language used to express ideas during the Industrial Age placed on us individually and as a society. We are now demanding and using images to improve some of these limitations and to regain our inner balance. This period of change will effect our society even more dramatically than the changes we experienced during the Industrial Age.

Some of the ways we can use images to bring us back into balance are in discerning and unfolding our inner nature, setting and achieving goals and enhancing creativity.

In the first case, we try on images in our personal communications, using successive images as they feel appropriate to us. The images we use on our letterhead or to illustrate a paper can tell us how we perceive ourselves.

The second case was described by Charles Garfield, author of *Peak Performance,* in an interview on the radio program *New Dimensions,* who said: "Peak performance is based on the power to imagine working in pictures and images. This is not new or avant-garde or on shaky ground. It's work that has been validated at the level of the Nobel prize."

Thirdly, recent research on the functioning of the two hemispheres of the human brain suggests that working with symbols, pictures and images stimulates the visually oriented

Images And Desktop Publishing

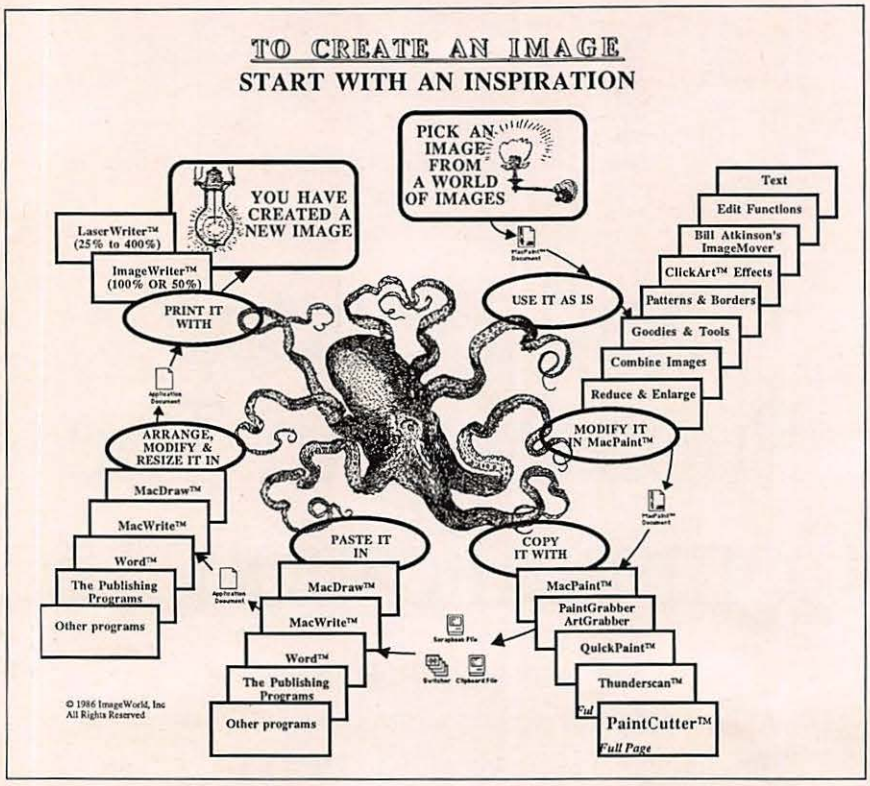

Figure 1

right brain and thereby enhances our creative abilities.

Images and the tools to manipulate images are becoming a major factor in the Communication Age and in our coming into balance. The Macintosh is such a tool.

The Macintosh personal computer, with its desktop publishing capability, fits Toffler's description of the communication-age tool more aptly than any other machine. Its very foundation is related to images.

The basic desktop publishing environment; the combination of *Macpaint,* Clipboard, Scrapbook, *Macwrite* and bit-mapped graphics allows us to create, modify and combine images, to mix these images with text and then publish our work.

The standardization of the Clipboard and the Scrapbook in the desktop publishing environment has further provided the foundation upon which software developers have expanded and configured their software.

What we have is not just one environment but a flexible, multidimensioned environment. We have many paths to choose from to expand our publishing environment, all the way to fully integrated systems that tie into professional typesetting systems.

The many paths to creating an image may appear confusing, but the basic process is really very simple. The basic steps involved in creating an image are illustrated in Figure 1.

First, we start with an inspiration. It can be a feeling, a thought, a mental picture or just knowing we want to create something. Sometimes the urge to create is stimulated by a need to communicate some specific information, such as an event from the list in Figure 2.

Then just start. Create an image in *Macpaint* or pick an image from one of the *Macpaint*-based art sources available. Next, we can use the image as is or modify it in *Macpaint.* Now we have a *Macpaint* document that we can print out, our first opportunity to publish our image.

We don't need to stop there, though. We can cut or copy and paste the image into one of the many application programs that accept *Macpaint* images. Once in these programs, we can add text and generally arrange, modify and even resize the image.

Here we have another opportunity to print and create an image. It's that simple. Let's take a look at these steps in a little more detail.

Since *Mac The Knife* and *Clickart,* the inventory of clip art, digitized images, canned pictures or, as they are often called, "imageware" has rapidly increased. As with art, the need will never be satisfied because the basic need for images to "try on" is itself constantly changing.

Macpaint excited many of us. With it we could create an image, add text and print our work with definition previously unavailable electronically. We could use the tools, such as the spray can, patterns, goodies and edit functions, to add shading, highlights and to modify the image. We could thereby take an existing image and make it our own.

Macpaint's latent importance lies even deeper. It is the standard for images created with the Macintosh. Without this standard we would be faced with an inflexible hodgepodge of images or no images at all, like certain other environments.

Moving an image between application programs, one of the strong points of the Macintosh, is attributable to the Clipboard and the Scrapbook standard.

One of the most significant developments in image exporting and importing is the program *Paintcutter* by Silicon Beach Software. This program allows us to cut or copy up to a full 8- by 10-inch *Macpaint* document to the Clipboard or the Scrapbook. We are no longer limited to copying the *Macpaint* window or the Macintosh screen.

Programs are beginning to appear that provide for the direct import of images from *Macpaint* documents.

Macwrite, Macdraw, Microsoft Word, Business Filevision, Pagemaker, Macpublisher, Readysetgo, Filemaker, Executive Office, Macdraft, Slide Show Magician and *Thinktank* are just some of the programs that encourage the importation of images.

In addition to the mixing of text and graphics, many of these programs allow resizing and other methods of modifying an image.

There will be an increasing number of programs that encourage the use of images,

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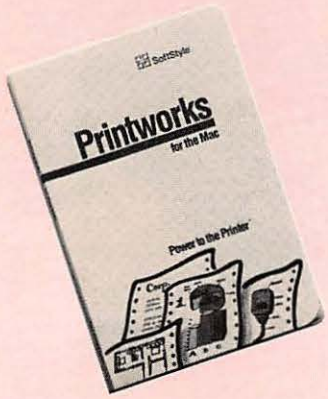

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Images And Desktop Publishing

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social notes
class handouts
arts and crafts
Christmas letters

AND...MUCH...MUCH...MORE...
You'll fancy finding your own inspired, imaginative, creative, expressive, effective and enjoyable uses as you create and "try-on"your image.

Figure 2

Original Oversize Multiple	Laserwriter Percent	Output Equivalent Lines Per Inch Screen and Quality	
1	100	72	Cartoon Quality
1.5	75	108	Newspaper Image Quality
2	50	144	Magazine Image Quality
4	25	288	Fine Art Print Quality

Figure 3

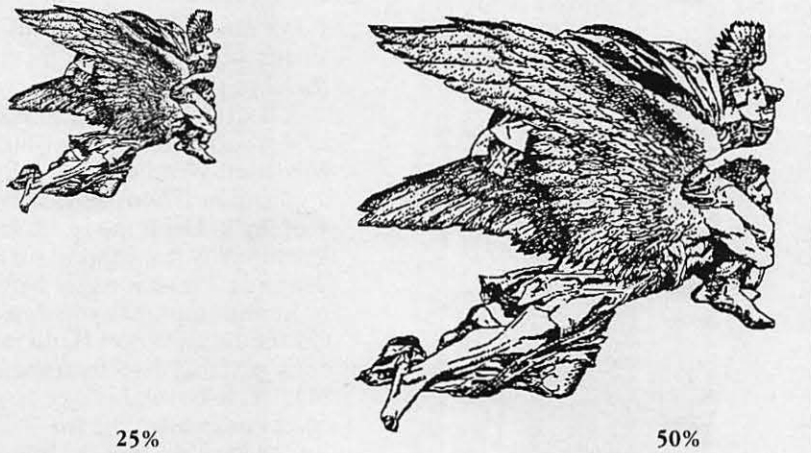

Figure 4

as the importance of images becomes more apparent to software developers.

To communicate the image we need output. The Imagewriter and the Laserwriter are excellent image printers. Which you use depends on the image and the impression you desire. The inked ribbon of the Imagewriter creates a softness that is not available on the Laserwriter.

A limitation is the inability to select a proportional size to print. With *Macpaint* you can only print at 100 percent. With most other application programs, you can print out both 100 percent and 50 percent. This is one of the benefits derived from cutting and pasting images into other programs.

The resolution of the images can be increased with the Laserwriter. To do this think big, then reduce.

The table in Figure 3 gives a comparison of the resolution that can be expected if the layout of the original is made oversized and then reduced with the Laserwriter. The images, however, must be large enough to reduce without losing their effectiveness.

This resolution enhancement can be seen by comparing the Winged Courier images in Figure 4.

Apple's desktop publishing manager, John Scull, says, "Desktop publishing is a market to which Apple is intensely committed."

Apple reinforced this position by inviting Alvin Toffler and John Naisbitt, foremost authorities on the communications revolution, to speak at seminars being given in conjunction with the recent Macworld Exposition.

The power of the Macintosh is in our hands. We can project our creative inspiration; our true image; the center of our feelings; our here-I-am, touch-me feelings.

We are implementing John Naisbitt's observations in *Megatrends:*

"The technology of the Information (Communication) Age is not absolute. It will succeed or fail according to the principle of high tech/high touch. The principle symbolizes the need for balance between our physical and spiritual reality."

When we grasp the full significance of our ability to project our image, we realize that we can make the Communication Age the proving ground for the determination of our self-image and our coming into balance. We will experience the joy of fulfillment that comes from creating the image that is right for us.

—Robert H. Paapanen, CEO, and Christianna Paapanen, president, Imageworld, Inc., publisher of The Macmemories Series, *13 diskettes of turn-of-the-century, copyright-free art and illustrations. Prior to forming Imageworld, they conducted personal development seminars that, in part, use images to stimulate creativity and develop inner awareness.*

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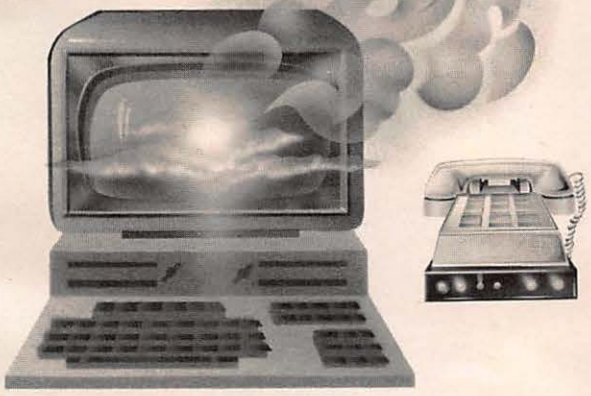

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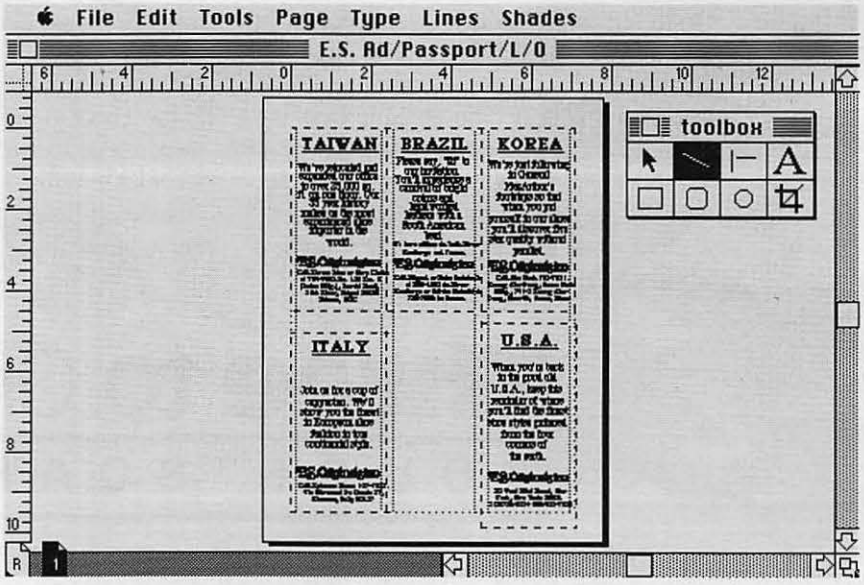
Circle 7 on Reader Service Card

Copying The Big Guys In Electronic Publishing With PageMaker

I recently attended an electronic publishing exhibition in New York. Some of the basic, inexpensive systems displayed there ran about $50,000; the more exquisite ones ran up to $300,000. *Pagemaker* by Aldus Corp. gives you a reasonable facsimile of these systems on the Apple Macintosh for only $495 in software and less than $10,000 in hardware—even going with the best available.

There are, however, limitations when working with such a system on a personal computer (PC). Even if you spent a small fortune for any configuration on any brand PC, you wouldn't be able to compete with the professional systems. These systems feature electronic photo retouching, full-size page makeup on screen and single-sheet printout for large sizes. There are hundreds of colors to work with and dozens of type styles on line.

Pagemaker does an excellent job of bridging the gap for the economy minded Macintosh user. Expecting to pay $1,000 to $3,000, I found the $495 price tag a real bargain. As



in most sophisticated software, full use of some of the procedures takes time to learn, but you will be well rewarded for your efforts.

As creative director of The Blue Chip Group, New York City, I have found *Pagemaker* handles most of our work; from small ads or brochures—up to 16 pages in length—to tabloid page ads. Poster sizes are available as well. *Pagemaker* has saved us hundreds of dollars in design and production

CHRISTIAN CITIZEN 4.30
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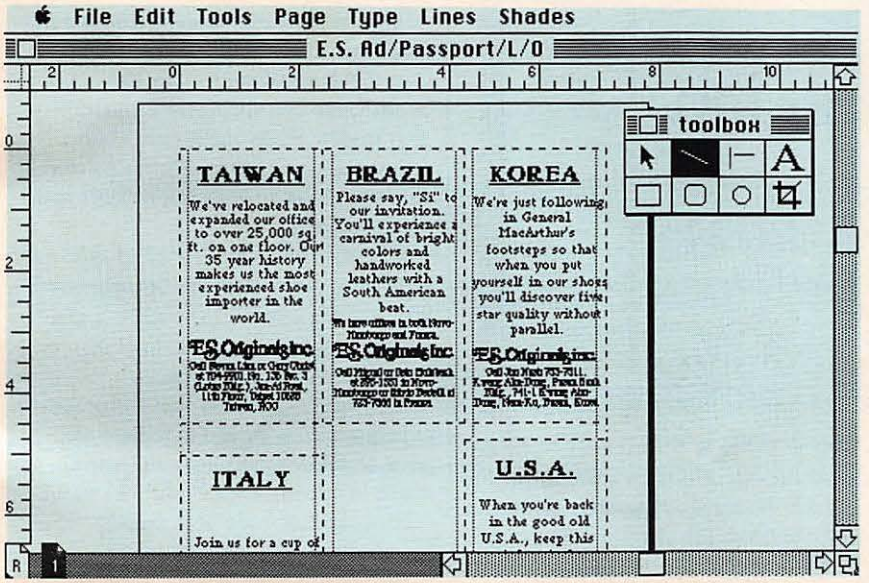
costs on every project we have used it for.

An example of a tabloid-size ad—11½ by 14½ inches—we did for one of our clients will give you a better idea of the capabilities and limitations of this program.

Instead of creating the entire layout in one piece, we decided it would be easier to create the copy separately and patch in the sections. Since the top type "coupons" in our layout ran to a 10-inch type-safety width, we wanted to turn our sheet and use an 11- by 8½-inch horizontal layout. That's where we ran into the first limitation of *Pagemaker.*

Although you can use *Pagemaker* to design a tabloid page, our Apple Imagewriter II printer wouldn't accommodate the horizontal format. We could only fit copy for three "coupons" across the width of the machine's print area. A "print layout sideways" feature would have come in handy, but *Pagemaker* doesn't have such a function.

Larger layouts print out in sections; you then have to paste the pieces together. While a similar limitation exists with the Laserwriter, some Postscript printers can print out large sheets.



The *Pagemaker* Master Page feature should be an essential function of any page making software used to design multiple page publications. *Pagemaker* allows you to use its master pages as a template throughout one or more publication files. Laying out your columns and measurements on the right- and/or left-hand master pages eliminates having to recreate these elements for each following page.

Everything you do on a master page is repeated on every layout in that particular file. You can specify column guides, ruled lines, boxes, drawings, illustrations, type and page numbers. You cannot manipulate these elements on any page except the master page.

A dashed-rule border was created for our ad from the program's toolbox (which has many, but not all the features of *Macdraw).* It ran across the top and bottom of the page. Dashed lines were used to divide larger rectangles within the ad into separate sections.

It was easy to transfer graphics and text from another disk to *Pagemaker.* We simply chose the type style and size we wanted and used the Place command. A dialogue box listed those files that *Pagemaker* could read in directly. Then a file name was keyed in and the Place command was used again.

When the Text tool is chosen, the pointer turns into a "text gun." By clicking the mouse at the upper-left corner of the left column, our *Macwrite* file flowed into the column. When we clicked the mouse in the Publication window, the text stopped after the current paragraph.

A block of sentences or paragraphs is indicated by handles at both top and bottom. A number sign marks the end of the text just inserted. A plus sign in the bottom handle indicates there is more hidden text to be placed. By clicking at the handle and pulling it down like a shade, more text is revealed.

You can then leave a space for a picture or a ruled box and click the text gun to continue text on that page or the following pages. If you want, you can stop, bring in other files and continue to place the first file on any other page.

Type can be directly entered within *Pagemaker,* but if there are major revisions,

Copying The Big Guys

on a newsletter for instance, these should be made in the original writing program. The headings for each coupon in our ad were typed directly into position using *Pagemaker.*

A logo for the ad was created in *Macpaint.* It was brought into *Pagemaker* through the Macintosh scrapbook, sized down, copied and positioned into each of the spaces left open in the coupons. A new width was set using new column guidelines, and the main text block of copy was typed directly in *Pagemaker.*

After printing the *Pagemaker* file and pasting the patches to the layout, we presented a photocopy of the ad to our client. The client had an accurate representation of the final ad, with both readable copy and art on the same sheet. Visual and copy changes were marked on the layout.

The benefits of using *Pagemaker* became more apparent when the client made changes and asked that we show them to him as soon as possible. The changes were easily made and the ad finally approved. We then sent our disk out to a local typographer who completed the mechanical for publication on a Linotron 101P phototypesetter.

Without having to buy expensive software or hardware, which is often unavoidable with other PC brands, *Pagemaker* performed on the Macintosh like electronic publishing systems costing 10 times the price.

There are many more extensive features in *Pagemaker* than those already described. Graphics created with other Macintosh programs and saved in the PICT (picture format) can be cropped, enlarged and reduced.

Numerous type or graphic elements placed on the pasteboard surrounding the publication page remain there and can be picked up and used on any other page. Built-in patterns of benday dot screens and ruled patterns can be used to lay varying shades of gray.

Column and column gutters can be set automatically. *Pagemaker* allows you to view your work at up to 200 percent of the original size, 70 percent, 50 percent, and screen size, as well as double-page spreads.

You can work on your design at the larger sizes. Pages can be inserted and deleted as you work. All of the *Macdraw* tools are available within *Pagemaker,* except the curve, freehand shapes and the polygon.

Pagemaker includes Helvetica and Times, the two most commonly used typefaces, in 9, 10, 12, 14, 18 and 24 point. It also includes two typewriter styles, Courier and Symbol, in 12 point. Twelve more typefaces from Adobe Corp. can be downloaded to the Laserwriter.

Pagemaker Version 1.2 supports the Laserwriter Plus and its seven additional typefaces. Type sizes available for layout range from 4 to 127 point, and leading can be automated up to 127 points in half-point increments.

Text blocks can be combined or broken down to separate blocks quickly. Columns can be widened or narrowed and wrapped around rules or picture areas for a more professional looking layout.

Up to 16 pages can be worked on at a time—the same as with a Kodak system that costs thousands of dollars. Any element can be stacked in overlapping layers to create drop shadow effects and reverse white against black type blocks. The measurement system used can be in inches, millimeters or points and picas.

Thumbnail printouts of up to 16 pages can be made to get a better idea of continuity. If you are using a Postscript-compatible printer, you can reduce a page down to 15 percent or enlarge it up to 1,000 percent.

Pagemaker works with Macintosh's *Switcher* program, allowing you to revise a *Macpaint* or *Macdraw* picture or document, switch instantly and place it in your layout.

If you use *Pagemaker* at its simplest—strictly for typesetting—you can expect to save up to 70 percent over previous costs. If you use it to compose a page as well, you will save additional mechanical and pasteup costs.

Though *Pagemaker* is perhaps the leading program of its type for the Macintosh, it is not perfect. Improvements need to be made and problems solved before the software is the best it can be.

The problem of 100 percent printout accuracy bothered me most and is mentioned in the manual. *Pagemaker*'s documentation tells you to use the Actual Size view to most accurately see how the text will look on a page. It says even Actual Size can't show exactly what will print on the Laserwriter or other high-resolution printers.

Another problem is that *Macpaint* pictures with gray shades will print out with an undesirable moire pattern unless you print at

When is a two-year-old an antique?

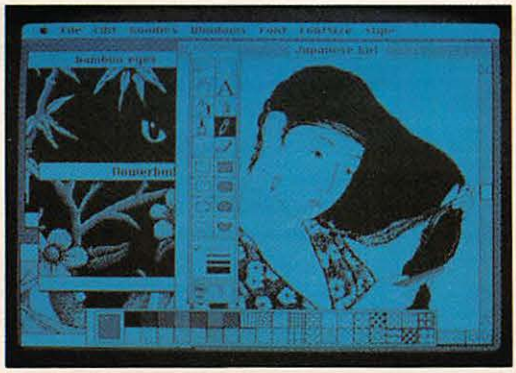
The computer industry moves fast. The program that was the star of the industry only two years ago is now the highlight of the history books.

Introducing FULLPAINT™ from Ann Arbor Softworks, the only painting program you'll ever need for your Macintosh™.

Starting where the classic left off, it adds a host of new features you wouldn't expect. Now, you'll find you can't live without them.

Features like full-screen painting. With palettes that don't get in the way. Move them, hide them. Even paint under them. Open up to four documents at once. In windows that move and grow like you're used to. With scroll bars. Windows that you can copy and paste between. Very, very quickly.

Rulers that continually show your current position on the full page. In inches, picas, centimeters, or pixels. A MouseSpot™ that displays the exact size of the object currently being drawn. And Mouse Crawl™, which lets you draw accurately even with a mouse.

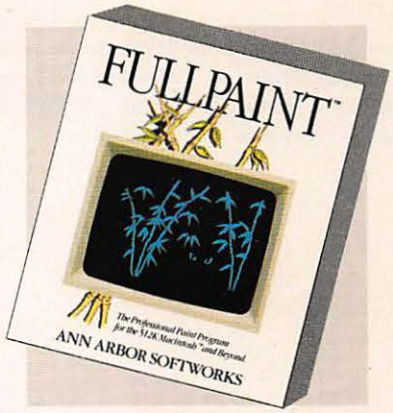


Not to mention reverse-color text. Transparent text. Custom font sizes. Editable brush shapes. A browsing Show Page dialog. Full document selections. Half-size printing. FatBits auto-scrolling. Skew, perspective, distort, and free rotate. In real time, as you watch, on the screen.

All this and more for only $99.95. Ask your dealer for a demonstration. It's more than you're expecting.

FULLPAINT

The Professional Paint Program for the 512K Mac, Mac Plus, and Beyond . . .



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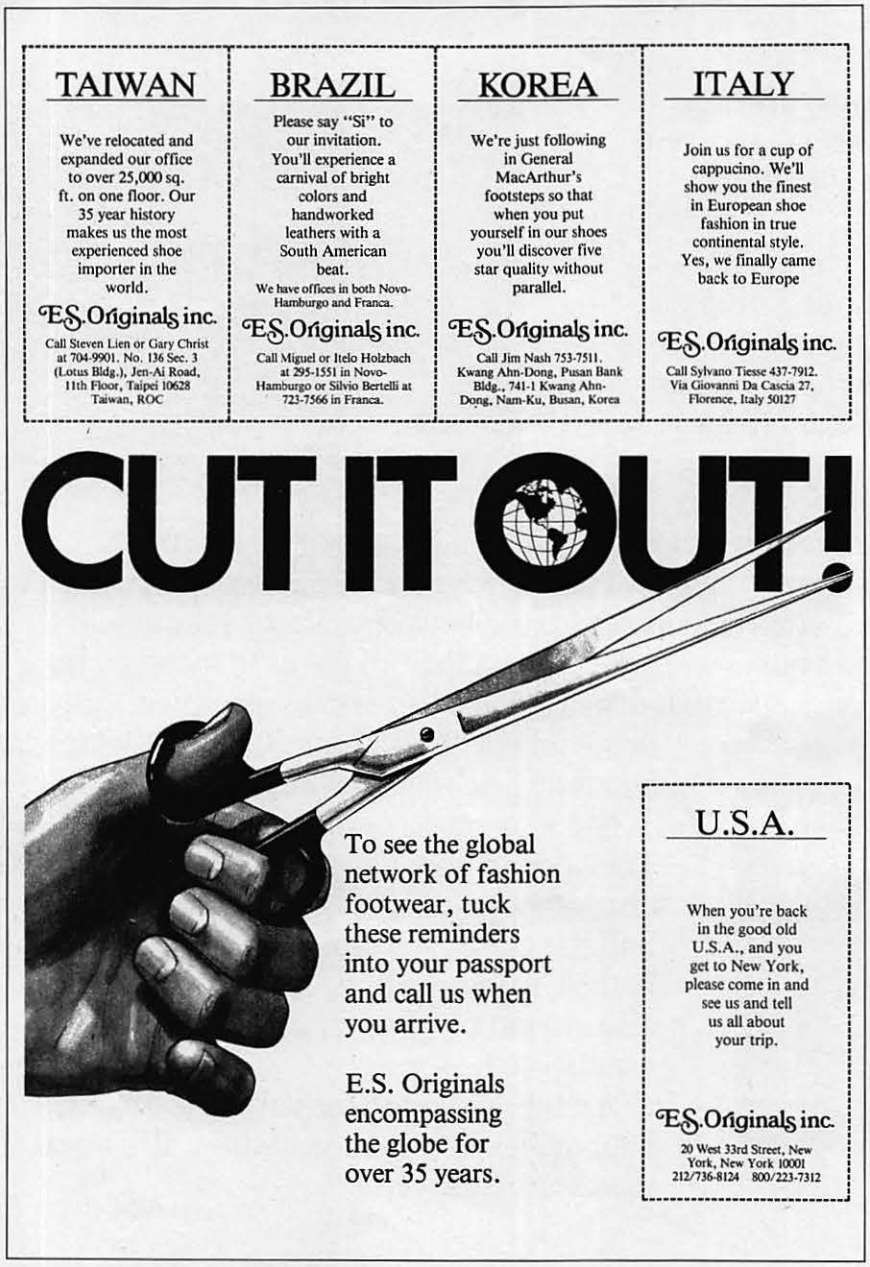

After extensive layout and design work using the Macintosh and *Pagemaker* software, this tabloid-size advertisement was created. The program's advanced features allowed experimentation to come up with just the right appearance, and the result was both professional and on deadline.

96 percent of the original size.

Printers that don't have an exact multiple of the Macintosh bit-map resolution of 72 dots per inch will cause *Macpaint*-type graphics to look slightly different when printed. Though these complaints may seem minor, it's necessary to address them in order to achieve professional results.

Such printout inaccuracies, however, may be something you have to live with in this electronic publishing software price range.

I would like to have a feature that allows me to work on a double-page spread. This way headlines and/or graphics could be run across both pages. If I used a hard disk, I would like to have the option of 64 or more pages available to work on simultaneously. This feature would make book design possible.

The *Pagemaker* manual does a fair job of explaining the program, but I found the "Columns" section difficult to follow, even though I have an extensive background in design, advertising and production.

I would have liked the overlapping feature explained in more detail with step-by-step screens to clarify the process. The reverse panels at the top of each right-hand page could also have been put to better use, identifying the feature being discussed.

The index helps, but a cross-index would have been better. When you have a deadline looming close, you don't want to be hung up on a program feature that you are unfamiliar with and must now use.

I should mention that the competition, *Readysetgo* ($195) and *Macpublisher II* ($149), don't have all the powerful features of *Pagemaker,* but they do have some features I would like to see in *Pagemaker.*

For example, *Readysetgo* can produce a 40-page document and scroll diagonally, while *Macpublisher II* has manual or auto kerning (tightening up the space between letters).

I probably have been spoiled by the professional typographers I've paid thousands of dollars to in the past, but if I can get some of the extras I mentioned added to *Pagemaker*—even at a modest cost increase—I may never need a $50,000 electronic publishing system.

—Michael Antebi

The author is creative director at the Blue Chip Group, and is a microcomputer consultant.

$495 retail

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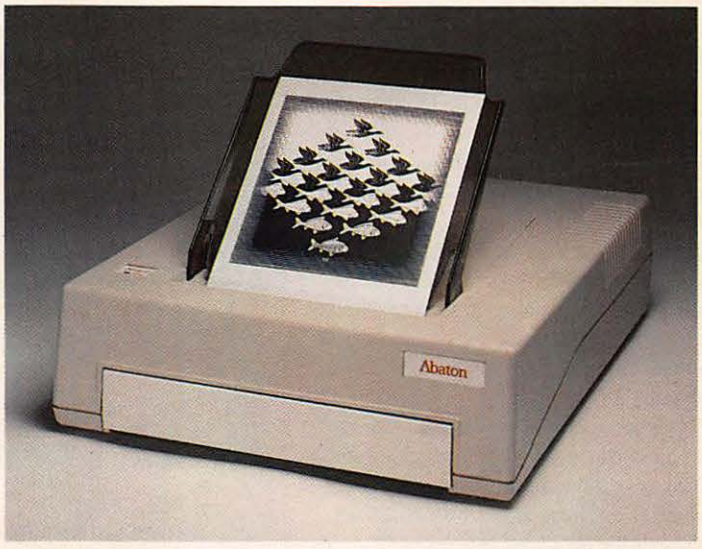

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Review

ReadySetGo Version 2.1

Page processing, page layout

512K or larger Macintosh.

Readysetgo is a page processing package for the 512K Macintosh. It allows you to replace tedious manual page design and pasteup with an easy-to-use, flexible text and graphics tool.

In just a couple of evenings, you can get a good grasp of *Readysetgo.* Its implementation with the Macintosh finder is so smooth, you'll know how to use the package almost without consulting the well-written, indexed manual.

It's a good idea, however, to go step by step through the tutorial provided. In simple language, written for the layman yet not insulting to a graphic artist, this tutorial explains all the important concepts of the package as it leads you through the layout and design of two sample newsletter pages.

When you first bring up the application, *Readysetgo* presents you with a grid of half-inch squares arranged in an 8½- by 11-inch page.

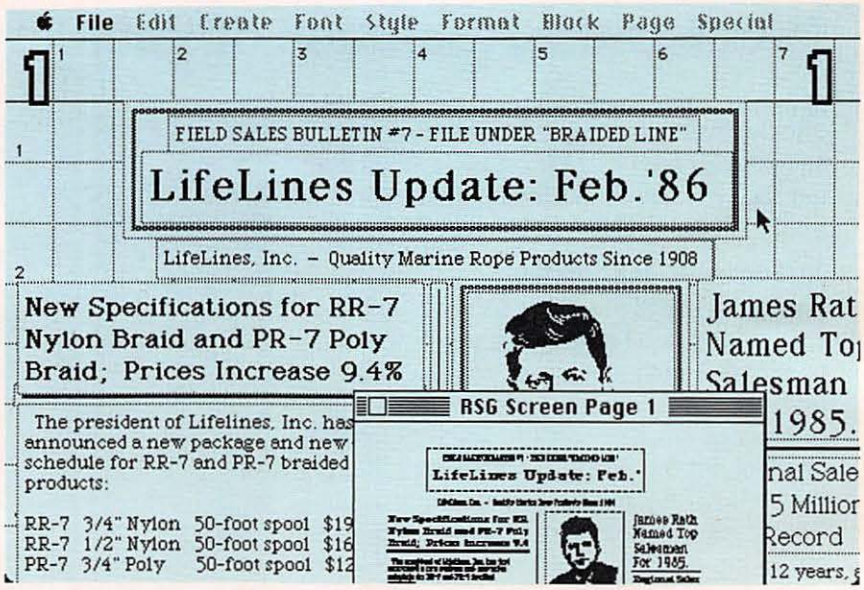
On the Macintosh screen, this page is slightly less than real size, but when printed out, the page conforms to these measurements. The same is true for font sizes as well. On screen, 12-point type looks a bit smaller than it does when printed out.

There are two ways to scroll around the page. One is with a Show Page command like the one in *Macpaint.* The entire page appears in a window, and a movable, dotted rectangle represents the portion visible on screen.

The other way is to simply "command-click" in one of eight screen locations, and the window will scroll quickly in the direction chosen. This is much faster—but less precise—than the other method.

A Page menu lets you insert and delete pages and move to the previous, next, first and last pages. You may create as many as 40 pages in a given document—subject to memory limits, of course.

Using the grid as a guide, you compose your page by creating component blocks chosen from a Create menu. These blocks appear as default one-inch squares in the upper left of the page, but you can make the



blocks any size you want by using one of two methods.

You may either point and drag with the mouse to stretch the block and then drag it to the desired location (great for first-pass, rough-draft layouts) or you may call up a window with the block's specification sheet.

A specification sheet is created automatically whenever you create a new block. It lets you specify the block's exact size and page position in fractions of an inch, if you desire.

A given page can have as many as 100 blocks, while a given document can have as many as 1,000 blocks.

To work on a block, you make it active by clicking within its borders (which become invisible on printout, as does the page grid).

Once created, blocks can easily be moved from one location to another, even from one page to another. It's even possible to shift all blocks on a page using the Shift All command.

You can create four different kinds of blocks. A Text block looks just like a little *Macwrite* window, and an insertion bar lets you type in your text. Standard edit functions are included.

Readysetgo includes Chicago, Geneva, New York, Monaco, Venice, London and Athens fonts, plus the common Helvetica and Times Roman faces. You can install any other fonts you want with the *Font Mover* utility.

The font sizes included on the menu are the standard ones, but one great menu option is Other, which brings up a dialogue box that allows you to choose any point size from 1 to 100. This allows for great customization.

Furthermore, you can center or justify headlines within the text block, specify indentation and use tabs.

Other blocks are the Solid block, used for creating patterns or lines between other blocks; the Frame block, used to surround other blocks; and the Picture block, used to put artwork on the page.

A picture block can contain anything that can be saved to the Finder's Scrapbook from any sort of graphics program. You can import clip art graphics, for example, by pasting pictures in the Scrapbook, then copy them to the Clipboard, creating a picture block, and dump the image from the Clipboard into the picture block.

Once the image is in the picture block, you can center it or move it around in the block by clicking within the block. The picture moves in whatever direction you click. If you stretch the block, the image is automatically scaled.

You can also use the picture block's specification sheet to scale the picture size. If you wanted to double the size of the image, for example, you would specify that the picture be 200 percent by 200 percent of its original size. This feature bypasses the tedious process of manually redrawing artwork.

You can also reproduce photographic images if you have access to a digital scanner such as Thunderscan. These devices optically scan a photo and save the image as a *Mac-*

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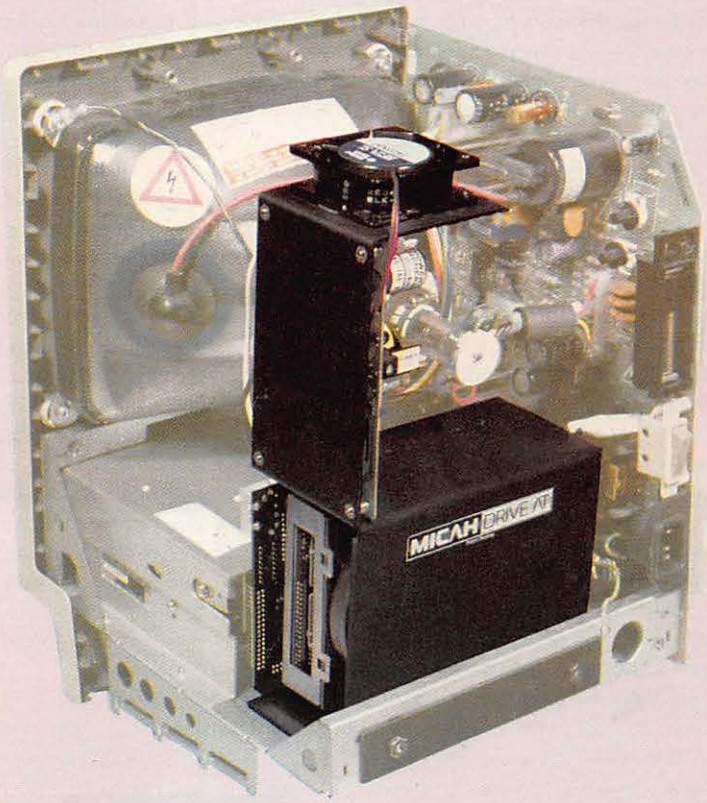

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MicahDrive AT 10™	$1495.
MicahDrive AT 20™	$1895.
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paint document, which can be imported to *Readysetgo* and resized to fit your newsletter, brochure, etc.

Picture blocks let you crop your images as well, and by carefully creating a series of text blocks around a picture block, you can skew text and art images.

It is unlikely that you'll want to create all your text documents within *Readysetgo.* You will more likely use *Macwrite, Microsoft Word* or another word processing package to actually write articles.

Readysetgo, accordingly, provides a Text Link feature that lets you import any text file (saved without format as text only from your word processor) into a text block. The text can assume any font style and size you choose.

You activate the block you want to "spill" the article into, choose Text Link from the menu and then choose Get Text from the File menu. This brings up a dialogue box listing all the text files at your disposal, from which you choose the one you want.

If the whole of a given article won't fit into one block, you can spill over onto another block on another column or page by "chaining" the blocks together with a Reflow command. If you decide to rearrange the blocks on a page, you can choose the Vacuum command to remove all the text you've spilled.

Readysetgo has several features that make it a valuable tool for putting together newsletters, brochures, flyers, forms, advertisements and the like. The package's interactive procedures make design and electronic pasteup easy and creative, because you can rearrange blocks and design elements as desired.

You can save the layout design as a template for the next document. In fact, this is a great area for software vendors to sell click art-type template products for use with *Readysetgo.*

You can use tabs to create charts from scratch or import graphics from a graphics package such as *Macpaint.*

Readysetgo can feed documents to the Laserwriter, as well as the Imagewriter, so you can get printout quality that's hard to distinguish from actual typeset work.

The program reads from disk often, causing performance to be a trifle slow at times. Try it with a RAM-disk product, however, and you'll see an improvement in this area. On the other hand, waiting a few seconds is still perferable to doing manual pasteup.

Error handling is done in straightforward Macintosh style. Dialogue boxes warn you of irreversible procedures, confirm that you want to do them or tell you that 100-point type is the limit, for example.

Two items are on my wish list for the next version. A wonderful improvement would be the addition of an elevator box, alongside and at the bottom of the main window, so you could browse easily across and down the page without having to move to a Show Page window.

I suspect performance might be hurt by this, but it would be nice just the same.

Another improvement would be the addition of more command key options to lessen the number of times you have to go to the pull-down menus.

Overall, however, *Readysetgo* is a good, basic workhorse of a product. It is a solid tool for anyone who needs to integrate graphics and text for any kind of desktop publishing enterprise.

—Sharon Gamble Rae

$125 retail; Version 2.0
$195 retail; Version 2.1
Manhattan Graphics Corp.; 163 Varick St.; New York, N.Y. 10013; 212-989-6442

Review

MacPublisher II

Publishing software

Any Macintosh.

Macpublisher II is a new electronic publishing tool designed to replace the old cut-and-paste method of laying out text and graphics for printed pages.

As you might guess from the name, this is not this software developer's first attempt to convince editors and art directors to forsake their drafting tables for computer screens. *Macpublisher,* which came out in 1984, was a solid first effort at filling the demands of desktop publishing, but it wasn't as flexible as many would have liked.

Enter *Macpublisher II,* a redesigned and expanded version that attempts to remedy the shortcomings and overcome the limitations of the earlier program.

The result is an extremely powerful, sophisticated program that can produce anything from a simple newsletter to a full-size magazine. Like any other publishing or printing tool, the quality of the output depends to a large extent on the printing device employed.

Built on a Quickdraw foundation, *Macpublisher II* is able to drive a full range of output devices, from the Imagewriter and Imagewriter II color printers through the Laserwriter and Linotronic 300 Laser Typesetter.

Macpublisher II is designed to run on the full line of Macintoshes and the Lisa. The program can function with as little as the basic 128K single-drive configuration, but if speed is a concern you'll probably be happier with 512K or better.

An external drive isn't really necessary for shorter documents that can be kept on your application diskette, but if you prepare longer projects that have to be stored on archive disks, it would be more convenient to have a second drive.

Currently, file size is limited to 96 pages or about the capacity of a 400K disk. By starting a second file and numbering the first page number 97, however, you could actually create a larger document.

If there's a problem with *Macpublisher II,* it's that it has so many options it's not possible to learn them all immediately. In order to meet my deadline for this article, I tested a prerelease (beta) version of the program before the manual was available and had to struggle through with only a few publisher's notes.

Suffice it to say that the program is not intuitive enough for this approach. Unless you want to spend considerable time on the phone with the manufacturer's support people, plan to read the manual.

Once you figure them out, though, you'll find that *Macpublisher II* does have some

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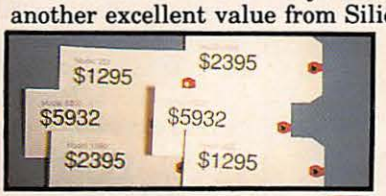

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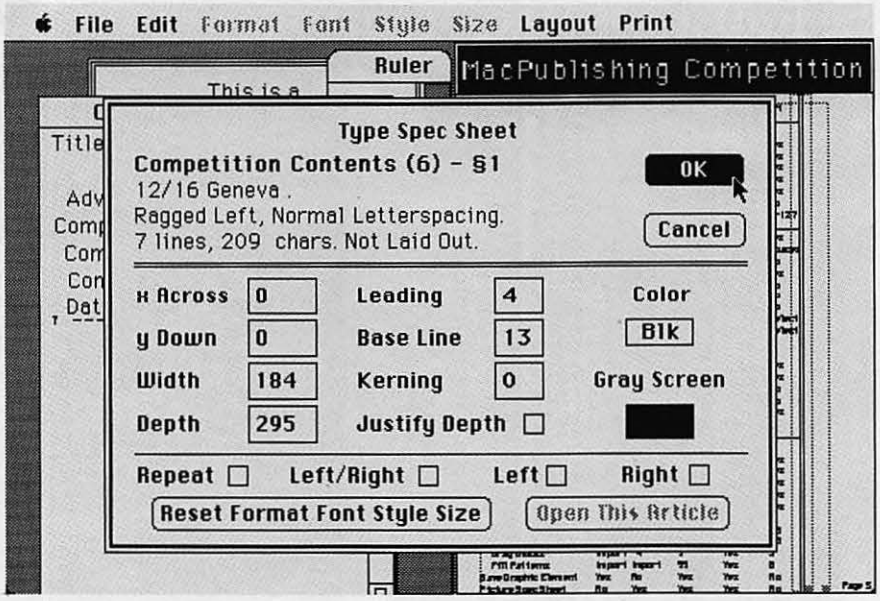

really nice features. The best is probably that, while you can write and edit your articles right in *Macpublisher,* you don't have to rekey text created in other programs.

Macwrite and *Microsoft Word* files can be opened and accessed directly, as can graphics designed in *Macpaint* and *Macdraw.* Documents created with other applications can be transferred as text-only files.

While it was not included in the beta version I tested, a company spokesman said the release version of *Macpublisher II* will include a built-in telecommunications program for transferring files by modem—a nice plus for busy editors.

To assure that a "disk full" message never forces you to abandon something you're trying to save, *Macpublisher II* has included a delete-file menu option. Delete lets you remove unnecessary files from the disk without having to return to the desktop.

When the automatic save option is turned on, a Macintosh saves changes to disk every few mouse clicks. So, even in the event of a power outage or a pulled plug, you won't lose more than a few minutes work.

While this is unquestionably a useful option, it made the program run so slowly, even on my 512K machine, that I decided to disengage it and take may chances with a power failure.

Macpublisher II is divided into article, picture and layout files that are all named and stored independently. To create a publication such as a newsletter or magazine, a layout file on the right of the screen is combined with picture and/or article files that appear in windows on the left of the screen.

The layout page is 44 percent of the size of the actual printed page and can be set for 8 1/2- by 11-inch, 8 1/2- by 14-inch, 11- by 17-inch and computer (newspaper) size paper that can print in either vertical or landscape orientation.

The layout page can be divided into anywhere from two to 24 columns, separated by gray vertical lines. Snap-to guides can be activated to automatically align text or graphic elements to the left or right of the columns or to the top and/or bottom of the page. Elements can also be freely placed anywhere on the page.

Graphics and sections of text can be "cut" and drug from their original windows onto the layout page, where they appear as blocks.

While blocks will stay where you put them, they are not necessarily static. They can be drug all over or discarded from the page, stretched beyond the limits of their original columns or shrunk to occupy less space.

Text can be edited in the article window even after it has been moved to the layout page.

An automatic text-flow option makes text and layout dynamic. Any changes in the length of an article will cause text to be reformatted within all its layout blocks.

An automatic relayout command, on the other hand, deals only with individual blocks, causing a single block to resize if the text within it increases or decreases.

The layout page can take several forms. Used as a dummy page, it simply shows where blocks have been placed on the page.

If you want more than just empty blocks, a minipage option fills the columns with a scaled-down representation of the actual text and graphics, giving you a feel for the balance and aesthetics of the page layout.

A facing-page option lets you look at two minipages at once. The maxipage command allows you to scan a page in its actual size.

A movable screen ruler, which measures in inches, centimeters or points, takes a little getting used to but is extremely useful in matching cuts with available space in a layout. Additional built-in window rulers are also available.

Another big help is the specification sheet, which provides numeric data on the x and y coordinates of blocks on the layout sheet. This is particularly useful when you want to place an item, such as a box or border, around or on top of an existing block.

If you key the numeric coordinates from one element into the specification sheet for the second, the two will automatically appear in exactly the same spot.

Graphic elements can be imported from other applications and sized and saved as pictures, using the "camera."

Macpublisher II also has considerable graphics capability built in and incorporates some 99 patterns for creating custom rules and borders, ranging from rectangles to circles. It also offers background screening in 10 percent intervals to 90 percent.

Macpublisher II provides a wide variety of printing and layout aids. If you know what to ask for, it's probably there. Additional fonts can be added with the font mover.

Type size can be selected anywhere from four to 127 points, at one-point intervals. Type styles can be changed throughout the text, and condensed or extended pitch can be utilized where necessary.

Leading (adjusting the space between lines) makes it possible for an article of, say, 15 lines to be aligned top and bottom with

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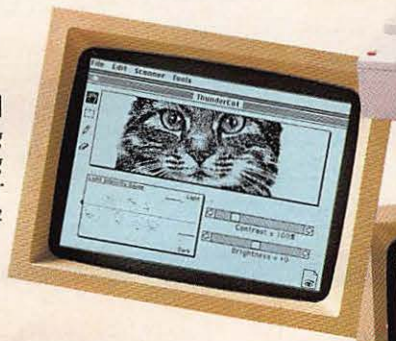

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another of only 12 lines.

Kerning (adjusting the space between letters) can be initiated automatically for 26 letter combinations or done manually between any letters to create ligatures or save space.

Macpublisher also offers many of the special features found in comprehensive word processing programs. These include discretionary (soft) hyphens, running heads and defeatable word wrap. Each column of text that continues onto another page automatically includes a message indicating where the next jump will be found.

The program has an unusual copy protection scheme. While copies must be verified with the original, as in many programs, once you pop in the master you don't have to do it again for 24 hours no matter how many times you turn the machine on and off.

In addition, you can actually use the copy without master verification. When you print your work, however, a large advertisement for the manufacturer appears on the bottom of each page.

—Donna Barron

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Review

Silicon Press

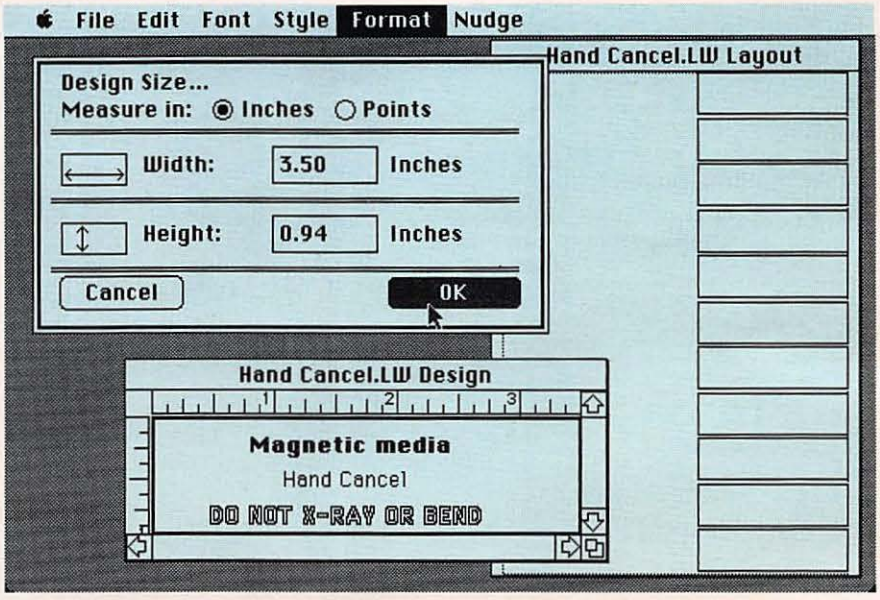
Printer utility

512K or larger Macintosh.

While most text-creation projects can be accomplished with a good general word processing program, there are times when it really helps to have software that's been designed specifically for the job you have in mind.

Silicon Press is that kind of software. An interesting little program that falls somewhere between a forms generator and a list processor, *Silicon Press* lets Macintosh 512K and Macintosh XL users combine text and graphics to create and print individualized labels, cards and even form letters.

Unlike a word processor, *Silicon Press* has virtually no design limitations. Use of space is completely arbitrary. Text and graphics can be placed virtually anywhere on a layout, multiple images can be layered one on top



of another and type size and style can be varied within the same line or word.

The program gives users the freedom to create lots of small projects that would be prohibitively expensive, if they had to be run in the large volumes usually associated with customized print shop orders.

If all you need is 100 computer disk labels containing your company logo, you can print 100 labels; you don't have to order 1,000.

If you want personalized name badges for your employees, you can create a badge form, merge it with your employee list and you'll get exactly the number of name badges you need.

The badges may not look like they came from a professional printing establishment, but then again they might. Print quality is a function of hardware, not software. *Silicon Press* will drive almost any printer that supports graphics, including the Imagewriter II color printer and the Laserwriter.

The program can be run with only one disk drive, but it's more convenient to have two, particularly for combining design and data files.

Forms generated by *Silicon Press* can be merged with *Silicon Press* or *Overvue* data files. The program can also "save as text" data files imported from programs such as *Microsoft Word, File, Jazz, Excel* and others.

Silicon Press lacks the sophisticated sort capabilities of a file manager, but it does provide a rudimentary ability to utilize only certain portions of a larger data base.

Actually, there is no limit to the size of the data base that can be accessed. Smaller data files are kept in memory, but those that exceed 30K or are larger than available memory are pulled directly from the disk.

Users have access to a large variety of print fonts, styles and sizes. However, graphics must be created and imported from *Macpaint,* or other similar applications, and incorporated into *Silicon Press* design layouts via the clipboard or scrapbook.

The program is geared toward grinding out stock items such as mailing labels, Rolodex cards, personalized identification tags and special business cards, but it leaves lots of room for creativity and imagination.

Silicon Press will print on anything from a 13/16-inch square decal to a 17- by 17-inch sheet.

Silicon Press incorporates standard word processing features such as word wrap and cut and paste. Its specific label orientation, designed to make laying out and printing forms—particularly labels—quick and uncomplicated, sets it apart from other word processing software.

The program can be set to print out a single column of continuous labels; multicolumn rows of two, three or more labels across; or sheets of asymmetrically placed labels.

The *Silicon Press* desktop is divided into

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Cumberland
The quick brown fox jumps over the lazy

Devoll
The quick brown fox jumps over the lazy dog.

Willamette (Medium and Light)
The quick brown fox jumps over the lazy dog.

Congo
The quick brown fox jumps over the lazy dog.

Thames
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MicroFonts
The LaserWriter's built-in fonts in condensed, expanded and extra-small versions.

Styx
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Columbia*
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three interactive windows: design, format and data.

The primary work area is the design window, a 3½-inch by 1-inch rectangle that simulates a standard mailing label. Visible rulers run along the top and left side of the window.

The rulers are set up so their measurements appear in inches, but these calibrations can be changed to either centimeters or points.

When a print job requires a larger or smaller design window than the one presented, its width and height can be readjusted by keying in new numeric values via the format menu. The design window resizes automatically to reflect the new dimensions.

Text and graphics are entered in the design window in individual design rectangles similar to the ones used to move *Macpaint* designs. These rectangles can be small enough to hold a single character or large enough to incorporate an entire business letter.

Text within any rectangle is acted on as a unit. Breaking words or letters into separate rectangles lets you mix print sizes within the same line of text. Like most standard Macintosh windows, design rectangles can be dragged, stretched or shrunk. Unlike other Macintosh windows, however, they can also be "nudged."

Nudging is a unique *Silicon Press* feature that works in conjunction with its grid option to help users fine-tune designs. Used alone, nudging lets you move design rectangles up, down or sideways one pixel at a time.

The grid option lets you divide your work space into equal squares that can be any size you choose. When the grid option is in force, nudging moves the design rectangles one grid square at a time.

An align option lets you justify all design elements with the left or right borders or center them.

The second major work area is the layout window. It is used to duplicate the actual set up of the forms or labels the user's printer will be printing.

When the user keys in the number of items to be printed across and down the page and the spacing between items, this window automatically creates a diagram of the layout of the labels or other items on the page.

Irregular patterns can be set up manually in the format window by placing correctly shaped representations into the window and dragging them into their proper position with the mouse.

The third window is the data window, which is used to create data files within *Silicon Press* or to accept data from other applications.

While the three windows work together, the program has an unusual save arrangement that lets users save and access each window as a separate file. This can be a little tiresome as there are several save commands to go through before you can exit or open a new file.

This feature does prove useful, however, because it allows users to create multiple print projects by simply rearranging existing files or incorporating them into new projects. This can save considerable disk space as well as time.

For example, I decided to make mailing labels for my investment club. After setting up the design, formatting for a single column of labels and creating an alphabetized data base of member information, I ran several sets of address labels.

I saved all the windows and used the same design and data base, but changed the format to put together a membership list that I printed out in two columns on a single sheet of 8 1/2- by 11-inch paper rather than on labels.

After that, I designed a personalized form letter advising each member of the date and place of the next meeting and merged that with my data list. I saved the design and format of the letter and, with minor modifications to the text, I'll be able to use the same design, format and data again next month.

Silicon Press comes with an easy-to-follow manual. It's not a difficult program to learn, particularly if you're already familiar with the Macintosh.

The program lends itself well to use with Apple's *Switcher* utility and has several built-in timesaving devices.

Keyboard equivalents to most mouse controls speed things up quite a bit, and a test print option lets users print single test copies of designs to check aesthetics and layout before committing an entire job to the printer.

The program is not copy protected, which saves a lot of irritating disk swapping every time you boot it.

—Donna Barron

$79 retail
Silicon Beach Software, Inc.; PO Box 261430; San Diego, Calif. 92126; 619-695-6956

Review

Microsoft Word Version 1.05

Writing; word processing

Any Macintosh.

Microsoft Word is the Macintosh word processing entry from industry giant Microsoft Corp. Well known for feature-rich IBM PC software, the company has successfully made the crossover into Macintosh territory with products such as *Word.*

Microsoft Word is a "power user's" kind of word processing package. It's chock-full of features and functions that make it a serious tool for anyone doing business, professional or academic writing.

While it was not meant to be a desktop publishing tool per se, the fact that it has a great deal of flexibility regarding page format and printing options makes it qualify as a desktop publishing candidate.

Furthermore, it can import graphics from packages such as *Macpaint* and *Microsoft Chart.* It can also perform print merge functions to create form letters and reports with files imported from such products as *Microsoft File.*

It's clear that Microsoft is aiming this product at the business user. *Microsoft Word* is what *Macwrite* wants to be when it grows up.

This package is not one for the faint-hearted. Prepare for a few evenings of studying the documentation and working through examples if you want to get a grip on *Microsoft Word*'s more sophisticated features.

If you don't want to devote the time to learning, then you probably don't want this package, because a number of features, while useful, aren't particularly intuitive. (That's another way of saying that the implementation with the Finder is just okay, but not as simple as you'd expect).

Many of the program's basic features are similar to *Macwrite*'s, including most of the editing, search and font and style commands. But several more features are added, and the package slows down considerably

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during some of the lengthy disk-reading periods. Nevertheless, the wait is worthwhile, considering some of the options you get.

Among the most useful of these options is a Glossary command. To use the Glossary, you enter often-used text or graphics by copying the text or graphics to the Clipboard and from there into the Glossary. You then name the passage or graphic in 64 characters or less. The size of the passage or graphic itself is limited only by disk space.

Once you've stored the information in the Glossary, you need only select the insertion point in your document, type the name, then type a Command Key and Backspace, and the full text or graphic appears.

Glossaries can be saved from session to session, so you have an easy way to reuse boilerplate text. Anyone putting together form letters, a masthead for a newsletter, contracts or forms of any type could make good use of this feature.

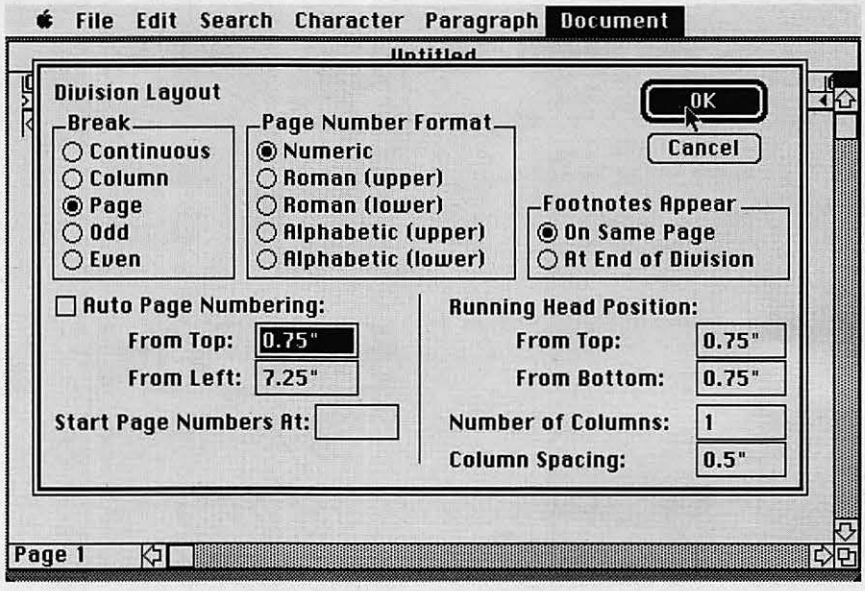
While *Macwrite* does let you use boilerplate text via the Clipboard, the Glossary function in *Microsoft Word* is more comprehensive and faster to use, once material is entered and tagged with a name.

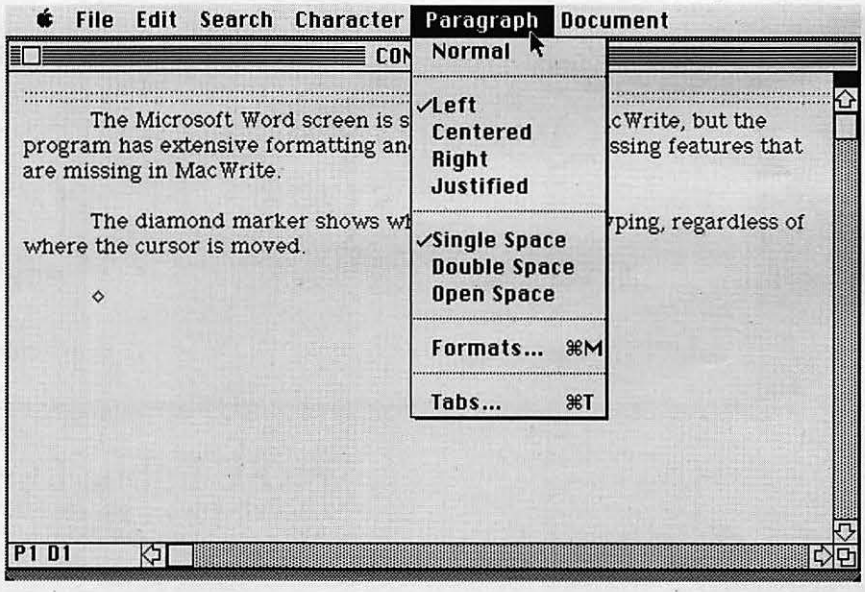
Another key feature for anyone doing desktop publishing work with *Microsoft Word* is the ability to divide a given document into an unlimited number of "divisions." A division is any part of a document with a single format.

You set off divisions by typing the Command and Enter keys at each breaking point. You might want to start a new division to change the arrangement or number of columns on a page, change the position of a running head, change the position of a footnote, change a page break and so on.

A single Division Layout command, on a Document menu, consolidates several of the functions found in *Macwrite* into one easy-to-maneuver window. With *Macwrite*, you have to access eight or 10 separate menu commands to format the different parts of a document. In *Microsoft Word*, you need only use a command key sequence to mark the end of the previous division, then choose the one command to access the window with your multiple choice format options.

Speaking of format options, *Microsoft Word* offers you a great deal of flexibility, including the ability to divide your document into columns, specifying the number of columns and the spacing between columns.





Unfortunately, when you do format your work in columns, the work shows on screen as one long column of the size specified, only showing the correct page layout when printed out.

Since you can specify page and column breaks and also import graphics through the Clipboard, it's not too farfetched to think that you might put together a two- or three-column newsletter or brochure with this package.

Users accustomed to the traditional Macintosh what-you-see-is-what-you-get orientation, however, will find the way *Microsoft Word* handles column formatting disorienting, to say the least. Furthermore, if you try to do a publication with lots of graphics, you may get frustrated because you have to go back and forth between your graphics package and this one to fine-tune measurements.

Nevertheless, *Microsoft Word* is full of other features that make it a powerful tool for business and academic writing in particular.

Running heads may be specified for a first page, odd-numbered pages and/or even-

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numbered pages. Footnotes can be automatically numbered for you, or you can choose a reference mark, such as an asterisk, to refer your reader to a footnote. Footnotes can be placed either at the bottom of a page or at the end of a text division, such as the end of a chapter in a dissertation.

Microsoft Word keeps track of your footnotes automatically through the Glossary as well. If you delete a footnote accidentally or lose your place, you can easily put your document back together.

Other features allow for additional flexibility in formatting the document. Page numbers, which are put in automatically, can be numeric, alphabetic or roman numeral. Characters of the alphabet can be emphasized in the same ways they are in *Macwrite*, plus they may be small capitals as well. Paragraphs may be "nested" with a simple command key sequence. That is, a paragraph may be indented one half inch more than its predecessor.

You may use a ruler like *Macwrite* has or you may use command key sequences or windows to format paragraphs, and you can copy paragraph formats within a document. The package also supports the Imagewriter, Laserwriter and daisy wheel printers.

In addition to features that affect the appearance of the final document, *Microsoft Word* also has two special features designed to make the process of writing easier.

First, you can have multiple documents open concurrently in as many as four windows. Second, the elevator bar on the side of the screen contains a "split" box that lets you split the screen in two horizontally and view two parts of the same document at the same time.

You can position the split line wherever you want, and each of the two parts contains elevator boxes, allowing you to scroll forwards and backwards and view both the beginning and end of, say, a contract.

One of the most useful business aspects of *Microsoft Word* is its Print Merge facility. This feature lets you print multiple versions of a basic document by combining that document with data from one or more other documents, including data from *Microsoft File*.

To perform this merge function, you need to learn a few simple programming instructions, which seem intimidating at first but really are not. Using this facility, you can run off form letters, personalized forms and so on.

Because of the sophistication of *Microsoft Word*, its designers thoughtfully provide online help screens. You can access these help screens via a command in the Apple menu, which brings up a window with a menu of help screens, or by hitting a control key and a question mark and then pointing to the command that's giving you trouble.

One note about that complexity: *Microsoft Word* allows the vast majority of its commands to be executed from the keyboard, bypassing the pull-down menus by using key sequences instead.

While this aspect of the user interface takes a detour from the usual Macintosh route, heavy word processing users will find it a real blessing because they seldom have to take their hands off the keyboard to fuss with the mouse.

Microsoft Word will require some learning time, but its documentation is clear and complete. It contains a section for beginners, a section for sophisticated users and a reference section with a glossary, key sequences and a good index.

If you need a word processing package capable of exacting, sophisticated formatting, consider making *Microsoft Word* part of your library.

—Sharon Gamble Rae

$195 retail
Microsoft Corp.; 10700 Northup Way; Box 97200; Bellevue, Wash. 98009; 206-828-8080

Use Your Imagination

The Macintosh computer appeals to people with imagination. It has been the inspiration of new, imaginative computer uses that are now within the reach of common, ordinary folks as well as extraordinary, brilliant and wealthy ones.

Desktop publishing is one such use. No matter what kind of software you use and what kind of applications you need, desktop publishing has the potential to enhance your output. Let's look at some examples.

Accounting is dull to everyone except accountants. Well, accounting data can be exciting for everyone by presenting it in fresh, new and professional-appearing ways.

The key is to use graphics; to turn a report into a newspaper, to give the three stockholders in your pizza restaurant an annual report that looks like one from a Fortune 500 company and generally to use these publishing tools to turn numbers into exciting items in ways that only you can imagine.

Do you use communications a lot? Access a data base for information and graphics to add pizazz to any publication? Typeset a memorable piece of electronic mail for distribution within a company or family?

The artists of the world will love the Macintosh/Laserwriter combination. Commercial artists will have a field day creating ads, copy and other client materials in record time and in high quality. Best of all, the artwork can be instantly altered and printed out no matter how many times the client changes his or her mind.

Prints of original computer artwork are now easy to reproduce in high resolution. Even color is becoming more practical with the Imagewriter II and other new products on the horizon. Musicians can produce professionally prepared scores for an entire symphony orchestra or for one guitar. Computer clip art takes on a new crispness and freshness with the quality of Laserwriter output. We could go on and on.

We suggest that you read through this issue and look at all the possibilities for desktop publishing. You'll find that there are many more than just the obvious ones such as word processing, forms generation and publications such as newsletters and books.

It's simply a matter of dreaming up the ways your workaday output can be made more exciting to you and to others who see it, through the use of desktop publishing.

Here are a few products, chosen at random, that will certainly prove to be useful. Our choices here are simply meant to encourage you to use the imagination you show through your interest in the Macintosh.

MacDraft

Drawing aid

512K or larger Macintosh.

An object-oriented drawing tool that allows users to produce professional looking drawings.

The program can be used to create scaled drawings, schematic diagrams, organizational charts, business illustrations, general sketches, greeting cards or just about anything a user may want to draw.

Macdraft's operating features include continuous drawing mode, 28 different scales, Zoom In and Zoom Out, automatic line dimensioning, circles by radius or diameter, distribution of objects along a line, rotation of objects in one-degree increments, pasting of drawings to and from other documents, pasting of pictures from *Macpaint* and more.

In addition, users can draw freehand lines and objects and add text to drawings or edit existing text.

$239 retail

Innovative Data Design, Inc.; 1975 Willow Pass Rd., Ste. 8; Concord, Calif. 94520; 415-680-6818

MacDraw

Designing; graphics

Any Macintosh.

A custom graphics program that allows users to design forms and technical illustrations, to create floor plans and maps, to prepare slide presentations, to customize graphs and charts and more.

The size of a *Macdraw* document can be anything from a one-page scale drawing to a multipage floor plan as large as 8 by 10 feet.

$125 retail

Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-996-1010

MacPaint

Drawing; graphics

Any Macintosh.

Macpaint provides a user with a canvas and a wide variety of tools in an almost limitless number of combinations to create drawings, graphs or charts.

All of the *Macpaint* tools are located along the left side of the screen, and the patterns available for filling in spaces are located along the bottom.

The toolbox contains a paintbrush that can be configured to represent many different sizes and shapes of a brush; a hand that is used to move the entire page around the screen; a pencil that makes a thin line; an eraser; shape makers that help keep squares, circles and rectangles symmetrical; a spray-paint can; and a paint can that allows a user to fill in blank spaces with a variety of patterns.

A user can incorporate text or words into the work by using the large letter A. This turns the program into a typewritter in which letters can be created in any of eight different sizes, from nine to 72 points. There are also different fonts and styles from which to choose.

The program also includes an option called Fat Bits, which expands the screen and magnifies the drawing to show every pixel.

An "undo" feature lets a user erase everything done up to the previous mouse click. This allows the user to experiment without endangering previous work.

$125 retail

Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-996-1010

MacWrite

Writing; word processing

Any Macintosh.

Macwrite is a word processing program that includes a combination of different fonts, styles and type sizes. All text is shown on screen exactly as it will appear when printed.

Formats are easy to change with the Macintosh-style ruler where tabs, line spacing, justification, indenting and margins are set.

The program includes provisions for headers and footers, allows search and replace and is capable of inserting page breaks at any point in a document.

Macwrite is fully integrated with *Macpaint* through the Clipboard, allowing drawings, graphs and illustrations to be incorporated into a *Macwrite* document at any point.
$125 retail
Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-996-1010

MegaForm
Electronic forms processor
512K or larger Macintosh.
Megaform is a forms and report generator that also acts like a spreadsheet, graphics package and data base all in one. It is a business product for the 512K Macintosh that can work alone or as part of an integrated software system.
Megaform allows a user to create any kind of form desired. It also contains several ready-made forms that can be used if needed. Because the program can read information from a *Megafiler* data base and perform calculations, a user can even design a form and instruct the program to fill it out.
$295 retail
Megahaus Corp.; 5703 Oberlin Dr.; San Diego, Calif. 92121; 619-450-1230

PictureBase
Clip art manager
512K or larger Macintosh.
An art management system that lets a user organize Macintosh clip art and *Macpaint* or *Macdraw* documents into easy-to-use picture libraries.
The program also allows a user to organize, store and retrieve pictures; give each picture a name and description and organize them into library files; search for a picture by either title or description; and copy all or any part of a picture to or from the clipboard.
Also included is the *Picturebase* desk accessory, for retrieving pictures without leaving the current application, and Apple's *Switcher* utility.
$69.95 retail
Symmetry Corp.; 761 E. University Dr., Ste. C; Mesa, Ariz. 85203; 602-844-2199 or 800-624-2485

Scan 300
Optical scanner
Scan 300 is an optical scanner that digitizes drawings, graphics and photographs into a Macintosh for the purpose of producing high-quality printouts. Its 300-dot-per-inch resolution matches the output of the Apple Laserwriter, Hewlett-Packard, Corona, Canon and Quadram laser printers.
Page makeup programs such as *Pagemaker, Readysetgo, Macpublisher* or *Typesetter* can be used to generate newsletters, manuals, product sheets or catalogs filled—on screen—with illustrations and photographs that previously had to be clipped out and pasted down.
$2,395 retail
Abaton Technology Corp.; 1526 Cloverfield Blvd.; Santa Monica, Calif. 90404; 818-905-9399

Desktop Publishing—Directory

Adobe
Fonts
512K or larger Macintosh.
Downloadable typefaces for all Postscript laser printers, including the Apple Laserwriter, Laserwriter Plus, and the Linotype Linotronic 100 and Linotronic 300 imagesetters.
Fonts include typefaces from the ITC Avant Garde Gothic, ITC Garamond, Palatino, Optima, Glypha, ITC Benguiat, ITC Friz Quadrata, ITC Bookman, ITC American Typewriter, ITC Machine, New Century Schoolbook, ITC Lubalin Graph, ITC Souvenir, ITC Zapf Chancery, and ITC Zapf Dingbats typeface families.
$185 retail; per single-printer package
$375 retail; multi-printer license
Adobe Systems, Inc.; 1870 Embarcadero Rd., Ste. 100; Palo Alto, Calif. 94303; 415-852-0271

ClickArt Publications
Drawings, illustrations for newsletters
Any Macintosh; Macpaint, Macwrite, *or any compatible program.*
$49.95 retail
T/Maker Graphics; 2115 Landings Dr.; Mountain View, Calif. 94043; 415-962-0195

Designs for MacPublishing
Designs, pictures, fonts, graphics
Any Macintosh; Macpaint.
$39.95 retail
Boston Software Publishers, Inc.; 1260 Boylston St.; Boston, Mass. 02215; 617-267-4747

DisplayAd Makeup System
Typography system
512K or larger Macintosh.
Can be used by untrained personnel in the small newspaper/shopper industry to generate typography for display ads. Outputs to laser or digitized phototypesetters.
$2,995 retail
Digital Technology International; 500 West 1200 South; Orem, Utah 84058; 801-226-1983

Fluent Laser Fonts
Any Macintosh.
A collection of Postscript fonts that download to the Laserwriter, Laserwriter Plus or other compatible printers.
The collection includes four fonts: Bodoni, Calligraphy, Regency Script and SansSerif. New typefaces will be added as they are completed. Included on disk are the Postscript font files, companion screen fonts to be installed in the system file and a downloading program to install the font into the memory of the Laserwriter.
$69.95 retail; Bodoni/Sans Serif
$69.95 retail; Calligraphy/Regency Script
Casady Company; PO Box 223779; Carmel, Calif. 93922; 408-646-4660

Fontographer
Professional font editor
512K or larger Macintosh.
Laserwriter font editor that allows creation of letter outlines for Apple's Laserwriter printers. Letters are drawn with full 300-dot per-inch resolution using straight lines and Bezier spline curves. Output is a PostScript font in a form suitable for downloading to the Laserwriter or any device that supports PostScript. Screen fonts can be automatically generated in a range of sizes from the outline data.
$395 retail
Altsys Corp.; PO Box 865410; Plano, Texas 75086; 214-596-4970

LaserFonts
Fonts, type styles
Any Macintosh; Laserwriter printer.
All typestyles include a collection of printer's bullets and spaces and an extended set of foreign accents, allowing a user to write in more than 30 languages.

Fonts include Minnesota, Platte, Cumberland, Manistee, Devoll, Congo, Neosho, Thames, Styx, Williamette and MicroFonts.
$29.95 each retail
Century Software; 2306 Cotner Ave.; Los Angeles, Calif. 90064; 213-829-4436

MacArt for Business
Business images, illustrations
Any Macintosh; MacPaint.
$23 retail; *Macart for Business*
$39.95 retail; book/disk set
Wiley Professional Software; 605 Third Ave.; New York, N.Y. 10158; 212-850-6788

MacPublisher
Camera-ready page layout
Any Macintosh; Imagewriter or Laserwriter printer.
Software that enables the user to lay out text and graphics in column format.
$99.95 retail
Boston Software Publishers, Inc.; 1260 Boylston St.; Boston, Mass. 02215; 617-267-4747

MacPublisher II
Boston Software Publishers, Inc., see review on page 00

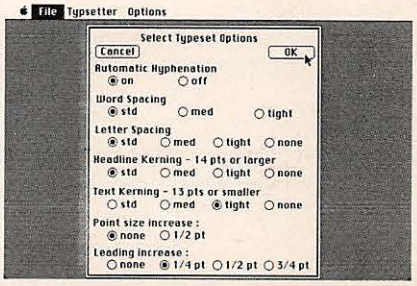
MegaForm
Electronic forms processor
512K or larger Macintosh.
A forms and report generator that also acts like a spreadsheet, graphics package, and data base all in one.
$295 retail
Megahaus Corporation; 5703 Oberlin Dr.; San Diego, Calif. 92121; 619-450-1230

PageMaker 1.2
Publishing tool
512K or larger Macintosh; external disk drive; Imagewriter, Laserwriter, or any PostScript supporting device.
Allows users to create and lay out single or multipage documents, integrating text and graphics, on the Macintosh screen and produce typeset-quality, camera-ready artwork with the Laserwriter or Laserwriter Plus.
$495 retail
Aldus Corporation; 616 First Ave., Suite 400; Seattle, Wash. 98104; 206-441-8666

The Print Shop
Personalized cards, letters
Any Macintosh.
Available first quarter, 1986
Broderbund Software; 17 Paul Dr.; San Rafael, Calif. 94903; 415-479-1170

ReadySetGo 2.1
Manhattan Graphics, see review on page 28

■Set & Send
Typesetting



Any Macintosh.
Set & Send is designed for publishers and typesetters. It allows a user to choose from

Fluent Laser Fonts™
Casady Company
A growing collection of typefaces in PostScript™ for use on the LaserWriter™ and compatible printers. Complete with screen fonts and downloading program. Use with PageMaker and all other programs.
SansSerif MONTEREY
MICRO Regency Script BODONI
Calligraphy RIGHT BANK RITZ
PREMIERE Cyrillic PreludeScript PLAZA
FOR ORDERS CALL (800) 851-1986 - IN CALIF. (800) 331-4321
FOR INFORMATION CALL (408) 646-4660
Circle 17 on Reader Service Card
Casady Company
P. O. Box 223779 • CARMEL, CA 93922
TWO-DISK SET OF QUALITY BITMAP FONTS FOR USE ON THE IMAGEWRITER. 48 STYLES INCLUDING TEXT, GRAPHICS, TECHNICAL SYMBOLS, IMAGES, & EXTENSIVE SUPPORT OF FOREIGN LANGUAGES.
FLUENT FONTS™ For the Macintosh™
TRADEMARKS: Fluent Fonts, Fluent Laser Fonts-Casady Company; Macintosh, LaserWriter, ImageWriter-Apple Computer, Inc.; PostScript-Adobe Systems, Inc.; PageMaker-Aldus Corp

different typefaces and type sizes ranging from four to 72 points.

The system includes automatic hyphenation, letter spacing, word spacing and headline and text kerning. It also features line spacing in quarter-point increments and rules from one to seven points in one-point increments.

Copy can be sent, using ordinary telephone lines or hard wire, to a Compugraphic typesetting computer in order to produce production-quality type for newspapers, books and magazines. Typesetting codes are written automatically.

Finished type can be previewed on screen, and a proof can be printed out on the Imagewriter.

$970 retail

Set & Send Technologies, Inc.; 545-108 Ave. NE, Ste. 6; Bellevue, Wash. 98004; 800-663-8973

Stylo-Castoff; Stylo-Estimate

Publishing; typeset estimator; cost estimator

Any Macintosh.

Stylo-Castoff is a program designed for authors or book publishers. A castoff is a procedure for estimating finished typeset book pages from the information derived by counting lines of a typewritten manuscript.

Because finished typeset copy can vary according to type design and size, the program calculates page estimates based on the number of manuscript lines, the size of type, the average number of characters in the typewritten line, and the width and depth of the typeset page in picas. $99.95 retail

A companion program, *Stylo-Estimate,* comes with a Book Page Cost Estimating program. Because specific kinds of pages, such as text, footnotes, extracts, tabular, etc., vary according to complexity of composition, different costs are assigned to them. The program can generate estimated and actual costs based on the final information after a book is completed. $199.95 retail

Type/Net; 161 Vine St.; PO Box 5279; Reno, Nev. 89513; 702-322-1884

Tekalike

Communications; text, graphics

Any Macintosh.

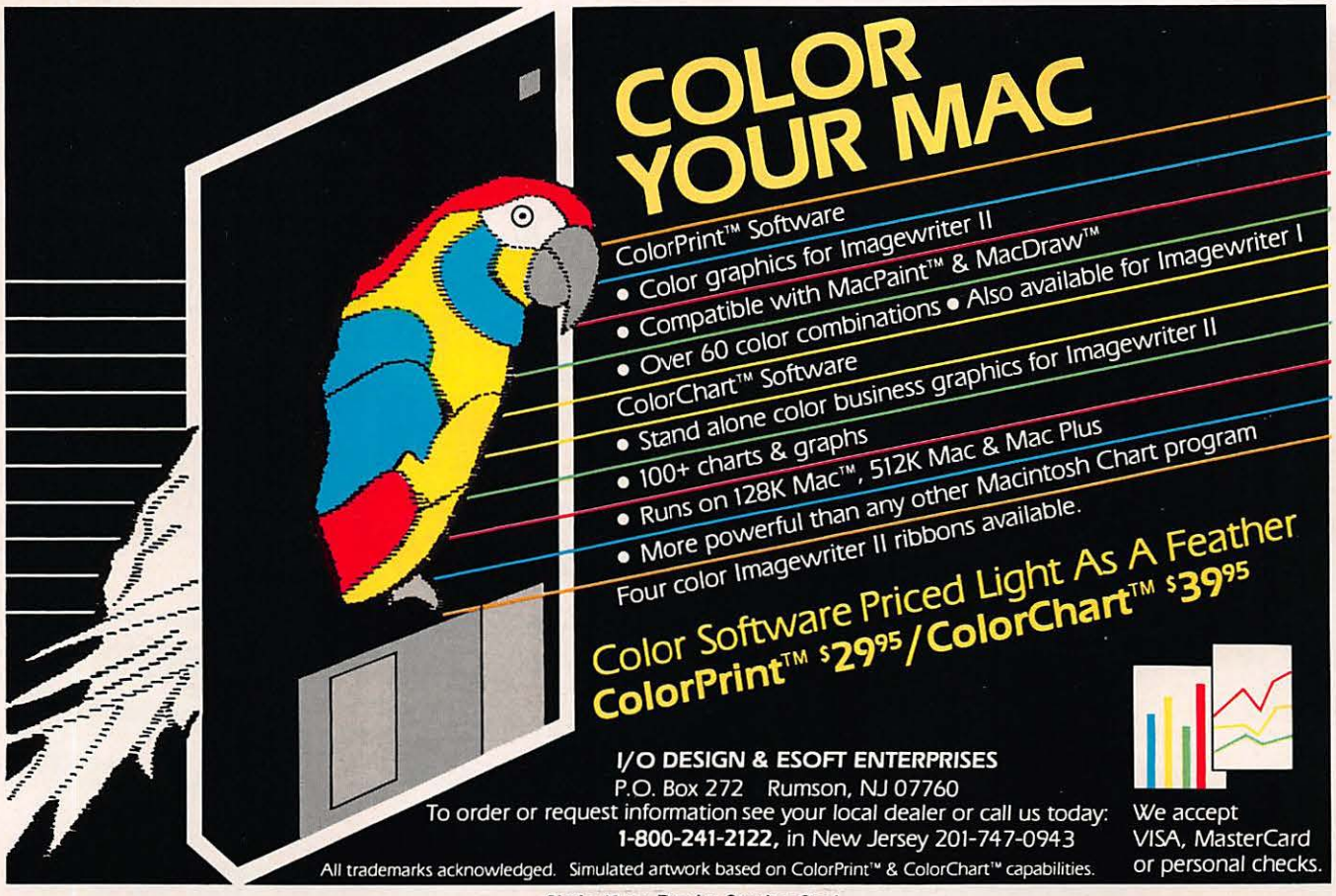
Version 2 allows users to interact with screen editors (VAX/VMS-Edit, Unix/Vi) and automatically switch to graphics. It is compatible with *Tellagraf, Disspla, SAS/Graph, SPSS/Graph, Plot-10,* and more.

The program supports the Tektronix 4014, 4010, 4012 graphic terminals, most features of the DEC VT100 alphanumeric terminal, most features of the VT640 terminal, and most features of the Tektronix 4105 color terminal.

The Laserwriter is supported in portrait and landscape orientations.

$250 retail

Mesa Graphics; PO Box 600; Los Alamos, N.M. 87544; 505-672-1998



Circle 18 on Reader Service Card

Accounting

Accountant, Inc.
Accounting
512K or larger Macintosh; external disk drive recommended.
Contains General Ledger, Accounts Payable, Accounts Receivable, and Inventory.
$299.95 retail
Softsync, Inc.; 162 Madison Ave.; New York, N.Y. 10016; 212-685-2080

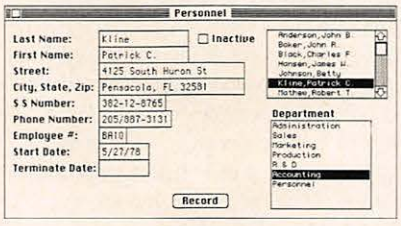
Accountant's Choice Series
Accounting
512K or larger Macintosh.
Made up of seven separate modules: General Ledger, Accounts Payable, Accounts Receivable, Sales Order Processing, Purchasing, Inventory Control, and Fixed Assets.
Sierra Information Systems, Inc.; 10201 Torre Ave., Suite 210; Cupertino, Calif. 95014; 408-725-3200

AMS General Ledger
Accounting
Any Macintosh.
Consists of Disbursements, Receipts, General Journal, Purchases, and Sales.
$99 retail; introductory price
Applied Micro Solutions; PO Box 860; Fort Collins, Colo. 80522; 303-484-3541

Auto Accountant Business Series
Accounting
512K or larger Macintosh.
Modules include General Ledger, Accounts Receivable, Accounts Payable, and Payroll.
$195 per module retail
Type/Net; 161 Vine St.; PO Box 5279; Reno, Nev. 89513; 702-322-1884

Back to Basics Accounting System
Accounting
Any Macintosh.
Modules include General Ledger, Accounts Receivable and Accounts Payable. Inventory will be available first quarter, 1986.
$175 retail per module
Peachtree Software; 4355 International Blvd.; Norcross, Ga. 30093; 800-554-8900

■CheckMark Payroll
Payroll accounting



Any Macintosh.
Checkmark Payroll generates payroll checks, W-2s, employee earnings reports, quarterly tax liability reports and more. It calculates payroll for weekly, biweekly, semimonthly or monthly pay frequencies. Employees may be salaried or hourly.
The program also tracks regular, overtime, double-time, sick and vacation hours on a current and year-to-date basis. Tax tables for state and federal withholding tax can be modified as necessary to reflect current tax laws.
Two additional income categories can be defined as taxable or nontaxable, and six user-defined deduction categories based on a variable or fixed calculation are available.
Summary payroll information can be used alone or posted into the *General Ledger* program by Applied Micro Solutions.
$195 retail
CheckMark Software, Inc.; PO Box 860; Fort Collins, Colo. 80522; 303-484-3541

Combo
Inventory and accounts receivable
Any Macintosh; external disk drive; Microsoft BASIC 2.0.
A menu-driven program designed to meet the needs of the average business person with respect to inventory and receivables.
$450 retail; without *Microsoft BASIC*
$595 retail; with *Microsoft BASIC*
Eureka Computer Systems, Inc.; PO Box 2308; Corsicana, Texas 75110; 214-872-2501

dbsPay
Payroll
Any Macintosh; external disk drive for 50 or more employees; Imagewriter printer.
Tracks personnel and payroll information in small or large companies.
$275 retail
Deverill Business Systems; 26-32 Hill St.; Poole, Dorset, England, BH15 1NR; 202-670-852

The General Ledger for the Macintosh
Accounting
Any Macintosh; external drive or hard disk.
Double-entry bookkeeping system with unlimited account distribution for each transaction. Up to 80,000 account numbers allowed.
$245 retail
Lake Avenue Software; 77 N. Oak Knoll, Bldg. 105; Pasadena, Calif. 91101; 818-792-1844

Hardisk Accounting
Accounting
Any Macintosh.
Modules include General Ledger, Accounts Payable, Accounts Receivable, Payroll, Inventory Management with Point of Sale Invoicing, and Job Cost.
Great Plains Software; 1701 SW 38th St.; Fargo, N.D. 58103; 701-281-0550

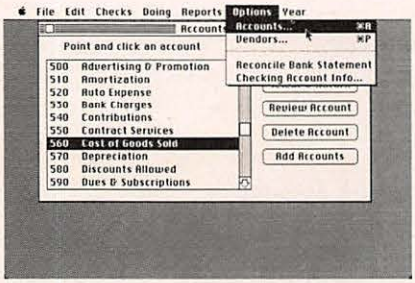
In-House Accountant
Accounting
Any Macintosh.
Incorporates general ledger, accounts payable, and accounts receivable into one package.
$179.95 retail
United Software Industries; 1880 Century Park E, Suite 300; Los Angeles, Calif. 90067; 213-556-2211

Insight Accounting System
Accounting
512K or larger Macintosh.
An integrated accounting system made up of three separate programs that provide accounts payable, accounts receivable, and general ledger functions.
$595 retail; per module
Layered, Inc.; 85 Merrimac St.; Boston, Mass. 02114; 617-423-9041

Accounting

■MacOneWrite

Accounting



512K or larger Macintosh.

Maconewrite is a modular accounting system for small businesses. Modules include Cash Disbursements, Receivables,Payroll and General Ledger.

The program does a variety of computing and paperwork so the user can produce financial reports when needed.

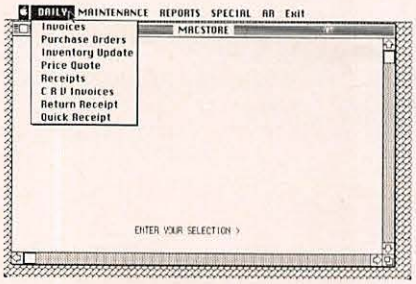
Features include a cash disbursements journal by account, leading to a summary of all account transactions; a year-to-date vendor report that lists totals for each vendor on file; a balance sheet that keeps a running tally of assets and liabilities; and a cash-basis income statement that tracks disbursements and balances income with expenses.

$249 retail

Sierra On-Line, Inc.; PO Box 485; Coarsegold, Calif. 93614; 209-683-6858

■MacStore

Accounting



512K or larger Macintosh; 10MB hard disk.

Macstore is a retail point-of-sale package that can be used with a cash drawer, replacing a cash register. The program includes a complete Accounts Receivable module and maintains customer, inventory and supplier information.

The program controls inventory, credit lines and open invoices and accommodates discounts, price overrides and sales tax.

Reports include inventory, supplier and customer reports; a daily report; price list; on-order and below reorder reports; and sales and value of inventory reports.

Inventory, customer, supplier and accounts receivable files are automatically updated with each transaction.

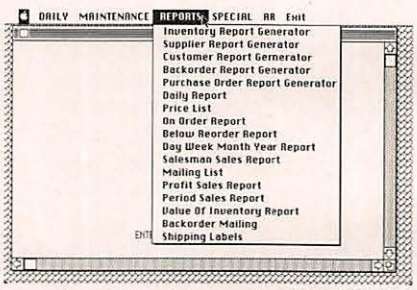
Macstore integrates with *The VBSI Accounting Series.*

$450 retail

Vertical Business Software, Inc.; 662 Main St.; New Rochelle, N.Y. 10801; 914-632-8305

■MacWholesaler

Accounting



512K or larger Macintosh; 10MB hard disk.

Macwholesaler contains a full Accounts Receivable module. It maintains customer, inventory and supplier information; controls inventory; and tracks backorders, credit lines and open invoices. Discounts, price overrides and sales tax are accommodated and multiple pricing levels are supported.

Reports include inventory, supplier, customer, backorder and purchase order reports; daily reports, price list, on-order and below reorder reports; and sales and value of inventory reports.

Invoices, statements and purchase orders may be printed, and a mailing list and shipping labels may be generated.

Inventory, customer, supplier and accounts receivable files are automatically updated with each transaction.

Macwholesaler integrates with *The VBSI Accounting Series.*

$800 retail

Vertical Business Software, Inc.; 662 Main St.; New Rochelle, N.Y. 10801; 914-632-8305

Open for Business I & II

Small-business accounting

512K or larger Macintosh; external disk drive or a hard disk.

Open for Business I consists of three modules: Accounts Receivable, General Ledger, and Cash Disbursements. $495 retail

Open for Business II includes all the functions of *Open for Business I* plus direct invoicing, general ledger budgeting, accounts payable, and inventory. Available first quarter, 1986; $995 retail

Open Systems, Inc.; 6477 City West Pkwy.; Eden Prairie, Minn. 55344; 800-328-2276

Palantir Financial Series

Accounting

Any Macintosh; Microsoft BASIC.

Modules include Accounts Receivable, Inventory Control, and General Ledger.

$145 each retail

Palantir Software; 12777 Jones Rd., Suite 100; Houston, Texas 77070; 800-368-3797

Payroll

Payroll processing

Any Macintosh; external disk drive recommended; Microsoft BASIC.

Eliminates the need to look up pay rates, calculate deductions, and type the reams of information once required to print payroll checks, end-of-quarter reports, payroll-ledger reports, and personnel reports.

$495 retail

Manufacturing Solutions; 3885 Industrial Ave.; Rolling Meadows, Ill. 60008; 312-392-3765

Payroll-Bridge

Payroll accounting

512K or larger Macintosh; external drive or a hard disk.

Records employee personnel and payroll data in any small business. It also tracks vacation time, sick-leave eligibility and usage, and stores comments about employee performance. It can also be used to print employee paychecks, check stubs, W-2s, and various reports.

$399 retail

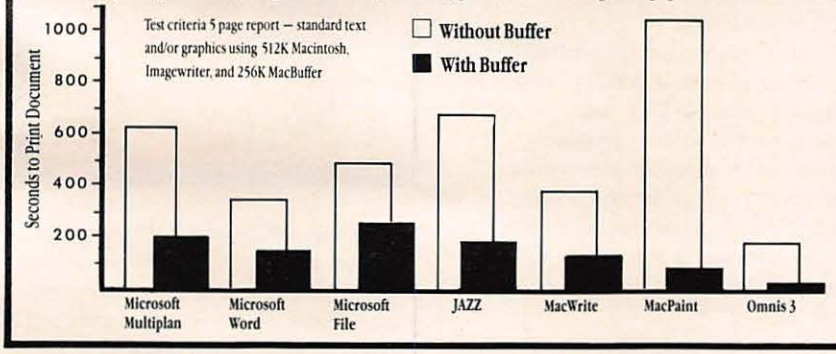
Software Bridge, Inc.; 6925 Union Park Ctr., Suite 413; Midvale, Utah 84047; 801-562-2121

MacBuffer®

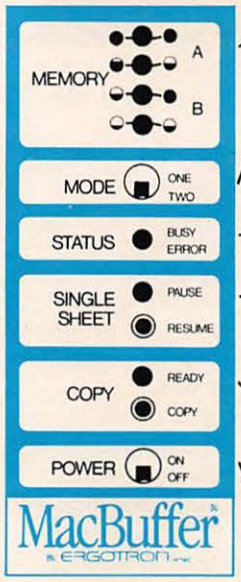
See your local Apple dealer for the first hardware printer buffer designed specifically to increase productivity of Macintosh print functions! Significant features include:

- MacBuffer speeds your printing functions three ways:
  1. Macintosh to MacBuffer transfer rate is 6 times faster than standard Mac to Imagewriter data transfer.
  2. First character in the buffer initiates the print cycle. No waiting. MacBuffer operation is completely automatic with no complex Operator set-up required.
  3. Once data transfer is complete, MacBuffer completes the print cycle, leaving the Macintosh Operator free to prepare the next report or pursue other functions.
- MacBuffer's memory size is designed to handle the extensive data storage requirements necessary to optimize Macintosh print functions, i.e. (a single page of standard text and/or graphics can require up to 50K of memory while a page of high resolution text and/or graphics can require up to 200K of memory). MacBuffer's storage configurations offer significant advantages over print spoolers or other buffers whose memory limitations make them ineffective in the Macintosh environment.
- MacBuffer's microprocessor eliminates the stolen memory cycles and computer overhead associated with the use of print spoolers.
- MacBuffer allows two Macintosh computers to share a single Imagewriter. No manual switching is required. MacBuffer will dynamically allocate memory as reports are received from each computer, or the memory may be partitioned by the operator. In either case printer utilization is greatly enhanced!
- MacBuffer is easy to install. It comes complete with all hardware, software and cables, ready for immediate use.
- "Copy" and "Pause" functions allow automatic printing of multiple copies and Pause between sheets in single sheet operation.
- Internal self-test to verify reliable operation.
- Imagewriter and Imagewriter II compatible.

MacBuffer offers dramatic reduction in Operator/Computer Wait times when performing Macintosh print functions. The following are typical timing comparisons when performing print functions using some popular Macintosh software.



MacBuffer Operator Panel



Memory Indicator – indicates % of MacBuffer memory in use.

Mode Switch –
–Mode one – used with one or two Macs. Memory is dynamically allocated on a first-in, first-out basis.
–Mode two – used with two Macs. Memory is partitioned 50%/50% between each computer.

Status Indicator – indicates MacBuffer is transmitting data to the printer. Flashing indicator indicates memory or transmission error.

Single Sheet Indicator/Push Button – Depression places MacBuffer in Pause mode, illuminating indicator. As each page is printed the printer stops, allowing operator to insert new page in printer. Depressing "Resume" switch reinitiates print cycle.

Copy Indicator/Push Button – Depression places MacBuffer in copy mode, illuminating indicator. Subsequent switch depressions determine number of copies to be printed. In copy mode Memory Indicator indicates the first and last four copies to be printed.

Power Switch – applies power, clears MacBuffer ready for use.

Technical Specifications

Microprocessor Controlled

Memory Configurations

Model M-256 256K
Model M-512 512K
Model M-1024 1024K
factory upgradeable

Data Transmission Rates

- 57.6K baud in standard
- 9.6K baud out standard
- 9.6K baud in/9.6K baud out available
- 57.6K baud in/57.6K baud out available

Operating Environment

Temperature 32°F(0°C) to 122°F(50°C)
Humidity 10% to 95% Relative Non-Condensing

Power Requirements

– 117V ± 10% 60 Cycle
– (220V ± 10% 50 Cycle optional)
– Power Consumption @ 117VAC
9 Watts maximum

Physical Dimensions

– Height 5.375 inches (13.7mm)
– Width 2.250 inches (5.7mm)
– Length 10.125 inches (25.7mm)

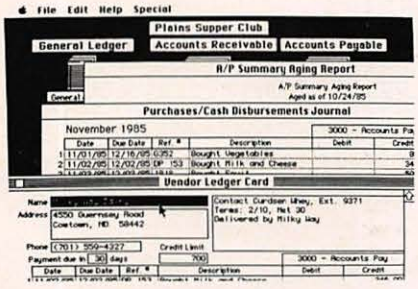
ERGOTRON inc
P.O. Box 17013 • Mpls., MN 55417 • (612) 854-9116; 800/328-9839

Circle 19 on Reader Service Card

Accounting

■Plains & Simple

Accounting



512K or larger Macintosh; second disk drive.

Plains & Simple is a one-write accounting system that includes general ledger, accounts receivable and accounts payable. Through these three functions the user can access the general journal sales/cash receipts journal, purchases/cash disbursements journal and customer and vendor ledger cards and reports.

The program graphically reproduces one-write forms on screen and provides a transition to computerized accounting. It also retains transaction details for as long as needed.

In addition, a cash flow calendar permits users to project future positions based upon anticipated incoming and outgoing cash flows.

$695 retail

Great Plains Software; 1701 SW 38th St.; Fargo, N.D. 58103; 701-281-0550

Rags To Riches

Accounting

Any Macintosh; printer.

Modules include Inventory, General Ledger, Accounts Receivable, and Accounts Payable.

$199.95 retail; per module

$499.50 retail; Inventory, Ledger, Payables

$499.50 retail; Ledger, Receivables, Payables

Chang Labs; 5300 Stevens Creek Blvd.; San Jose, Calif. 95129; 800-972-8800 or 800-831-8080 in Calif.

Recenu

Receivables

Any Macintosh; external disk drive; Microsoft BASIC 2.0.

A menu-driven software program designed to provide small businesses with affordable receivables control.

$295 retail; without *Microsoft BASIC*

$445 retail; with *Microsoft BASIC*

Eureka Computer Systems, Inc.; PO Box 2308; Corsicana, Texas 75110; 214-872-2501

■ShopKeeper

Small-business accounting

512K or larger Macintosh; Microsoft BASIC 2.0; *external disk drive.*

Shopkeeper is an integrated program consisting of accounts receivable, billing, inventory, invoicing and point-of-sale functions.

The program is designed so that inventory does not have to be merchandise or parts. It can be hourly labor charges, medical lab procedures, auto tune-ups, thesis pages typed, golf lessons or anything that can have a set unit price.

Shopkeeper handles inventory reports, monthly statements, summaries and other reports, and all information is accessible beyond the end of each month. It can handle handwritten sales tickets and dollar or percentage discounts.

Customer numbers can be numbers, names or a mixture of both. In addition, all disk information is stored as plain ASCII text and can be transferred to other programs.

Optimized for about 400 customers and 1,300 inventory items, the system is said to be able to handle more than twice those numbers. Inventory is limited only by disk space and memory.

$79.95 retail

Woodtec; 320 W. Maple; PO Box 445; Arkansas City, Kan. 67005; 316-441-0187

Strictly Business Accounting System Module One: General Ledger

Accounting

512K or larger Macintosh; two disk drives.

Offers balance-sheet, profit-and-loss, trial-balance, and detail general ledger accounting capabilities.

$395 retail

Future Design Software; 13681 Williamette Dr.; Westminster, Calif. 92683; 714-891-9796

■TimeCard

Payroll accounting

512K or larger Macintosh.

The *Timecard* accounting package contains six integrated modules: *Invoice, Payroll, Checkbook, Accounts Receivable, Accounts Payable* and *General Ledger.*

The *Accounts Payable* module performs A/P functions as well as employee payroll. Calculations of all *Timecard* information, including hourly rates, overtime, commissions, straight salary and other payroll aberrations, are automatic.

The *Checkbook* module prints checks from both the *Payroll* and *Accounts Payable* modules.

Complete reports including cash disbursements, quarterly and year-to-date taxes, check registers, payroll registers, employee data, accounts payable data and accounts receivable data are continuously updated.

$369 retail; start-up package (includes *Payroll* and *Checkbook* modules)

$100 retail; each additional module

Varo Design Group; 28 Ridge St.; Arlington, Mass. 02174; 617-643-6135

■The VBSI Accounting Series

Integrated accounting system

512K or larger Macintosh; 10MB hard disk.

Modules available in *The VBSI Accounting Series* include *Accounts Receivable, Inventory, Accounts Receivable With Inventory* and *Accounts Payable/General Ledger.*

Accounts Receivable does invoicing and maintains account information, ages receivables and accommodates sales tax, discounts and credit. It also prints invoices, statements, a customer list and a transaction list. $300 retail

Inventory Manager maintains inventory by tracking items in stock and on order. The program will issue purchase orders and update reorder history. Reports can be generated from any item field. $300 retail

Accounts Payable/General Ledger handles an unlimited number of accounts and maintains all transactions for the year, automatic double entries, bank reconciliation and records for five banks. It also allows partial payment of invoices and takes into account discounts and complete vendor histories. The *General Ledger* is automatically updated. $500 retail

Accounts Receivable With Inventory includes *Accounts Receivable* and *Inventory Manager.* Stock is automatically deducted

The Creation

PageMaker™, the remarkable page layout program, gives you the tools to create high-quality business communications such as newsletters, catalog sheets and price lists in your own office.

Combining PageMaker with a Macintosh™ Computer and LaserWriter creates a powerful desktop publishing system that substantially reduces the time and money you spend on publications.

For example, a 16-page newsletter that takes 26 hours and costs $960 using traditional methods can be produced with PageMaker in just 8 hours for only $170.

PageMaker lets you quickly and efficiently integrate text and graphics onto a page which is displayed on the computer screen where you can also see how graphics, type styles, fonts and sizes will look when printed. When layout is completed, the document is ready for reproduction.

You don't have to be a graphic designer or computer expert to work with PageMaker.

The program makes it simple by following standard publishing procedures, eliminating repeated proofreading and incorporating a built-in text editor.

For more information on PageMaker—the most versatile desktop publishing system in all creation—contact your authorized Apple® dealer or Aldus Corporation.

PageMaker

Aldus Corporation
616 First Avenue, Suite 400
Seattle, Washington 98104
(206) 441-8666

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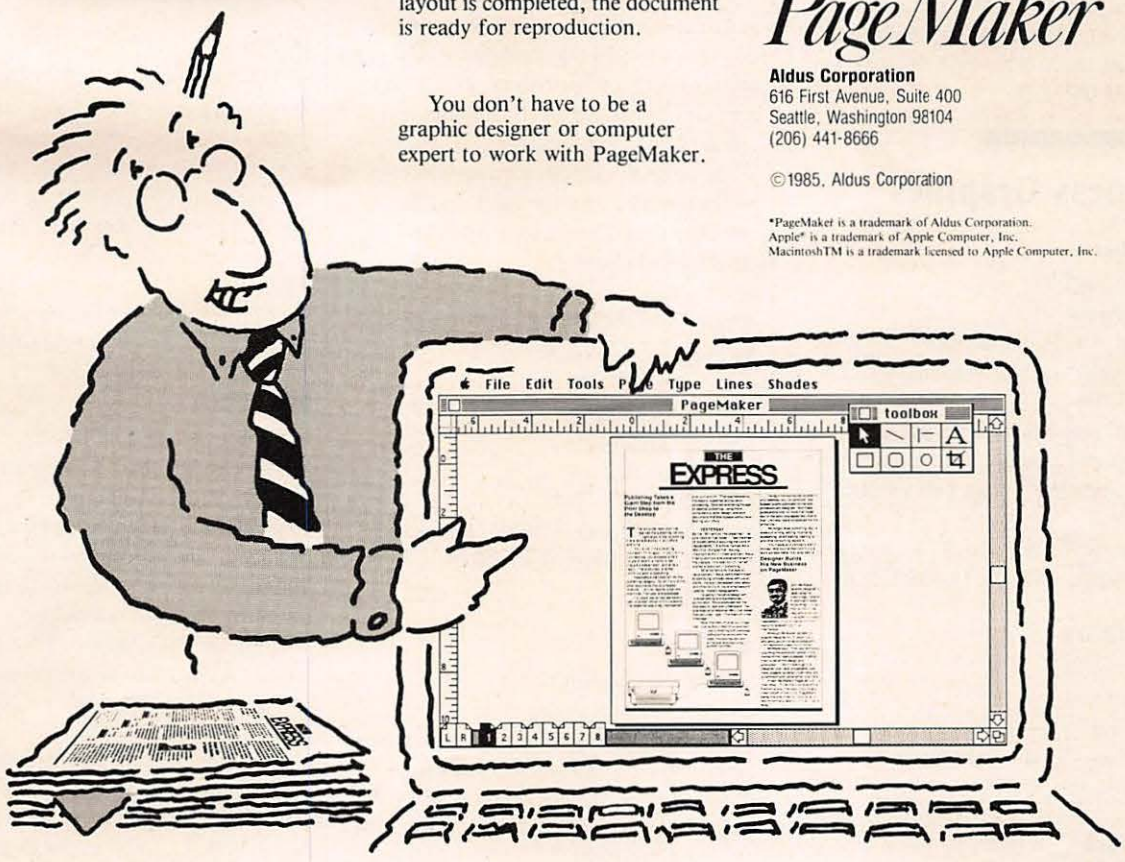


Accounting

when issuing an invoice. $450 retail
$750 retail; *The Complete Accounting Series,* includes *Accounts Receivable* and *Accounts Payable/General Ledger*
$900 retail; *The Complete Accounting Series With Inventory,* includes *Accounts Receivable With Inventory* and *Accounts Payable/General Ledger*
Vertical Business Software, Inc.; 662 Main St.; New Rochelle, N.Y. 10801; 914-632-8305

Versa Business Series

Accounting
Any Macintosh; external disk drive.

The series is made up of five separate software modules: Versareceivables, Versapayables, Versapayroll, Versainventory, and Versaledger II.
$149.95 retail; *Versaledger II*
$99.95 each retail; all other modules
H & E Computronics, Inc.; 50 N. Pascack Rd.; Spring Valley, N.Y. 10977; 914-425-1535 or 800-431-2818

Business Graphics

ColorChart

Business graphics
Any Macintosh.

A stand-alone business graphics program that will print and plot black-and-white or color charts.

Finished charts may be printed out on an Imagewriter or plotted on an Apple Color Plotter or Hewlett-Packard 7475A Plotter.
$39.95 retail
Esoft Enterprises; 8555 N. 117 E. Ave., Suite E-104; Owasso, Okla. 74055; 918-272-7616

■Easy Chart

Graphics; charts
Any Macintosh.
$19.95 retail
Encycloware; 715 Washington St.; Ayden, N.C. 28513; 919-746-3589

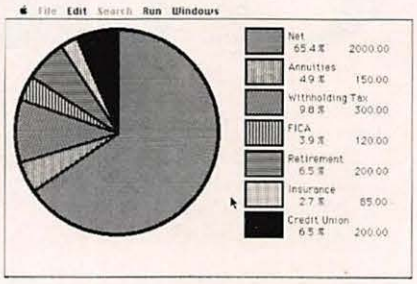
Mac-n-Pack

Business graphics
512K or larger Macintosh; Microsoft BASIC 2.0; *external disk recommended.*

A business graphics program designed to be used with the Hewlett-Packard 7475A Plotter.
$149 retail
Tan Technologies, Inc.; PO Box 445; Utica, Mich. 48087; 313-247-0470

■Master Graphics Made Easy

Business graphics



512K or larger Macintosh; Macpascal *or* Microsoft BASIC 2.0.

Master Graphics Made Easy is a two-dimensional graphics package.

Graphics utilities include user-coordinate-to-screen-coordinate transformations (linear and logarithmic); pie and bar charts; x-y point-to-point plotting; two-dimensional contour mapping; perimeter generation with selectable formatting labels; and user specification of text label formatting.

The program includes a master disk with program source code for BASIC and Pascal and documentation for both BASIC and Pascal graphics utilities.
$59.95 retail
KeySoft; 1817 Welton, #402; Denver, Colo. 80202; 307-742-5702

Microsoft CHART

Business graphics
Any Macintosh.
$125 retail
Microsoft Corporation; 10700 Northup Way, Box 97200; Bellevue, Wash. 98009; 206-828-8080

■ShowMe

Presentation graphics
Any Macintosh; Macpaint.

Showme can be used to present meaningful graphics in corporate meetings, retail demonstrations, training seminars, classrooms or anywhere people gather to receive desired information.

Graphics can be created from a variety of Macintosh software applications, such as *Macdraw* and *Thunderscan,* and large graphics can be displayed to the limits of the screen, excluding the menu bar.

Showme is not copy protected and, as

such, it operates on most hard disk drives. Other supported system options include the *Switcher* utility, a printer, an external large-screen display, RAM disk, external disk drive and more.
$49 retail
Folkstone Design, Inc.; 71-777 W. Queens Rd.; N. Vancouver, B.C., Canada, V7N 2L5; 604-986-8060

Communications

1stPORT

Communication; data conversion
Any Macintosh.

Allows the Macintosh to function as a terminal for communicating with other micros and mainframes. Also allows for conversion of data files from/to DIF, SYLF, Flat File, and *1stBASE* formats.
$95 retail
DeskTop Software Corporation; 244 Wall St.; Princeton, N.J. 08540; 609-924-7111

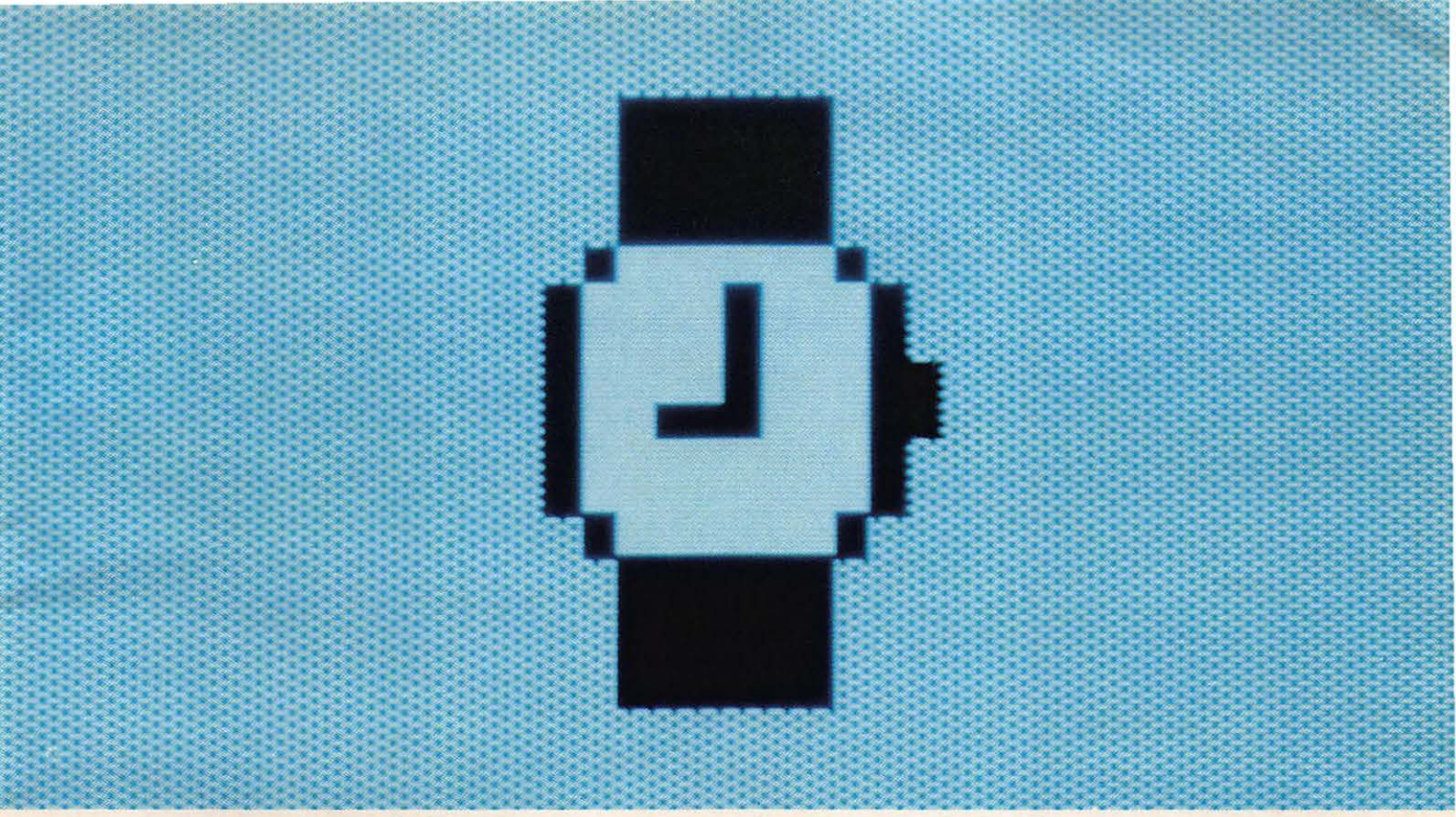
■AlphaMac

Communications; file transfer
Any Macintosh; Alpha Micro computer with AMOS/L; Macterminal.

Alphamac is software that runs on an Alpha Micro computer, and is designed as an interface between the Macintosh and the Alpha Micro family of computers.

Alphamac lets a Macintosh communicate with an Alpha Micro as an intelligent terminal. File transmission is also possible between the two computers.

In development are file translation facilities that will allow the Alpha to reformat some Macintosh files, such as *Macwrite* and *Microsoft Word,* to be read with an Alpha Micro word processor.



STARE AT THIS FOR 18.5 SECONDS. THANK YOU. YOU'VE JUST DEMONSTRATED THE BEST REASON TO OWN A HYPERDRIVE.

It takes 18.5 seconds to start MacWrite on a regular 512K Macintosh. And only 5.5 seconds on the world's fastest Macintosh—namely, one with HyperDrive. (Which will work with either the 512K Mac or the Macintosh Plus.)

To demonstrate the second best reason to own a HyperDrive, stack fifty diskettes atop one another. HyperDrive holds up to that much data without enlisting outside help from any diskettes at all.

The next demonstration will require a little imagination. Imagine a Macintosh with software that protects your data against loss by copying it onto diskettes. A print spooler that lets you go on to other jobs while your printer is occupied. And a security program that protects your files from unauthorized entry. You've just imagined a Macintosh with HyperDrive.

The next demonstration requires no imagination at all. Just stare at your Macintosh. Since HyperDrive is the first hard disk that's installed inside the Mac, it also preserves the Mac's appearance and portability.

But for the most convincing demonstration of all, just perform this simple operation: Visit an authorized General Computer dealer. He'll show you all the reasons why HyperDrive is, in the words of Macworld, "the happiest marriage of the Macintosh and a hard disk."

For details, call us at (800) 842-9000, Ext. 7, or (800) 843-9090, Ext. 7.*

GENERAL COMPUTER

The leading edge starts here.

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Circle 21 on Reader Service Card

Communications

Programs that will read an Alpha Micro document and translate it into something a Macintosh program can understand are also under development.
$500 retail
Products Diversified, Inc.; 9720 Beechnut, #406; Houston, Texas 77036; 713-771-8357

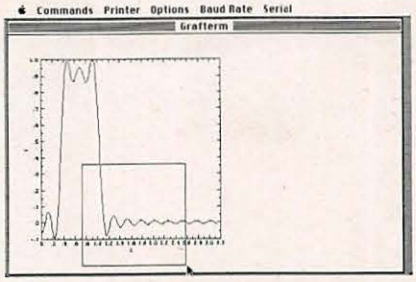
BLAST
Communications
512K or larger Macintosh.
Transfers information between a Macintosh and any of more than 150 other brands of computers, including micros, minis, and mainframes.
$250 retail
Communications Research Group; 8939 Jefferson Hwy.; Baton Rouge, La. 70809; 800-242-5278 or 504-923-0888

Cat Communication System
Communications
Any Macintosh.
Accesses asynchronous ASCII systems, bulletin boards, microcomputers, minicomputers, and mainframes. Includes *Mite* software.
$499 retail
Novation, Inc.; 20409 Prairie St., Box 2875; Chatsworth, Calif. 91311; 818-996-5060

Dow Jones Straight Talk 2.0
Communications
Any Macintosh; modem.
Connects the Macintosh to the Dow Jones News/Retrieval service and other remote data bases.
$95 retail
Dow Jones & Company, Inc.; PO Box 300; Princeton, N.J. 08540; 800-257-5114

Electronic Envelope
File transfer
Any Macintosh.
A communications utility program that prepares binary files for transmission over public and private electronic mail networks.
$49.95 retail
MCTel, Inc.; 3 Bala Plaza E, Suite 505; Bala Cynwyd, Pa. 19004; 215-668-0983

■Grafterm
Terminal emulation



Any Macintosh.
Grafterm consists of an ANSI (VT100 style) terminal emulator that can acquire and display Tektronix 4010/4014 format graphics vectors. The received vectors are displayed immediately with user-defined scaling and offset and are stored for screen redisplay and Imagewriter output.
The program provides a mouse-directed interface so that any portion of a plot can be displayed on screen. Zooming a plot is done by outlining a desired rectangle with the mouse and clicking a menu option.
The terminal emulator section of *Grafterm* supports baud rate and serial setup options and allows optional key remapping for convenience with various host computers. It has been optimized for common VT100 applications such as the DEC keypad editor when used with the Apple keypad. Some non-ANSI VT100 functions, such as 132-character screen width, are not supported.
The program is provided under single-machine license. It is available with optional support for users who require Tektronix 4105 or DEC Regis graphics functions.
$100 retail; *Grafterm*
$250 retail; Tektronix option
$250 retail; DEC Regis option
Infrastructure Software; 701 Devonshire C-18; Champaign, Ill. 61820; 217-351-0066

GriffinTerminal
Communications; text, graphics
Any Macintosh.
A Tektronix 4012 compatible text/graphics terminal emulator.
$89 retail
Metaresearch, Inc.; 1100 SE Woodward; Portland, Oreg. 97202; 503-232-1712

GriffinTerminal 100
Terminal emulation
Any Macintosh.
Emulates either a Tektronix 4012 Graphics Terminal or a VT100 terminal when linked to a mainframe or host computer.
$99 retail
Metaresearch, Inc.; 1100 SE Woodward; Portland, Oreg. 97202; 503-232-1712

■InBox
Desktop communications application
512K or larger Macintosh.
Inbox lets Appletalk Network users send messages and memos, and gives users true file sharing capabilities.
It offers automatic log on to the computer system; a typical Macintosh interface with animated buttons; and shared use of the Laserwriter printer. It is fully compatible with the new Macintosh Plus hardware and takes full advantage of the SCSI port and Apple's Hard Disk 20 storage device.
The Starter Kit contains the administrator package for the maintenance of the file server and the system and three *Inbox* personal connections.
Available first quarter, 1986; $295 retail; Starter Kit; $75 retail; each additional Personal Connection
Think Technologies, Inc.; 420 Bedford St.; Lexington, Mass. 02173; 617-863-5590

inTouch
Communications
Any Macintosh.
Allows communications with other computer systems, complete file transfers through industry-standard protocols, emulate various terminals, and supports the CompuServe VIDTEX software protocol.
$145 retail
Palantir Software; 12777 Jones Rd., Suite 100; Houston, Texas 77070; 713-955-8880

LEXIS/NEXIS
Communications
Any Macintosh; modem.
Enables access to a large full-text data base.
$165 per diskette
Volume discounts available
Mead Data Central; PO Box 933; Dayton, Ohio 45401; 800-227-4908

Mac 240
Terminal emulation
Any Macintosh.
Mac 240 is a terminal emulator for the VT240 line of text/graphics terminals

HOW TO BE ELOQUENT, WITTY, LOGICAL, FUNNY, PERSUASIVE FORCEFUL, AND EVEN VOCIFEROUS, BUT ALWAYS *EFFECTIVE.*

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Circle 22 on Reader Service Card

Communications

manufactured by Digital Equipment Corp. These terminals provide an ANSI-compatible text terminal and a graphics terminal (using the REGIS protocol) in one package.

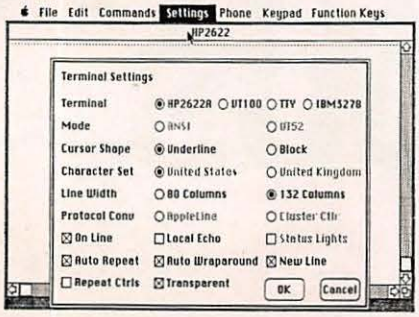
Features include VT220/VT100 compatibility, REGIS graphics for compatibility with DEC programs, and hard-copy output on the Imagewriter or other Macintosh-supported printers.

$195 retail

White Pine Software, Inc.; Pineherst Bldg.; 68 Rt. 101A, PO Box 1108; Amherst, N.H. 03031

■MAC-3000

Terminal emulation



512K or larger Macintosh.

Mac-3000 provides full HP block mode and HP 2622A, VT102, IBM 3278 and TTY terminal emulations.

Features include extended screen memory, user defined function keys, HP screen enhancements and default configurations and telephone number storage.

The program offers file transfer capabilities for downloading HP flat files to the Macintosh. Once on the Macintosh, data can be used in applications such as *Lotus Jazz* and *Microsoft Multiplan.*

Mac-3000 also offers the ability to communicate with a variety of computers and electronic information services such as The Source, Dow Jones News/Retrieval and CompuServe.

$99 retail

International Computer Consultants; 1311 Clegg St.; Petaluma, Calif. 94952; 707-765-9200

MacDasher

Terminal emulation

Any Macintosh.

Simulates operation and supports screen attributes of a Data General D210 terminal through the Macintosh's serial ports. Includes function key templates and macros.

$69 retail

Kaz Business Systems; 10 Columbus Cir., Suite 1620; New York, N.Y. 10019; 212-757-9566

MacLink

Macintosh/IBM PC communications

Any Macintosh; modems or optional cable.

Includes two-way file translations between *Lotus 1-2-3/Multiplan; Wordstar/Macwrite; Multimate/Macwrite;* and *Displaywrite/ Macwrite.*

$125 retail; *Maclink*

$155 retail; *Maclink* with eight-foot interface cable

DataViz, Inc.; 16 Winfield St.; Norwalk, Conn. 06855; 203-866-4944

MacMail

Telecommunications

Any Macintosh.

Based on an address book that contains phone numbers and mailing addresses, it is designed to handle both electronic and paper mail.

$59.95 retail

Aegis Development, Inc.; 2210 Wilshire Blvd., Suite 277; Santa Monica, Calif. 90403; 213-306-0735

■MacMainframe

IBM mainframe communications; terminal emulation

512K or larger Macintosh; Macterminal.

A hardware/software product that works in conjunction with its vendor's HFT (host file transfer) software on IBM mainframes, *Macmainframe* transfers files between a Macintosh and an IBM host.

Both *Macmainframe* and HFT are compatible with IBM's CICS, TSO and CMS environments.

Macmainframe also gives Macintosh users full IBM 3278 terminal emulation and either local or remote connection to the host, providing dial-in capabilities for multiple users.

Its hardware unit attaches directly to an IBM 3274 or 3276 control unit via coax cable. The *Macmainframe* unit, which attaches to a Macintosh's modem port, also provides an auxiliary RS-232 port with terminal pass-through capabilities for asynchronous communications.

Macmainframe's software component acts as a desk accessory for use with *Macterminal.* The software is fully interactive, allowing file transfers to be set up in standard Macintosh format using the mouse and other Macintosh conventions.

In addition, file-transfer features allow the sharing of text and binary data between Macintosh users and an IBM host.

Macmainframe is also compatible with its maker's TURBO line of micro-to-mainframe links for the IBM PC. This allows file/data sharing among IBM PC and Macintosh users connected to the same host.

$1,295 retail

Avatar Technologies, Inc.; 99 South St.; Hopkinton, Mass. 01748; 617-435-6872

■Mac Menlo Lear Siegler ADM2

Terminal emulation

Any Macintosh.

Mac Menlo supports block mode applications for host computer environments that use the Lear Siegler ADM2 terminal or its equivalent. Additionally, it supports conversational communications with all host computers and micros that include standard communications software.

The program takes full advantage of and applies standard Macintosh desktop and user interface features to host-based applications. It includes file transfer facilities to transfer text and graphics to and from the host computer.

It also allows the user to record an on-line session dialogue as a Macintosh file for later editing, printing or processing. An extensive local user programmable macro feature is provided as well as customized labeling of program functions and user defined keyboard equivalents.

The program supports saving and reloading any number of different configurations such as communications protocols, terminal options, file transfer options, host program function labels and local user commands. It communicates at baud rates ranging from 300 to 19,200.

$325 retail

Menlo Business Systems, Inc.; 334 State St., Ste. 201; Los Altos, Calif. 94022; 415-948-7920

■Mac Menlo T65xx

Terminal emulation

512K or larger Macintosh; cable, modem or other communications equipment.

Mac Menlo supports block mode applications for the Tandem host computer environ-

ment by emulating Tandem's T65xx line of terminals. It supports conversational communications with all host computers and micros that use standard communications software.

The program applies standard Macintosh desktop and user interface features to host-based applications. It includes file transfer facilities to transfer text and graphics to and from the host computer.

It also allows the user to record an on-line session dialogue as a Macintosh file for later editing, printing or processing. An extensive local user programmable macro feature is provided as well as customized labeling of program functions and user defined keyboard equivalents.

The program supports saving and reloading any number of different configurations such as communications protocols, terminal options, file transfer options, host program function labels and local user commands. It communicates at baud rates ranging from 300 to 19,200.

$395 retail

Menlo Business Systems, Inc.; 334 State St., Ste. 201; Los Altos, Calif. 94022; 415-948-7920

MacTerminal

Data communications

Any Macintosh; modem; RS-232 cable. For IBM 3278 communications, an AppleBus or Apple Cluster Controller is also required.

Allows emulation of several common data terminals such as the IBM 3278, DEC VT100 and VT52, and TTY.

$99 retail

Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-973-3317

MailBox

Electronic-mail system

128K or 512K Macintosh.

Allows users of IBM PC and compatible computers to send memos, reports, files, spreadsheets, and graphics to Macintosh and other computers on the Appletalk Personal Network. The program can be used in a network of up to 32 Macintosh and IBM Personal Computers.

$495 retail; *MailBox* with card, software, and documentation

Tangent Technologies; 5720 Peachtree Pkwy., Suite 100; Norcross, Ga. 30092; 404-662-0366

Mail Center

Information transfer

Any Macintosh.

Transfers diskette files and messages between computers linked by the AppleTalk Network.

Videx, Inc.; 1105 NE Circle Blvd.; Corvallis, Oreg. 97330; 503-758-0521

Market Link

Investor communications

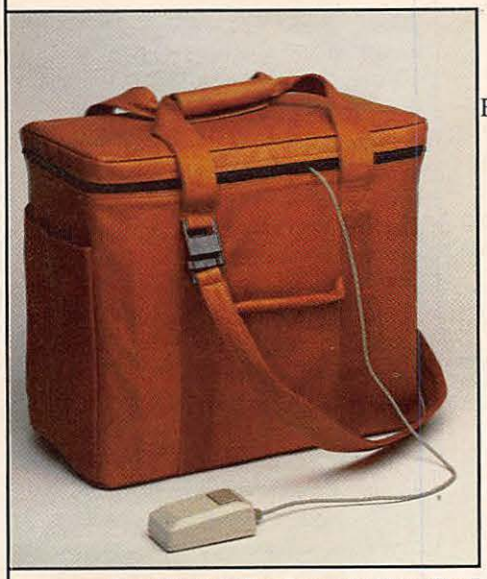
Any Macintosh; Apple, Hayes, or compatible modem.

Provides access to both Dow Jones and The Source and automatically fetches quotes from the Dow Jones News Retrieval service. Also, it provides an interface to the *Stock Portfolio System* as well as most spreadsheet applications.

$85 retail

Smith Micro Software, Inc.; PO Box 7137; Huntington Beach, Calif. 92615; 714-964-0412

Pamper your Macintosh in leather with . . . *The Bag*™



100% leather

Fully padded

Styles for the Mac and the Mac Plus

The Bag for the Macintosh **$149**

The Bag+ for the Macintosh+ **$169**

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MacLink allows you to translate spreadsheet and word-processing files between the Macintosh and the IBM PC... easily and quickly.

Now you can translate spreasheets between Lotus on the PC and Multiplan on the Mac ... including formulas, column formats, and functions.

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MacLink's integrated communications and unique

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translators work via modems or with an optional PC to Mac cable.

The cost is just $125. This includes the MacLink manual, and a MacLink disk for both the PC and the Mac. $155 with cable.

DataViz, Inc.-16 Winfield Street-Norwalk, CT 06855
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Trademarks: IBM, Lotus, Macintosh, MacWrite, Multimate, Multiplan, Wordstar, Displaywrite, Excel, Jazz, Word

Communications

MicroPhone
Telecommunications
Any Macintosh; plus modem.

File transfer is supported by XMODEM protocols and *Macbinary*, allowing anything that can be created on the Macintosh to be sent or received.

Emulates DEC VT52, VT100, and TTY-type terminals and supports ASCII and XMODEM protocols. It is compatible with the Laserwriter printer and Hayes, Apple, and other leading modems. The Apple *Switcher* is included for use with other programs.
$74.95 retail
Software Ventures Corp.; 2907 Claremont Ave., Suite 220; Berkeley, Calif. 94705; 800-336-6477, 800-336-6478 (in Calif.) or 800-336-6479 (in Canada)

■pcLINK
VAX interconnect; terminal emulation
Any Macintosh.

This product enables files to be transferred between Macintosh and VAX systems via a direct RS-232 connection or through a modem. *Pclink* performs the required data conversion for text files and supports MAC binary for binary file transfers.

VT100, VT220, ADDS Viewpoint 60 and Televideo 950 terminal emulation is supported for running VAX applications.

The program's function key facility allows the creation on screen of mouse activated macros. These can be used to abbreviate host commands and bring increased ease of use to VAX software.

Pclink's command file feature gives a user the ability to construct customized communication applications such as having a Macintosh wait until a designated time, dial a host, log on and upload several files to a designated directory. This can be accomplished without an operator at either end of the link.

Only the VAX side of *Pclink* is licensed. Pricing is based on the number of PCs connected to the host system.
$2,000 to $15,000 retail; five PCs to an unlimited number of PCs on a single host
Pacer Software, Inc.; 100 Pennsylvania Ave., Ste. 320; Framingham, Mass. 01701; 617-879-1765

PC to MAC and BACK
Communications
Any Macintosh; modem recommended. 128K IBM PC/XT/AT/PCjr; one disk drive; modem recommended.

Links the IBM Personal Computer to the Macintosh. It also provides each machine with the capability of connecting to outside information services.
$149.95 retail
dilithium Press; PO Box 606; Beaverton, Oreg. 97005; 800-547-1842

PROCOM-M
Communications
Any Macintosh; modem.

Has built-in text editor for use with all Hayes-compatible 300/1200-baud modems.
$99 retail; *PROCOM-M*
$549 retail; ProModem 1200M
Prometheus Products, Inc.; 4545 Cushing Pkwy.; Fremont, Calif. 94538; 415-490-2370

Smartcom II for the Macintosh
Communications
Any Macintosh; modem.

Incorporates the graphic user-interface concept found on the Macintosh.
$149 retail
Hayes Microcomputer Products, Inc.; PO Box 105203; Atlanta, Ga. 30348; 404-449-8791

TekPrint
Graphics; terminal emulation
512K or larger Macintosh; Versaterm.

A graphics application that allows high-resolution Tektronix 4014 graphics vectors (4,096 by 3,120 pixels) to be previewed and captured as *Tekprint* documents.

The program must be used in conjunction with *Versaterm*, a text and graphics terminal emulator.
$175 retail; with *Versaterm*
$79 retail; as an update to *Versaterm*
Peripherals Computers & Supplies, Inc.; 2457 Perkiomen Ave.; Mt. Penn, Pa. 19606; 215-779-0522

Telescape
Graphic communications
Any Macintosh; modem.

Allows sending of messages composed of various text sizes, fonts, and graphics shapes. Emulates any conventional terminal and includes an electronic mail message service.
$125 retail
Mainstay; 28611B Canwood St.; Agoura Hills, Calif. 91301; 818-991-6540 (voice) or 818-991-5037 (modem)

TopMail
Communications
512K or larger Macintosh; AppleTalk Personal Network.

An electronic mail store-and-forward system designed to be used with the Macintosh Office. It has two components: a central server and a desk accessory. The central server, which does not require a dedicated Macintosh, maintains a data base of system users, passwords, and mail in transit. The desk accessory is used to send or receive mail or query mail waiting for a user.
$299 retail; for an unlimited number of users
Topexpress Limited; 13/14 Round Church St.; Cambridge, England CB5 8AD; 223-355427

TouchStone Software
Networking; communications
Any Macintosh.

Macline, for the Macintosh, can be used in a network or by itself to communicate with a variety of systems. Used alone, it can dial and access any information system that supports ANSI, TTY, or DEC VT52/100 terminals.

Used in conjunction with the other programs in this family, *Macline* enables a Macintosh to exchange mail, transfer files, and access a remote printer or disk with a Unix, IBM PC, or VAX/VMS system. Requirements include an RS-232 cable. $145 retail

Unihost/vms runs on a DEC/VAX system and acts as a command server for the *Pcworks* and *Macline* packages. It facilitates file transfer, electronic mail, disk storage, or remote printing functions between systems. The VMS Operating System and a nine-track tape drive is required by DEC users. $1,495 retail

Unihost performs functions similar to *Unihost/vms*, but for users of Unix, Xenix, and Unix-derivative operating systems. It requires 30K to 60K disk/memory space. $295 to $795 retail

Pcworks also performs the same networking and telecommunications functions, except for users of IBM or IBM-compatible computers outfitted with 128K RAM, DOS 2.0, a 280K disk drive, and a RS-232 cable.
$195 retail
TouchStone Software Corporation; 909 Electric Ave., Ste. 207; Seal Beach, Calif. 90740; 213-598-7746 or 800-531-0450

"Smartcom II® (communications software) for the Mac is the best terminal program for the Macintosh..."

—*Link Up*, September 1985.

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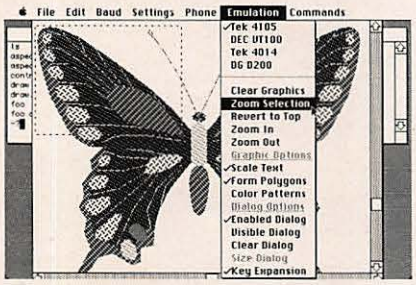
Communications

VersaTerm
Terminal emulation
Any Macintosh.
Allows a Macintosh to emulate a DEC VT100 or Data General D200 text terminal or a Tektronix 4014 graphics terminal.
$99 retail
Peripherals Computers & Supplies, Inc.; 2457 Perkiomen Ave.; Mt. Penn, Pa. 19606; 215-779-0522

VersaTerm-HP
Terminal emulation
Any Macintosh.
A text and graphics terminal emulator that allows a Macintosh to emulate an HP 2621 terminal from Hewlett-Packard, a Data General D200 text terminal, or a Tektronix 4014 graphics terminal when linked to a host computer.
$99 retail
Peripherals Computers & Supplies, Inc.; 2457 Perkiomen Ave.; Mt. Penn, Pa. 19606; 215-779-0522

■VersaTerm-PRO
Terminal emulation; communications



512K or larger Macintosh.
Versaterm-Pro allows users to use mainframe workstation graphics tools designed for the Tektronix 4105 color graphics/text terminal. Tektronix 4014 graphics, DEC VT100 text and Data General D200 text terminals are also supported.
A high-resolution selection of any graphic displayed on screen may be copied to the Macintosh clipboard and used in any other graphics application.
The program provides color output capability when connected to the Imagewriter, Imagewriter II or Laserwriter printer.
Versaterm-Pro also provides file communications features such as the XMODEM and Kermit file transfer protocols.
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Shaherazam; PO Box 26731; Milwaukee, Wis. 53226; 414-442-7503

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Diablo Valley Design; 4103 Hidden Valley Rd.; Lafayette, Calif. 94549; 415-283-1082

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Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-996-1010

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Any Macintosh; Macpaint.
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Williams AG Products; 8282 S. Memorial Dr., Suite 118; Tulsa, Okla. 74133; 918-252-7477

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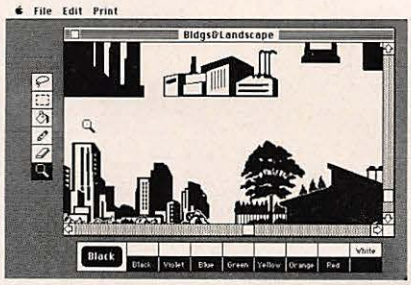

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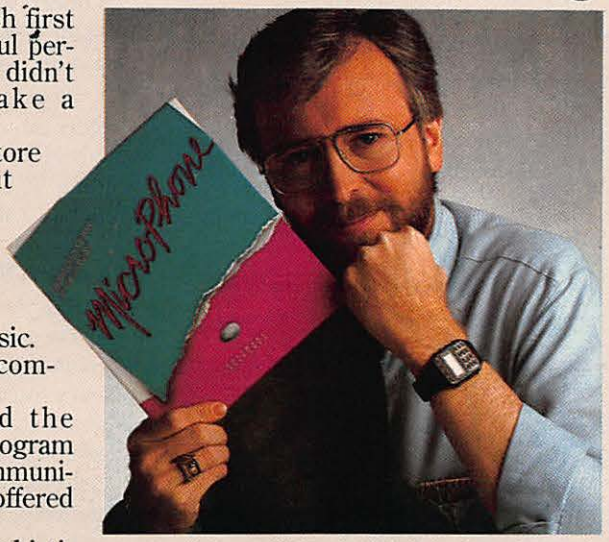
For all of you who thought Dennis Brothers was crazy to give away MacTEP,™ here's MicroPhone.™ The one he's selling.



When the Macintosh first came out, the most powerful personal computer ever built didn't have the brains to make a phone call.

So Dennis Brothers tore down his Mac, figured out how it worked, and wrote Mac's first communications program, MacTEP.

Which he proceeded to give away.

MacTEP was a classic. The first standard in Mac communications.

Now he's created the second: MicroPhone. A program that goes far beyond any communications software currently offered for any computer.

MicroPhone is so sophisticated, it cuts through the worst tangles you encounter when you go on-line. A delight to the experienced. And a saviour for the novice.

Run on automatic.

When you open MicroPhone to the desktop you'll find a comprehensive collection of icons pre-programmed to access all major information services: CompuServe,® Dow Jones News/Retrieval,® The Source,℠ Delphi,™ the works.

A few clicks and you're in. With automatic log-in and sign-on.

But that's just the beginning of its ability to automate the whole telecommunications process. For MicroPhone features the most powerful, yet simplest to set up macros ever seen on a program.

Write your own script.

Dennis gives you two ways to create these macros. The first is to set MicroPhone in the Watch Me,™ the recording mode.

The program looks over your shoulder as you conduct a communications session following your keyboard and menu commands.

MicroPhone can remember not only an uninterrupted string of keyboard commands, but also wait-for-prompt conditions. In fact, virtually any series, no matter how long or complex.

The entire sequence is saved. To be invoked at any time with a single key command.

The second way to generate macros is through MicroPhone's unique "Script" window. Open it and you'll discover an extensive set of functions which can be called up and linked with a series of mouse clicks. The resulting macro is extremely powerful. The method is Mac-simple.

Using Watch Me or the Script window, or a combination of both, you can automate log-ons, file transfers and unattended operations. And navigate back into the farthest reaches of any database with a single stroke.

Make files fly.

Sending and receiving files is faster and easier with MicroPhone, too. Using XMODEM protocols and MacBinary, MicroPhone transmits or receives anything you can create on a Macintosh. Including MacPaint documents, text, spreadsheets, charts, database tables, or programs.

MicroPhone allows you to scroll back and forth at high speed to review your session. Then you can select any portion of your session, print it, save it to a file, or copy it to the Clipboard for use by other Macintosh programs.

MicroPhone also features an editor desk accessory for composing text in mid-session using familiar Macintosh editing techniques.

But enough talk. See for yourself what Dennis Brothers has done now to advance the cause of telecommunications. Just take any major credit card in hand and call us toll free to place your order.

Dennis isn't giving it away this time. But at **$74.95,** almost.

Let's get technical box.
Runs in terminal emulation mode at speeds up to 57.6K Baud. Emulates DEC™ VT52,™ VT100™ and TTY type terminals. Supports TEXT (ASCII) and XMODEM (Christensen) protocols, send and receive. Supports MacBinary. Runs on 128K and 512K Macintosh. LaserWriter compatible. Includes Switcher for use with other Macintosh programs. Compatible with Hayes, Apple and other leading modems. Built-in full text editor licensed from Dreams of the Phoenix Inc. Documentation by Neil Shapiro.

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In USA and Canada, add US $3.00 for postage and handling per product ordered. All other countries add US $10.00. In California add 6% ($4.50) sales tax. ALL FOREIGN ORDERS: please make payment by bank draft, payable in US dollars, drawn on a US bank. No C.O.D. or Purchase Orders. If you are not 100% happy, return MicroPhone within 30 days for a full refund.

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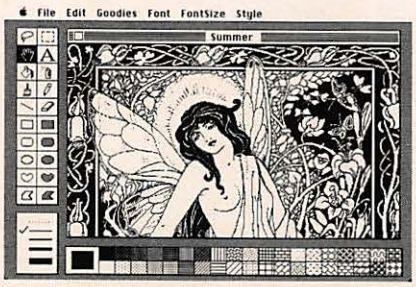

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Creative / Music

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Allows entry, printing, and playback of sheet music or a user's own compositions.
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Great Wave Software; 104 Gilbert Ave.; Menlo Park, Calif. 94025; 415-325-2202

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This product is fully compatible with all features of *ConcertWare+*. The user can record a sequence played on a keyboard into any of eight voice lines and have the computer translate it into standard musical notation. The Macintosh can record pitches, durations, and program changes, and velocity is also recorded if detected by the synthesizer. While recording one voice, the other voices can be played back and, if chosen, a metronome will tick the beat.
$139.95 retail
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Great Wave Software; 104 Gilbert Ave.; Menlo Park, Calif. 94025; 415-325-2202

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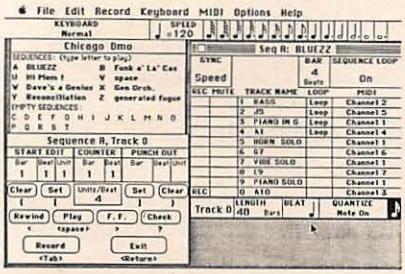

512K or larger Macintosh; MIDI interface.

The *Midimac Patch Editor* is a program for owners of Yamaha DX7, DX5, TX7 and TX816 synthesizers. It eases the complexity of programming digital FM synthesis algorithms by displaying every parameter of a sound on screen at once.

The *Midimac Patch Librarian* allows a user to use disks to store thousands of sound "patches" for his synthesizer.

Midimac Sequencer is a real-time musical performance and composition system. Through the use of MIDI, the Macintosh becomes a multitrack recording system that can be used by professional musicians, studio engineers or home users.

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Any Macintosh.

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MusicType 2.0

Music notation

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Shaherazam; PO Box 26731; Milwaukee, Wis. 53226; 414-442-7503

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512K or larger Macintosh.

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It plays back music—pitch blend, velocity and system exclusive information—exactly as entered.

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Mark of the Unicorn; 222 Third St.; Cambridge, Mass. 02142; 617-576-2760

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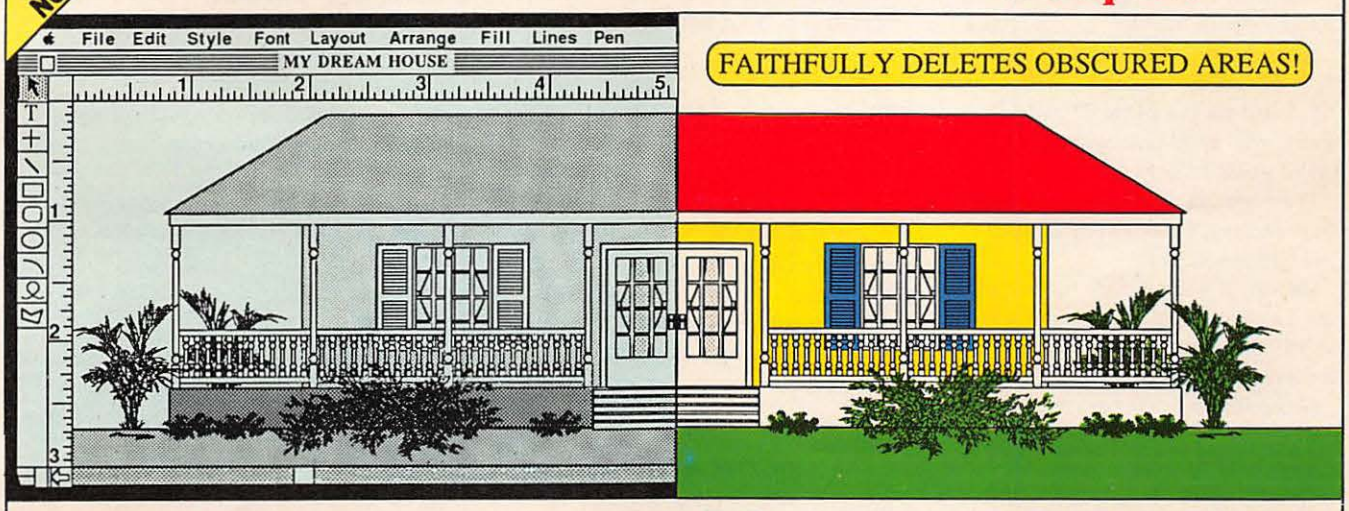

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Creative / Music

SongPainter
Music composition
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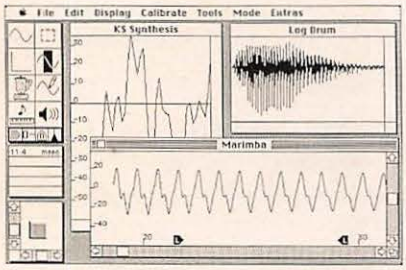
Rubicon Publishing; 6300 La Calma Dr., Suite 100; Austin, Texas 78752; 512-454-5004

■Sound Designer 2000
Music system



512K or larger Macintosh.

Sound Designer 2000 is designed to be used with the Sequential Prophet 2000 digital sampling keyboard. It allows sampled sounds to be transferred between a Macintosh and the Prophet 2000 via a standard Macintosh MIDI interface.

Sound data is transferred at twice normal MIDI data rate (63K baud) to minimize waiting. Sound waveforms are displayed on screen, with up to three waveforms displayed simultaneously.

The waveform display can be magnified to show fine detail, with editing accuracy to 1/40,000 of a second.

Calibration scales provide readouts of time and amplitude values at any location in the waveform, and the waveform display can be horizontally or vertically scrolled.

Sound Designer 2000 also includes FFT (Fast Fourier Transform) based frequency analysis and modification of sounds, digital equalization, enveloping, digital mixing, digital merging and a variety of other digital signal processing functions.

Direct digital synthesis can be performed on a Macintosh, and the resulting sounds transferred to the Prophet 2000 for playback.
$495 retail
Digidesign, Inc.; 920 Commercial; Palo Alto, Calif. 94303; 415-494-8811

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Creative Solutions, Inc.; 4701 Randolph Rd., Suite 12; Rockville, Md. 20852; 301-984-0262

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Southworth Music Systems, Inc.; 91 Ann Lee Rd.; Harvard, Mass. 01451; 617-772-9471

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Any Macintosh.
$79.95 retail
Polarware/Penguin Software; PO Box 311; 830 4th Ave.; Geneva, Ill. 60134; 312-232-1984

InMotion
Sound; multiple foreground animation; full-screen background images
512K or larger Macintosh.
$139.95 retail
Ann Arbor Softworks, Inc.; 308 ½ S. State St.; Ann Arbor, Mich. 48104; 313-996-3838

I/O Design
ColorPrint—compatible with the Imagewriter II using the four-color ribbon or the standard Imagewriter by changing color printer ribbons. This graphic printer utility allows a user to print in full color. Works with *Macpaint* or *Macdraw*. $29.95 retail.

ColorPrint Starter Kit 3—Colorprint software plus one each red, yellow, and blue ribbon. $49.95 retail
I/O Design, Inc.; PO Box 272; Rumson, N.J. 07760; 201-747-0943 or 800-241-2122

■Mac Animation Station System 1
Animation; artwork
512K or larger Macintosh.

The *Mac Animation Station System 1* is designed for animators, storyboard designers and other professionals in the film, television and commercial production industries who deal with moving images.

Computerized artwork can be prepared by artists using "paint" programs and the *Macmovie Studio* software. Video camera images may be combined with hand drawn or computer generated artwork for special effects.

An included pen and tablet graphics work slate can be used instead of the mouse for entering hand drawn artwork.
$4,995 retail
Beck-Tech; 41 Tunnel Rd.; Claremont Hotel; Berkeley, Calif. 94705; 415-548-4054

MacDraft
Drawing aid
512K or larger Macintosh.

The program can be used to create scaled drawings, schematic diagrams, organizational charts, business illustrations, general sketches, greeting cards or just about anything a user may want to draw.
$239 retail
Innovative Data Design, Inc.; 1975 Willow Pass Rd., Ste. 8; Concord, Calif. 94520; 415-680-6818

MacDraw
Designing and graphics
Any Macintosh.

A custom graphics program that allows the user to design forms and technical illustrations.
$125 retail
Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-973-3317

■MacMike

Hardware/software digitizer

512K or larger Macintosh.

Macmike is a combination hardware/software product for digitizing sound and playing it back through a Macintosh's built-in sound port.

The software permits recording, playback, editing and mixing in order to create sound selections and special effects. Various filters and a real time FFT (Fast Fourier Transform) are included for the analysis of waveforms.

Moving waveforms can be displayed on screen directly from the microphone or during playback.

In storage oscilloscope mode, a waveform can be zoomed out to view its envelope; editing can be performed at any zoom setting.

An included microphone contains digitizing circuitry in its handle and draws power from the Macintosh's serial port. A direct electrical connection that disables the microphone element is provided.

Memory usage is optimized through the use of compression and a sample speed control. The sample speed can be set to any rate from 30,000 to 10 samples per second or less.

The mike hardware monitors the sample speed and automatically adjusts its seven-pole anti-aliasing filter.

Available first half, 1986; $130 retail

Phonetix, Inc.; 300 E. 40th St., Ste. 21E; New York, N.Y. 10016; 212-570-7449

■MacSlideshow Interactive

Presentation graphics; slide shows

512K or larger Macintosh.

Macslideshow Interactive is designed for general business, audiovisual training and educational applications.

The program is both a presentation graphics tool for making slide shows with *Macpaint* images and an audiovisual training tool that provides an interactive data base of pictures and text information.

It can help users select images from an on-screen image library, organize them into an effective sequence, time them and add special effects and titles. The program can also play back sequences one frame at a time or at any speed.

Macslideshow Interactive emulates videodisc operation and can be used to run a slide show, prompt and question viewers interactively and, depending on responses, branch to other sequences in a slide show where corrective action or additional information is provided.

$195 retail

American Intelliware Corporation; 330 Washington St., Ste. 400; Marina del Rey, Calif. 90292; 213-827-0803

Magic Slate

Geometric abstracts; graphics

Any Macintosh.

Allows a user to generate both formal, geometric abstract art and stylized graphics. It can also be use to teach balance, form and rhythm—the basics of art.

$99 retail

Devionics; PO Box 2126; Covina, Calif. 91722; 714-779-7193

The Slide Show Magician Version 1.3

Computerized slide shows; special effects; voice and sound

Any Macintosh.

The Slide Show Magician allows users to create computerized "slide shows" with movie-like special effects. $59.95 retail

Natural Sound Editor includes the translator and editor for using the *Macintalk* voice by Apple. It permits the user to select all or parts of any sound and change its length and volume, to repeat sounds, add echoes, mix and overlay one sound upon another, link sounds, and create reverberations. $39.95 retail

Natural Sound Cable connects your tape recorder to the Macintosh. It allows the user to add the digitized sound he has recorded to any frame of the presentations created with the *Slide Show Magician.* $90 retail (not for the XL or Lisa)

Natural Sound "Sound Effects" is a two-disk set that allows the user to add effects to presentations in order to increase interest and capture attention. $29.95 per set retail

Magnum Software; 21115 Devonshire St., Suite 337; Chatsworth, Calif. 91311; 818-700-0510

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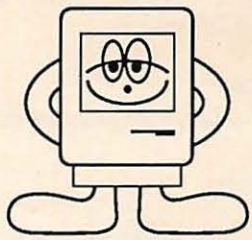
and

Macintosh™

MAC MENLO™



Emulates:
- Tandem T6510,20,3x
- Lear Siegler ADM-2™
- TTY type terminals
- *MAC* MENLO can also be customized to emulate your specialized terminal.

Features include:
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- Block mode w/attributes
- powerful file transfer
- XModem
- and much, much more...

Menlo Business Systems, Inc.
Computer Application Strategies
334 State St. - Suite 201
Los Altos, CA 94022
(415) 948-7920

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ADM-2 is a trademark of Lear Siegler Corp.
Macintosh is a trademark licensed to Apple Computer, Inc.
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Creative / Other

SmoothTalker 2.0
Speech synthesis software
Any Macintosh.

Converts plain English text and numbers from the keyboard, *Macwrite, Microsoft Word, Jazz,* or almost any text document, into high-quality speech. Female voice is now available. Works with *Microsoft BASIC 2.1* and other programming languages.
$99.95 retail
First Byte, Inc.; 2845 Temple Ave.; Long Beach, Calif. 90806; 213-595-7006

Storyboarder
Creative planning
512K or larger Macintosh.

An animation and presentation program that allows users to dramatize ideas into a dynamic montage or slide shows.
$495 retail
American Intelliware Corporation; 330 Washington St., Ste. 400; Marina del Rey, Calif. 90292; 213-827-0803

TALKSHOW
Subset of Smalltalk 80 programming language
Any Macintosh.
$149 retail
Rune Enterprises; 1502 Kirkham; San Francisco, Calif. 94122; 415-681-1763

Data Base

1stBASE
Relational data base system
Any Macintosh.

Supports file handling and report writing.
$195 retail
DeskTop Software Corporation; 244 Wall St.; Princeton, N.J. 08540; 609-924-7111

Brock Keystroke Advanced/Data Encrypted Version
Relational data base system
Any Macintosh.

Add password protection in three levels to the *Brock Keystroke Relational Database.* Merges from SYLK; DIF files also possible.
$395 retail
Brock Software Products, Inc.; 8603 Pyott Rd.; PO Box 799; Crystal Lake, Ill. 60014; 815-459-4210

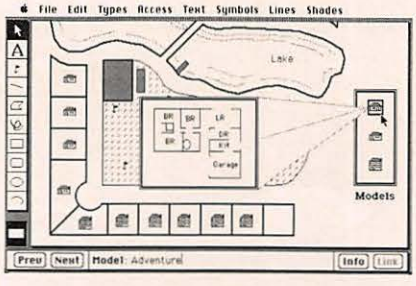
Brock Keystroke Filer
Data base
Any Macintosh.

Features free-form input design; flexible field formatting; supports calculations and computed fields; search/sort feature; and prints reports, labels and does form letter merges.
$99 retail
Brock Software Products, Inc.; 8603 Pyott Rd.; PO Box 799; Crystal Lake, Ill. 60014; 815-459-4210

Brock Keystroke Relational Database and Report Generator
Data base
Any Macintosh.

Has all the features of *Brock Keystroke Filer.* Allows for relationships to be established between files on a record-by-record basis for easy searching, or on a file-by-file basis for updating files in batch mode.
$199 retail
Brock Software Products, Inc.; 8603 Pyott Rd.; PO Box 799; Crystal Lake, Ill. 60014; 815-459-4210

■Business Filevision
Integrated filing



512K or larger Macintosh; external drive.

Business Filevision integrates a full-function filing system, a drawing system and a reporting system.

The program offers an optional import/export utility that enables users to exchange data with existing Macintosh and MS-DOS programs. In addition, applications that use DIF, SYLK or ASCII files can exchange files with *Business Filevision.*

The filing system works with files as large as four megabytes. Files can be independent of the program's drawing system or linked to graphics such as pictures and maps.

The drawing system provides an 8- by 10-inch space for graphics. Drawings stored in the program are "intelligent pictures" from which the user can get data by pointing to any part of the picture.

The reporting system provides a 30- by 30-inch print size and reduction and rotate page capabilities. It can mathematically or statistically compute information from different data fields in all reports.

Business Filevision's ability to accept *Macpaint* files enables it to use digitized images and other images made with graphics input aids.
$395 retail
Telos Software Products; 3420 Ocean Park Blvd.; Santa Monica, Calif. 90405; 213-450-2424

Client-Bridge
Data base manager
512K or larger Macintosh; external drive or hard disk.

Can be used to record and track information about current and potential business clients/customers/members. The program records information such as names, addresses, telephone numbers, status, activity, and so forth. It also tracks financial activity and status. Mailing labels may be produced, and it can be used in conjunction with word-processing systems to create personalized form letters.
$99 retail
Software Bridge, Inc.; 6925 Union Park Ctr., Suite 413; Midvale, Utah 84047; 801-562-2121

DataFast
Data base management
Any Macintosh.

Maintains mailing lists, addresses, inventories, recipes, bibliographies, or anything that needs orgainzing.
$49 retail
StatSoft; 2831 E. 10th St., Suite 3; Tulsa, Okla. 74104; 918-583-4149

Attention lawyers, doctors, engineers, accountants, consultants, businessmen, marketeers, realtors, and their staffs: ***Think of the productivity gains you will make in your business, if you master your ABC's like spreadsheets master your 123's.***

A spreadsheet for words?

Spreadsheet programs were the first dramatic use of **knowledge modeling**. The Model Office Company has now extended the power of modeling from the realm of *numbers* and *formulas* to the realm of *words* and *activities*, with two exciting new programs:

1 The *Document Modeler* allows you to build a model of a document so that you or your staff can create every conceivable variation of that kind of document, *in a fraction of the time, and at a fraction of the cost.*

2 The *Project Modeler* allows you to construct a model of all the possible activities involved in a project so that you or your staff can expedite the performance of a particular project step by step. Most of the record-keeping, reminding, explaining and doing is done automatically by the model.

As author of a model, you are able to provide in-depth assistance to the person using the model, at every step.

The Model Office Company has made it profoundly simple for you to create models which combine your business knowledge with the speed and power of the computer. You don't have to be a *computer* expert to make the most of your *business* expertise. Furthermore, you can keep enhancing and updating the models to reflect your day-to-day experience.

Making documents from models is a snap. As you respond to the prompts the document unfolds. Document Modeler automatically finds the appropriate clauses, fills in the blanks, performs all the necessary calculations, and formats a finished document ready for printing or for final editing using your word processor.

With the declining cost of computing and the rising cost of people, it makes sense to delegate routine work to computers. People can then have more time for qualitative aspects of work. Isn't that just what you'd expect from a Macintosh?

We're so sure you'll be able to recover the cost of our program in your first application, you can return the program for a full refund if you don't. To order products or information, contact:

THE MODEL OFFICE COMPANY

The Gooderham 'Flatiron' Building,
49 Wellington St. East,
Toronto, Canada M5E 1C9
1-800-268-8181; or, (416) 860-1033

Document Modeler, Project Modeler, and The Model Office Company are trademarks of The Model Office Company Inc. Macintosh is a trademark licensed to Apple Computer Inc.

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Data Base

DB MASTER for the Macintosh
Information management; data base
Any Macintosh; printer recommended.
$195 retail
Stoneware, Inc.; 50 Belvedere St., San Rafael, Calif. 94901; 415-454-6500

dBx Translation System
Language translator
Any Macintosh; C language.
Allows a user to move functional *Dbase* applications to environments where using the C language is more practical.
$350 retail
Desktop A.I.; 1720 Post Rd. E, #3; Westport, Conn. 06880; 203-255-3400

Detente
Relational multi-user data base system
512K or larger Macintosh; external disk drive.
A multi-user data base management system that allows as many as 45 people to share the same file at the same time.
The program is compatible with *Wosbase* for the IBM PC. This means that, with AppleTalk, users can assemble a network of Apple and IBM personal computers.
$195 retail; two users
$495 retail; 15 users
$995 retail; 45 users
WOS Data Systems, Inc.; 455 Austin; Colby, Kan. 67701; 913-462-7581

■Easy Data
File management; data base; forms
512K or larger Macintosh.
$19.95 retail
Encycloware; 715 Washington St.; Ayden, N.C. 28513; 919-746-3589

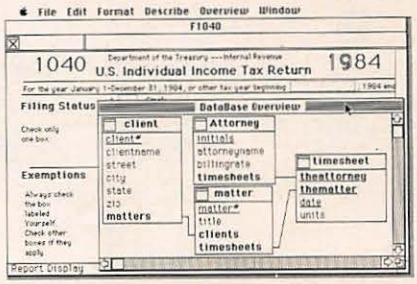
Factfinder
Data organization and management
Any Macintosh.
A free-form filing system for organizing and retrieving notes, ideas, and simple documents. It is not copy protected.
$150 retail
Forethought, Inc.; 1973 Landings Dr.; Mountain View, Calif. 94043; 415-961-4720 or 800-622-9273

FileMaker
Data base
Any Macintosh.
Combines comprehensive data management, flexible forms design, and sophisticated report generation into a single package. It is not copy protected.
$195 retail
Forethought, Inc.; 1973 Landings Dr.; Mountain View, Calif. 94043; 415-961-4720 or 800-622-9273

Filevision
Visual filing system
Any Macintosh.
$195 retail
Telos Software Products; 3420 Ocean Park Blvd.; Santa Monica, Calif. 90405; 213-450-2424

Helix
Information management; data base
512K or larger Macintosh.
Helix is a data based information management and decision support system that allows individuals to build applications tailored to their specific needs. $395 retail
Double Helix provides these individuals with the ability to create custom menus and to protect the structure of the application with passwords. $495 retail
Runtime Helix allows value-added resellers and application publishers within corporations to build stand-alone vertical packages. $500 license fee; 10 applications
Multiuser Helix allows people in a networked work group to simultaneously use a customized *Helix* information base and share information dynamically.
Available first quarter, 1986
Odesta Corp.; 4084 Commercial Ave.; Northbrook, Ill. 60062; 312-498-5615

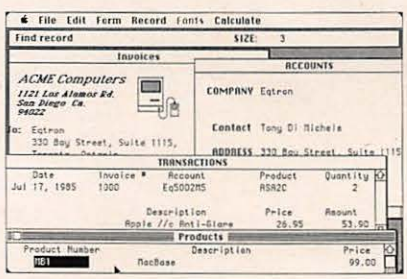
■Interlace
Information management analysis
512K or larger Macintosh.
Interlace merges the capacity of a relational data base, the calculation capability of a spreadsheet and the clarity of a visual layout into one product.
Interlace does not require a knowledge of



programming languages. Instead of the sequential, step-by-step method of solving problems required by programming languages, the package works through familiar spreadsheet formulas.
The program describes the relationships between data in multiple files and specifies the calculations required to perform complex tasks.
Interlace provides visual data base design and what-you-see-is-what-you-get report and form layout. Since layouts are free-form, users can position data exactly where they want it using appropriate fonts, styles, formatting and graphics.
$139 retail
Singular Software, Inc.; 5888 Castano Dr.; San Jose, Calif. 95129; 408-446-0207

LaserBase
Information management
512K or larger Macintosh.
Used for inventory, order processing, stock management, job costing, sales tracking, customer records, medical records, and many other applications.
$149.95 retail
Kette Group, Inc.; 6860 Shingle Creek Pkwy.; Minneapolis, Minn. 55445; 800-328-0184 or 612-566-0221

■MacBase
Relational data base



512K or larger Macintosh; printer and external disk drive recommended.

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Liberty Spell-Checker™ works with spread-sheets, word processors, graphics, programming tools, and most other standard Mac programs.

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Data Base

With *Macbase*, text can be placed anywhere on screen.

Field types include alphanumeric, integer, floating point, date and telephone numbers. All field types can be formatted and stretched via the mouse.

The program comes with the *Desk Grabber+* desk accessory, which allows the user to copy graphics created in *Macpaint* and paste them into the background of a form.

Macbase has over 40 different functions to construct complex formulas, which can be up to 32,000 characters in length.

Numeric fields can use arithmetic, business, trigonometric, logarithmic and statistical functions. Alphanumeric fields can use concatenation and substring functions.

Additional functions allow the user to calculate the last day of a month or the day of the week for a particular date.

Forms can be placed within another, and data can be extracted from the inner form using values in the fields of the outer form. The user can nest forms in this manner up to 200 deep.

Macbase can also import and export data from other applications that use SYLK or Text file formats.

$99 retail

Eqtron Corp.; 330 Bay St., Ste. 1115; Toronto, Ontario, Canada M5H 2S8; 800-622-2273 or 416-361-5002

■MacPhile

File management

Any Macintosh; Microsoft BASIC.

Macphile is a file management program designed for business or personal users who already own *Microsoft BASIC.*

Created to eliminate card file or notebook filing systems, *Macphile* features a powerful report generation function, sorting on any field and on-line help screens. A user's guide is included for learning how to use these functions.

Macphile is user-supported software, acquired from its author for a nominal fee. Purchase entitles the user to support services, low-cost upgrades and the BASIC source code.

The program is not copy protected.

$15 retail

SanSoft; 892 E. Quail Pl.; Highlands Ranch, Colo. 80126; 303-791-0686

MegaFiler

File management; data base

Any Macintosh.

$195 retail

Megahaus Corporation; 5703 Oberlin Dr.; San Diego, Calif. 92121; 619-450-1230

■Micetro

Information management

Any Macintosh.

Micetro is an information management package that consists of two applications and allows a graphic pattern of free-form information and access rules to be developed and used for interrogation purposes.

Unlike conventional data base programs, *Micetro* records a user's input while the user is obtaining information.

Micetro's uses include testing, surveys, computer aided instruction, specialized data bases, mini expert systems, user's manuals and more.

$95 retail

Mainstay; 28611B Canwood St.; Agoura Hills, Calif. 91301; 818-991-6540 (voice) or 818-991-5037 (modem)

Microsoft FILE

File management; data base

Any Macintosh.

$195 retail

Microsoft Corporation; 10700 Northup Way; Box 97200; Bellevue, Wash. 98009; 206-828-8080

Net Solutions I

Data base templates

512K or larger Macintosh; external disk drive or hard disk.

Contains the following data base templates: *Business Checkbook System, Service Industry System,* and *Business Mailing List Manager.*

All three templates require the *Omnis 3* data base management program, and are suitable for use in small and mid-size businesses.

$49.95 each retail

The Networkers; 3500 Market St., Suite 103; San Francisco, Calif. 94131; 415-550-1710

■NiftyBase

Data base

Any Macintosh.

A relational MIS system that allows a user to have mainframe data management power in his micro. Full indexing of files and sorting capabilities are standard.

Kette Group, Inc.; 6860 Shingle Creek Pkwy.; Minneapolis, Minn. 55445; 612-566-0221 or 800-328-0184

OMNIS 2

Information management

Any Macintosh; external disk drive.

$275 retail

Blyth Software Inc.; 2655 Campus Dr., Suite 150; San Mateo, Calif. 94403; 415-571-0222

OMNIS 3

Data base manager

512K or larger Macintosh; external disk drive.

$495 retail

Blyth Software Inc.; 2655 Campus Dr., Suite 150; San Mateo, Calif. 94403; 415-571-0222

Omnis 3 Multi-User

Data base

512K or larger Macintosh; Corvus Omnidrive; 3Com Fileserver.

$990 to $2,995 retail

Blyth Software, Inc.; 2655 Campus Dr., Suite 150; San Mateo, Calif. 94403; 415-571-0222

OverVUE 2.0

Data base management

Any Macintosh.

A relational data base with unmatched speed that supports features such as import/export, clairvoyance, macros, charts, and math functions, giving it characteristics of both spreadsheets and chart programs.

$295 retail; *OverVUE 2.0*

$20 retail; upgrade for current *OverVUE* owners

ProVUE Development Corporation; 222 22nd St.; Huntington Beach, Calif. 92648; 714-969-2431

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Redgate Communications Corporation

3381 Ocean Drive, Vero Beach, Florida 32963, 305-231-6904

Data Base

PFS:File and Report

File management; data base; report organizer

Any Macintosh; second disk drive recommended for large files.

$175 retail

Software Publishing Corporation; 1901 Landings Dr.; Mountain View, Calif. 94043; 415-962-8910

PictureBase

Clip art manager

512K or larger Macintosh.

An art management system that lets a user organize Macintosh clip art and *Macpaint* or *Macdraw* documents into easy-to-use picture libraries.

Also included is the *Picturebase* desk accessory, for retrieving pictures without leaving the current application, and Apple's *Switcher* utility.

$69.95 retail

Symmetry Corporation; 761 E. University Dr., Ste. C; Mesa, Ariz. 85203; 602-844-2199 or 800-624-2485

Record Holder

Data base manager

Any Macintosh.

The maximum length of a data field in the program can be up to 32K on a 512K Macintosh. Besides text fields, *Record Holder* allows numeric fields, date fields, and derived or computed fields.

$49.95 retail

Software Discoveries, Inc.; 99 Crestwood Rd.; Tolland, Conn. 06084; 203-872-1024

ValueSoft Manager

File management

Any Macintosh.

Allows storage and retrieval of graphs, charts, and pictures as well as text.

$175 retail

ValueSoft, Inc.; 24 Diablo Ct.; Danville, Calif. 94526; 800-631-2616 or 415-838-7507

WOSbase

Relational multi-user data base

512K or larger Macintosh; AppleTalk Personal Network for multi-users.

A data base program that allows multiple Macintoshes and IBM computers running on the AppleTalk Personal Network to share the same data. There is no copy protection.

$195 retail; two-user version

$495 retail; 15-user version

$995 retail; 45-user version

WOS Data Systems, Inc.; 455 Austin; PO Box 744; Colby, Kan. 67701; 913-462-7581

■Zip Code Finder

Mailing aid

Any Macintosh.

Allows access to the zip code of any city in the United States.

$29 retail; 2-disk set of all U.S. cities

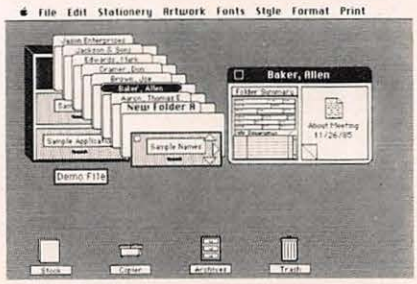
$169 retail; 20-disk set of all cities, streets/PO Boxes

Encycloware; 715 Washington St.; Ayden, N.C. 28513; 919-746-3589

Integrated

■Executive Office

Integrated office manager



512K or larger Macintosh.

Executive Office is an integrated software program made up of different word processing, data base and spreadsheet modules.

All program functions are controlled by the user through a filing cabinet, which is visually represented on screen, and each module can import data from *Macwrite, Macpaint* and SYLK files.

Word processing capabilities include document preparation, two-column newsletter printing, paragraph formatting and multiple document viewing. File management features include searching, listing and report generation.

Executive Office's data base holds as many records as disk space permits, and each record is retained in the form of a file folder.

The program's 360-cell spreadsheet, compatible with *Multiplan* and other spreadsheet software, can be used for calculating profit projections and so forth.

Executive Office also performs a number of math calculations, saves report formats and allows a user to create custom forms. In addition, it can print form letters and mailing labels.

$349.99 retail

$6.95; demo disk and audio tape

Datapak Software, Inc.; 14011 Ventura Blvd., Ste. 402; Sherman Oaks, Calif. 91423; 818-905-6419

Genesis

Integrated software

Any Macintosh.

Package contains separate word-processing, spreadsheet, data base, graphics, and communications modules. Each module can function as a stand-alone component or be integrated with other system modules.

Available second quarter, 1986; $199.95 retail

Boston Software Publishers, Inc.; 1260 Boylston St.; Boston, Mass. 02215; 617-267-4747

Jazz

Five integrated functions

512K or larger Macintosh; external disk drive.

Multifunctional business software that offers integration between Worksheets, Graphics, Word Processing, Database management, and Communications.

$595 retail

Lotus Development Corporation; 55 Cambridge Pkwy.; Cambridge, Mass. 02142; 617-577-8500

Microsoft Excel

Integrated spreadsheet, graphics, data base

512K or larger Macintosh; external disk drive recommended.

A spreadsheet program for users who work with numbers, it incorporates both business graphics and an on-sheet data base.

The Apple *Switcher,* which allows users to switch between applications, comes bundled with the program.

$395 retail

Microsoft Corporation; 10700 Northup Way; Box 97200; Bellevue, Wash. 98009; 206-828-8080

How to build a design studio, a type house and a print shop on 3.1 square feet of desk.

Introducing Desktop Publishing Plus.

You can hook up to 31 Macintosh Plus computers up to one LaserWriter Plus over the AppleTalk network.

If you're in charge of producing your company's newsletters, flyers, forms and manuals, we'd like to give you something:

Our sympathy.

Because we understand the pressure of getting a newsletter out while it's still news. The frustration of having a manual with more type bills than pages. The panic of revising a presentation ten minutes before you present.

Sympathy, of course, won't solve your problems. But we have something that will. Our Desktop Publishing Plus™ system.

The whole idea of Desktop Publishing Plus is based on the concept of desktop publishing, a category we virtually invented.

That concept being, when you need typesetting and production work done, you don't need to run to outside vendors anymore. You can just run to your desk.

Which will save you time because you can create, revise and, in many cases, produce mechanicals without going back and forth to type shops all day.

And you'll save money, because of all the monstrous type bills you won't be paying.

Desktop Publishing Plus actually consists of two pluses.

Our Macintosh™ Plus computer and our LaserWriter™ Plus printer.

The Macintosh Plus is the most powerful personal computer

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz ITC Avant Garde Gothic

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz ITC Bookman

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz Helvetica Narrow

Here are some of the new faces you'll be seeing around the office. And you'll be seeing them in sizes from 4-point to 720-point.

© 1986 Apple Computer, Inc. Apple and the Apple logo are registered trademarks of Apple Computer, Inc. Desktop Publishing Plus, LaserWriter, MacDraw, MacPaint, MacWrite and AppleTalk are trademarks of Apple Computer, Inc. Macintosh is a trademark of McIntosh Laboratory, Inc. and is being used with its express permission. POSTSCRIPT is a trademark of Adobe Systems, Inc. Helvetica, Times, Palatino, Linotype and Linotronic are registered trademarks of Allied Corporation. ITC Avant Garde Gothic, ITC Bookman, ITC Zapf Chancery and ITC Zapf Dingbats are registered trademarks of International Typeface Corporation. Microsoft is a registered trademark of Microsoft Corporation. PageMaker is a trademark of Aldus Corporation. Easy3D is a registered trademark of Enabling Technologies, Inc. Letraset is a trademark of Letraset USA, Inc. For an authorized Apple dealer near you, call **(800) 446-3000 ext 50.** In Canada, call **(800) 268-7796** or **(800) 268-7637.**

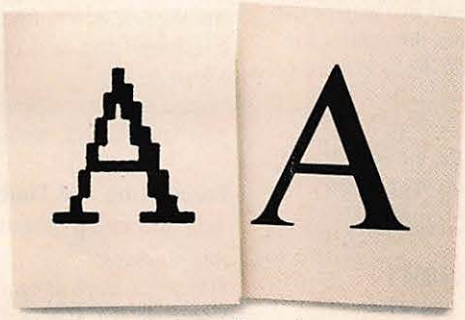
we've ever built. Its Motorola 68000 microprocessor and full megabyte of memory allow you to run powerful graphic and page design software programs. As well as powerful word processing, spreadsheet, database, and other business programs.

And its point-and-click mouse technology makes it easier to use than Letraset. So you can spend more time doing work instead of learning how to get the computer to work.

The LaserWriter Plus printer has the same 68000 microprocessor that's in the Macintosh Plus. Not to mention a hefty 1.5 megabyte of memory and a megabyte of ROM.

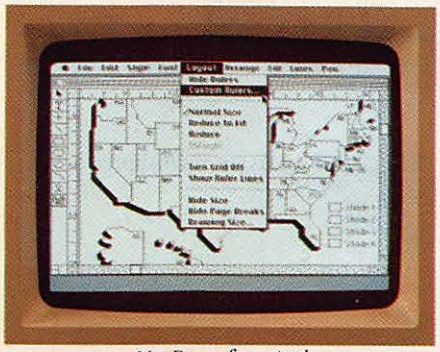
And inside its ROM is POSTSCRIPT,® the page description language that is quickly becoming the industry standard.

Translated, this means the LaserWriter Plus can cover an entire page with virtually any combination of near typeset quality text and high resolution graphics.

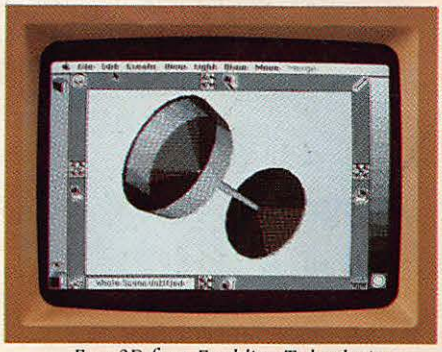


The crisp looking "A" was done on a LaserWriter Plus. The fuzzy one was done on a standard dot matrix printer.

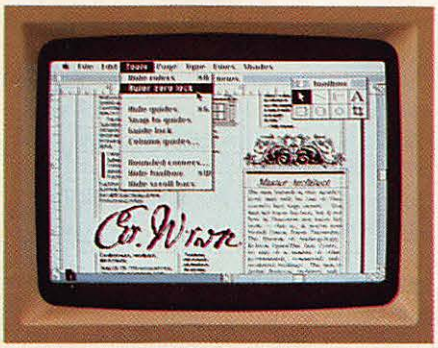
POSTSCRIPT also allows the LaserWriter Plus to generate dozens of different type styles and hundreds of sizes from its 11 built-in typeface families. These families being Helvetica,® Helvetica Narrow, Times,® Palatino,® ITC Avant Garde Gothic,® ITC Bookman,® New Century Schoolbook, ITC Zapf Chancery,® ITC Zapf Dingbats,® Courier and Symbol. And more families are becoming available all the time.



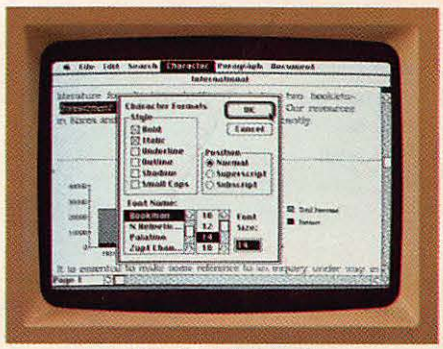
MacDraw from Apple



Easy 3D from Enabling Technologies



PageMaker from Aldus



Word from Microsoft

All of which means, you can now generate professional quality manuals, reports, presentations and overheads faster than you can say "you can now generate professional quality manuals, reports, presentations and overheads."

And if you decide you need commercial typeset quality printing, the Macintosh Plus can easily hook up to larger POSTSCRIPT compatible typesetting machines like a Linotype Linotronic 100 or 300.

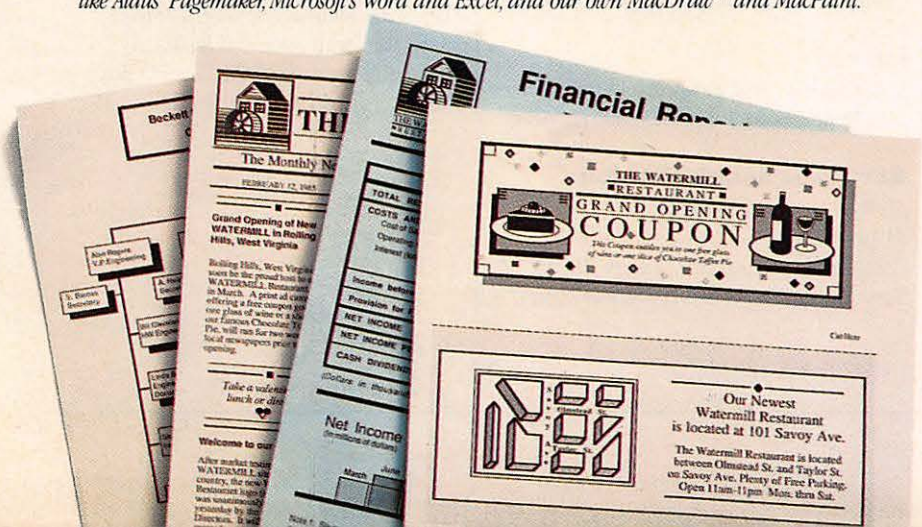
So visit your authorized Apple dealer.

And start making plans to build a design studio, a type house and a print shop on your desk.

But don't expect to have a ground-breaking ceremony in your office.

Just expect to break some new ground in it.

These were produced with nothing more than a Macintosh Plus, a LaserWriter Plus, and software like Aldus' Pagemaker, Microsoft's Word and Excel, and our own MacDraw™ and MacPaint.™



Integrated

MindSight
Business planning, analysis
512K or larger Macintosh; external disk drive.

A corporate decision-support and business-planning package that features modeling, data management, what-if analyses, goal seeking, graphics, reporting, and communications.
$195 retail
Execucom Systems Corporation; PO Box 9758; Austin, Texas 78766; 512-346-4980

Quartet
Integrated spreadsheet, graphs, text editor, data base
Any Macintosh.

Allows business charts and text areas to be embedded into spreadsheets. Its four main functions are spreadsheet, graphics, text editing, and data base.
$199.95 retail
Haba Systems, Inc.; 6711 Valjean Ave.; Van Nuys, Calif. 91406; 818-901-8828

Miscellaneous Management

Business Forms 1
Business forms on disk
Any Macintosh; Microsoft BASIC *is optional.*
$15, or $10 plus disk
Computer Aide; 1063 Silver Tip Way; Sunnyvale, Calif. 94086; 408-984-2558

Corporate Tax Planner
Tax-analysis template
Any Macintosh.
$150 retail; *Corporate Tax Planner*
$50 retail; *California Corporate*
TaxCalc Software, Inc.; 4210 W. Vickery; Fort Worth, Texas 76107; 817-738-3122

dbsForm
Payroll-forms design
Any Macintosh; two disk drives plus dbsPay.
$195 retail
Deverill Business Systems; 26-32 Hill St.; Poole, Dorset, England, BH15 1NR; 202-670-852

■Decision Analysis Techniques
Book and software
Any Macintosh.

This book and software package presents modern techniques developed to aid in the process of decision making.

Techniques described include decisions by statistical sampling, by experiment, by mathematical programming and by utility analysis.

Also described are multi-objective decision making, decision tables, decision trees and the use of Bayesian probability theory.
$110 retail
Lionheart Press, Inc.; PO Box 379; Alburg, Vt. 05440; 514-933-4918

■The Decision Maker
Miscellaneous management
Any Macintosh.

Allows you to compare up to four items simultaneously, rating them in as many as 20 categories. By picking the categories in order of importance and rating the item in each category, the program will tabulate the ratings and display the results in a graphic bar chart. The chart compares the choices and indicates the most logical decision based on your ratings.
$49.95 retail
Vertical Business Software, Inc.; 662 Main St.; New Rochelle, N.Y. 10801; 914-632-8305

DecisionMap
Decision support, modeling
Any Macintosh.

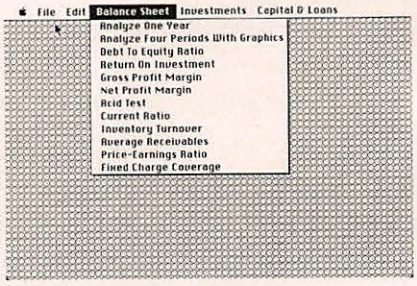
Designed to help users make more efficient decisions, from hiring an employee to deciding which product to manufacture or which college to attend, etc.

The program allows users to experiment with different weightings of decision factors and rankings of alternative decisions. It functions like a spreadsheet program, but for qualitative instead of quantitative problem solving.
$145 retail
SoftStyle, Inc.; 7192 Kalanianaole Hwy., Suite 205; Honolulu, Hawaii 96825; 800-367-5600

■Excel/Jazz Business Templates
512K or larger Macintosh.
$59.95 retail
Computer Concepts; 2697 Lavery Ct., #6; Newbury Park, Calif. 93020; 805-499-0583

Financial Utilities Pack
Financial analysis
Any Macintosh.
$29.95 retail
Brainstorm Development, Inc.; PO Box 26948; Austin, Texas 78755; 512-346-7864

■The Financier
Miscellaneous management



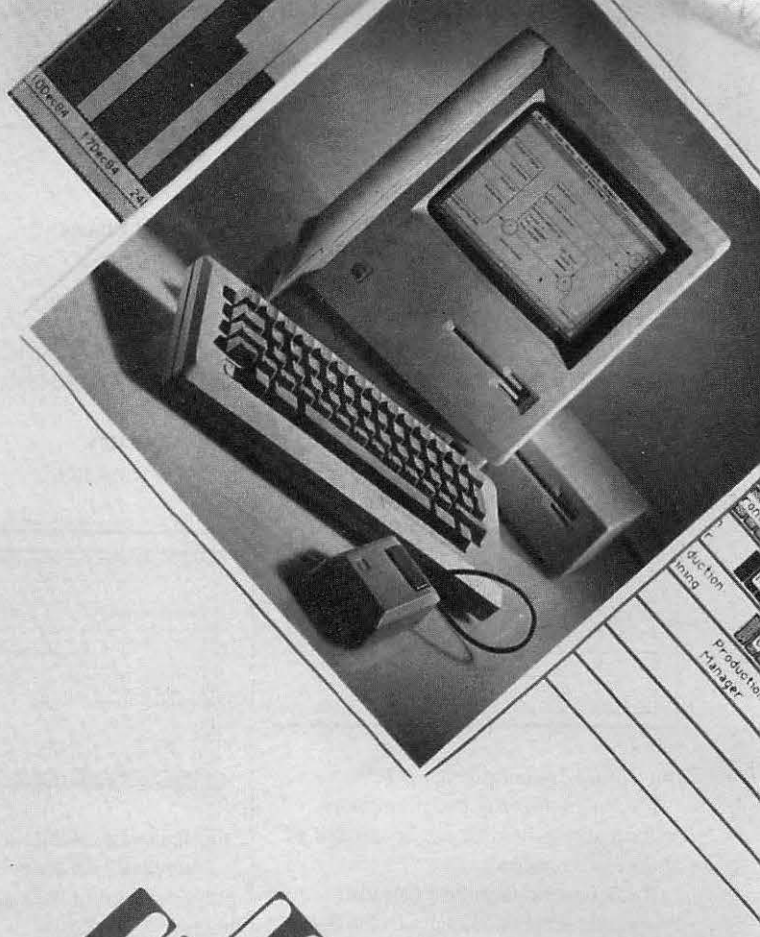
Any Macintosh.

Consists of formulas for the following financial questions: activity ratios, bond yield analysis, cost analysis, leverage ratios, liquidity ratios, loans and mortgages (loan amortization tables), market ratios, return of investments and value of investments.
$49.95 retail
Vertical Business Software, Inc.; 662 Main St.; New Rochelle, N.Y. 10801; 914-632-8305

Forecasting and Time Series Software
Two forecasting programs
Any Macintosh.
$145 retail; *Forecasting and Time Series*
$145 retail; *Business and Economic Forecasting*
$200 retail; both titles purchased together
Lionheart Press, Inc.; PO Box 379; Alburg, Vt. 05440; 514-933-4918

Invenu
Small-business inventory
Any Macintosh; Microsoft BASIC.
$195 retail; without *Microsoft BASIC*
$345 retail; with *Microsoft BASIC*
Eureka Computer Systems, Inc.; PO Box 2308; Corsicana, Texas 75110; 214-872-2501

Who's who in business all over the world.



They are leading edge companies, the first to adopt the latest technology to improve productivity and the bottom line.

They have discovered the powerful combination of MICRO PLANNER and the Macintosh™.

The power to turn money losing projects around through improved utilization of their available resources.

The power to spot bottlenecks ahead of time and see how to avoid them.

The power to monitor and manage projects from conception to completion with state-of-the-art *Progress Reporting* and *Exception Management Reporting.*

The power to trouble shoot the inevitable unexpected problems with five different memory archives to store and compare different scenarios of the project onscreen simultaneously.

Announcing New **MICRO PLANNER PLUS**

Original **MICRO PLANNER,** named productivity package of the year in 1985, is now six times faster, has three times more capacity, has improved outputs, and is even easier to use.

MICRO PLANNER for Macintosh

These sophisticated organizations know that only MICRO PLANNER offers mainframe project and resource management capability made easy on the Macintosh.™

ALCOA	British Govt. Communications Hdqt.	General Motors	NASA	Rolm
ARCO	Brown & Root, Inc.	Gillette Company	Northrop	Small Business Admin.
Allen-Bradley	C.I.A.	Grumman Aerospace	Naval Research Labs	SOHIO
Amdahl	Chevron Research	Honeywell, Inc.	Ontario Hydro	Southern Calif. Edison
American Red Cross	Cray Research	Hughes Aircraft	Owens Corning Fibreglass	Space Application
Apple Software Development	Dow Chemical	Jet Propulsion Laboratory	Pacific Bell	Sperry Corporation
Bechtel	E.I. DuPont	Lawrence Livermore Labs	Peat Marwick	Taylor Woodrow Intl.
Bell Northern Research	E-Systems	Lear Siegler, Inc.	The Pentagon	Touche Ross & Co.
Bethlehem Steel	Federal Express	Lockheed	Plessy Research	U.S. Navy
Boeing Computer Services, Inc.	First Wisconsin Natl. Bank	Lotus Development	Price Waterhouse	Union Carbide
Booze Allen	G.D. Searle & Co.	Lucas Research Center	Public Broadcasting System	Western Gear Corporation
British Aerospace	GTE Communications	Martin Marietta	RCA	Westmoreland Coal Corp.
British Telecom	General Dynamics	Motorola	Raytheon	And Many More . . .

Find out what these leading companies already know, contact the professional project management consultants at MICRO PLANNING SOFTWARE, USA.

NEW MICRO PLANNER PLUS: $495.00
128K Mac MICRO PLANNER: $349.00

Available on IBM® and compatibles.
We offer full training and consulting.

Micro Planning Software USA

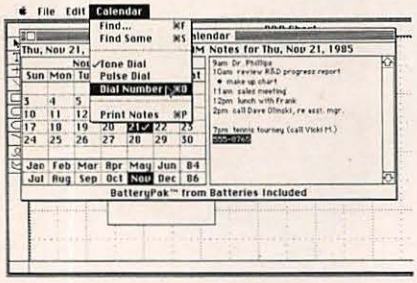
235 Montgomery Street, Suite 840
San Francisco, CA 94104
(415) 788-3324

Circle 32 on Reader Service Card

Miscellaneous Management

■The Mac BatteryPak

Desktop accessories



Any Macintosh; Imagewriter printer.

The Mac Batterypak is eight memory-resident accessories that can be installed all at once or as needed.

The accessories include a Calendar; Phonepad; Telephone/Modem Dialer; Scientific Calculator; RPN (Reverse Polish Notation) Calculator; 5-Function Disk Utility (Trash Files, Copy Files, Get File Info, Get Disk Info and Change Disk Drive Default Number); Program Launcher; and Print Text.

Each accessory occupies no more than 12K of RAM memory, and total memory used by all eight installed is less than 80K.

The Mac Batterypak is not copy protected, and an installation program is included on disk.

$49.95 retail (U.S.)

Batteries Included; 30 Mural St.; Richmond Hill, Ontario, Canada L4B 1B5; 416-881-9816

Micro Planner

Project and resource management

Any Macintosh.

$395 retail; *Micro Planner* $25 retail; demo

Micro Planning Software USA; 235 Montgomery St., Suite 840; San Francisco, Calif. 94104; 415-788-3324

Optimization

Business simulation and modeling

Any Macintosh.

$110 retail

Lionheart Press, Inc.; PO Box 379; Alburg, Vt. 05440; 514-933-4918

People In Places

Census data base

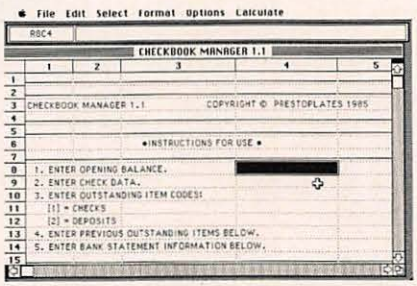
Any Macintosh.

$59.95 retail

CMSI; 100 Bush St., Suite 200; San Francisco, Calif. 94104; 415-982-1591

■Prestoplates

Business templates



Any Macintosh; Multiplan.

Prestoplates is a series of 10 business templates designed to work with *Microsoft Multiplan.*

Applications include a checkbook manager, credit card manager, cash flow manager, cash flow projector, accounts payable, accounts receivable, economic order quantity, payroll, financial ratios and income statement.

The product contains one disk with all 10 applications.

$29 retail

Prestoplates; PO Box 2012; Calverton, N.Y. 11933

■Profit Planning

Business templates

512K or larger Macintosh; external drive; Multiplan *or* Excel.

Profit Planning contains templates, designed for use with *Multiplan* or *Excel,* that provide detailed planning capabilities for businesses with up to 10 separate business units or product lines.

The templates summarize planning detail categories into consolidations by account period, business unit and company total. They also help compute critical operating indicators and financial success factors.

Other features include integration of operating, expense and income plans to balance operating capability with planned profit objectives; updates to fiscal year plans; and more.

$49.95 per plan or $129.95 for three; *Multiplan* version

$59.95 per plan or $149.95 for three; *Excel* version

Softouch Software, Inc.; PO Box 1744; Lake Oswego, Oreg. 97034; 503-635-1400

Profit Projections/Breakeven Analysis

Decision support; financial analysis

Any Macintosh.

$65 retail

Harris Technical Systems; 624 Peach St.; PO Box 80837; Lincoln, Neb. 68501; 402-476-2811

SoftForms

Business forms on disk

Any Macintosh.

For use with *Macpaint.*

$39.95 retail

Artsci, Inc.; 5547 Satsuma Ave.; N. Hollywood, Calif. 91601; 818-985-5763

Soft Start—Business Analysis

Work sheet templates

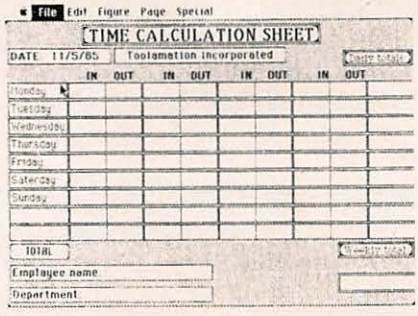
Any Macintosh; Multiplan.

$49.95 retail

Allegro Software; 79 Milk St., Suite 1108; Boston, Mass. 02109; 800-343-0664 or 800-322-1238, ext. 5500

■TimeCalc

Time calculation



Any Macintosh; Microsoft BASIC 2.0.

Timecalc is a time calculation program that calculates the number of hours or minutes an employee has worked.

$17 retail

Bird Software Co.; 39257 N. Gabriel Ave.; Zion, Ill. 60099; 312-872-8448

Useful BASIC Programs for Home and Business

Investment analysis; real estate

Any Macintosh; Microsoft BASIC.

$35 retail

Footsteps Software; PO Box 365, Dept. F; Cambridge, Mass. 02142; 617-494-0910

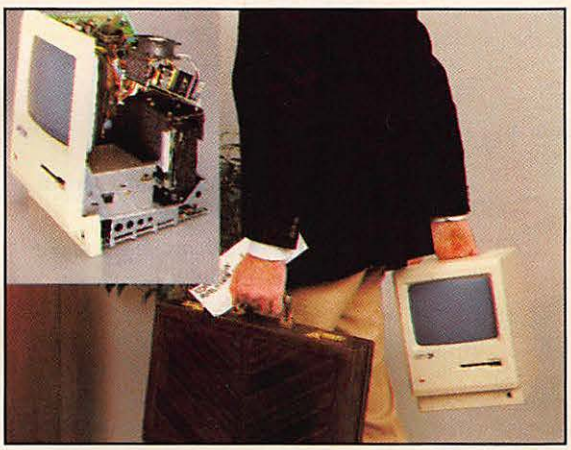
20 Meg Internal for Mac Plus + 512k

Drive *16* Macs *50* Times Harder

The MagNet™ 20 Meg MultiUser Internal Hard Drive

The MagNet 20™ Hard Drive

Mirror Technologies introduces one of the most powerful Macintosh hard drives available. The MagNet 20 combines great value, expandability, speed and portability to give your Mac amazing capabilities.



This Internal Hard Drive Is Fast And Portable

Mirror Technologies has teamed up with Infosphere, to develop a special version of MacServe.™ (XL-Serve, the predecessor of MacServe, is the **most** popular AppleTalk™ network software in the world!) MacServe software adds all of the capabilities and features of the best Mac hard drives available today, plus the ability to share peripherals, programs and data with multiple computers. As your needs grow the MagNet 20 already contains the power and versatility to handle your computing to go.

Packed With Features

The MagNet 20 allows you to print spool, disk cache, protect files with passwords, partition volumes and fully or incrementally backup your data. The MagNet 20 is the most powerful single or multiuser storage solution available today.

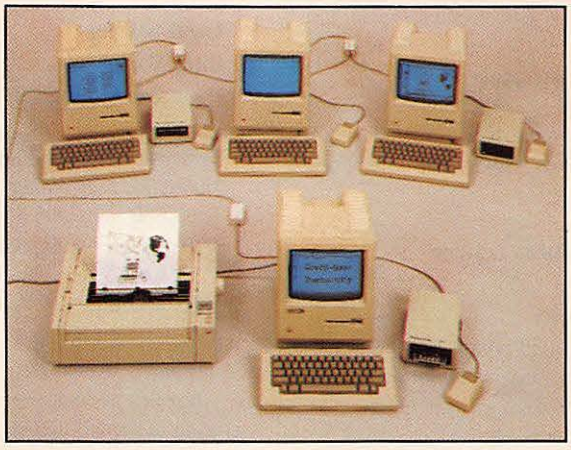
Apple and Macintosh are registered trademarks of Apple Computer, Inc. / MagNet 20 is a registered trademark of Mirror Technologies Inc.

Rugged Design

The MagNet 20 uses a hard drive specially designed to withstand treatment that would "crash" the competition. The patented drive head lifter in the MagNet 20 pulls the read/write heads away from your precious data upon power off. This means you and your Mac can travel with confidence.

The Powerful Single User Solution

Purchase the MagNet 20 as a **very** powerful single user drive and simply add the inexpensive AppleTalk network cables to allow multiple Macs to access shared programs, data and peripherals!



Multiuser Capability at a Single User Price

Stop in at your nearest Apple authorized dealer for a demonstration of the MagNet 20.

Drive *16* Macs *50* times harder.

MIRROR TECHNOLOGIES Inc.

2209 Phelps Road
Hugo, Minnesota 55038
612-426-3276

Office Management

The Desk Organizer
Desk accessories
Any Macintosh.
An all-in-one perpetual calendar, phone dialer, alarm clock, calculator, free-form notepad, and file box.
$99 retail
Conceptual Instruments; 269 W. Walnut Ln.; Philadelphia, Pa. 19144; 215-438-5220

FileFinder
Desk accessory
Any Macintosh.
Lets users manage files while working within any application. Its four main commands are: Copy, Delete, Rename, and Get Info.
It is not copy protected, therefore, it can be installed on a hard disk. Apple's *Desk Accessory Mover* is included for easier installation. Once installed, *Filefinder* is always available in the Apple menu.
$24.95 retail
Nashoba Systems, Inc.; 175 Sudbury Rd.; Concord, Mass. 01742; 617-371-2029 or 800-842-4250

Haba Business Letters
Form letters
Any Macintosh.
Consists of 50 professionally written, predefined letter and memo formats, such as letters to employees, stockholders, customers, vendors, etc.
$49.95 retail
Haba Systems, Inc.; 6711 Valjean Ave.; Van Nuys, Calif. 91406; 818-901-8828

Habadex 2.0
Desktop organizer
Any Macintosh.
Features include a name and address directory, automatic phone dialing, appointment calendar, form letter and mailing label generation, multiple window viewing and window sizing, multiple user-definable data bases, perpetual calendar, and a print-review facility.
$99.95 retail
Haba Systems, Inc.; 6711 Valjean Ave.; Van Nuys, Calif. 91406; 818-901-8828

HabaForms
Business forms
Any Macintosh.
A library of 40 predesigned, commonly used business forms. Seven categories include general office, commercial, retail, shipping/receiving, sales, accounting, and quotes.
$49.95 retail
Haba Systems, Inc.; 6711 Valjean Ave.; Van Nuys, Calif. 91406; 818-901-8828

Haba WindowDialer
Phone directory and dialing
Any Macintosh; HabaDialer.
Allows users to store up to 200 names and phone numbers, and it automatically dials direct or using OCC services all without disturbing the program in which the user is working.
$29.95 retail
Haba Systems, Inc.; 6711 Valjean Ave.; Van Nuys, Calif. 91406; 818-901-8828

Legal Billing
Bulk Mailer
Management programs
Any Macintosh.
$595 retail; *Legal Billing* (512K)
$125 retail; *Bulk Mailer*
Satori Software; 2815 Second Ave., Ste. 590; Seattle, Wash. 98121; 206-443-0765

MacCalendar
Appointment book
Any Macintosh.
Installed as an accessory with built-in alarm to remind user of dates and appointments.
$89 retail
Videx, Inc.; 1105 NE Circle Blvd.; Corvallis, Oreg. 97330; 503-758-0521

MacOffix
Six integrated functions
Any Macintosh.
Functions include Filing, Word Processing, Form Design, Finding Forms, Form Letters, and Report Generation.
$149 retail
Emerging Technology Consultants, Inc.; 4760 Walnut; Boulder, Colo. 80301; 303-447-9495

MegaDesk
Time management tools
Any Macintosh.
Includes Appointment Book, Transfer Routine, Card File, and Installation Program.
$125 retail
Megahaus Corporation; 5703 Oberlin Dr.; San Diego, Calif. 92121; 619-450-1230

Mighty Mac
Desktop management
Any Macintosh.
Allows entering of events, reminders, appointments, phone-directory information, and notes.
$59.95 retail
Advanced Logic Systems; 1195 E. Arques Ave.; Sunnyvale, Calif. 94086; 408-730-0307

My Office
Integrated office system
Any Macintosh.
$129.95 retail
DataPak Software; 14011 Ventura Blvd., #402; Sherman Oaks, Calif. 91423; 818-905-6419

My Office Deluxe; CompuForm
Several integrated functions
512K or larger Macintosh; external disk drive recommended.
This version of *My Office* expands on the basic functions of the original program. It will drive the Laserwriter printer in high-quality mode, will summarize folders to enhance sorting functions, has flexible field-designation headings, and provides special coding operations.
It also expands the word-processing functions to include word wrap, movable and variable-function tabs, columnar formats for newsletters, full justification and alignment, automatic pagination, and more.
Compuform is a collection of 25 forms already created for use with *My Office.* The library includes forms such as Credit Application, Purchase Order, Calendar, Invoice, and Receipt.
$349.99 retail; *My Office Deluxe*
$39.95 retail; *Compuform*
DataPak Software; 14011 Ventura Blvd., #402; Sherman Oaks, Calif. 91423; 818-905-6419

Office Productivity System
Computer billing
512K or larger Macintosh; external drive.
A computer billing system designed to be used by accountants, architects, engineers, consultants, and other professionals who bill for services based on time expenditures.
The *Office Productivity System* can be ex-

panded via the AppleTalk Personal Network to link 31 separate workstations together with an included file server. It also supports the Macintosh Office and Laserwriter printer.
$475 retail
Applied Micronetics, Inc.; 1078 Carol Ln., Suite 202; Lafayette, Calif. 94549; 415-283-4498

QuickSet 2.0
Desk accessory
512K or larger Macintosh.

Quickset 2.0 is a set of modules that can be accessed as desk accessories or individually. As desk accessories, the individual modules run concurrently with other programs, making it unnecessary to exit work in progress. Version 2.0 contains a financial and statistical calculator, calendar, cardex, encryptor, note filer, phone dialer, and print spooler.

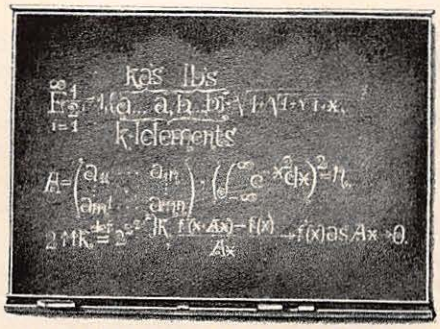
Individual modules can be run on the 128K as application programs.
$49.95 retail
EnterSet; 410 Townsend; San Francisco, Calif. 94107; 415-543-7644

SideKick
Office management
Any Macintosh.

A multitasking office manager that operates concurrently in the background with other Macintosh programs. Integrated with nine desk accessories, the program also includes personal information files with flexible reporting and printout capabilities. Also included is a Hayes-compatible communications program that operates at 300/1200/2400 baud.
$84.95 retail
Borland International, Inc.; 4585 Scotts Valley Dr.; Scotts Valley, Calif. 95066; 408-438-8400

SoftLetters
Form letters
Any Macintosh.

Package of 50 form letters for use with *Macwrite.*
$39.95 retail
Artsci, Inc.; 5547 Satsuma Ave.; N. Hollywood, Calif. 91601; 818-952-2922



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MicroTeX

ADDISON-WESLEY PUBLISHING COMPANY, INC.
Educational Media Systems, Reading, MA 01867
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■TimeBase 1.6
Time management

Any Macintosh.

Timebase 1.6, an updated version of the original *Timebase* program, is an integrated office management system designed to maintain unlimited numbers of schedules in either a single or multi-user environment.

It provides complete time management and data base capabilities, simple project management, limited word processing and the ability to link information and data files from other Macintosh software directly to specific schedules.

New features include multi-user capabili-

Office Management

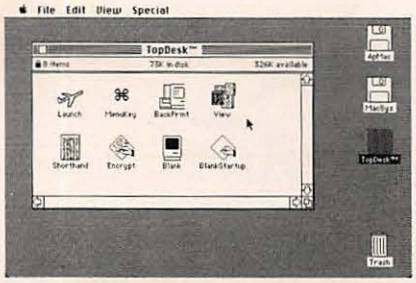
ties, viewing of unlimited multiple schedules in a single screen, locating the next commonly available time that any group of individuals is free for a meeting, customized time reporting for single or multiple schedules, voice synthesized reminders and alarms, multiple data base capabilities, mailing labels, user defined indexes, an independent things-to-do list for each schedule, tracking of expense accounts and credit cards and compatibility with Apple's Laserwriter.

The program includes a copy of Apple's *Switcher* utility and supporting documentation.

$149.95 retail; *Timebase 1.6*
$10 retail; upgrade for current *Timebase* owners
$10 retail; demonstration disks
SoftDesign, Inc.; 14206 SW 136th St.; Miami, Fla. 33186; 305-253-5521

■TopDesk

Desk accessories



Any Macintosh.

Topdesk is comprised of seven desk accessories: *Launch, Menukey, Shorthand, Backprint, View, Encrypt* and Blank.

The Launch Now feature of *Launch* allows the user to immediately abandon a current application and enter another selected application. Any unsaved work will be lost however.

The Launch After feature may be used instead. It allows the user to enter the selected application upon subsequent exit from the current application.

Menukey remedies the problem of preassigned and unassigned command keys by making the assignment of keys to menu items user definable.

Shorthand allows the user to insert frequently used words and long phrases with just a few keystrokes.

Backprint can be initiated after queuing a document to print using any application's normal print facility. The utility then allows the user to continue working in the application while the document queued is printed.

View allows the user to display, from within any application, up to eight text and *Macwrite* documents from which text can be copied onto the clipboard.

Encrypt is a general-purpose encryption program.

Blank is designed to protect your screen from permanent burn-in damage. It automatically blanks the screen after a given time interval of inactivity has elapsed.

$59.95 retail
Cortland Computer, Inc.; PO Box 9916; Berkeley, Calif. 94709; 415-845-1142

Varioform

Preprinted forms

Any Macintosh; Microsoft Multiplan; *external disk drive; printer.*

Allows viewing of the total text of a preprinted business form on a Macintosh screen, and prints only text that is to be filled in on the form. An airmail version is now available.

$35 retail (includes *Variotext, Variotrans,* and *Variomix*)
Mexoft Belgium; 140 Wirtzfeld Ave.; B 4761 Bullingen; Belgium; 32-80647713

Programming

■Absoft FORTRAN 77/RL

Compiler utility

Any Macintosh; Microsoft FORTRAN 77; *hardware floating point.*

Absoft Fortran 77/RL consists of a replacement run-time library for Microsoft's *Fortran* 77 compiler.

It provides support for aftermarket hardware such as General Computer's Hyper-Driver 2000 with a 12Mhz processor and MC68881 floating-point chip or various boards based on National Semi-Conductor's 32081 floating-point hardware.

Fortran 77/RL is compatible with the Microsoft *Fortran* 77 compiler only. It is available in different configurations that correspond with most of the NS32081 or MC68881-based floating-point boards currently available.

Absoft Fortran 77/RL can be purchased directly from Absoft. Model number and manufacturer of hardware floating-point board must be specified at time of order.

$149 retail
Absoft Corp.; 4268 N. Woodward; Royal Oak, Mich. 48072; 313-549-7111

AELM-51 Assembler/Editor/Loader

Software development; research

Any Macintosh.
$99 retail
Metaresearch, Inc.; 1100 SE Woodward; Portland, Oreg. 97202; 503-232-1712

Aztec C68k-c

Software development

Any Macintosh.
$499 retail; *Aztec C68k-c*
$299 retail; *Aztec C68k-d*
$199 retail; *Aztec C68k-p*
Manx Software Systems; PO Box 55; Shrewsbury, N.J. 07701; 800-221-0440

CLR ToolLib and CLR MathStatLib

BASIC extension libraries

Any Macintosh; Microsoft BASIC 2.0 *or* 2.1.
$35 each retail
$50 retail; both packages
Clear Lake Research, Inc.; 5353 Dora St., Suite 7; Houston, Texas 77005; 800-835-2246, ext. 199 or 800-362-2241, ext. 199

Consulair Linker

Software development

512K or larger Macintosh.

An optimizing linker and librarian for Consulair's *Mac C* and Apple's *Macintosh 68000 Development System (MDS).*

$80 retail
Consulair Corp.; 140 Campo Dr.; Portola Valley, Calif. 94025; 415-851-3272

■Consulair Utilities

Programming utilities

512K or larger Macintosh.

Consulair Utilities are a collection of development utilities for the *Consulair Mac C* and Apple's *Macintosh 68000 Development System* (MDS).

Included in the package are four programming utilities: *Supermake,* which analyzes the linker control file and determines which files need to be recompiled; *Diff,* a file com-

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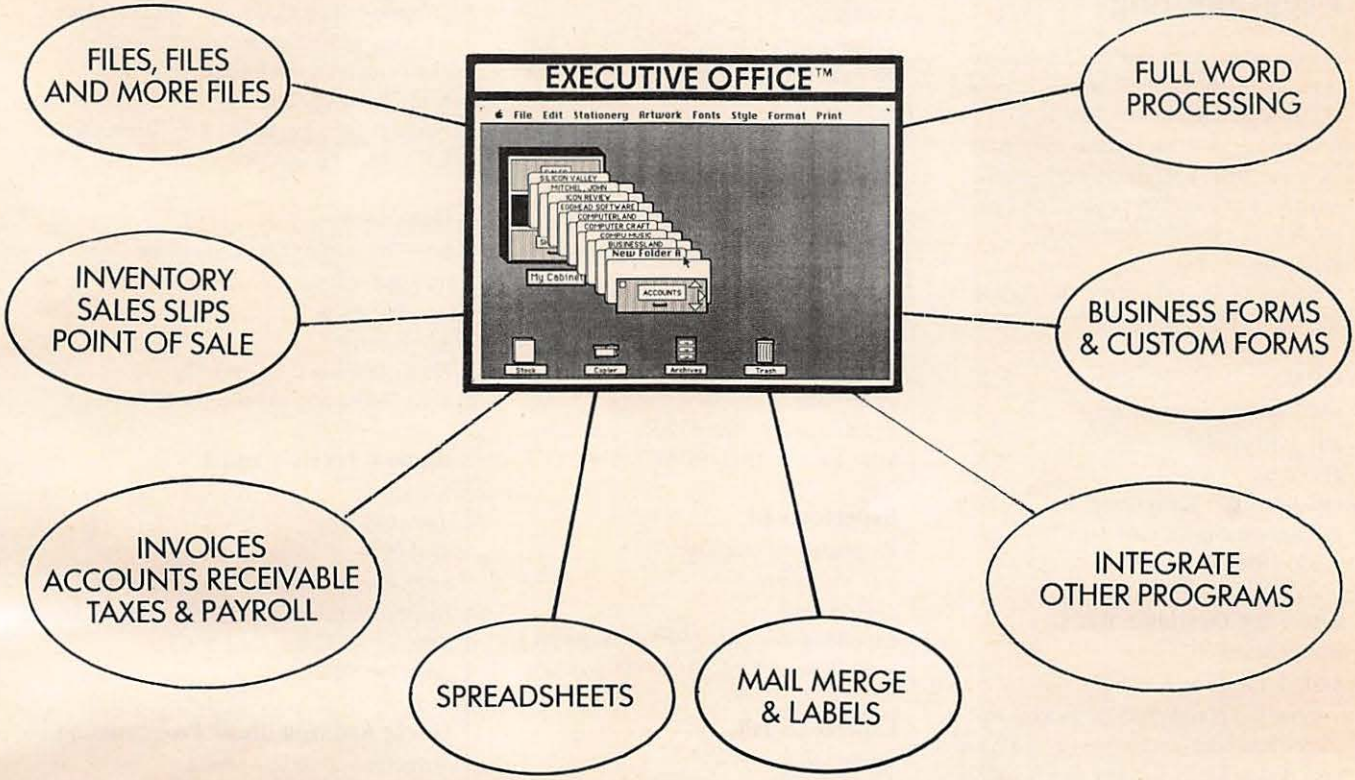

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- **Complete Tax Preparation System:** for quarterly or year-end taxes on your own custom designed facsimiles of government forms.
- **Custom Mail House System:** capable of handling a quarter of a million names and addresses (on a hard disk).
- **Automatic Payroll System:** which can calculate taxes, FICA, insurance, commissions, split commissions, etc. all the way from start through finished check printing.
- **Label Printing:** print large shipping labels or normal envelope labels on one, two or three wide label stock.

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Programming

parison utility that helps find changes between different file versions; *Grep*, a multiple file search utility that finds all occurrences of string patterns over many files; and *MPA*, a Maximum Performance Analyzer that monitors program performance and lessens execution bottlenecks.
$100 retail
Consulair Corp.; 140 Campo Dr.; Portola Valley, Calif. 94025; 415-851-3272

C.P.Mac
CP/M program interpreter
Any Macintosh.
$135 retail
Logique; 30100 Town Center Dr. "O", Suite 198; Laguna Niguel, Calif. 92677; 714-953-8985

C-tree for Consulair Mac C
File handler
512K or larger Macintosh.
C-tree is a complete ISAM package that includes both high-level, multi-key ISAM routines and low-level B+ Tree functions. The complete C-Tree source code is provided with the package.
$395 retail
Consulair Corp.; 140 Campo Dr.; Portola Valley, Calif. 94025; 415-851-3272

DeSmet C
Software development
Any Macintosh; second disk drive or a hard disk recommended.
$150 retail
C Ware Corp.; PO Box C; Sunnyvale, Calif. 94087; 408-720-9696

ExperFacts
Expert-systems language
512K or larger Macintosh; external disk drive or hard disk; Experlisp.
$250 retail
ExperTelligence, Inc.; 559 San Ysidro Rd.; Santa Barbara, Calif. 93108; 805-969-7874

ExperLisp 1.04
Programming language
512K or larger Macintosh; external disk drive.
New features include Parentheses-Matching Editor, a SETF, general system enhancements, plus examples that allow users to create a variety of functions.
$495 retail
ExperTelligence, Inc.; 559 San Ysidro Rd.; Santa Barbara, Calif. 93108; 805-969-7874

■ExperLisp-Talk
Programming language add-on
512K or larger Macintosh; Experlisp.
An add-on to *Experlisp* that enables users to integrate real-time speech synthesis into *Experlisp* programs. Includes source for the talking version of the Animal program as well as detailed documentation of the speech primitives.
$69.95 retail
ExperTelligence, Inc.; 559 San Ysidro Rd.; Santa Barbara, Calif. 93108; 805-969-7874

ExperLogo 1.1
Programming language
Any Macintosh.
$149.95 retail
ExperTelligence, Inc.; 559 San Ysidro Rd.; Santa Barbara, Calif. 93108; 805-969-7874

ExperLogo Talk
Speech routines
512K or larger Macintosh.
$49.95 retail
ExperTelligence, Inc.; 559 San Ysidro Rd.; Santa Barbara, Calif. 93108; 805-969-7874

ExperOPS5
Expert-systems development
512K or larger Macintosh; second disk drive or a hard disk; ExperLisp *programming language.*
$325 retail
ExperTelligence, Inc.; 559 San Ysidro Rd.; Santa Barbara, Calif. 93108; 805-969-7874

■Express
Software development; education
512K Macintosh.
Express was designed to help educators develop courseware for students, assist publishers who are producing educational software and aid software developers preparing tutorials for their own and other programs.
Express presents information in separate blocks called "scripts." Authors can create a script using a combination of text and graphics. Each script contains questions or exercises that require a user's responses.
An individual script can be linked with up to 10 other scripts. The user's needs determine the path taken, or the links established, through a tutorial.
Express also includes an evaluation mode for tracking progress and determining a user's comprehension level.
Available March, 1986
Nextstep, Inc.; 350 Ocean Rd.; Narragansett, R.I. 02882; 401-789-5861

HeapShow
Software development; memory management
Any Macintosh.
$49.95 retail
B/T Computing Corp.; PO Box 1465; Euless, Texas 76039; 800-843-6463 or 817-267-1415

Hippo-C Levels 1 and 2
C compiler
Any Macintosh.
$149.95 retail; *Hippo-C Level 1*
$399.95 retail; *Hippo-C Level 2*
Hippopotamus Software; 985 University Ave., Suite 12; Los Gatos, Calif. 95030; 408-395-3190

Linear And Non-linear Programming
Mathematical programming
Any Macintosh.
$95 retail
Lionheart Press, Inc.; PO Box 379; Alburg, Vt. 05440; 514-933-4918

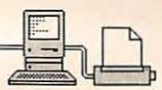
Logo for the Macintosh
Programming language
Any Macintosh.
$124.95 retail
Microsoft Corp.; 10700 Northup Way; Box 97200; Bellevue, Wash. 98009; 206-828-8080

MacASM Macroassembler
Assembly-language development system
Any Macintosh.
$125 retail
Mainstay; 28611B Canwood St.; Agoura Hills, Calif. 91301; 818-991-6540 (voice) or 818-991-5037 (modem)

MacBCPL
Software development
Any Macintosh.
$150 retail
TopExpress, Ltd.; 13/14 Round Church St.; Cambridge, England CB5 8AD; UK-223-355427

The MacServe Theory of Networking.

1+1>2



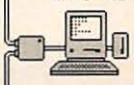
Connect your Macs (and your Bobs, Sallys and Toms) with MacServe™ and you'll quickly rediscover the old adage, "The whole is greater than the sum of the parts."

We mean *quickly!*

You and your colleagues will *immediately* realize that

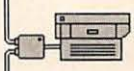
MacServe lets you share a disk, or information someone else is using. And avoid the bother of keeping a mountain of disks at every station.

Within hours, you'll find your productivity increases as you share applications and documents with MacServe, over



AppleTalk,™ securely, quickly, and efficiently.

It may take days to appreciate little things like not having to wait to use *the* printer. With MacServe's print spooler, you and others can share a serial printer and still get back to work sooner.



Weeks, or months, later when you expand your network, you will recognize the long-term benefits of MacServe. Add disks

and printers to your MacServe system, as you need them, without committing to a single vendor. MacServe requires no special or dedicated hardware.

For the Macintosh™ Plus, Macintosh 512K and Macintosh XL, no one knows networking better than Infosphere.

Visit your Macintosh dealer. See a live demonstration of how MacServe will add synergy to your Macintosh Office and begin discovering just how *much* "1 + 1" is greater than.

MacServe

Sharing Resources through AppleTalk

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Macintosh is a trademark licensed to and AppleTalk is a trademark of Apple Computer, Inc.

INFOSPHERE

4730 S.W. Macadam Ave., Portland, Oregon 97201
503/226-3620

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Programming

Mac C and Mac C Toolkit Version 4.0
C compiler; development tools
512K or larger Macintosh.
$425 retail; *Mac C, Mac C Toolkit,* and *Consulair Linker*
Consulair Corporation; 140 Campo Dr.; Portola Valley, Calif. 94025; 415-851-3272

Mac COBOL
Software development
512K or larger Macintosh; two disk drives recommended.
$495 retail; volume discounts available
Micro Focus; 2465 E. Bayshore Rd., Suite 400; Palo Alto, Calif. 94303; 415-856-4161

MacExpress
Programming utility; toolbox application manager
Any Macintosh.
$495 retail; all versions
ALSoft, Inc.; PO Box 927; Spring, Texas 77383; 713-353-4090

MacFORTH
Programming language
Any Macintosh.
$149 retail; *MacFORTH Level 1*
$249 retail; *MacFORTH Level 2*
Creative Solutions, Inc.; 4701 Randolph Rd., Suite 12; Rockville, Md. 20852; 301-984-0262

■MacFORTH 3-D Library
Graphics and animation
Any Macintosh; MacForth.
A set of graphics and animation extensions for *MacForth.* It includes source code for the three-dimensional examples in the *MacForth* Workout Disk.
$25 retail
Creative Solutions, Inc.; 4701 Randolph Rd., Ste. 12; Rockville, Md. 20852; 301-984-0262

MacFORTH Developer's Kit
Software development
Any Macintosh.
$499 retail; *Developer's Kit*
$350 retail; Level 1 upgrade
$250 retail; Level 2 upgrade
Creative Solutions, Inc.; 4701 Randolph Rd., Suite 12; Rockville, Md. 20852; 301-984-0262

■MacFortran/020
Compiler
Any Macintosh; MC68020 hardware upgrade.
Macfortran/020 is a special version of Absoft's *Fortran 77* compiler that has been upgraded with MC68020 processors. It is a mainframe-quality compiler that is 100-percent source-code compatible with Microsoft's *Fortran 77* compiler.
Macfortran/020 includes a screen debugger, virtual array support, overlays, VAX and ANSI 8X extensions, number support and a toolbox interface.
Also included is MC68881 support (as a coprocessor only) that may be invoked as a compile-time option.
Absoft Corp.; 4268 N. Woodward; Royal Oak, Mich. 48072; 313-549-7111

Macintosh 68000 Development System
Assembler
Any Macintosh; second disk drive recommended.
$195 retail
Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-996-1010

Macintosh Pascal
Programming language
Any Macintosh.
$125 retail
Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-996-1010

The Macintosh Reference Systems
Programming tools, aids
Any Macintosh.
$109.95 retail; entire system
$59.95 retail; data base only
$64.95 retail; card deck only
$11.95 retail; cross-reference poster
TOM Programs; 1500 Massachusetts Ave. NW, Suite 34-T; Washington, D.C. 20005; 202-223-6813

MacKIT Level 1
Expert-systems development
512K or larger Macintosh.
$149 retail
Knowledge System Environments, Inc.; 201 S. York Rd.; Dillsburg, Pa. 17019; 717-766-4496

■MacLanguage Series Database Toolkit
Pascal routines
Any Macintosh; MacLanguage Series Pascal.
The *Database Toolkit* is a library of Pascal procedures that allows the user to build powerful applications to sort, search and manage data.
Included with the program are example programs and a mini data base application for maintaining names, addresses and phone numbers.
Database Toolkit's file system supports multiple indexes per file, multiple keyparts per index, duplicate keys on any index, automatic or manual index updates and random or sequential access on any index.
The program also supports multi-user record lock for building applications that run on a file server.
$89.95 retail
TML Systems; PO Box 361626; Melbourne, Fla. 32936; 305-242-1873

MacLanguage Series Pascal
Pascal compiler
512K or larger Macintosh.
$99.95 retail
TML Systems; PO Box 361626; Melbourne, Fla. 32936; 305-242-1873

MacModula-2 Version 4.0
Software development
Any Macintosh.
$150 retail
Modula Corporation; 950 N. University Ave.; Provo, Utah 84604; 801-375-7400

MacNosy Version 2
Disassembler
512K or larger Macintosh.
$85 retail
Jasik Designs; 343 Trenton Way; Menlo Park, Calif. 94025; 415-322-1386

MacScheme
Lisp programming
512K or larger Macintosh.
$125 retail
Semantic Microsystems; 4470 SW Hall St., Ste. 340; Beaverton, Oreg. 97007; 503-643-4539

The Mac's Core
Computer literacy
Any Macintosh; Microsoft BASIC.
$69.95 retail; *The Mac's Core*
$84.95 retail; *The Mac's Core Part II*
$139.95 retail; both programs
The Professor Corp.; 959 NW 53rd St.; Ft. Lauderdale, Fla. 33309; 305-771-6498

MasterFORTH
Programming language
Any Macintosh.
$125 retail; *MasterFORTH*
$60 retail; Floating Point
$60 retail; Relocator
MicroMotion; 8726 S. Sepulveda Blvd., #A171; Los Angeles, Calif. 90045; 213-821-4340

■Microsoft BASIC 2.0
Book and software
Any Macintosh.
Microsoft BASIC 2.0 introduces the user to this new programming language through tutorial and reference sections.

Users learn how to use functions such as menus, windows, graphics and sound; how to draw a picture in *Macpaint;* how to create music; and how to write and modify programs.

There is a special reference chapter in the included book devoted to the Macintosh toolbox, and all Macintosh commands and functions are explained, illustrated and demonstrated in the book's reference section.
$39.95 retail
Merl Miller & Associates; PO Box 367; Lake Oswego, Oreg. 97034; 503-636-2023

Microsoft BASIC 2.1
Programming language
Any Macintosh.
$150 retail
Microsoft Corporation; 10700 Northup Way; Box 97200; Bellevue, Wash. 98009; 206-828-8080

Microsoft FORTRAN 2.1
Compiler
Any Macintosh.
Microsoft Corporation; 10700 Northup Way, Box 97200; Bellevue, Wash. 98009; 206-828-8080

■Neon Assembler
Neon language add-on
512K or larger Macintosh.
$50 retail
Kriya Systems, Inc.; Six Export Dr.; Sterling, Va. 22170; 800-345-7492 or 703-430-8800

Neon Version 1.5
Programming language
Any Macintosh.
$195 retail; with floating point
Kriya Systems, Inc.; Six Export Dr.; Sterling, Va. 22170; 800-345-7492 or 703-430-8800

On Stage
Pascal compiler
Any Macintosh; external drive recommended.
$399.95 retail; Developer's System
$119.95 retail; Personal System
Step-Lively Software, Inc.; 622 Watervliet-Shaker Rd.; Latham, N.Y. 12110; 518-785-7214

■Pascal Extenders; C Extenders
Programming utilities
512K or larger Macintosh.
Pascal Extender and *C Extender* are run-time libraries that contain routines designed to simplify and enhance Macintosh interface programming. After installing the libraries on a language disk, the *Extender* routines are called up in the same manner as other library routines.

The *Extender* code uses standard Apple toolbox data structures. All direct, in-line toolbox calls remain supported and function as expected.

Advanced programmers can control any or all events including window handling, keyboard events, menu handling and graphics and text scrolling.

Pascal Extenders are available for the *Apple Macintosh Pascal* interpreter and *TML MacLanguage Series Pascal. C Extenders* are available for *Aztec C* and *Megamax C.*
$69.95 retail; for *Apple Macintosh Pascal*
$129.95 retail; for *Aztec C*
$129.95 retail; for *Megamax C*
Invention Software Corp.; PO Box 3168; Ann Arbor, Mich. 48106; 313-996-8108

■PCMacBasic
Compiler
512K or larger Macintosh.
PCmacbasic is a BASIC compiler that is compatible with the IBM PC's BASCOM (BASICA) compiler. It can be used to bring other programs into the Macintosh environment.

Features include mouse-sensing commands, dynamic and pagable program arrays, data size limited only by disk size and unlimited program size containing as many segments, each up to 32K, as desired.

Subprograms from any other programming language that create a REL linkage file compatible with the MDS assembler from Apple, or that can be placed in a resource file, can be called from this BASIC.

The program uses resource files to create icons, dialogue boxes, window size and type, menus, alert boxes, input to data statements, compiler directives, a default character font, screen update method and error messages.

Multiple windows, each with automatic redrawing of text, are supported. Redrawing takes place under either horizontal or vertical scrolling or when windows are brought forward. Input statements scroll either horizontally or vertically, so the input cursor is within the visible window.
$250 retail
Pterodactyl Software; 200 Bolinas Rd., #27; Fairfax, Calif. 94930; 415-485-0714

PortaAPL
APL language interpreter
Any Macintosh.
$275 retail
Portable Software; 60 Aberdeen Ave.; Cambridge, Mass. 02138; 617-547-2918

■PRISM
Design language
512K or larger Macintosh.
PRISM (Productivity Improvement for Software Engineers and Managers) uses pseudocode, an English-like description of program logic, to create a source file.

Pseudocode supports the design process from source file, to listings, to code.

Complex programs can be broken into smaller, more manageable subprograms, each representing a specific routine. Engineering team members working on individual subprograms can reference all other routines outside their domain with the use of the program's External function.

The *Prism* processor helps a designer group related subprograms into packages to improve readability. Comment blocks can be included in the input file to clarify a design point.

Features include table of contents, design body, data cross-reference, subprogram cross-reference, nesting tree and complete documentation.
$850 retail
Iconix Software Engineering, Inc.; 1037 Third St., Ste. 105; Santa Monica, Calif. 90403; 213-458-0092

Programming

■Programmer's Toolkit

Programming utility

Any Macintosh; MacFORTH.

The *Programmer's Toolkit* incorporates four new menus: File, Edit, Select and Help.

The File Menu includes the ability to begin other application files with standard file Macintosh toolbox routines. A new text editor is included in the Edit Menu.

The Select Menu allows the user to choose which file to edit from available open block files, and the Help Menu permits the viewing of a brief definition of any word in the *Macforth* library.

The program is available to *Macforth* registered clients. Also included is a 2.4-kernel update disk and documentation.

$30 retail

Creative Solutions, Inc.; 4701 Randolph Rd., Ste. 12; Rockville, Md. 20852; 301-984-0262

Prolog II

Artificial-intelligence language

512K or larger Macintosh.

$495 retail U.S.; available in French and English

Avenue Software, Inc.; C.P. 2085; Terminus, Quebec, Canada G1K 7M9; 418-641-0441

Rascal

Programming language; development system

Any Macintosh.

$129 retail

Metaresearch, Inc.; 1100 SE Woodward; Portland, Oreg. 97202; 503-232-1712

Screen Coordinator

Programmer's screen overlay

Any Macintosh; plus Macpaint *and a dot-matrix printer.*

$39.95 retail

Rubicon Publishing; 6300 La Calma Dr., Suite 100; Austin, Texas 78752; 512-454-5004

■Structure Chart

Program diagraming

512K or larger Macintosh; printer.

Software Chart can be used to build a working blueprint of a large-scale software system, called a Structure Chart diagram, that can be modified and put on paper.

The diagram illustrates the organization and connection of modules of software (procedures, functions, subroutines, etc.) in a program.

The software itself can be used to coordinate the efforts of a programming team, to manage the complexity of large programs and to provide product maintenance and documentation.

Features include Cut, Paste, Copy, Search, Replace and Move for any graphic or text selection. *Structure Chart* diagrams showing hundreds of software modules can be built, revised, enlarged, reduced or positioned on pages as desired.

$449 retail; *Structure Chart*

$19 retail; demo kit

Excel Software; PO Box 1414; Marshalltown, Iowa 50158; 515-753-0889

TMON

Programming utility for 68000 development

Any Macintosh.

$100 retail

TMQ Software, Inc.; 626 Wheeling Rd.; Wheeling, Ill. 60090; 312-520-4440

True BASIC

Programming language

Any Macintosh.

$149.90 retail

Addison-Wesley Publishing Co., Inc.; Two Jacob Way; Reading, Mass. 01867; 617-944-3700, ext. 2677

■VideoWorks Object Code

Animation tool

Any Macintosh.

Users can add animation to a program, using *Videoworks Object Code,* or directly control the movement of 24 sprites in real time.

An *Introductory Package,* for noncommercial usage, allows users to check out object code for compatibility with their own ideas. Users receive basic object code with minimal documentation and some sample programs, but no technical support.

The *Developer's Package* version of the program, for commercial use, includes full object code, more extensive documentation and additional sample programs. Users also receive a tool for converting *Videoworks* documents into standard resources that can be combined with a finished program in a single file.

Users of the *Developer's Package* also receive one hour of technical support time (phone support or custom programming).

$250 retail; *Introductory Package*

$500 retail; *Developer's Package*

MacroMind, Inc.; 1028 W. Wolfram, Chicago, Ill. 60657; 312-327-5821

Specific Application / Architecture

Housebuilder

Architectural graphics

Any Macintosh; Macpaint.

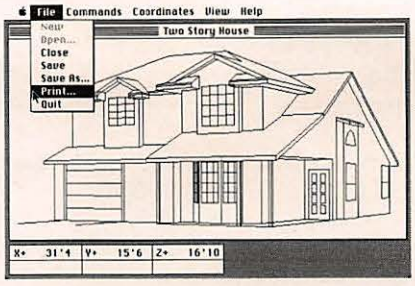
An architectural graphics package, designed by a building contractor, that enables a user to assemble accurately drawn images of real-world building and landscape materials. These images can be used to produce plans, elevations, and interiors in two different scales.

$55 retail

Alternative Enterprises; 3300 Jarrettsville Pike; Monkton, Md. 21111; 301-557-9670

■MacPerspective

Line drawings



Any Macintosh; Imagewriter or Laserwriter printer.

Macperspective permits architects, draftsmen and commercial artists to construct wire-frame perspective drawings of houses, buildings or other objects composed primarily of straight lines.

The program reduces the time required to construct a perspective, compared to conventional graphical techniques, and the viewpoint of the observer can be changed to find the best viewing angle without reconstructing a drawing.

Drawings can be printed on either the Imagewriter or Laserwriter printer in any size up to 100 inches in width. Also, *Macpaint* copies of a drawing can be created.

Features include zoom-in/zoom-out, rela-

tive drawing commands, direct entry of feet and inches (also accepts decimal entries), one-click line deletion and more.

Front, top and side orthographic views can be displayed and printed, and drawings can be stored and retrieved from disk using familiar Macintosh menu selections.

$149 retail

B. Knick Drafting; 313 Marlin Pl.; Melbourne Beach, Fla. 32951; 305-727-8071

Sketch-To-Scale

Architectural drafting symbols

Any Macintosh.

A library of the most commonly used drafting symbols that can be used by architects, building designers, and hobbists to produce near-to-scale drawings.

Users of the program can produce professional-looking floor plans that include sinks, bathtubs, kitchen cabinets, electrical symbols, ceiling fans, doors, and windows.

All symbols can be drawn to scale using *Sketch-To-Scale*'s plastic overlay template, which provides two-dimensional drafting capabilities.

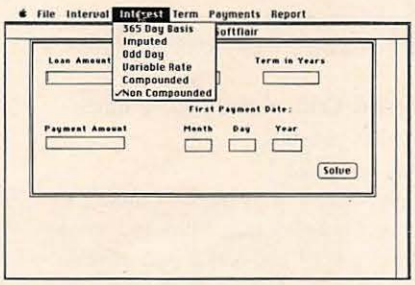
$49.95 retail; *Architectural Drafting Symbols*
$34.95 retail; plastic overlay template
$74.95 retail; program disk and template

Williams AG Products; 8282 S. Memorial Dr., Suite 118; Tulsa, Okla. 74133; 918-252-7477

Specific Application / Business, Sales

■AmPack

Financial planning



Any Macintosh.

Ampack, designed by a CPA and a tax attorney, assists with financial and tax planning, real estate transactions and other loan arrangements.

Features include imputed interest, skipped payments, variable-rate loans, multiple payment intervals, customized schedules, graduated payments, principal-only payments, fiscal or calendar years, 360- or 365-day interest and odd-day interest.

Terms are figured on weeks, half months, months, quarters, half year or year. Intervals are figured weekly, semimonthly, monthly, quarterly, semiannually or annually.

Reports may be sent to the screen or printer and printed by entire schedule, partial, specific year only, annual totals, compact schedule or fiscal year.

All files created with *Ampack* may be transferred into either the *Excel* or *Multiplan* spreadsheet programs.

Ampack is designed to run on the 512K Macintosh, but a modified version also runs on the 128K machine.

$99 retail

Softflair, Inc.; 2100 W. 53rd St.; Minneapolis, Minn. 55419

■Construction Project Management System

Residential construction templates

512K or larger Macintosh; Multiplan *or* Excel.

The *Construction Project Management System (CPMS)* allows users to plan and control schedules, costs and payables for all phases of residential construction projects. Builders, owners, architects and general contractors can use it to develop and simulate estimates and schedules.

The system allows consistent comparisons of subcontractor bids, actual costs and payment disbursements to be made for each construction task during all phases of a construction project.

CPMS consists of three independent planning-and-control processes: Schedule and Bid, which tracks construction tasks, cost estimates, subcontractors, submitted bids and schedules; Cost Control, which handles construction tasks, submitted bids, subcontractors, actual costs and task status; and Payables Control, which handles construction tasks, actual costs, subcontractors, payment amounts and payment status.

$49.95 retail; *Multiplan* version
$59.95 retail; *Excel* version

Softouch Software; PO Box 1744; Lake Oswego, Oreg. 97034; 503-635-1400

Date Calculator

Date computer

Any Macintosh.

Helps a user find out how many days there are between two dates, excluding days

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™ Mac Memory Disk is a trademark of Assimilation Inc.

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Specific Application / Business, Sales

that would not be counted.
$39 retail
The Model Office Company, Inc.; 49 Wellington St. E; Toronto, Ontario, Canada M5E 1C9; 800-268-8181 or 416-860-1033

EZTax-Plan Pro

Individual, corporate tax planning
Any Macintosh; Multiplan *or* Excel.

Eztax-Plan Pro's main function is to develop present and future tax plans for individuals or corporations. It allows a user or users to pay the lowest tax legally allowed.
$295 retail
EZWare Corporation; 29 Bala Ave.; PO Box 620; Bala Cynwyd, Pa. 19004; 215-667-4064

Front Desk

Scheduling and resource management
Any Macintosh.

Schedules and improves productivity of resources such as personnel, facilities, equipment, outside services, projects, or money. Analysis reports track resource utilization and billing and forecast revenue and workload. Version 3.0 includes Apple's *Switcher* program.
$149.95 retail
Layered; 85 Merrimac St.; Boston, Mass. 02114; 617-423-9041

■Hotel-Mac

Hotel, motel management
512K or larger Macintosh; external drive recommended.

Hotel-Mac is an electronic cash register that allows hotel or motel managers to provide and track a variety of services for up to 20 to 40 rooms.

By clicking the mouse at the appropriate room number, a choice of 30 different, predefined services available for this room will appear.

When making invoices, all of the different costs attributed to this room will be printed on the bill. These will be divided into subtotals, totals per category and tax percentages.

At the end of the month, a printout per service and per tax percentage can be made for your VAT (valued added taxes) listings.

Statistics on different services can be worked out to study the rentability of each service, room, etc.

The program is available in English, German, French and Dutch.
$195 retail (U.S.)
Mexoft Belgium; 140 Wirtzfeld Ave.; B-4761 Bullingen; Belgium; 011-3280-647713

Mac-Barcode; Scanstar-Mac

Bar-code generator and scanner
Any Macintosh.

Mac-Barcode—enables users to create bar-code labels according to their own specifications and construct worksheet documents that contain both text graphics and coded information. $295 retail, Imagewriter version; $395 retail, Laserwriter version; $495 retail, Printronix L150 version

Scanstar-Mac—connects through the computer's keyboard socket providing bar-code scanning as a means of data entry without software or hardware modifications. $600 retail with light pen
Computer Identics Corp.; 5 Shawmut Rd.; Canton, Mass. 02021; 800-622-2633

Macintosh Bar Code Printing Program

Label maker
Any Macintosh.

Allows a user to print bar-code labels in a wide range of sizes, densities, and with a variable number of characters.
$50 retail; with purchase of barcode reader
TPS Electronics; 4047 Transport St.; Palo Alto, Calif. 94303; 415-856-6833

Mac Movie

Video-rental store management
Any Macintosh; external disk drive or hard disk; Microsoft BASIC 2.0.

A program for video retailers that combines inventory control, customer control, and cash-register activity in one software module.
$395 retail; without *Microsoft BASIC*
$545 retail; with *Microsoft BASIC*
Eureka Computer Systems, Inc.; PO Box 2308; Corsicana, Texas 75110; 214-872-2501

MacProject

Project management
Any Macintosh.

Designed to help plan and track any size or type of project.
$125 retail
Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-973-3317

■Micro Planner Plus

Project, resource management
512K or larger Macintosh; external drive.

Micro Planner Plus is designed to help managers complete projects on time and on budget.

It uses the principles of critical path analysis (or PERT) and resource scheduling and optimization techniques to show a manager when a project can be completed and pinpoint any problem areas such as resource overloads.

Micro Planner Plus provides Progress Reporting that compares actual results to the plan and highlights slippages; Exception Management Reporting, to retrieve just the managerial information needed; and Dynamic On-Screen Modeling, which tests different solutions to problems that come up.

Micro Planner Plus is faster than the original *Micro Planner,* has three times the capacity, full network viewing and more enhancements.

Training is also available.
$495 retail; *Micro Planner Plus*
$395 retail; *Micro Planner*
$25 retail; demo
MicroPlanning Software USA; 235 Montgomery St., Ste. 840; San Francisco, Calif. 94104; 415-788-3324

Overture

Financial planning, analysis
Any Macintosh.

A cash-flow, decision-support program based on the two most widely used methods of discounted cash-flow analysis: net present value and internal rate of return.
$99.95 retail
Brainstorm Development, Inc.; PO Box 26948; Austin, Texas 78755; 512-345-3324

Pert & Critical Path Techniques

Project planning
Any Macintosh.

Shows how to use network models for project planning and control and how to develop PERT and critical-path modes.
$95 retail
Lionheart Press, Inc.; PO Box 379; Alburg, Vt. 05440; 514-933-4918

Project Modeler

Project management, modeling
512K or larger Macintosh.

Designed to help professionals and office workers organize projects such as the incor-

poration of a business, buying a new building, designing a tax plan, hiring personnel, treating a patient, organizing a meeting, and so forth.

Project Modeler consists of three programs: *Guide Maker, Expediter,* and *Calendar.*

$199 retail, *Guide Maker*
$199 retail, *Expediter* and *Calendar*
$299 retail both; site licenses available
The Model Office Company, Inc.; 49 Wellington St. E; Toronto, Ontario, Canada M5E 1C9; 800-268-8181 or 416-860-1033

■Puzzle-512

Financial planning

512K or larger Macintosh.

Puzzle-512 is an integrated financial planning system that contains an eight-page questionnaire, which serves as a data entry instrument.

Features include a Briefcase, which allows day-to-day comparisons for present and future positions; Advisor, which performs all calculations pertaining to present financial position; and Projection Mode, which projects a total financial plan.

Puzzle-512 comes in two versions: Consumer and Professional. The Consumer version is a one-file system and the Professional version is a multifile program.
$95 retail; Consumer version
$235 retail; Professional version
JLC Software; 2950 S. Ceylon Way; Aurora, Colo. 80013; 303-690-5443

■Puzzle-Print

Financial planning

512K or larger Macintosh; printer; second disk drive recommended.

Puzzle-Print works in conjunction with *Puzzle-512,* manufactured by the same company. The program reads a client's file and allows the user to print a total, comprehensive personal financial plan.

Functions include a cover page, table of contents, 25-page present position, 25-page projected position, two-page plan of action, eight-page update, one-page review form, one-page product recommendation implementation form and a three-page location of assets form.
$75 retail
JLC Software; 2950 S. Ceylon Way; Aurora, Colo. 80013; 303-690-5443

TimeWand

Bar-code system

Any Macintosh.

A software/hardware system that can read bar-code information and retain it in its own internal memory.

Once stored, this information can be transferred to a Macintosh via a recharger unit that contains a built-in communications link. It also recharges *Timewand*'s batteries.
$799 retail
Videx, Inc.; 1105 NE Circle Blvd.; Corvallis, Oreg. 97330; 503-758-0521

Video Rental System

Customer, inventory tracking

512K or larger Macintosh; external drive or hard disk.

Designed to record and report information about current and potential customers and club members in a video retail store.
$449 retail; ($549 with optional payroll module)
Software Bridge, Inc.; 6925 Union Park Ctr., Suite 413; Midvale, Utah 84047; 801-562-2121

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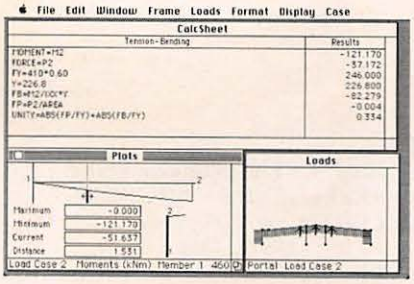
Specific Application / Engineering

BEAMAC
Structural beam analysis
Any Macintosh.
$95 retail
Erez Anzel; 5800 Arlington Ave., #5T; Riverdale, N.Y. 10471; 212-884-5798

BEAMAC II
Structural beam analysis, design
Any Macintosh.
A structural engineering program that can be used to analyze and help design any continuous beam having any number of spans, supports, hinges, loads, etc.
$295 retail
Erez Anzel; 5800 Arlington Ave., #5T; Riverdale, N.Y. 10471; 212-884-5798

■Cstructures
Structural analysis, design



512K or larger Macintosh.
Cstructures, a package for the analysis and design of engineering structures, is comprised of three applications: Cframe, for two-dimensional rigid-jointed frame structures; Cgrid, for grillage or gridwork structures; and Ctruss, for two-dimensional pin-jointed truss structures.

A scale-drawing model of the structure to be analyzed may be created on screen using the Macintosh's mouse and interactive graphics. Structure loading, restraints and material properties may be defined by pointing to the drawing with the mouse. It is also possible to define the structure using text-based editing.

A number of different windows are available to define structure geometry; specify restraints; loading and material properties; and to view the results of an analysis in graphical or text form.

These windows may be resized, repositioned or removed from the screen at any time.

A calculation sheet that allows the user to define calculations and to obtain the results of an analysis for use in a design is also provided.
$1,695 retail (U.S.)
Crystal Graphics; PO Box 68; Cottesloe, Western Australia 6011; 09-383-2157

■Easy3D
Three-dimensional modeling
512K or larger Macintosh.
Easy3D enables users with no previous computer graphics experience to create realistic, shaded solid objects. Using the mouse, objects or entire scenes can be created, rotated, lit, distorted, moved and joined.

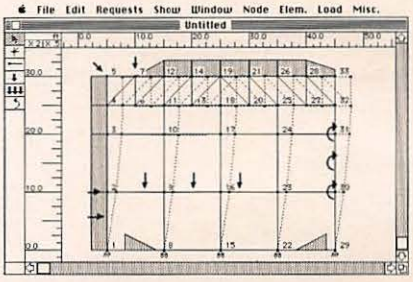
Features include a full set of geometric solids; Lathe and Jigsaw tools for turning two-dimensional outlines into solid three-dimensional objects; adjustable and moveable lighting; the ability to join any two objects, subtract one object from another and isolate what is common to two objects; and full rotation, dragging, distortion, multiple view, perspective, lighting and assembly capabilities.
$99 retail
Enabling Technologies, Inc.; 125 Armstrong Rd.; Des Plaines, Ill. 60018; 312-427-0408

Electro Bits
Circuit graphics
Any Macintosh.
Available in English or Spanish, it employs *Macpaint* to draw circuit diagrams.
$24.95 retail (U.S.); $29 retail (non-U.S.)
Medina Software; 2008 Las Palmas Cir.; Orlando, Fla. 32822; 305-281-1557

Electronic PAD
Electronic-circuit design
Any Macintosh.
An integrated, computer-aided engineering package for digital circuit design.
$395 retail; 128K
$595 retail; 512K
Rune Enterprises; 1502 Kirkham; San Francisco, Calif. 94122; 415-681-1763

Engineering Tool Kit
Engineering data; graphics
Any Macintosh; Microsoft BASIC 2.0.
Records numeric engineering data, translates data into engineering graphics form, and generates statistical reports.
$99 retail
Sof-Ware Tools; PO Box 8751; Boise, Idaho 83707; 208-343-1437

■FRAME-MAC
Structural frame analysis, design



512K or larger Macintosh.
Frame-Mac analyzes and assists in designing two-dimensional frames. Any number of nodes, elements, supports, hinges and loads (including node and element, sloped and trapezoid) are accepted.

Frames are drawn with the mouse, and either the mouse or keyboard can be used to add, move, change or remove any nodes, elements or loads.

The program uses a stiffness matrix method with 19-digit accuracy. An AISC section table is included on disk and can be accessed to aid in design.

The program comes with a full menu bar; a frame window that shows original shape, loads and/or deflected shape; a node window that shows any node as a free body; and an element window that shows any element and its loading, tension, shear, moment and deflection.

Input and output texts and a section table each have a window, too.
Available March, 1986; $495 retail
$10 retail; demo disk
Erez Anzel; 5800 Arlington Ave., #5T; Riverdale, N.Y. 10471; 212-884-5798

LogicWorks
Digital logic-circuit design
512K or larger Macintosh.
Includes all the digital logic-circuit design capabilities of the original *Logimac* program plus a number of new features.

Users of *Logicworks* may take any circuit designed on the program and compress it into a single symbol using *Macpaint.* The

new symbol can be stored in a library and reused when needed.

In addition, programmable logic chips can be simulated by specifying internal logic in truth-table form, as a list of product terms, or in a high-level machine description using the separate *Logic Compiler* program.

The original *Logimac* will be supported for users who require compatibility with a 128K Macintosh.

$159.95 retail

Capilano Computing Systems, Ltd.; PO Box 86971; North Vancouver, B.C., Canada V7L 4P6; 604-669-6343

LogiMac

Digital logic-circuit design

Any Macintosh.

Serves as a drawing aid that provides a drawing interface and predefined symbols for common logic devices. It also provides simulations of circuit operation.

Its drawing area, not restricted by the size of a Macintosh's screen, may be up to 38 feet by 38 feet. Complexity of a circuit is limited only by available memory.

$79.95 retail (U.S.)

Capilano Computing Systems, Ltd.; PO Box 86971; North Vancouver, B.C., Canada V7L 4P6; 604-669-6343

MacCAD

Drawing templates for engineers and architects

512K or larger Macintosh; Macdraw *or* Macdraft.

A set of 12 different drafting template packages. Typically, each template package consists of a 3- or 4-disk library of predrawn symbols that conform to industry standards.

$49 to $169 retail per package

CompServCo; 800 Freedom Ln.; Slidell, La. 70458; 800-272-5533 or 504-649-0484

MacDraw Templates

Flowcharting; architectural; engineering

These templates contain standard symbols predrawn to assist the user in his particular application. The flowcharting template contains a complete set of ISO and ANSI flowcharting symbols for creating flowcharts. The architectural templates contain standard symbols used for drawing doors, tubs, switches, plugs, etc. The engineering template contains standard symbols for electrical and mechanical engineers.

$16 each retail

$25 retail; two or more templates

Marshall Consulting Services; PO Box 2060; Glendora, Calif. 91740; 818-963-7693

MacFrame2D

Structural analysis

Any Macintosh.

Uses stiffness matrix methods to help engineers, structural designers, and students analyze two-dimensional structural frames.

$150 retail

Design Source Software; PO Box 91219; Houston, Texas 77291; 713-820-7026

■MacSpace

Graphic design

512K or larger Macintosh.

Macspace allows a user to draw any object in three dimensions, save it and print or modify it in any way desired.

The program divides the screen into four windows. The first three windows, on which

Mouse upgrade, $9.95.

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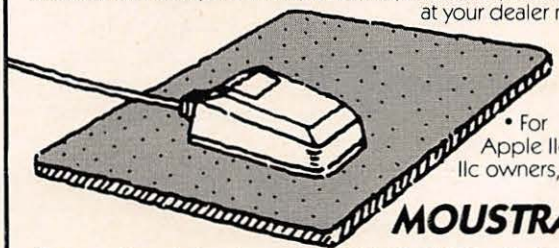

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Glenwood Springs, CO 81602

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Specific Application / Engineering

the drawing itself will be done, represent the front view, side view and the plane view.

The fourth window shows a three-dimensional view of the shapes created in the first three.

A column of symbols on each side of the screen describe the commands or tools available to the user. The left side shows the tools used to create an image; the right side lists the commands available to modify it.

The bottom line of the screen displays the dimensions and plan coordinates of the object.

Selecting the tools is done by pointing the mouse at the desired icon and clicking. Drawing is assisted by options from the layout menu, which appear at the top of the screen. The mouse is used as a pen. It can be moved to draw on any of the first three windows.

$385 retail

Abvent; 9903 Santa Monica Blvd., Ste. 268; Beverly Hills, Calif. 90212; 213-659-5157

NWA Quality Analyst

Quality control; process control capability

512K or larger Macintosh.

Can be used for both process capability studies and ongoing process control. Source code is available.

$495 retail

Northwest Analytical, Inc.; 520 NW Davis St.; Portland, Oreg. 97209; 503-224-7727

■PDrop

Engineering; fluid pressures

512K or larger Macintosh; Microsoft BASIC 2.0 *or higher.*

Pdrop is a menu-driven program for anyone calculating the pressure drop of fluids flowing in circular pipes.

The program solves a pressure drop in any type of pipe (with any diameter), any fluid (liquid or gas), any temperature, any type of fitting valve and any flow region.

BASIC source code is provided for customization of routines.

Some of *Pdrop*'s major functions include: Enter Identification, which allows input of titles that will appear on a printout; Define or Redefine System Constants, which accepts values of "e" for any type of pipe and allows definition of the fluid used, its properties and the units of flow used in a calculation.

Other features are: Create Pipe Data, Calculate Pressure Drops; Correct a Pipe's Data, Recalculate Pressure Drop; Save Data File to Disk; Retrieve Data File from Disk; and Print a Hard Copy of Pressure Drop Data.

$100 retail

PSI/Systems; 31 Main St., 2nd Fl.; Andover, Mass. 01810; 617-475-8088

■Petroleum Industry Directional Well Package

Well drilling

Any Macintosh.

The *Petroleum Industry Directional Well Package* is a collection of separate software modules designed to assist engineering firms engaged in the drilling of oil wells.

The *Survey Calculation Program,* the primary module, helps users visualize and plan where and how to drill for oil based on data obtained from geological studies, engineering reports and so forth. It also helps determine the accuracy of surveys and reports.

In addition, the package includes an *Interpolation Program,* used to estimate correct drilling depths, convert angular data into usable form, determine radius of curvature, etc.; a *Spider Plots Program,* which diagrams directionals and produces sector plots; and a *3-D Plots Program,* which produces three-dimensional views of a drilling site.

$2,500 retail; *Survey Calculation Program* $14,500 retail; *Petroleum Industry Directional Well Package*

Houston Directional Software; 7127 Mobud Dr.; Houston, Texas 77074; 713-776-8835

■QuickLog

Civil, geotechnical engineering

Any Macintosh.

Quicklog enables a user to compose and create an entire borehole log, including graphics and plotting, at one time. The completed log can be edited as new data becomes available, and common data can be copied between logs.

Features include text, graphics and plotting on one log; editing; multiple plots on one graph; user designed graphics and symbols; printing of a complete log; separate printing of data from the log; and a log data base.

$1,495 retail (U.S.); $1,995 retail (Canada)

MacSink, Inc.; 1089 West Broadway, Ste. 201; Vancouver, B.C., Canada V6H 1E5; 604-732-9022

Stru-Plan

Structural engineering

Any Macintosh; Microsoft Multiplan *or* Excel.

The *Stru-Plan* steel-building design program is a group of *Multiplan* templates in either *Excel* or *Multiplan* that allows structural engineers to produce accurate and well-documented designs in a minimum amount of time.

Available templates include Beams, Columns, Footings, Baseplates, Slabs & Girts, Basement Walls, Roof and Floor Joists, and more.

$349 retail

Benchmark Software, Inc.; 824 Cotswold Rd.; Somerdale, N.J. 08083; 609-784-6070

Ultra Fonts Technical and Business Set

Specialized fonts

Any Macintosh.

Collection of Imagewriter fonts designed for engineers, lawyers, doctors, mathematicians, and others in need of specialized alphabets.

$29.95 retail

Century Software; 2306 Cotner Ave.; Los Angeles, Calif. 90064; 213-829-4436

Specific Application / Health Care Management

CMA Dental Office Management 512

Dental-office management

512K or larger Macintosh; hard disk drive.

Designed to work as a single user application or to be used in the Macintosh Office. Includes a complete patient receivables system including claims preparation, patient treatment planning, and an appointment scheduling element featuring patient recall.

$1,995.95 retail

CMA Micro Computer Division; 55722 Santa Fe Trail; Yucca Valley, Calif. 92284; 619-365-9718

Health Care Management
Office management
512K or larger Macintosh.

The *Macbealth Series* (including *Dentalmac, Opticmac, Chiromac,* and *Medimac)* can be configured for a single or multi-user system, has the feature of allowing all data fields in the series to merge into *Microsoft Business Pack, Lotus Jazz,* or *Forethought Filemaker,* and allows creation of specialized reports, personalized letters, spreadsheets, and performance graphs. Serves the needs of physicians, dentists, optometrists, and chiropractors.
HealthCare Communications; 245 S. 84th St.; Lincoln, Neb. 68510; 402-489-0391

OR-D Dental Management System
Dental-office management
Any Macintosh.

Monitors a patient from initial entry into a dental office through complete treatment history.
$3,500 retail software (lease plan available)
OR-D Systems; Div. of DVI-OR USA, Inc.; One Martin Ave.; Cherry Hill, N.J. 08002; 609-665-2255

OR-D Medical Management System
Medical-office management
Any Macintosh.

Generates all necessary forms and reports required to expedite administrative and patient needs.
$3,500 retail software (lease plan available)
OR-D Systems; Div. of DVI-OR USA, Inc.; One Martin Ave.; Cherry Hill, N.J. 08002; 609-665-2255

Pro-Mac
Hospital operating room system
All software and hardware provided by vendor.

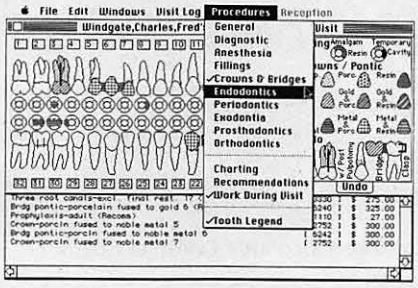
The *Pro-Mac* system allows a hospital to computerize its operating room by automating the following integrated functions: patient scheduling, doctor's preference cards, patient OR charges, OR inventory, staff scheduling, report generation, word processing, and more.

The system includes a Macintosh computer and the AppleTalk network, which allows up to 32 user stations to be networked with various peripheral devices such as printers, external hard disks, etc.
$12,000 (base price) retail; including hardware
Professional Data Management, Inc.; PO Box 31926; Tucson, Ariz. 85751; 602-881-5747

TessSystem One
Medical-office management
512K or larger Macintosh; 10MB to 40MB hard disk drive.

Tracks accounts receivable, patient files and patient appointments for a single-doctor office, as well as generating numerous practice analysis reports.
$1,995 retail
Tess Data Systems, Inc.; 17070 Red Oak Dr., Suite 403B; Houston, Texas 77090; 713-440-6943

■ToothPics
Dental management system



ToothPics

512K or larger Macintosh; 20MB hard drive; two Imagewriter printers; A/B switch box.

Toothpics provides a graphic on-screen diagram of each dental patient's mouth and can record the condition of the patient's teeth, the treatment provided by the dentist and recommendations for work to be performed.

Personalized charts can be included as part of a comprehensive receipt given to all patients.

Reports include recalls and recommendations, patient data, monthly billing, patient receipts, accounts receivable, accounts aging and practice productivity. The system also fills out standard ADA insurance forms.
$3,995 retail; single-station version
Available third quarter, 1986; networked version
Class One Ltd.; 431 East Ellis Dr.; Tempe, Ariz. 85282; 602-820-3696

488

Looking for an IEEE 488 interface?

☐ Add IEEE instrument control to your Macintosh, IBM PC, or RS-232/422 computer
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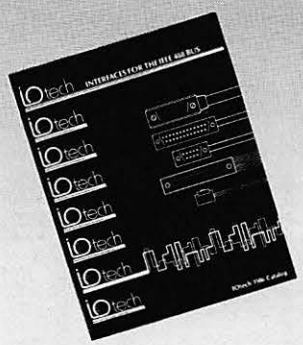
☐ Control and monitor digital I/O lines from an IEEE or RS-232 computer
☐ Remotely control IEEE instruments over telephone lines
☐ Add modem capability to your IEEE controller



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Cleveland, Ohio 44146
Telex via WUI 6502820864
(216) 439-4091

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Specific Application / Mathematics

■Alpha MathFonts

Mathematical fonts

Any Macintosh.

Mathfonts consists of eight separate fonts including the Greek alphabet, exponents and indexes, fraction bars, brackets, square brackets and radicals of all sizes, as well as a large number of special mathematical characters.

All characters can be superimposed to write formulas under a radical or a fraction bar.

All fonts come in 9, 10, 12, 18, 20 and 24 point sizes.

$39.95 retail

Alpha Systems; 349 Paseo Tesoro; Walnut, Calif. 91789; 714-598-6742

ANCOM/TFD

Statistical analysis; comparisons

512K or larger Macintosh; Microsoft BASIC.

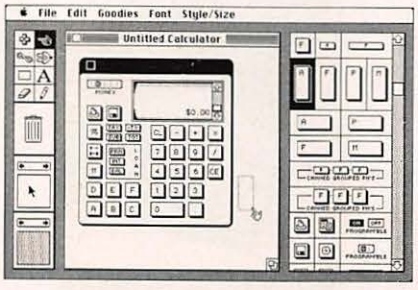
ANCOM/TFD (analytical comparisons to the first degree) performs a number of statistical tests that are usually not available in most mainframe and microcomputer statistical packages.

$99.95 retail

Scilab, Inc.; PO Box 614; Guilderland, N.Y. 12084; 518-355-3363

■Calculator Construction Set

Mathematics



Any Macintosh.

The *Calculator Construction Set* allows a user to design and build his own calculator desk accessories.

Included are a host of mathematical, scientific, business, data/time and conversion function keys. Or a user may define his own programmable keys.

The program's Parts Box contains a collection of "unwired" part shapes. It also includes assorted keys, switches, LEDs, clock/calendar displays and a resizable, scrolling paper tape that prints to the Imagewriter Clipboard or a standard Macintosh text file.

Math functions include absolute value, generate random number, reciprocal, square root, square, the xth root of y, y to power of x, base 10 logarithm, natural logarithm, e to the power of x, sine, cosine, tangent, cotangent, secant, cosecant and shift decimal left and right.

$99 retail

Dubl-Click Software; 18201 Gresham St.; Northridge, Calif. 91325; 818-349-2758

Cricket Graph

Business, scientific graphics

Any Macintosh.

The program offers a wide variety of graphs including: scatter, line, area, bar, column, stacked bar, stacked column, and polar. Scatter and line plots can use either linear, semilog, or log axes and can include error bars.

$195 retail

Cricket Software, Inc.; 3508 Market St.; Philadelphia, Pa. 19104; 215-387-7955, 800-345-8112 or 800-662-2444 in Pa.

Custom Calculator Construction Set

Customized calculators

Any Macintosh.

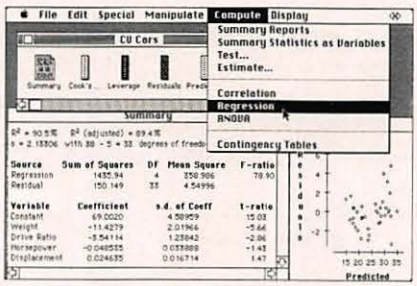
A personal productivity and educational tool that gives users the ability to create their own calculators, which may be used as memory-resident desk accessories.

$49.95 retail

Electronic Arts; 2755 Campus Dr.; San Mateo, Calif.; 94403; 415-572-2787

■Data Desk

Data analysis



Any Macintosh.

Data Desk is a statistics package designed to give a user a better understanding of the results obtained from complex computations via its built-in graphics capabilities.

The program computes statistics, manipulates data and creates displays. Users may enter and edit data with full word processing capabilities, mix text and numbers and name categories mnemonically rather than with code numbers.

Displays available include scatterplots, histograms and boxplots.

$125 retail; professional version

$35 retail; student version

Data Desk, Inc.; PO Box 4555; Ithaca, N.Y. 14852; 607-256-4411

LogarithMac

Logarithm templates

Any Macintosh.

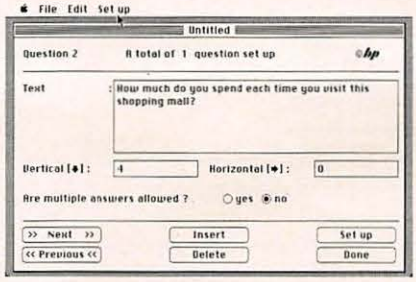
A three-disk package that includes 76 *Macpaint* logarithm templates.

$39.95 retail

Heizer Software; 5120 Coral Ct.; Concord, Calif. 94521; 415-827-9013

■macINTERVIEW

Survey program



512K or larger Macintosh.

Macinterview is a variable survey program that helps to analyze different kinds of inquiries, enabling the user to classify, concentrate and compare a large number of individual data.

The program consists of three parts: Setup, Record and Analysis.

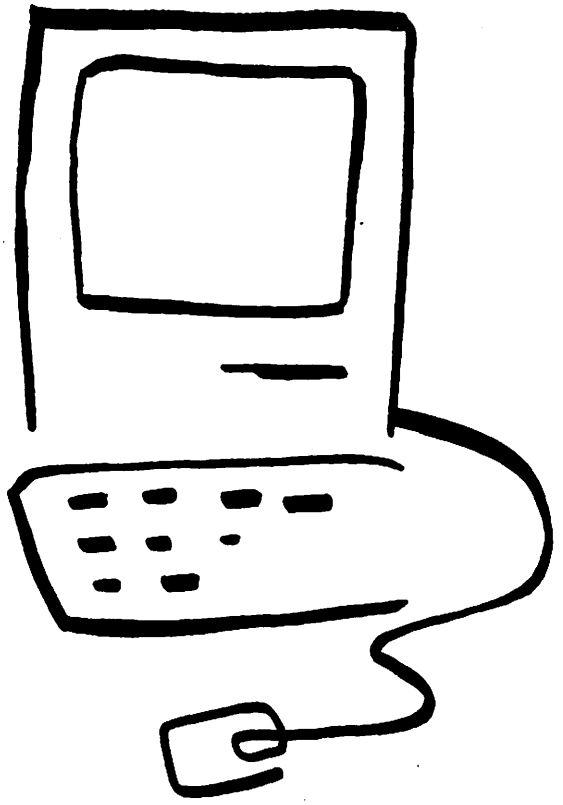
Version 2.1 of the software is scheduled to be released in May. It will provide optional comparative and descriptive statistical capabilities, such as filtering and transforming data, factor, cluster and discriminant analyses.

$950 retail; Version 1.1

$950 retail; Version 2.1

$300 retail; statistical option

Erich Breitschwerdt and Partner; Paulsmuhlenstrasse 41; 4000 Dusseldorf 13; West Germany; 0211-7182232



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The MacHealth Series offers the easiest way you'll find to put your *business* in order and get on with your *practice*. With the point-and-click simplicity of the Macintosh, you and your staff will master the entire system in hours — from patient billing and accounts receivable, to insurance processing and practice management.

Of course, HealthCare Communications provides total installation, training, service and support. Purchase and lease-purchase options are available.

For the name of the authorized dealer nearest you, or to arrange a demonstration, call 1-800-HCC-MACS.

HealthCare Communications 245 So. 84th St., Suite 301 Lincoln, NE 68510 Circle 43

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Specific Application / Mathematics

MacMathPascal
Data analysis
Any Macintosh.

Contains a set of routines that can help engineers, researchers, and students solve complex mathematic and scientific problems. The program, compatible with Apple's *Macintosh Pascal* and Softech's *Macadvantage Pascal*, allows the use of single-, double-, and extended-precision mathematics.
$100 retail
Coherent Cognition; PO Box 24114; San Diego, Calif. 92124; 619-695-9764

Mac.Stat.Pak
Statistical analysis
Any Macintosh; Microsoft BASIC 2.0.
$50 retail (evaluation copies available by sending a disk to the company)
Scientific MicroPrograms; 213 Merwin Rd.; Raleigh, N.C. 27606; 919-851-8111

MathPak
Equation, data analysis
Any Macintosh; Microsoft BASIC.

Provides subroutines for Root Finding, Gaussian Elimination, Polynomial Fitting, and Optimization that can be used alone or integrated within BASIC-language programs.
$100 retail
PSI/Systems; 31 Main St., 2nd Fl.; Andover, Mass. 01810; 617-475-8088

■Matrix Calculator
Scientific, engineering analysis
512K or larger Macintosh.

Matrix Calculator contains over 40 preprogrammed functions, including Cholesky decomposition, Sweep operator and Eigenvalues/vectors.

The program has a complete mouse interface with pop-down menus, full screen input/edit and transformations.
$39.95 retail
Prime Line Software; 1058 North 1500 West; Salt Lake City, Utah 84116; 801-595-8314

Number Cruncher Stat System
Statistical analysis
512K or larger Macintosh.

Provides a user with statistical procedures, data management, a data base, regression analysis, analysis of variance, nonparametric tests, contingency tables, plots, t-tests, and transformations.
$79 retail
NCSS-MAC; 865 East 400 North; Kaysville, Utah 84037; 801-546-0445

NWA StatPak
Statistical analysis
512K or larger Macintosh.
$395 retail; source code available
Northwest Analytical, Inc.; 520 NW Davis St.; Portland, Oreg. 97209; 503-224-7727

PowerMath
Problem-solving tool
512K or larger Macintosh.

Solves problems from the most simple arithmetic to symbolic and polynomial calculus problems.
$99.95 retail
BrainPower, Inc.; 24009 Ventura Blvd.; Calabasas, Calif. 91302; 818-884-6911

Process Control Chart Tool Kit
Statistical graphing, charting
Any Macintosh; Microsoft BASIC.

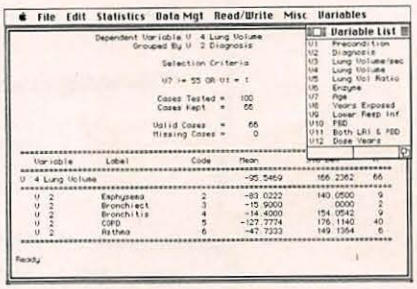
Used to record numeric sample data and translate this data into graphs and control charts.
$99 retail
Sof-Ware Tools; PO Box 8751; Boise, Idaho 83707; 208-343-1437

Scientific Analysis Programs
Data analysis
Any Macintosh.

A two-disk set written in *Microsoft BASIC* that solves the following equations: linear, nonlinear, real, complex, matrices, definite integrals, binomials, polynomials, and differential.

Version 2.1 is compatible with *Microsoft BASIC 1.0,* and Version 3.1 is compatible with *Microsoft BASIC 2.0.*
$49.95 retail
PCA Software; PO Box 1231; Arlington, Texas 76010; 817-860-5498

■STAT80
Statistical analysis



512K or larger Macintosh; external disk drive.

The Standard version of *Stat80* provides 27 statistical procedure commands, ranging from a simple data description to multiple regression and analysis of variance. Eighty-eight additional commands provide further data management and miscellaneous functions.

A Professional version of the program also provides factor analysis, canonical correlation analysis, cluster analysis and a matrix facility.

Stat80 aids in the use of its commands, whatever the degree of experience of the user. Infrequently used commands can be sought out via the pull-down menus.

Once a command is located, a single keystroke then provides guidance in the form of an example.

For frequently used commands, speed is obtained by using keyboard shortcuts that bypass pull-down menus and examples or by typing commands directly.

Special windows allow users to keep variable names continually in view and to preview data files, print files or text files without exiting the program.
$249 retail; Standard version
$399 retail; Professional version
Statware; PO Box 510881; Salt Lake City, Utah 84151; 800-782-8807 or 801-521-9309

StatFast
Statistical analysis
Any Macintosh.

Includes menu-driven data analysis and forecasting, graphics, a flexible data editor, and can access spreadsheet and data base files.
$119 retail
StatSoft; 2831 E. 10th St., Suite 3; Tulsa, Okla. 74104; 918-583-4149

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Hard Disk Info: (Coming Soon External Version)

- Uses state of the art high speed SCSI Interface
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- Compatible with Apple's new HFS file system
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- Macintosh Plus Compatible
- 120 Day Warranty

With our 20 Megabyte Internal Hard Disk you will be able to store the information which would occupy fifty 400K diskettes. This means you will be able to organize all of your software in one place and manage large data bases such as customer lists. Our Hard Disk will also do far more for you because we include the following software: A Print Spooler which allows you to continue using your Macintosh while the printer is printing; Disk Caching which speeds disk access time; Partitioning which allows you to use the old Macintosh file system and the new HFS file system together for maximum software compatibility; and more.

Memory Upgrade Info:

- Includes self loading RAM Disk Software
- 120 Day Warranty

With our Memory Upgrades you will be able to upgrade your Macintosh so you can run a RAM Disk program to make your Macintosh "lightning fast". You will be able to quickly and powerfully create and manipulate large files with programs such as PageMaker, Excel, MacDraft, etc.
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Specific Application / Mathematics

Statistical Analysis

Books and software

Any Macintosh.

Contains programs covering statistical computations, sampling schemes, modern multivariate techniques, descriptive statistics, industrial quality control techniques, and more.

$145 retail; *Experimental Statistics*
$145 retail; *Business Statistics*
$150 retail; *Multivariate Analysis*
$75 retail; *Exploratory Data Analysis*
$125 retail; *Quality Control and Industrial Experiments*

Lionheart Press, Inc.; PO Box 379; Alburg, Vt. 05440; 514-933-4918

Stats Tool Kit

Statistical analysis

Any Macintosh; Microsoft BASIC 2.0.

Used for recording sample data and generating various statistical-analysis reports.

$99 retail

Sof-Ware Tools; PO Box 8751; Boise, Idaho 83707; 208-343-1437

StatView

Statistical analysis

Any Macintosh.

$199.95 retail

BrainPower, Inc.; 24009 Ventura Blvd.; Calabasas, Calif. 91302; 818-884-6911

StatWorks

Statistical analysis

Any Macintosh.

$125 retail

Cricket Software, Inc.; 3508 Market St.; Philadelphia, Pa. 19104; 215-387-7955, 800-345-8112 or 800-662-2444 in Pa.

WormStat

Statistical analysis

Any Macintosh.

Designed as a general-purpose statistical package and as a tool for helping students learn statistics. Functions include arithmetic mean, standard deviation, histograms, median, range, box-and-whisker plots, analysis of variance, and more.

$79 each retail; one to nine
$39 each retail; 10 or more
$2,000 retail; site license

Small Business Computers of New England, Inc.; PO Box 397; Amherst, N.H. 03031; 603-673-0228

Specific Application / Real Estate

Advanced Property Management

Property management

512K or larger Macintosh; external drive.

Designed to manage residential property, commercial property, and condominium associations.

The program has all the features of the *Basic Property Management* program plus a general ledger that houses budget information.

$795 retail

Yardi Systems, Inc.; 3324 State St., Suite "O"; Santa Barbara, Calif. 93105; 805-687-4245

BASIC Property Management

512K or larger Macintosh.

Designed for use by property owners and professional property managers, the system automates and organizes the management of commercial and residential properties.

$395 retail

Yardi Systems; 3324 State St., Suite "O"; Santa Barbara, Calif. 93105; 805-687-4245

Commercial/Industrial/Real Estate Applications

Property cost, expense analysis

Any Macintosh; Multiplan, Excel, *or* Jazz.

Rentroll—Creates an Annual Property Operating Statement and records data on up to 30 units per property.

Project—Produces a Project Cost Analysis Report that provides a commercial developer with a pro forma statement suitable for presentation to a lender.

Ltrack—Used to monitor the status of as many as 32 rental units per property; maintain a "tickler file" of escalations, renewal options, and lease expirations; record current collection status; and track occupancy and vacancy.

$100 each retail

RealData, Inc.; PO Box 691; Southport, Conn. 06490; 203-255-2732

■Contracts

Real estate contracts

512K or larger Macintosh.

Contracts contains a complete set of attorney-approved real estate contracts such as equity shares, standard offers, options, lease purchases, exchanges, and so forth.

The program prints original contracts; provides correct wording for the number of parties, dates of possession and form of title; keeps complete records of all deals, including broker names; and calculates broker commissions, fees, terms, percentages and deposits for each contract.

Contracts includes the *Professional Real Estate Anthology* textbook, which details closings and managing properties, and other study materials.

Call for quotes.

UEAA; 280 N. Benson Ave., #6; Upland, Calif. 91786; 714-981-2020

Financial Analysis

Business reports; analysis

Any Macintosh; Multiplan, Excel, *or* Jazz.

$100 retail

RealData, Inc.; PO Box 691; Southport, Conn. 06490; 203-255-2732 or 203-838-2670

■MacBank

Real estate accounting system

512K or larger Macintosh.

Macbank includes both accrued and/or cash methods of accounting. If features an unlimited number of accounts; general and specific ledgering; the ability to track an unlimited number of properties, project expenses and income sources; automatic check/receipt writing; preparation of income/expense reports; bank reconciliations; printing of envelopes for checks and receipts; and assistance in filling out loan applications.

Spreadsheets and graphics are included for ACRS depreciation calculations, auto leases/purchases, business cash budgeting, college funding, home budgeting, home purchases/renting, income statements/balance sheets, inventory ordering, investment portfolios, internal rates of return, loan amortizations and stock portfolios.

Macbank includes the *Macbank Megatactics* textbook, which discusses banks and bankers, and additional materials.

Call for quotes.

UEAA; 280 N. Benson Ave., #6; Upland, Calif. 91786; 714-981-2020

MacCenter+

Commercial property management

512K or larger Macintosh; Microsoft Excel.

Maccenter+, when used with the *Excel* spreadsheet program, is a software template that can be used to help manage a shopping center. It can produce quarterly and annual reports for each tenant as well as the owner of a center.

$370 retail

MacManage; 2522 S. Florence Ave.; Tulsa, Okla. 74114; The Source: BDZ083

■MacInvest and MacTitle/MacTrust Complete

Property management, accounting

512K or larger Macintosh.

Includes the *Macinvest* and *Mactitle/Mactrust* real estate software packages.

$6,995 retail

UEAA; 280 N. Benson Ave., #6; Upland, Calif. 91786; 714-981-2020

■MacInvest Complete Software Module

Property management, accounting

512K or larger Macintosh.

The *Macinvest Complete Software Module* includes *Property Management and Accounting, Property Analysis, Contracts,* and *Macbank* modules.

Additional system features include a tutorial, calendar and task scheduling, a terminal program for telephone communications, complete Macintosh training, word processing and video training.

The complete set includes the *Professional Real Estate Anthology* textbook, which discusses making and closing deals and managing properties, and other study materials.

$3,995 retail

UEAA; 280 N. Benson Ave., #6; Upland, Calif. 91786; 714-981-2020

MacManage+

Property management

Any Macintosh; two disk drives; Microsoft Multiplan.

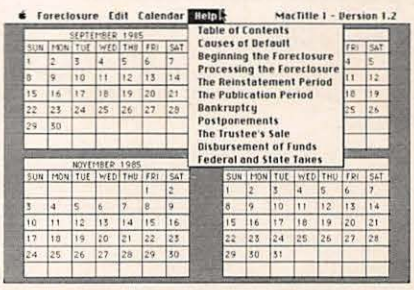
Keeps current, detailed accounting and maintenance records on single-family rental dwellings.

$100 retail

MacManage; 2522 S. Florence Ave.; Tulsa, Okla. 74114; The Source: BDZ083

■MacTitle/MacTrust

Property management, accounting



512K or larger Macintosh.

Mactitle/Macirust, with word processing, is a real estate accounting package that can be used to prepare and/or track legal names, filing dates, billings, correspondence, reports and more.

It includes both accrued and/or cash methods of accounting and handles an unlimited number of accounts. Other features include automatic check/receipt writing, printing of envelopes for checks/receipts, general and specific ledgering and more.

The system's graphic spreadsheets show the user "best" business opportunities, de-

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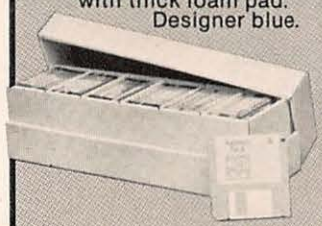

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___	File 4-Pak—SAVE!	$27.95	$___
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bede tech, inc. 8327 Clinton Rd. Cleve., OH 44114
Member, The Bede Companies, Est. 1976 M

Specific Application / Real Estate

pict expenses and earnings and assist with budgeting.

Included with the program are *Trustee Game* study materials, advice for starting a new business and the *Terminal* program for telephone communications.

$3,995 retail

UEAA; 280 N. Benson Ave., #6; Upland, Calif. 91786; 714-981-2020

Mortgage Switch Calculator

Mortgage-rate template

Any Macintosh; Microsoft Multiplan *or* Lotus Jazz.

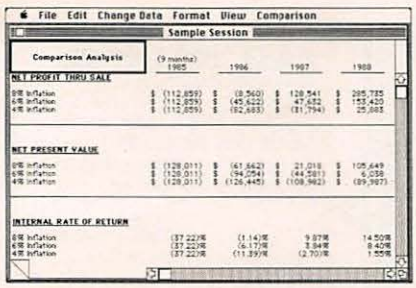
Compares the true cost of keeping a current mortgage structure versus refinancing with a new mortgage.

$65 retail

AIS Microsystems; 1007 Massachusetts Ave. NE; Washington, DC 20002; 202-547-9113

■ProAnalysis

Real estate analysis



512K or larger Macintosh.

Proanalysis can help both novice users and experienced real estate investors analyze investment properties.

Data inputs can be forecast to vary according to an inflation index that, when changed, causes all variables in an analysis to be automatically updated.

To accommodate nonstandard tax situations, users may specify the tax bracket for ordinary income and capital gains for each year of an analysis.

The program incorporates multiple profitability measures, including net present value, internal rate of return, adjusted internal rate of return, incremental rate of return and a variety of cash-flow methods.

In addition, a built-in Comparison Analysis routine allows users to simultaneously compare the results from several different properties or scenarios.

Proanalysis supports the Macintosh Office, including the Macintosh XL, Imagewriter and Laserwriter, via the AppleTalk Personal Network.

$295 retail

Technalysis Services; 14555 DeBell Rd.; Los Altos Hills, Calif. 94022; 415-949-4176

■Property Analysis

Real estate

512K or larger Macintosh.

Property Analysis provides before- and after-tax profit analyses for multiple loan amortizations, depreciation schedules/deductible interests, debt ratios, retirement and more.

It also prorates closing costs and provides before- and after-sale analyses for net present values, gross/net incomes, internal rates of return, return on equity and graphs of any figures.

The program includes the *Professional Real Estate Anthology* textbook, for making and closing deals and managing properties, and computer tactic study materials.

Call for quotes.

UEAA; 280 N. Benson Ave., #6; Upland, Calif. 91786; 714-981-2020

■Property Management and Accounting

Record keeping; accounting

512K or larger Macintosh.

Property Management and Accounting facilitates record keeping for an unlimited number of properties.

It allows for more than one tenant, pets, children, custom deposits, etc.; prepares lease contracts and pay-or-quit notices; tracks vacancies and availability dates; keeps actual pictures of property with advertising and listing information; and reports all income, expenses and deposits for every property and/or unit number.

The program's accounting system includes both accrued and/or cash methods, an unlimited number of accounts, general and specific ledgering, tracking of an unlimited number of properties and/or project expenses and income sources, check/receipt writing, income/expense reporting, bank reconciliations and the printing of envelopes for checks and receipts.

The program includes the *Professional Real Estate Anthology* textbook and other study materials.

Call for quotes.

UEAA; 280 N. Benson Ave., #6; Upland, Calif. 91786; 714-981-2020

Property Management, Level 1

Real estate

512K or larger Macintosh; Multiplan *or* Excel.

Real estate property management system for the small investor. Includes property profile, accounts receivable, and receipts and expense summary for up to 70 rental units.

$250 retail

RealData, Inc.; 78 N. Main St.; South Norwalk, Conn. 06854; 203-255-2732

Real Estate Investment Analysis

Income property investment and development

Any Macintosh; Multiplan.

Tax Shelter Syndication Analysis—allows a user to analyze and prepare reports on financing, depreciation, cash flows, and more. $295 retail

Real Estate Investment Analysis—produces a detailed year-by-year report that includes before- and after-tax cash flows; annual debt service, interest and payoff; internal rate of return, and more. $150 retail

On Schedule—provides a pair of spreadsheet models designed specifically for "economic, critical-path" analyses by developers and lenders involved in condominium and subdivision projects. $195 retail

RealData, Inc.; PO Box 691; Southport, Conn. 06490; 203-255-2732 or 203-838-2670

Real Estate Planner

Investment analysis

Any Macintosh.

Investment template used to evaluate the

pluses and minuses of a real estate investment over a period of 10 years.
$100 retail
$50 retail; if purchased with *Taxcalc Tax Planner*
TaxCalc Software, Inc.; 4210 W. Vickery; Fort Worth, Texas 76107; 817-738-3122

Real Estate Tool Kit
Property-investment analysis
512K or larger Macintosh.
Compares real estate investment alternatives based on cash flows and the internal rate of return over a 10-year period.
$245 retail
Yardi Systems, Inc.; 3324 State St., Suite "O"; Santa Barbara, Calif. 93105; 805-687-4245

The Realtor
Real estate management
Any Macintosh.
Available second quarter, 1986; $150 retail
P3, Inc.; 949 Parklane Ctr.; Wichita, Kan. 67218; 316-686-2000

Residential Real Estate
Any Macintosh; Multiplan, Excel, *or* Jazz.
A single software package containing four separate modules.
Value—Estimates the value of a home through analysis of other homes sold in the same area.
Home—Compares the cost of home ownership to the cost of renting a home by considering occupancy costs, such as tax, insurance, and utilities, and by calculating mortgage principal and interest, etc.
Qualify—Determines the maximum mortgage for which a home buyer will qualify.
Payment—Generates a mortgage-payment chart that displays the monthly payment for any interest-rate/payment-term combination, real or hypothetical.
$100 retail
RealData, Inc.; PO Box 691; Southport, Conn. 06490; 203-255-2732

Specific Application / Science

Astronomy, Version 2.8
Astronomical plots
512K or larger Macintosh.
Produces two astronomical plots in two separate windows.
The first window, called Solar System, plots a polestar's eye view of the solar system for a give date and time.
The second window, called Sky View, plots an image of the heavens as seen by an Earth-bound observer for a given date, time, longitude, and latitude. This window also locates the sun, moon, planets, Halley's Comet, and major constellations.
$35 retail
E&M Software Company; 95 Richardson Rd.; North Chelmsford, Mass. 01863; 617-251-7451

BASIC Programs for Scientists and Engineers
Science and engineering
Any Macintosh; Microsoft BASIC.
Over 50 customizable programs and subroutines for data plotting, curve fitting, matrix multiplication, equation solving, and numerical integration.
$35 retail
Footsteps Software; PO Box 365, Dept. F; Cambridge, Mass. 02142; 617-494-0910

The BenchTop Operating System
Laboratory control
Any Macintosh.
Turns a Macintosh into a central controlling device for up to 256 serially networked laboratory instruments from Metaresearch.
$89 retail
Metaresearch, Inc.; 1100 SE Woodward; Portland, Oreg. 97202; 503-232-1712

■ChemDraw
Structural formulas
512K or larger Macintosh.
Chemdraw is used to generate structural formulas that may be used in papers, reports, presentations, theses, etc.
Common chemical notations such as wedged or double bonds, white space around atom labels or bond crossings, automatic subscripts in chemical formulas, common saturated and unsaturated rings and reaction and curved (electron-pushing) arrows can be produced.
$495 retail; academic and volume discount available
Stewart Rubenstein; 77 Sacramento St., #11; Somerville, Mass. 02143; 617-495-4707

Comet Halley
Astronomical displays
Any Macintosh.
Displays the position of Halley's Comet and gives daily viewing tips and instrument suggestions for the period August 1, 1985 to July 31, 1986.
In addition, the program can display more than 600 stars in 33 constellations with optional constellation names and connecting lines. Available windows also give sky position, moon information, and horizon views.
$29.95 retail
Great Wave Software; 104 Gilbert Ave. Menlo Park, Calif. 94025; 415-325-2202

The DNA Inspector II
Molecular biology
512K or larger Macintosh; two disk drives recommended.
Gives a molecular geneticist or any curious user the ability to carry out recombinant DNA experiments via computer and analyze sequences of genes in several ways.
$245 retail
Textco; 27 Gilson Rd.; W. Lebanon, N.H. 03784; 603-643-1471

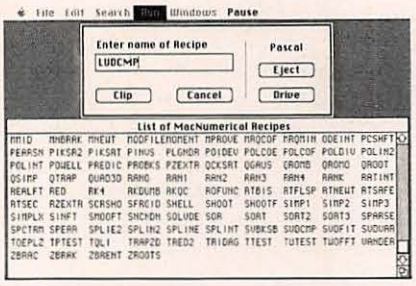
HumanForms
Anatomical drawings
Any Macintosh.
Allows users to assemble and modify—via *Macpaint*—anatomically and proportionally correct illustrations of the male and female human body.
$59.95 retail
Bert Monroy; 1133 Broadway, Rm. 611; New York, N.Y. 10010; 212-713-5195

MacControl
Data acquisition; laboratory control
Any Macintosh; Imagewriter printer; external disk drive; Microsoft Multiplan *or* Excel.
Used to collect data from and control laboratory instruments or industrial sensors and to set up controlled logic parameters with decision criteria and collect statistics on the results.
$695 retail
Small Business Computers of New England, Inc.; 4 Limbo Ln.; PO Box 397; Amherst, N.H. 03031; 603-673-0228

Specific Application / Science

■MacNumerical Recipes

Scientific computations



Any Macintosh; Pascal 1.0 *or any Pascal compiler; external disk drive recommended.*

This diskette contains over 200 procedures and functions for scientific computing. All of its routines are supplied as Pascal source code.

Utility programs that allow a user to "clip" one or more of *Macnumerical Recipe*'s procedures into modifiable, user-written *Macintosh Pascal* programs are provided. These procedures are also compatible with all Pascal compilers for the Macintosh.

Macnumerical Recipes includes a variety of scientific computations, such as linear equations, interpolation, integration, random numbers, sorting, nonlinear equations, optimization, eigensystems, Fourier transform and spectral methods, statistical treatment of data, differential equations and more.

Macnumerical Recipes is designed to be used along with the book *Numerical Recipes: The Art of Scientific Computing,* available from Cambridge University Press, at 800-431-1580, for $39.50 retail.

$39 retail

Numerical Recipes Software; PO Box 243; Cambridge, Mass. 02238

Macquisition

Data acquisition; laboratory control

Any Macintosh; Imagewriter printer; external disk drive; Microsoft Multiplan *or* Exel.

Used to collect data from and control laboratory instruments or industrial sensors.

$450 retail

Small Business Computers of New England, Inc.; 4 Limbo Ln.; PO Box 397; Amherst, N.H. 03031; 603-673-0228

MacStronomy

Astronomical displays

Any Macintosh.

Maps the stars, moon, and planets in their correct locations for any given date and time.

Users may select the region of the sky to be mapped by choosing the location on Earth from where an observation is to be made, the date and time, the direction of the observation, and the field-of-view diameter.

$75 retail

Etlon Software; PO Box 649; Lafayette, Colo. 80026; 303-665-3444

Sci-Graph, Version 1.5

Scientific graphing

Any Macintosh; Microsoft BASIC 1.0 *or* 2.0.

Allows a user to plot out technical data, found in an ASCII data file created with the program's data menu, on a graph.

$72.95 retail

JJB Enterprises; 1112 Richland Ave.; Metairie, La. 70001

TECH

Scientific and mathematical fonts

Any Macintosh.

Contains separate 9-, 10-, 12-, 18-, 20-, and 24-point scientific and technical fonts, over 1,300 individually designed scientific symbols, the complete scientific Greek alphabet, and more.

$79.95 retail

Linguists' Software; 137 Linden St.; South Hamilton, Mass. 01982; 617-468-3037

TellStar

Astronomy

512K or larger Macintosh.

Tellstar's graphic display allows users to locate and identify constellations, stars, planets, and other stellar objects. Views are presented for all compass points as well as overhead.

In addition, the program contains information on Halley's Comet and various other solar bodies, star clusters, galaxies, nebulae, and constellations.

$49.95 retail; Level I (one star table)

$79.95 retail; Level II (three star tables)

Spectrum HoloByte, Inc.; 1050 Walnut, Suite 325; Boulder, Colo. 80302; 303-443-0191

Specific Application / Miscellaneous

Budget Planner

Creative planning, film, advertising, television

512K or larger Macintosh.

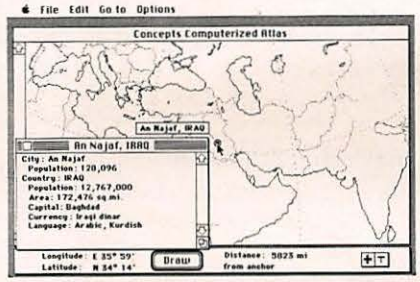
Can be used to create on-screen notes, avoid repetitive data entries, compare proposed costs versus actual costs, and more.

$995 retail

American Intelliware Corporation; 330 Washington St., Ste. 400; Marina del Rey, Calif. 90292; 213-827-0803

■Concepts Computerized Atlas

World maps, facts, figures



Any Macintosh.

Compiled from a number of sources, including a CIA satellite, *Atlas* displays the world in three dimensions on screen.

Any country can be "visited" by typing in its name, and a Factsheet may be called up to find population, size, capital, monetary unit and more.

The program also contains information on more than 2,500 cities, including exact location, latitude and longitude, population and facts about the country it's part of. Just like countries, the cities can be located by typing in their names.

Atlas can also determine the distance between any two places in the world in land miles, nautical miles or kilometers.

$69.95 retail

Software Concepts, Inc.; PO Box 3323; Wallingford, Conn. 06494; 203-357-0522

Crop/Livestock Profit Projector

Agriculture financial analysis

Any Macintosh.

Allows a farmer or rancher to calculate income and expenses on a total or per unit basis.

$95 retail
Harris Technical Systems; 624 Peach St.; Lincoln, Neb. 68501; 402-476-2811

■CSL Marks
Grade book reporting
Any Macintosh.

CSL Marks is timesaving software for teachers and administrators that helps produce reports on student's grade marks.

Features include split windowing, which allows simultaneous viewing of student marks and class tasks; various report options; weighted scores; recalculation of the spreadsheet; a security option for confidentiality when class scores are posted; and end-of-term and end-of-year consolidations.
$98 retail
Chancery Software Ltd.; 200-1120 Hamilton St.; Vancouver, B.C., Canada V6B 2S2; 604-685-2041

Da Poma GB
Grade-book management
Any Macintosh.

Allows a teacher or professor to record and calculate class grades.
$75 retail; High School/Elementary
$150 retail; University
Da Poma, Inc.; PO Drawer H; Hondo, Texas 78861; 512-426-5932

DietMac
Diet and nutritional analysis
Any Macintosh.

Helps with nutritional analysis of various food and food combinations and helps to make up specific dietary menus.
$79 retail
Tess Data Systems, Inc.; 17070 Red Oak Dr., Suite 403B; Houston, Texas 77090; 713-440-6943

Edudisc, Inc.
Authoring systems, videodisc interface
Any Macintosh; external drive.

Macauthor is an entire course development package into which educators can plug their subject materials. Instructional formats provide for text, art, multiple choice, fill in the blank, and relational and ready reference courses.

Mentor/Macvideo is a courseware authoring system for interactive videodisc presentations that's also designed to be used in educational settings.

Prototyper/Video Editor is a videodisc courseware authoring system designed for corporate training environments.

Artmaster is videodisc image management software that can record, catalog, and retrieve videodisc still images, including art, science, and document information.

System requirements for the preceding three products include a Panasonic TQ2023F recorder or TQ2024F player, or a Sony LDP 1000(A) and LDP 2000 series player; and a NTSC video monitor. Pioneer player interface available.

Timemaster, designed for educational and professional video photographers and producers, is videodisc recording software that can be used to record time-lapsed sequences with a video camera. System requirements for this product include a Panasonic Optical Memory Disc Recorder TQ2023F and a NTSC video monitor.
$200 retail; institutional site license available;
Macauthor
$595 retail; institutional site license available;

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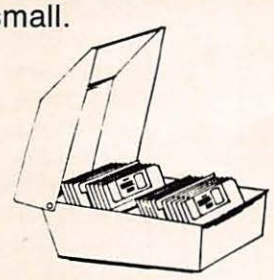

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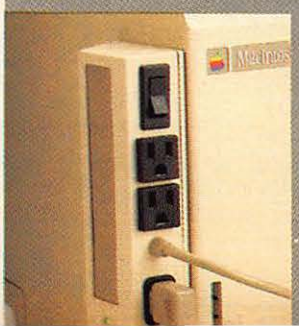

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Specific Application / Miscellaneous

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$650 retail; institutional site license available; *Prototyper/Video Editor*
$750 retail; *Artmaster*
$750 retail, *Timemaster*
Edudisc, Inc.; 3501 Amanda; Nashville, Tenn. 37215; 615-269-9508

Farm Management

Farming, ranching templates
Any Macintosh; Multiplan.

Templates include Farm Business Management, Farm Machinery Management, Crop Management, Cow-Calf Herd Management, Feedlot Cattle Management, Swine Farrowing Management, and Swine Finishing Management.
$95 each retail
Harris Technical Systems; 624 Peach St.; Lincoln, Neb. 68501; 402-476-2811

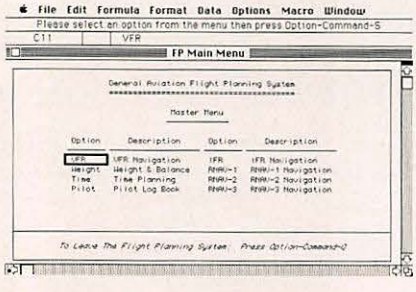
Farm Management

Production; marketing
512K or larger Macintosh; Microsoft BASIC.

The Compulize series consists of Commodities Charting, Cash Crop Breakeven, and Farm Bookkeeping.
$395 retail; *Commodities Charting, Microsoft BASIC*
$119 retail; *Cash Crop Breakeven*
$395 retail; *Bookkeeping, Microsoft BASIC,* and *Cash Crop Breakeven*
Hutch Computer Industries; 555 Third Ave. NW; Hutchinson, Minn. 55350; 612-587-2940

■Flight Plan

Flight-planning software



512K or larger Macintosh; Microsoft Excel.

Working in conjunction with popular spreadsheet programs, *Flight Plan* allows pilots to prepare VFR, IFR and RNAV flight plans; trip schedules; weight-and-balance reports; and a pilot's log book.

Finished reports are presented in standard formats for cockpit use.

The package includes a series of eight templates for use with *Microsoft Excel.*

Screen displays prompt for required information, such as latitude and longitude of departure and destination airports. Standard flying terminology is used, and *Flight Plan* accepts and displays time in hours and minutes rather than in tenths of hours.

The VFR module computes en route and arrival times, true and magnetic headings, estimated ground speed and fuel used and fuel remaining for each leg of a trip.

The IFR template creates a standard Jeppeson format with data similar to that in the VFR plan.

Three types of RNAV flight plans may be prepared using templates included in the package. The first is a two-point plan that provides a quick time-and-distance check for any trip. A similar template allows for intermediate way points on longer straight-line trips. Finally, the multileg module covers flights where the route is not a straight line.

The package also includes a Weight-and-Balance section that can store data for up to 10 aircraft; a Time Planning template that allows pilots to schedule all activities from arrival at the departure airport to final checkout at the destination; and a computerized, standard-format *Pilot Log Book.*
$59.95 retail
Insanely Great Software; 130 Redwood Pl.; Scotts Valley, Calif. 95066; 408-438-2276

■MacBible Concordance

King James Bible search
Any Macintosh.
$49.95 retail
Encycloware; 715 Washington St.; Ayden, N.C. 28513; 919-746-3589

■MacCHURCH Data

Church management; data base; forms
Any Macintosh.
$39.95 retail
Encycloware; 715 Washington St.; Ayden, N.C. 28513; 919-746-3589

MacGENE

Genealogy
Any Macintosh.

Provides for genealogical data collection and manipulation. Displays family trees, group sheets, pedigree charts, birthday lists, LDS group records, etc.
$125 retail
Applied Ideas, Inc.; PO Box 3225; Manhattan Beach, Calif. 90266

MacSurf

Marine hull design
512K or larger Macintosh.

Enables users to manipulate three-dimensional curved surfaces. It is particularly suited to the design of marine hull shapes for ships, yachts, and sailboards.
$1,950 retail
Graphic Magic Pty. Ltd.; PO Box 185; Cottesloe 6011; Western Australia; 011-61-9-383-2114

Nutritionist II

Diet analysis
512K or larger Macintosh; Microsoft BASIC.

Graphically displays nutritive analyses of foods and diets, both in weight and percent of recommended daily allowances for 40 nutritive components, including trace elements and the breakdown of amino acids.
$295 retail
N-Squared Computing; 5318 Forest Ridge Rd.; Silverton, Oreg. 97381; 503-873-5906

Production Planner

Creative planning, film, advertising, television
512K or larger Macintosh.

Allows a user to perform script breakdowns, generate a shooting schedule, make multiple draft copies, tabulate schedule summaries, and more.
$495 retail
American Intelliware Corporation; 330 Washington St., Ste. 400; Marina del Rey, Calif. 90292; 213-827-0803

Professional Bibliographic System; Biblio-Link

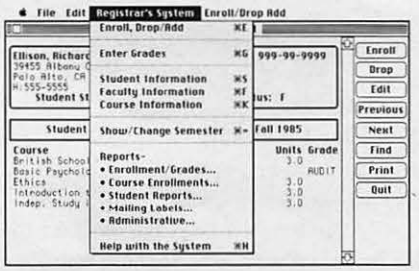
Data base; bibliographic system
Any Macintosh.

Professional Bibliographic System—helps users compile bibliographies and use citations. $295 retail

Biblio-Link—reformats records that have been downloaded from Dialog, BRS, OCLC, or RLIN. $195 retail
Personal Bibliographic Software, Inc.; PO Box 4250; Ann Arbor, Mich. 48106; 313-996-1580

■Registrar's Office

Student enrollment



512K or larger Macintosh; hard disk drive.

Registrar's Office enables colleges, universities, graduate institutions and elementary and secondary schools to schedule classes, enroll and grade students and maintain all student records and demographic information.

Faculty and course records can also be maintained.

Macintosh features, such as pull-down menus, are used throughout the program. For example, a few clicks of the mouse enrolls a student for a semester or prints class lists for all students and courses.

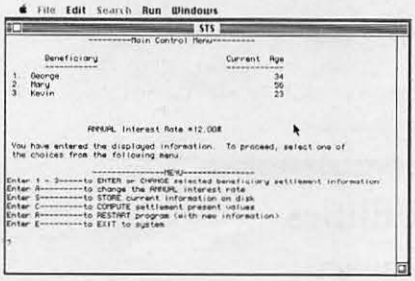
The program generates over 50 reports, ranging from student schedules and transcripts to mailing labels and H.E.G.I.S./governmental reports.

Registrar's Office is adaptable to each institution's academic and administrative needs.

Right Track Software; 39455 Albany Common, #N; Fremont, Calif. 94538; 415-797-1160

■STS

Financial settlements



512K or larger Macintosh.

STS permits a user to evaluate or construct the exact terms of complex settlement offers.

All information is provided in a question-and-answer setting.

By answering a few questions, the user may construct payment plans that fit most situations. A single program run can accommodate up to five beneficiaries, with as many as 16 distinct payment streams per beneficiary.

Program results may be viewed on screen, printed in formatted tables that outline all settlement terms or integrated via word processing software into other written reports.

The program allows a user to see the effects of what-if changes in settlement terms. For example, dollar amounts, duration of payments, growth or reduction of payments and interest rates can all be changed. The impact of such changes is reflected in all tables and reports.

$295 retail

Randle, Coray & Associates, Inc.; PO Box 1228; USU Station; Logan, Utah 84322; 801-753-5681

■Syncorp Budget Aids

Template software

Any Macintosh; Microsoft Multiplan.

The *Syncorp Budget Aids* program is a series of templates designed for budgeting and managing a labor-intensive project. It includes 21 templates for budgeting a 12-month project, a 24-month project and a facilities or nonlabor project.

Templates are also provided that facilitate the comparison of budgeted with actual cost performance and support the calculation of percent deviation from budgetary plans.

For the user with access to *Microsoft Chart,* special templates automatically generate graphic plots of budget performance from data generated by *Multiplan* work sheet templates.

A 512K Macintosh with a numeric keypad is recommended, and an Imagewriter or Laserwriter is necessary to print hard copy versions of completed templates.

$59.95 retail

Synectics Corp., Commercial Div.; 10400 Eaton Pl., Ste. 200; Fairfax, Va. 22030; 703-385-0190

WillWriter

Self-help, legal software

Any Macintosh.

Allows a user to draw up a valid will where requests can be made and executors and guardians for children appointed. A 200-page book gives information on estate planning. Programmed for all U.S. states except Louisiana.

$39.95 retail

Nolo Press; 950 Parker St.; Berkeley, Calif. 94710; 415-549-1976

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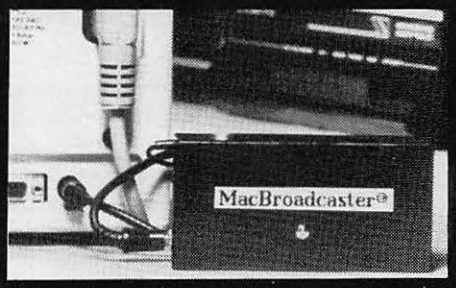

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Newport Beach, CA 92662
(714) 673-4200

Spreadsheet

ClickOn Worksheet
Spreadsheet, graphics desk accessory
Any Macintosh.
Desk accessory with a 50-row by 20-column spreadsheet with many features and graphics.
$79.95 retail
T/Maker Graphics; 2115 Landings Dr.; Mountain View, Calif. 94043; 415-962-0195

Crunch
Integrated spreadsheet
512K or larger Macintosh.
Full spreadsheet with data base and graphics. Features built-in auditing, 74 functions, and 21 icons.
$149 retail
Paladin Software Corp.; 3255 Scott Blvd., 7C; Santa Clara, Calif. 95054; 408-970-7300

■Easy Spread
Spreadsheet calculations manager
512K or larger Macintosh.
$19.95 retail
Encycloware; 715 Washington St.; Ayden, N.C. 28513; 919-746-3589

Microsoft Multiplan 1.1
Spreadsheet; financial analysis
Any Macintosh.
Updated features include improved printing options; seven additional financial functions; variable font sizes for work sheets; a go-to command; a second window onto the work sheet; context-sensitive help; and minor optimizations for compatibility with *Microsoft Excel* and the Laserwriter.
$195 retail
Microsoft Corporation; 10700 Northup Way; Box 97200; Bellevue, Wash. 98009; 206-828-8080

■Super Crunch
Spreadsheet
512K or larger Macintosh.
Super Crunch is an updated version of *Crunch* that offers graphics, data management and note keeping capabilities, plus features such as macros, three-dimensional work sheets and design-your-own icons.
The program offers users two kinds of macros: "learn mode," or recording macros, and programming macros. In learn mode, *Super Crunch* captures keystrokes and mouse movements for later replay, allowing creation of a macro.
The programmable macro feature offers users a Pascal-like programming language for creating complex loops.
The *Super Crunch* spreadsheet is 250 columns by 9,999 rows and 250 levels deep. Users can stack 250 blank work sheets and fill information down through different levels of the stack.
This capability allows users to explore a variety of what-if scenarios on different levels of the spreadsheet and print them without changing numbers on the original spreadsheet.
The software also includes a speech synthesis feature, enabling it to read text and numbers aloud.
$295 retail
Paladin Software Corp.; 3255 Scott Blvd., 7C; Santa Clara, Calif. 95054; 408-970-7300

Training

Entrepreneur
Business simulation program
Any Macintosh.
$49.95 retail
Microsoft Corporation; 10700 Northup Way; PO Box 97200; Bellevue, Wash. 98009; 206-828-8080

The Information Factory
Text and video training
3½ hours of video with a 160-page student manual.
$350 each retail; *Basic Telecommunications; Local Area Networks*
$400 retail; *Computer Literacy*
The Information Factory; 1259 Folsom St.; San Francisco, Calif. 94103; 408-374-1235

Learning Microsoft Multiplan and Microsoft Chart
Training aids
Any Macintosh.
$59.95 retail
Microsoft Corporation; 10700 Northup Way; Box 97200; Bellevue, Wash. 98009; 206-828-8080

MacType
Typing instruction
Any Macintosh.
$49.95 retail
Palantir Software; 12777 Jones Rd., Suite 100; Houston, Texas 77070; 800-368-3797

Notes for Excel, Jazz
Assistance, on-line help
Any Macintosh.
Notes for Microsoft Excel and *Notes for Lotus Jazz* are spreadsheet, word-processing, data-base, graphics, and communications support programs for *Excel* and *Jazz* respectively.
They also serve as desk accessories, desktop utilities, and—through the included *Business Companion* program—both provide business templates that assist users of either *Excel* or *Jazz* with finance, marketing, sales, operations, and administrative tasks.
$89 each retail
Layered, Inc.; 85 Merrimac St.; Boston, Mass. 02114; 617-423-9041

Tutorial Software
Training
Any Macintosh.
$75 retail; *Maccoach*
$75 retail; *Teach Yourself Excel*
$75 retail; *Teach Yourself Jazz* (requires 512K Macintosh)
$75 retail; *Teach Youself Multiplan*
American Training International; 12638 Beatrice St.; Los Angeles, Calif. 90066; 800-421-4827 or 213-823-1129

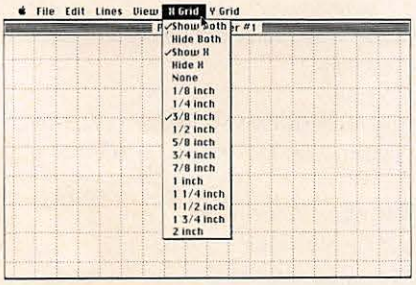
Typing Intrigue
Typing instruction
Any Macintosh.
$49.95 retail
Forethought, Inc.; 1973 Landings Dr.; Mountain View, Calif. 94043; 415-961-4720 or 800-622-9273

Utilities

1stMERGE
Data entry; mail merge
Any Macintosh; printer.
Merge *Macwrite* documents, memos, and letters with a data file created in *1stMERGE.*
$95 retail
DeskTop Software Corporation; 244 Wall St.; Princeton, N.J. 08540; 609-924-7111

■4paint

Two-dimensional graphic utility



Any Macintosh.

A two-dimensional, object-oriented graphics program that can be used to make line drawings.

Page-size sections of a line drawing may be entered into *Macpaint* documents for further enhancement via *Macpaint.*

A *4paint* drawing may consist of lines, curves, rectangles, round-cornered rectangles, circles, ellipses, and arcs in a variety of line thicknesses. These drawing elements may be moved, rotated, scaled up or down, reshaped, and/or combined.

A drawing may be divided into 16 layers, any or all of which may be viewed and worked on at one time. Entire drawings may be scaled up or down and tilted and moved to allow any portion to be seen and printed out, or they may be merged into a *Macpaint* document.

Grids may be used to allow precision work.
$39.95 retail
Reas'nable Software; 779 11th St.; Idaho Falls, Idaho 83401; 208-529-0378

Accessory Pak #1

Miscellaneous utilities

Any Macintosh.

Programs include *Paint Cutter, Screen Saver, Rulers* desk accessory for *Macpaint, Quickeject* desk accessory, *Coordinates* desk accessory, *Silicon Beach Font,* and Apple's *Desk Accessory/Font Mover.*
$39.95 retail
Silicon Beach Software; PO Box 261430; San Diego, Calif. 92126; 619-695-6956

Brock Disk Librarian

Disk utility

Any Macintosh.

Helps a user organize disks and files into a more meaningful information library.
$49.95 retail
Brock Software Products, Inc.; PO Box 799; Crystal Lake, Ill. 60014; 815-459-4210

Colormate

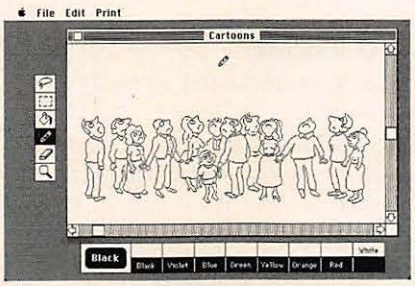
Color output utility

Any Macintosh.

Controls eight colors for text and graphics created with *Macpaint, Macwrite,* or other Macintosh software. A NEC Pinwriter Model P2, P3, CP2, or CP3 is needed to print in color.
$125 retail
NEC Information Systems, Inc.; 1414 Massachusetts Ave.; Boxborough, Mass. 01719; 617-264-8000

■Colormate

Color output utility



Any Macintosh; Imagewriter II.

Colormate allows for color painting on the Macintosh and printing on the Imagewriter II in eight colors.
$95 retail
SoftStyle, Inc.; 7192 Kalanianaole Hwy., Ste. 205; Honolulu, Hawaii 96825; 808-396-6368

ColorPrint

Color printing utility for Imagewriter and Scribe

Any Macintosh.

Allows printing of *Macpaint* and *Macdraw* documents in three primary colors on a Scribe printer, or 10 colors on an Imagewriter I or II. It also scales images to be printed in a variety of sizes.
$29.95 retail; software only
Esoft Enterprises; PO Box 179; Owasso, Okla. 74055; 918-272-7616

COPY II MAC v4

Disk-backup utility

Any Macintosh.

Will backup most protected software and allows several to be transferred to the hard disk where they can be run without a key disk in drive A. Mactools utilities include repairing damaged disks, protect/unprotect files, copy files/disk, delete files/disk, undelete files, make files visible/invisible, format/verify disks, rename files/disk, and view/edit any block on a disk.
$39.95 retail
Central Point Software, Inc.; 9700 SW Capitol Hwy., Ste. 100; Portland, Oreg. 97219; 503-244-5782

Disk Ranger

Disk utility

Any Macintosh.

Used to catalog and label an entire collection of diskettes. Disk volumes and files can be cataloged and sorted alphabetically, by type or by creator. A catalog can be printed or saved to disk, and hard-disk drives can also be cataloged. Labels can be printed on a strip of more than 50 pin-feed labels, included with the program.
$49.95 retail; *Disk Ranger*
$19.95 retail; pin-feed labels (225)
Mainstay; 28611B Canwood St.; Agoura Hills, Calif. 91301; 818-991-6540 (voice) or 818-991-5037 (modem)

FlashFinder

High-speed finder

Any Macintosh.

Designed for users willing to trade the Apple icon-oriented Finder for more speed and space. It works with all available software and can be copied onto any application or data disk.

The program allows users to open any application or data file quickly; go to the File Manager dialogue box; choose the Use Desk Accessories option; return to the Apple Finder; and change drives, volumes, or eject disks.
$39.95 retail
Unicom Software Development Group; 297 Elmwood Ave.; Providence, R.I. 02907; 401-467-5600

Font Explorer

Font utility

Any Macintosh.

A utility software program enabling users to identify and use font characters needed to meet specialized requirements.

The program's major features include: a disk-resident utility, called The Font Well, that can be pasted into any text document to reveal and allow the use of all 256 characters in a font, including hidden characters that cannot be reached from the keyboard.
$24.95 retail
Heizer Software; 5120 Coral Ct.; Concord, Calif. 94521; 415-827-9013

Utilities

■FrontEnd

Interface emulation utility

Any Macintosh.

Frontend provides a Macintosh interface for minicomputers and mainframes.

Using simple command codes, applications running on a host computer can create and format multiple windows on screen and direct data to any of the windows. Data can be displayed in any font, size or style.

The host computer can create up to nine separate List Windows, which are essentially grids of data similar to a spreadsheet format.

The List Window can display its data in any number of cells of any size, in any font, size or style. It includes scroll bars and a sizing box that are consistent with the Macintosh interface.

The basic terminal emulation features of the program include Data General D210 and DEC VT100 emulation, macros, file transfers and function key templates.

$179 retail

KAZ Business Systems; 10 Columbus Cir.; New York, N.Y. 10019; 212-757-9566

■FullPaint

Screen painting utility

512K or larger Macintosh.

Fullpaint allows full-screen access, makes the entire screen available for painting and gives stationary tool and pattern pallets the capability to float.

These pallets can be moved freely around the screen or even offscreen, enabling users to see a finished piece before printing.

Drawing and fill routines have been optimized to execute faster, and several new commands, such as skew, rotate, distort and perspective, have been added.

In addition, the program allows up to four documents to be opened simultaneously. This feature speeds cutting and pasting between documents.

$69.95 retail

Ann Arbor Softworks; 308 ½ S. State St.; Ann Arbor, Mich. 48104; 313-996-3838

■Glue

Graphics utility

Any Macintosh.

Glue allows a user to share Macintosh graphics between applications.

Graphics produced by programs such as *Macproject* and *Microsoft Chart* can be pasted into documents produced by *Macwrite, Microsoft Word* and other applications.

Spreadsheets created by *Excel* and *Jazz* can be viewed or printed by users who don't have a copy of the creating application. These images can even be transmitted through electronic mail systems.

The program also allows newsletters produced by *Pagemaker* or *Readysetgo* to be printed or viewed by users who don't have a copy of the desktop publishing software.

$95 retail

Solutions, Inc.; PO Box 989; Montpelier, Vt. 05602; 802-229-0368

Haba QuickFinder

Application-switching desk accessory

Any Macintosh.

Allows a user to move directly from one application to another without returning to the desktop.

$29.95 retail

Haba Systems, Inc.; 6711 Valjean Ave.; Van Nuys, Calif. 91406; 818-901-8828

Hard Disk Util

Disk utility

Any Macintosh.

Allows users to back up protected software and upload many programs to hard and RAM disks. BBS updates available.

$89.95 retail

FWB Software; 2040 Polk St., Suite 215; San Francisco, Calif. 94109; 415-474-8055

Hippo-Lock

File encryption

Any Macintosh.

A security program that protects information by scrambling.

$119.95 retail

Hippopotamus Software, Inc.; 985 University Ave., Suite 12; Los Gatos, Calif. 95030; 408-395-3190

HP Laser Program

Printer utility

Any Macintosh; HP 2686A printer.

This program prints *Macpaint* files on Hewlett-Packard's 2686A laser-jet printer.

$39.95 retail

New Image Technology, Inc.; 10300 Greenbelt Rd., #104; Seabrook, Md. 20706; 301-464-3100

I.E.S. DiskSurgeon

Disk utility

Any Macintosh.

Enables a user to perform disk-based storage functions.

$19.95 retail

Intelligent Engineered Systems; 2415 E. 39th St.; Indianapolis, Ind. 46205; 317-545-6618

■Mac+][

Apple II+ *emulator*

512K or larger Macintosh.

Mac+][, version 2.0, emulates a 64K Apple II+ on a Macintosh, including all PEEKs and POKEs.

The program, 100 percent compatible with Apple II, allows users to run *Applesoft, Integer BASIC*, 6502 machine language, *DOS 3.3, ProDos, Pascal 1.3* and the thousands of programs written for the Apple II+.

Users can call the 68000 machine language and the Macintosh ROM's toolbox from 6502, BASIC or Pascal 1.3 programs. Access to hard disks is not supported.

Registered 1.0 users should contact the manufacturer to receive version 2.0 of the program.

$149.95 retail

Meacom; PO Box 272591; Houston, Texas 77277; 713-526-5706

MacBackup

Disk-backup utility

Any Macintosh.

Makes copies of protected and unprotected software.

$69.95 retail

Practical Computer Applications, Inc.; 1305 Jefferson Hwy.; Champlin, Minn. 55316; 612-427-4789

MacBooster

Cache memory program

512K or larger Macintosh.

Speeds up a 512K Macintosh by reducing the number of times a disk is accessed.

$50 retail

Mainstay; 28611B Canwood St.; Agoura Hills, Calif. 91301; 818-991-6540 (voice) or 818-991-5037 (modem)

■MacCopy Version II

Backup utility

Any Macintosh.

Unprotects and allows a user to load multiple programs onto one diskette and mounts protected software to a hard disk.

$49.95 retail
Tesseract Software; PO Box 937; St. Catharines, Ontario, Canada L2R 6Z4; 416-685-4854

■Mac Disk Catalog Version 1.3

Disk utility

Any Macintosh.

Helps organize and keep track of software and files by reading volume and file names and associated directory information from floppy and hard disks into a data base that can be sorted and viewed seven different ways.

Applications and files can be grouped using 16 categories such as word processing, spreadsheets, etc. Categories are assigned using category cursors.

The program can print volume and file listings from the catalog, as well as diskette labels and 3x5 index cards. MDCLabels and pin-feed labels are also available.
$39.95 retail; *Mac Disk Catalog*
$11.95 retail; 150 MDCLabels
$19.95 retail; 250 MDCLabels
$39.95 retail; 500 MDCLabels
New Canaan MicroCode; 136 Beech Rd.; New Canaan, Conn. 06840; 203-966-6969

MacKeymeleon

Keyboard utility

Any Macintosh.

Allows a user to design custom keyboard configurations for foreign languages and other specialized needs (e.g. Dvorak).
$49.95 retail
Avenue Software, Inc.; C.P. 2085; Terminus, Quebec, Canada G1K 7M9; 418-641-0441

MacMate!

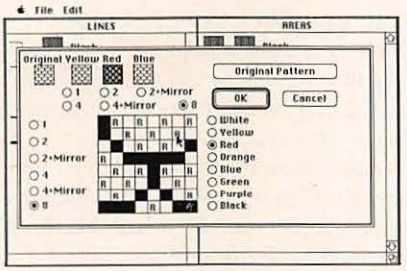
Print spooler and RAM disk utility

512K or larger Macintosh.

$49.95 retail
SMB Development Associates; PO Box 3082; Chatsworth, Calif. 91311; 818-341-2523

■MacPalette

Printer utility



Any Macintosh; Imagewriter II.

Macpalette enables multicolor printing to be produced on the Imagewriter II from existing object-oriented software such as *Macdraw, Macproject, Macdraft, Jazz* and *Microsoft Chart.*

Compatibility with *Macwrite* and other word processors is currently being developed.

The program allows text to be selected by style and printed in any of seven colors. An almost infinite number of color patterns can be assigned to the monochrome fill patterns used in a drawing, and lines may be selected by pattern, width and assigned color patterns.

Macpalette consists of two components: a driver, which uses a user-assigned file to print in color directly from an application; and an application program that allows a user-assigned file to be set up and tried out on print files created by the drivers within other applications.
$69 retail (U.S.)
Microspot; 9 High St.; Lenham, Maidstone, Kent, England ME17 2QD; 504-649-0484 (U.S.) or 0622-858753 (U.K.)

MacPlot Professional

Plotter utility

512K or larger Macintosh.

Allows a Macintosh to be interfaced with a wide range of plotters that can produce E-size charts, plans, and drawings in color.

The program can be used with *Jazz, Ensemble, Macdraw, Macproject, Macdraft, Microsoft Chart* and other software.
$325 retail
Microspot; 9 High St.; Lenham, Maidstone, Kent, ME17 2QD, England; 504-649-0484 (U.S.) or 0622-858753 (U.K.)

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9700 S.W. Capitol Hwy. #100
Portland, OR 97219

Central Point Software INCORPORATED

Circle 49

Backup utilities also available for the IBM, Apple II and Commodore 64/128.

Utilities

MacPlot Standard
Plotter utility for 'A' or A4 and 'B' or A3 size plotters
Any Macintosh; plotter.
Any picture cut or copied to the Clipboard, and soon any printable picture, may be plotted on a range of 19 different plotters including the HP7470A and HP7475A.
$162 retail
Microspot; 9 High St.; Lenham, Maidstone, Kent, ME17 2QD, England; 504-649-0484 (U.S.) or 0622-858753 (U.K.)

MacPlots II
Plotter utility
Any Macintosh; Macdraw *or other graphics software; color plotter.*
Plotters supported are HP7470-001, HP7475A-001, HI DMP 41/42, HI DMP 51/52, DMP 29, DMP 40, HP7550, HP7585, HP7586, and HP7580.
$195 to $295 retail
Computer Shoppe; PO Box 18344; Greensboro, N.C. 27419; 919-299-4843

MacServe
Networking software
512K or larger Macintosh; hard disk.
The program makes it possible to share a Macintosh's hard disk and serial printer with other 512K Macintoshes and XLs in a work group.
Users may structure hard-disk storage capacity for maximum effectiveness via the program's volume-partitioning feature. They may also divide their hard disks into as many as 16 volumes of whatever sizes they choose.
The program supports leading hard disks and serial printers. More than likely, users may build a Macintosh Office using equipment already in place or on order.
$250 retail
Infosphere, Inc.; 4730 SW Macadam Ave.; Portland, Oreg. 97201; 503-226-3620

MacWorks XL
Software utility for Macintosh XL
$195 retail
Apple Computer, Inc..; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-996-1010

■MDC II
Disk utility
512K or larger Macintosh.
MDC II is the expanded 512K version of *Mac Disk Catalog.* It helps organize and keep track of software and files by reading disks directly, storing their directory information in a fully indexed data base.
Features allow the user to: search on any field and select the items found for further processing; view or print volume and file lists sorted on any field with a choice of fonts; show only columns of interest; print diskette labels and 3x5 index cards; categorize files into groupings; create text file output; assign volume IDs; and edit the information for customization.
$49.95 retail; *MDC II*
$11.95 retail; 150 MDCLabels
$19.95 retail; 250 MDCLabels
$39.95 retail; 500 MDCLabels
New Canaan MicroCode; 136 Beech Rd.; New Canaan, Conn. 06840; 203-966-6969

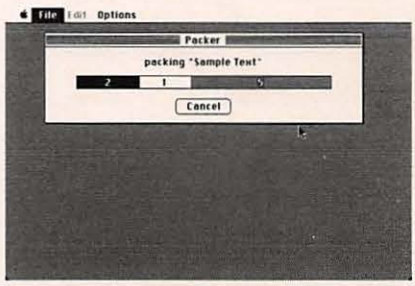
■myDiskLabeler
Disk utility

Any Macintosh; printer.
Mydisklabeler allows users to design and print removable labels for 3 1/2-inch disks. A variety of formats, fonts, text sizes and styles are available to choose from.
Six different windows allow editing of text or graphics: disk name, disk edge, contents, owner, automatic date and picture.
The program also reads and sorts disk directories, and labels can be saved for updates.
Labels may be printed all at once or one at a time, and three print qualities are available.
$39.95 retail; software, manual, 54 disk labels
$5 retail; 54 label refills
$9.50 retail; 108 label refills
$18 retail; 216 label refills
Williams & Macias Microcomputer Products; PO Box 19206; Spokane Int. Airport Business Pk.; Spokane, Wash. 99219; 800-752-4400

N'cryptor
File encryption
Any Macintosh.
Protects both sensitive files and applications through a password-based encryption process. The program, written in assembly language, can protect large files in 30 seconds or less. It is not copy protected and can be backed up or installed on a hard disk.
$39.95 retail
Mainstay; 28611B Canwood St.; Agoura Hills, Calif. 91301; 818-991-6540 (voice) or 818-991-5037 (modem)

OmniTalk
Shared data storage
Any Macintosh; OmniDrive hard disk.
Omnitalk lets users share information, mass storage, and a Laserwriter printer on an Appletalk Personal Network.
The program is true networking software, which means users can communicate with other Macintosh users in a work group, office, or classroom.
Program features include: volume partitioning, which lets users configure areas on an OmniDrive hard disk in standard or custom sizes and extend the number of files possible; volume attributes, such as read/write (private), read only (public), controlled (shared), and uncontrolled (shared), that allow users to determine who gets to see and modify information; and more.
$1,890 to $9,585 retail
Corvus Systems, Inc.; 2100 Corvus Dr.; San Jose, Calif. 95124; 408-559-7000

■Packer
Document encryption, compression



Any Macintosh.
Packer is a utility program that performs two functions simultaneously—document en-

cryption and document compression.

The program scrambles documents as they are compressed, therefore packed documents cannot be used or read by any program other than *Packer,* including hacker tools or editing utilities.

Its encryption option, Pack With Password, prevents anyone, including other *Packer* users, from restoring an original document without the proper password.

Packer compresses documents such as spreadsheets, BASIC programs and word processor or text files, allowing a disk to hold more documents.

It also allows electronic mail users to reduce XMODEM transmission costs by sending and receiving compressed documents and gives hard disk owners the chance to back up documents larger than 400K.

The program works with the Apple *Switcher.*

$29 retail

Bobbing Software; 67 Country Oaks Dr.; Buda, Texas 78610; 512-295-5045

■PacPaint

Compression utility

Any Macintosh.

Pacpaint is a compression utility for *Macpaint* files. These files are squeezed by the program so they take up 40 to 70 percent less space on a disk.

Compression and decompression is handled quickly—usually under 30 seconds per file. The program is written in assembly language and takes up 7K of disk space.

$39.95 retail

Mainstay; 28611B Canwood St.; Agoura Hills, Calif. 91301; 818-991-6540 (voice) or 818-991-5037 (modem)

P/C Privacy

File encryption

Any Macintosh.

Keeps sensitive information from unauthorized disclosure or use—on disk or through electronic mail systems.

$95 retail

MCTel, Inc.; Three Bala Plaza East, Suite 505; Bala Cynwyd, Pa. 19004; 215-668-0983

Plot-It

Plotter utility

Any Macintosh.

Version 2 plots *Macpaint, Macdraw* and other documents on the Apple Color Plotter, Hewlett-Packard 7470A and 7475A, and Houston Instruments DMP-29, PC-695, DMP-51, and DMP-52. Registered owners may obtain a low-cost upgrade from Mesa Graphics.

$125 retail

Mesa Graphics; PO Box 600; Los Alamos, N.M. 87544; 505-672-1998

Plots II

Plotter utility

Macintosh XL with 7/7 software; 1MB memory.

Plotters supported are HP 7470-001, HP 7475-001, HP 7550A, HP 7580B, HP 7585B, HP 7586, and HI DMP 41 and 42.

$295 to $495 retail; depending on plotter

Computer Shoppe; PO Box 18344; Greensboro, N.C. 27419; 919-299-4843

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Multi-Color PUBLISHING SYSTEMS, complete and easy-to-use.

Apple Macintosh publishing system; does composition, text typesetting, graphics, art & paste-up. w/ Imagewriter $2449; w/ Laserwriter $7549; w/Kiss text laser printer $4049

ST publishing system; supports composition, text typesetting, graphics, art & on-screen paste-up. Includes: 32 bit processor computer, mouse, icon OS., 512K Ram, Hi-Res 640x400 monitor, floppy drive, quad density graphics printer, software, cables. $999

--System with Color monitor and color printer and printer driver software $1699

--Monochrome monitor and one megabyte ram instead of 512K $1299

--With Kiss 300x300 dot/inch laserprinter $2799

IBM PC compatable publishing system, graphic and text printer, software $1299

--with laser printer instead $3289

SANYO IBM COMPATABLE COMPUTERS

MB 675-$1499, 775-$2199, 885-$1399, 990 AT - $2599, 670 HD-$2649, 770 HD-$3399, 885HD-$2699. Sanyo Care 1 yr. $199, 2 years $299 - includes models with 20 meg Hard disk.

ATARI STs 520-$389, 520 mono sys. -$759, 520 Color $950, 3 1/2" SS Drive $189, DS drive $269, 20 meg hard disk$749, Hi Res monitor $194, Printer $214 . Copy-All program $53. Midi Music+Internal Music $39. **Software - All the latest and best** avail. **CALL.**

APPLE MAC specials, While they last -SS ext. drive $289, Apple SS Drive $339, DS drive $429, Imagewriter$399, ribbons $3.99 ea., reinker $19.95, 20 Meg drive $1299, 10 meg hard drive $1099, 35 meg file server with 5 meg removable hard disk $4499, AB switch $29.95, Joystick and converter $39, Appletalk connector and cable $44. Laserwriter cartridges $79, "Laserwriter +" kit $769. Public Domain software $7.99 ea. incl. diskette. Imagewriter II Color ribbons $8.95 ea., Sheet feeder $199, 32K Buffer $84. Mac 800K ext. drive $499

MISC. Printer paper-tractor 2550 sheets $29., 2 meg J ram with J laser $699. Atari - IBM Printer cable $12.95, RS232-4 Pos. switch $94. Sunol 16 meg file server $1449, Appletalk interface $399. Mac XL with profile $2399. Corvus 10 meg constellation -networking $1499. **Lutzky Baird networking+UNIX system - call.**

Mac Work station - **clearance special,** holds ImageWriter and paper over Mac $19.95

Qume Sprint 3-55, 55 CPS Daisy wheel rebuilt-in desk $599.

Electrohome Data Projector EDP 58 to 8X10 FT. Works with MAC, IBM, ATARI, etc. with stand. Projects to over 10 Ft. on wall or screen. $3899

Abaton scan 300x300 dot per inch document scanner, digitizer. Change to bit map for composition, OCR, archiving, etc. $2395

3 1/2" Floppy disks $2.25 ea in lots of 10.

Electrohome Hi Res. Data Display color monitor RGB or composite, sound $199

Hayes compatable modems 300/1200, works w/ IBM, Atari ST, Mac, etc. $239

256K Ram $2.95 ea. 64K $1.49 150 Nonoseconds

IBM Public Domain diskette rental $2. ea.

Special Lisa/Mac XL Parallel port boards $199

Atari 520 ST to 1 meg upgrade $229, Upgrade kit $89

IBM serial port $60, multifunction serial, parallel, game, clock, 384K ram $180

Utilities

Print A File II
Serial printer utility
Any Macintosh.
$19.95 retail
CAT Systems; 21115 Devonshire St.; Chatsworth, Calif. 91311; 805-251-4197

Printer Interface
Serial printer interface
Any Macintosh.
Gives a user a choice of printer to be used.
$79.95 retail
DataPak Software; 14011 Ventura Blvd.; Sherman Oaks, Calif. 91423; 818-905-6419

The Print-Link
Printer driver
Any Macintosh.
Allows the Macintosh to print directly on most dot matrix and daisy wheel printers.
$84.95 retail; includes cable
GDT Softworks Inc.; 2800 Douglas Rd., Suite D; Burnaby, B.C., Canada V5C 5B7; 604-291-9121 or 800-663-6222

QuickDisk
RAM disk utility
512K or larger Macintosh.
$34 retail
Symmetry Corporation; 761 E. University Dr., Ste. C; Meas, Ariz. 85203; 602-844-2199 or 800-624-2485

Silicon Press
Silicon Beach Software, see review on page 34

Softstyle Printer Drivers
Printer utilities
Any Macintosh.
Toshstart—interfaces Toshiba 24-pin, serial dot matrix P1340, P1351, and P351 printers. $45 retail
Epstart—interfaces Epson FX-, JX-, MX-, RX-, LX-, and LQ-series printers. $45 retail
TI-start—interfaces Texas Instruments 855, 865, 850XL, and 860XL printers. Includes cable. $75 retail
Laserstart—interfaces Hewlett-Packard LaserJet. Includes cable. $95 retail
Jetstart—interfaces Hewlett-Packard 2225D serial ThinkJet. $45 retail
SoftStyle, Inc.; 7192 Kalanianaole Hwy., Suite 205; Honolulu, Hawaii 96825; 800-367-5600

Spinwriter Accessory Kit
Printer utility
Any Macintosh; Spinwriter printer.
Links Macintosh with the 360, 2010, 3510, or 8810 Spinwriter letter quality printers. Also, it supports NEC Spinwriter forms handling, proportional spacing, and extended character-set capabilities.
$99 retail
NEC Information Systems, Inc.; 1414 Massachusetts Ave.; Boxborough, Mass. 01719; 617-264-8000

Spreadsheet Link
Data gathering utility
Any Macintosh; Dow Jones Straight Talk; Multiplan; *modem.*
Allows users to create templates, log on to Dow Jones News/Retrieval, and place information directly into a spreadsheet.
$99 retail
Dow Jones & Company, Inc.; PO Box 300; Princeton, N.J. 08540; 800-257-5114

Stylo-Formatter
Word processing utility
512K or larger Macintosh.
Stylo-Formatter has the ability to output text files with all the appropriate typesetter native format commands for the Mergenthaler CRTronic and Linotronic typesetting devices. The program converts word processor format commands to the machine specific CRTronic commands. Counting, justification, tabbing, font, selection, and paging are all performed by the program. All specialized typesetter commands can be coded in *Stylo-Formatter* and passed directly to the typesetter for processing.
$495 retail
Type/Net; 161 Vine St.; PO Box 5279; Reno, Nev. 89513; 702-322-1884

Switcher and Switcher Construction Kit
Application-switching program; configuration developer
512K or larger Macintosh; external drive or hard disk recommended.
Allows a Macintosh user to work with two or more applications in memory at the same time. This means the user can move back and forth between these applications almost instantaneously. The program allows the creation of customized sets of "integrated" applications.
Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-996-1010

Tempo
Macro utility
Any Macintosh.
A macro-producing tool with features that include editing a macro, pausing for text entry, branching on a logical command, and transferring information between unrelated programs.
It can be used to enhance nearly any Macintosh program that adheres to the standard user interface.
$99 retail
Affinity Microsystems, Ltd.; 1050 Walnut St., Suite 425; Boulder, Colo. 80302; 800-255-5550

TexSys
Text control system
512K or larger Macintosh.
Allows a user to create a detailed record of document revisions, including why each revision was made.
$59 retail
ToolMasters, Ltd.; 1810 Michael Faraday Dr., Suite 205; Reston, Va. 22090; 703-478-0220

TOPS
Networking software
Up to 32 Macintoshes; AppleTalk.
Allows users to link up to 32 Macintosh computers without any additional hardware except cables, or link to IBM PCs over AppleTalk using TOPS PC cards.
Centram Systems West, Inc.; 2372 Ellsworth Ave.; Berkeley, Calif. 94704; 415-644-8244

TurboCharger
Disk cache software
512K or larger Macintosh.
Makes the Macintosh faster by speeding disk access. Completely automatic operation.
$95 retail
Nevins Microsystems, Inc.; 250 Fifth Ave.; New York, N.Y. 10001; 212-532-8720

XL/Serve
Network utility
Macintosh XL, Lisa 2/5 or 2/10 plus any group of Macintoshes or Lisas on the AppleTalk Personal Network; Macworks XL.

THE KEEPER.™

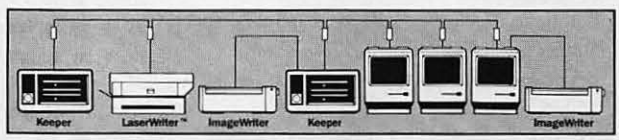
THE FIRST SMART FILE SERVER FOR THE MACINTOSH™ OFFICE.

First—And Only.

The Keeper is the only shared storage device that uses the built-in intelligence and power of an internal microcomputer. There's no need to tap the strength of the network by "dedicating" a Macintosh to run the Keeper. It's the easiest, most cost-effective way to store and share information on the AppleTalk™ network.

There's Room for Everybody.

As the network grows, multiple Keepers can be added for more storage, with each providing up to 64 dynamically sized disk volumes which can be shared by every user simultaneously. Because disk volumes expand and contract automatically when files are added or deleted, there's no need for complicated calculations to "partition" the disk. And with removable hard disk cartridges, storage is virtually unlimited. The Keeper is available in 10, 20 or 30 megabyte capacities, as well as in combination with a 5 megabyte cartridge drive.



Typical network setup using two Keepers

Brains and Brawn.

The powerful Keeper file server is all you need to vastly enhance a variety of essential functions: It acts as a print server and spooler for the Imagewriter™ and Macintosh network. It offers versatile back-up capabilities and security options. It operates as a stand-alone hard disk for a single Macintosh. And it does it all while maintaining the simplicity of the Macintosh itself.

Now that's smart.

MICRO-DESIGN
MASS·STORAGE·DEVICES

800-531-5002/In Texas, call 512-441-7890

Contact your local computer dealer or Micro-Design for more information.

The Keeper and The Keep are trademarks of Micro-Design. Apple is a registered trademark, and ImageWriter, LaserWriter and AppleTalk are trademarks of Apple Computer, Inc. Macintosh is a trademark licensed to Apple Computer, Inc.

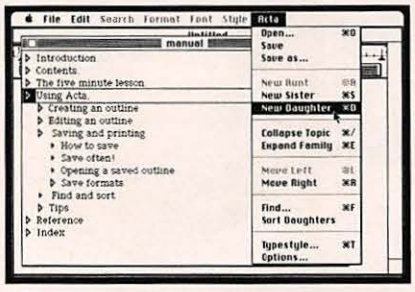
Circle 52 on Reader Service Card

Allows a Macintosh XL to function as a disk and printer server and allows all computers on the network to share hard-disk space and printers.
$195 retail
Infosphere, Inc.; 4730 SW Macadam Ave.; Portland, Oreg. 97201; 503-226-3620

Word Processing

■Acta

Outline processor



512K or larger Macintosh.

Acta is an outline processor/writing tool, installed as a desk accessory, that operates even while other applications, such as *Macwrite, Microsoft Word* and *Lotus Jazz,* are being used.

Acta can be used to prepare and organize manuscripts, reports, journals, seminars, documentation, schedules and almost any other kind of writing.

Features include cut and paste between *Acta* and another application, exporting an outline to *Macwrite* or *Word,* search and sort and a conversion utility for *Thinktank* documents.
$59.95 retail
Symmetry Corp.; 761 E. University Dr., Ste. C; Mesa, Ariz. 85203; 602-844-2199 or 800-624-2485

■AlKaatib

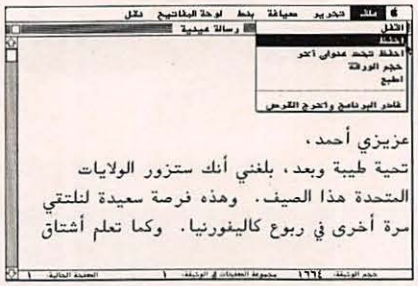
Arabic script word processor

Any Macintosh.

Alkaatib turns a Macintosh into an Arabic/Persian word processor, capable of writing from right to left.

Other software packages, such as *Microsoft File, Microsoft Word, Macpaint* and *Macdraw,* can be combined with *Alkaatib* in a wide variety of fonts.

Features include automatic selection of an Arabic letter contextually, multiple keyboard



support, Arabic voweling, English or Arabic system messages and menus, documentation in English and Arabic, full Laserwriter support and automatic Arabic ligatures.
$399 retail
Arabic Software Associates, Inc.; 240 East Center St.; Provo, Utah 84601; 801-377-4558

AUTOREF

Bibliography compiler

512K or larger Macintosh.

An automatic reference-list compiler that can be used in stand-alone mode with any word processor in order to create a bibliography for a document.
$89.95 retail
Scilab, Inc.; PO Box 614; Guilderland, N.Y. 12084; 518-355-3363

ClickArt Letters

Large letters and numbers

Any Macintosh.

A lettering system made up of many separate alphabets in 24-, 36-, 48-, and 72-point type.
$49.95 retail
T/Maker Graphics; 2115 Landings Dr.; Mountain View, Calif. 94043; 415-962-0195

Document Compare

Compare Macwrite documents

512K or larger Macintosh.

Gives a user a way to tell the difference between two or more versions of a *Macwrite* document.
$99 retail
The Model Office Company, Inc.; 49 Wellington St. E; Toronto, Ontario, Canada M5E 1C9; 800-268-8181 or 416-860-1033

Document Modeler

Generates templates, documents

512K or larger Macintosh.

The *Document Modeler* consists of two programs: one to make document templates; the other to make documents.

The *Template Maker* program can be used to build a document template. The *Document Maker* uses created document templates to prompt a user for particulars.
$199 retail, *Template Maker*
$199 retail, *Document Maker* (with editor)
$299 retail, both programs; site licenses are available
The Model Office Company, Inc.; 49 Wellington St. E; Toronto, Ontario, Canada M5E 1C9; 800-268-8181 or 416-860-1033

DocuMentor

Writing; document processing

Any Macintosh.

Used for word processing or document processing and includes a built-in graphics package.
$249 retail
B/T Computing Corp.; PO Box 1465; Euless, Texas 76039; 800-843-6463 or 817-267-1415

FONTastic

Font editor

Any Macintosh.

Allows users to create new fonts from scratch or edit existing fonts.
$49.95 retail
Altsys Corporation; PO Box 865410; Plano, Texas 75086; 214-596-4970

Foreign-Language Fonts

Twelve different fonts

Any Macintosh.

MacCyrillic (Russian, Ukrainian, Bulgarian, Serbian, Byelorussian, Macedonian, Yakut). $49.95 retail

SuperFrench, German, Spanish (more than 77 languages included). $49.95 retail

SuperGreek (overstrikes with automatic nondeleting backspacing and MacGreek Text Critics and TLG symbols); SuperHebrew, MacArabic, SuperHebrew-I (Israeli keyboard layouts); MacKana & Basic Japanese Kanji; MacKorean; MacPhonetics (IPA); MacTransliterator (Arabic, Semitic languages, Greek, Coptic...); MacSemitic Coptic Devanagri (Syriac, Jacobite, Nestorian, Estrangela, Coptic, Devanagri). $79.95 each

SuperGreek, Hebrew & Phonetics (includes SuperGreek, SuperHebrew, MacPhonetics, and MacTransliterator). $119.95 retail
Linguists' Software; 137 Linden St.; South Hamilton, Mass. 01982; 617-468-3037

KidsTime™

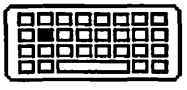
At last! Educational software for young children that encourages creativity.

KidsTime™ is an educational package which includes five different games for young children ages three to eight.

KidsNotes™

Let your child's first love of music be developed with KidsNotes. See the results as notes are entered using the mouse to "play" the piano keyboard on the screen, or by "playing" the Mac keyboard. As each note is entered, the piano key is highlighted. Musical skills are developed by learning note names, note and rest durations, and basic key and time signatures. Children will enjoy entering and playing their own melodies. Some music is already included on the disk.

Story Writer

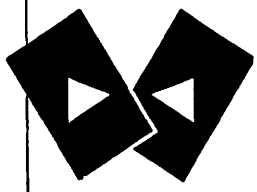


Your child's typing skills will develop with this self-rewarding activity. As the child types on the Mac keyboard, the corresponding key is highlighted on a screen keyboard. Key position skills are developed at the child's own rate. Besides writing stories with words, young children can also create their own picture stories using a special picture font instead of the usual letter font. The picture font may also be used with other word processing programs such as MacWrite™.

ABKey™

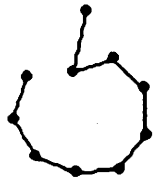
Watch your child develop letter recognition skills using the Mac keyboard. Letters are presented on the Mac screen and disappear when the matching key is pressed on the Mac keyboard. Pictures also appear which disappear when their beginning letter is pressed. This activity includes many levels of challenge. Your child can develop letter recognition skills at an individual pace.

Match-It™



As your child plays these fun matching games, the pile of matched cards grows to provide encouragement. This activity includes matching letters, words, pictures and puzzles. Your child will enjoy playing this variety of games individually or with others.

Dot-to-Dot



A new, interactive version of an old game. As your child moves the pointer from dot to dot (by numbers or by letters), lines connecting the dots appear. When the puzzle is completed, a picture appears to fill in the details. New puzzles can be created from MacPaint documents using the Dot-to-Dot program.

This exciting package includes all five games for only **$49.95**.

Also from Great Wave Software:™

ConcertWare™+(version 3)- Includes three integrated applications. Music can be entered, composed, edited, played and printed with the Music Writer. New instrumental sounds can be designed with the InstrumentMaker™ and the Music Player provides enhanced playback. Almost an hour of music and 40 instrumental sounds included.

ConcertWare+ MIDI—All features of ConcertWare+ and full support for MIDI synthesizer in and out.

ConcertWare+ Music—Enjoy more ConcertWare+ music with these music and instrument disks.
Vol. 1—Instumental Favorites.
Vol. 2—The Art of Fugue.
Vol. 3—Christmas Favorites.
Vol. 4—Early Music.
Vol. 5—Classical Selections.

Comet Halley—Your daily guide to exactly where, when and how to see Halley's Comet!

Contact your local software dealer or Great Wave Software at: 415-325-2202, P.O. Box 5847, Stanford, California 94305.

Great Wave Software™

Circle 53 on Reader Service Card

KidsNotes, Match-It, ABKey, ConcertWare, InstrumentMaker, and Great Wave Software are trademarks of Great Wave Software Company.

Word Processing

GriffinText
Text editor
Any Macintosh.
ASCII text editor designed to be used where speed and storage capabilities are of primary importance.
$69 retail
Metaresearch, Inc.; 1100 SE Woodward; Portland, Oreg. 97202; 503-232-1712

HebreWriter/Graphics
Hebrew fonts
Any Macintosh.
Allows the Macintosh to function like a Hebrew typewriter. Left to right format.
$39.95 retail
Certificate Plus Company; 580 Fifth Ave., 10th Floor; New York, N.Y. 10036; 212-227-3331

JustText including LaserTools
Text, graphics utilities
512K or larger Macintosh; Laserwriter.
$195 retail
Knowledge Engineering; GPO Box 2139; New York, N.Y. 10116; 212-473-0095

Le conjugueur
French grammar
Any Macintosh.
A desk accessory that supplies the correct conjugation of literally any French verb. Designed for those who use French in their work or study. A click-on installation program is included.
$49.95 retail (U.S.)
Les Editions Ad lib., Inc.; 970 Avenue Salaberry; Quebec City, Canada, G1R 2V3; 418-529-9676

■Liberty Checker
Spelling checker
Any Macintosh.
An interactive spell checker that resides on disk as a desk accessory and checks spelling as it is typed or when a document is completed. It works with spreadsheets, word processors, graphics, programming tools and most other standard Macintosh programs.
$59.95 retail
DataPak Software; 14011 Ventura Blvd., #402; Sherman Oaks, Calif. 91423; 818-905-6419

MacArabic & Farsi
Arabic font
Any Macintosh.
An Arabic and Farsi font program that can be used to type right to left in Arabic. In both 12- and 24-point sizes, the program includes Arabic overstrike diacritical marks and nondeleting backspacing. The *MacRTL* desk accessory is also included.
$79.95 retail
Linguists' Software; 137 Linden St.; South Hamilton, Mass. 01982; 617-468-3037

Maccessories Professional Type Fonts for Headlines
512K or larger Macintosh.
Contains many type fonts from 24 to 72 point.
$69.95 retail
Kensington Microware Ltd.; 251 Park Avenue S; New York, N.Y. 10010; 212-475-5200

Maccessories Professional Type Fonts for Text
Any Macintosh.
Contains many type fonts from 12 to 24 point.
$49.95 retail
Kensington Microware Ltd.; 251 Park Avenue S; New York, N.Y. 10010; 212-475-5200

MacIndex
Index preparation
Any Macintosh.
Works in conjunction with *Macwrite* or *Microsoft Word* to help users create an alphabetical index listing every occurrence of a selected word or key phrase in a *Macwrite* document.
The program comes with the Apple *Font/Desk Accessory Mover.*
$49.95 retail
Boston Software Publishers, Inc.; 1260 Boylston St.; Boston, Mass. 02215; 617-267-4747

■MacLightning
Spelling and grammar checker
Any Macintosh.
Maclightning is a RAM-resident software tool that allows users to access and manipulate a variety of data libraries and reference works.
The program includes a 31,000-word dictionary and a built-in grammar checker. It checks an average of 43 words per second (wps) at a top speed of 60 wps, depending on whether you are using a hard drive or floppy disk.
The program loads under the Apple pull-down menu, and can be turned on and left in the background to invisibly "watch" a users' moves and beep each time an error is made.
Additional reference libraries will be introduced and will include encyclopedias; technical dictionaries; medical, legal and scientific references; and several other vertical data libraries.
Maclightning runs simultaneously with virtually any application, including *Jazz, Excel, Omnis 3, Pagemaker, Microsoft Word* and *Thinktank.*
$99.95 retail
SoftDesign, Inc.; 14206 SW 136th St.; Miami, Fla. 33186; 305-253-5521

■MacSpec
Word processing
Any Macintosh.
Macspec is a word processing/editing program that facilitates composition of technical papers, documentation, specifications, proposals and any other document that requires a specification-type layout.
Features include multiple disk drive support, multiple fonts and font sizes, Imagewriter support and full compliance with user interface standards.
$199.95 retail
LM Software; PO Box 93; Belmont, Calif. 94002; 415-594-0627

Mac The Knife/Volume Two: Fonts
Fonts; type faces
Any Macintosh.
A collection of two dozen fonts.
$49.95 retail
Miles Computing, Inc.; 21018 Osborne St., Bldg. 5; Canoga Park, Calif. 91304; 818-994-7901

Mac the Linguist 2
Phonetic fonts
Any Macintosh.
Contains two new Macintosh fonts, LinguistG and LinguistNY, for linguists and other language specialists.
LinguistG and LinguistNY are modeled after the Geneva and New York fonts and can reside with them, in fact, so symbols from standard and *Mac the Linguist* fonts can be mixed in documents.
$70 retail
Megatherium Enterprises; PO Box 7000-417; Redondo Beach, Calif. 90277; 213-545-5913

MacTransliterator
Transliteration software
Any Macintosh.
Includes 10-, 12-, 20-, and 24-point fonts used for transliterating languages such as Greek, Coptic, Arabic, Hebrew, and other Semitic languages into Roman script.
$79.95 retail
Linguists' Software; 137 Linden St.; South Hamilton, Mass. 01982; 617-468-3037

MacWrite
Writing; word processing
Any Macintosh.
$125 retail
Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-996-1010

MegaMerge
Mail merging
Any Macintosh.
Allows merging of pictures and text.
$125 retail
Megahaus Corporation; 5703 Oberlin Dr.; San Diego, Calif. 92121; 619-450-1230

Microsoft Word Version 1.05
Microsoft Corporation, see review on page 36

PreWriter
Idea processing
512K or larger Macintosh.
Offers simultaneous access to outlining, word processing and note organization; opens multiple windows on individual or multiple documents; can read a *Thinktank* document; and can output in *Macwrite* format.
$149 retail
MindWork Software Publishing, Inc.; PO Box 2566; Monterey, Calif. 93942; 408-649-0431

Scriptwriter
Word processing
512K or larger Macintosh.
Features include word processing, script editing, global search and replace, on-screen formatting, and more.
$495 retail
American Intelliware Corporation; 330 Washington St., Ste. 400; Marina del Rey, Calif. 90292; 213-827-0803

SMK GreekKeys
Foreign-language fonts
Any Macintosh.
Allows a user to type and print the diacritical marks used in classical and biblical Greek.
$25 retail
SMK; 5760 S. Blackstone Ave.; Chicago, Ill. 60637; 312-947-9157

■SpellCheck 2.0
Spelling checker
Any Macintosh; Macwrite 2.2 *or* Macwrite 4.5.
Spellcheck 2.0 contains a 17,333-word dictionary and a special 1,500-word user-specified dictionary. The program is a stand-alone application that can be used with the *Switcher,* if more integration is desired.
It works with both hard and RAM disks and is not copy protected.
$25 retail
Wolverine Software; 8200 Ridgepointe Dr.; Burr Ridge, Ill. 60521

■Spellswell
Spelling checker
Any Macintosh.
Spellswell is a spelling checker program for the Macintosh that scans *Macwrite, Microsoft Word, Thinktank* and text-only documents.
Its compressed dictionary includes every word the program checks and does not make assumptions (many other spell checkers keep only root words and make guesses about allowable endings). The dictionary also includes contractions, abbreviations and hyphenated words.
Spellswell comes with a user-modifiable homonym dictionary. It can also check and maintain capitalization of proper nouns.
$49.95 retail
Greene, Johnson, Inc.; 15 Via Chualar; Monterey, Calif. 93940; 408-375-2828

Superfonts
Macwrite fonts
Any Macintosh.
A collection of many typefaces.
$29.95 retail
Software Apple-cations; 11510 Alejandro; Boise, Idaho 83709; 208-322-8910

ThinkTank 128
Outline processor
Any Macintosh.
Allows a user to enter thoughts and ideas as they occur and then organize them into a logical format.
$145 retail
Living Videotext, Inc.; 2432 Charleston Rd.; Mountain View, Calif. 94043; 415-964-6300

ThinkTank 512
Outline processor with word processing and graphics capabilities
512K or larger Macintosh.
Used to create and process outlines, write documents, and incorporate graphics.
$245 retail; *Thinktank 512*
$100 retail; upgrade from *Thinktank 128*
Living Videotext, Inc.; 2432 Charleston Rd.; Mountain View, Calif. 94043; 415-964-6300

TypeNow
Typing accessory
Any Macintosh.
Turns a Macintosh and an Imagewriter printer into a memory typewriter for doing jobs that are difficult to do with a word processor. Some of these jobs include addressing an envelope, taking a note, filling in a form, etc.
$39.95 retail
Mainstay; 28611B Canwood St.; Agoura Hills, Calif. 91301; 818-991-6540 (voice) or 818-991-5037 (modem)

UltraFonts
Macintosh Fonts
Any Macintosh.
A collection of 21 Imagewriter fonts that range in size from 6 to 36 point.
$29.95 retail
Century Software; 2306 Cotner Ave.; Los Angeles, Calif. 90064; 213-829-4436

Variomix, Variotrans and Variotext
Mail merging; letter writing
Any Macintosh; Microsoft Multiplan; *external disk drive recommended.*
Variomix—mail-merging, letter-writing program that performs automatic mail merges in the middle of text. $59.95 retail (includes *Variotext* and *Variotrans*)
Variotrans—performs mail-merge and letter-writing functions with an added foreign-language capability. $49.95 retail (includes *Variotext*)
Variotext—a basic mail-merge program for small businesses. $39.95 retail
Mexoft Belgium; 140 Wirtzfeld Ave.; B 4761 Bullingen; Belgium; 32-80647713

Education

ChipWits
Robot simulation; programming instruction; logical reasoning
Any Macintosh.
$49.95 retail
BrainPower, Inc.; 24009 Ventura Blvd.; Calabasas, Calif. 91302; 818-884-6911

DejaVu
Memory game
Any Macintosh.
$39.95 retail
Rubicon Publishing; 6300 La Calma Dr., Suite 100; Austin, Texas 78752; 512-454-5004

■KidsTime
Educational games
Any Macintosh.
Kidstime is an educational package that includes five different games for young children ages three to eight: *Kidsnotes, Story Writer, Abkey, Match-It* and *Dot-to-Dot.*
Kidsnotes teaches musical note names, note and rest durations and basic key and time signatures. Notes to play the piano keyboard on screen are entered using the mouse or the Macintosh keyboard.
Story Writer teaches typing skills. As a child types on the keyboard, the corresponding key is highlighted on a screen keyboard. Besides writing stories with words, picture stories can be created by using a special picture font.
Abkey teaches letter recognition skills using the keyboard.
Match-It includes matching letters, words, pictures and puzzles.
Dot-to-Dot is an interactive version of the original game of the same name.
$49.95 retail; all five games
Great Wave Software; 104 Gilbert Ave.; Menlo Park, Calif. 94025; 415-325-2202

KidTalk
Education; writing
Any Macintosh.
A creative writing tool for children that allows them to write, hear, and read stories, reports, plays, poems, and secret messages. It includes *Smoothtalker* speech capability.
$79.95 retail
First Byte; 2845 Temple Ave.; Long Beach, Calif. 90806; 213-595-7006

Learn About the Solar System and Halley's Comet
Astronomy; science
Any Macintosh.
$39.95 retail
Millett Software; 146 West 255 South; Orem, Utah 84058; 801-224-6841

MacAnatomy, Volumes I, II, & III
Anatomical diagrams
Any Macintosh.
Macanatomy, Volumes I, II, & III, use the *Macpaint* format to provide users with an atlas of clip-art anatomical drawings.
The program disks contain anatomical drawings covering the whole body. Individual illustrations are sized to fit into one screen so they can be isolated, copied, and moved. Details are presented in a line-drawing format.
$95 each retail
MacMedic Publications, Inc.; 5805 Westheimer; Houston, Texas 77057; 713-977-2655

MacAw Coloring Book and Software Figures
Visual art for children
Any Macintosh.
$59.95 retail
Azilian Systems; 24 Redfield Cir.; Derry, N.H. 03038; 603-434-2449

MasterType
Typing instruction
Any Macintosh.
$39.95 retail
Scarborough Systems, Inc.; 55 S. Broadway; Tarrytown, N.Y. 10591; 914-332-4545

MathFlash
Math flash-card drills
Any Macintosh.
$49.95 retail
Palantir Software; 12777 Jones Rd., Suite 100; Houston, Texas 77070; 800-368-3797

MicroTest II
Test generator
Any Macintosh; external disk drive.
$195 retail
Chariot Software Group; 3659 India St.; San Diego, Calif. 92103; 619-298-0202

■NotePro
Study aid
Any Macintosh.
Notepro is designed to help users learn to review their notes more efficiently. Meant to be used daily, it contains information about different learning techniques that can be used to review notes taken in class, in lab, from books, etc.
The *Notepro* learning environment consists of five study processes: Classnotes, the process in which users begin to restructure and review notes by entering them into the program; Pronotes, which restructures notes by reformatting them into an outline; Speedreview, which allows the user to review files created with Classnotes and Pronotes; Speedcharts, which helps create a chart to compare and contrast main ideas from notes; and Test Simulator, which tests the user's knowledge and retention of Speedcharts.
While these operations are separate, they are all tied to and built upon one another.
$59.95 retail
Learning Skills, Inc.; PO Box 8038; Reno, Nev. 89507; 702-825-9537

The Perfect Score: Computer Preparation for the SAT
Any Macintosh.
$79.95 retail
Mindscape, Inc.; 3444 Dundee Rd.; Northbrook, Ill. 60062; 800-221-9884 or 800-942-7315 in Ill.

Queue Software
Childhood education
Any Macintosh.
What Comes Next? features sequencing activities and mathematical progressions that help young children prepare for common IQ testing. $49.95 retail
Not Like The Others teaches children to recognize similarities and differences, with different levels of difficulty. $49.95 retail
How Many? teaches fundamentals of mathematics such as counting, number recognition, addition, and subtraction.
$34.95 retail
Queue, Inc.; 562 Boston Ave.; Bridgeport, Conn. 06610; 800-232-2224 or 203-333-0908

Speed Reading Tutor with Eyerobics
Any Macintosh.
An expert-system tutorial program that helps users improve their reading skills.

$89.95 retail
Kriya Systems, Inc.; Six Export Dr.; Sterling, Va. 22170; 800-345-7492 or 703-430-8800

Speller Bee
Education
Any Macintosh.
A learning tool for spelling mastery. Includes *Smoothtalker* speech capability.
$79.95 retail
First Byte; 2845 Temple Ave.; Long Beach, Calif. 90806; 213-595-7006

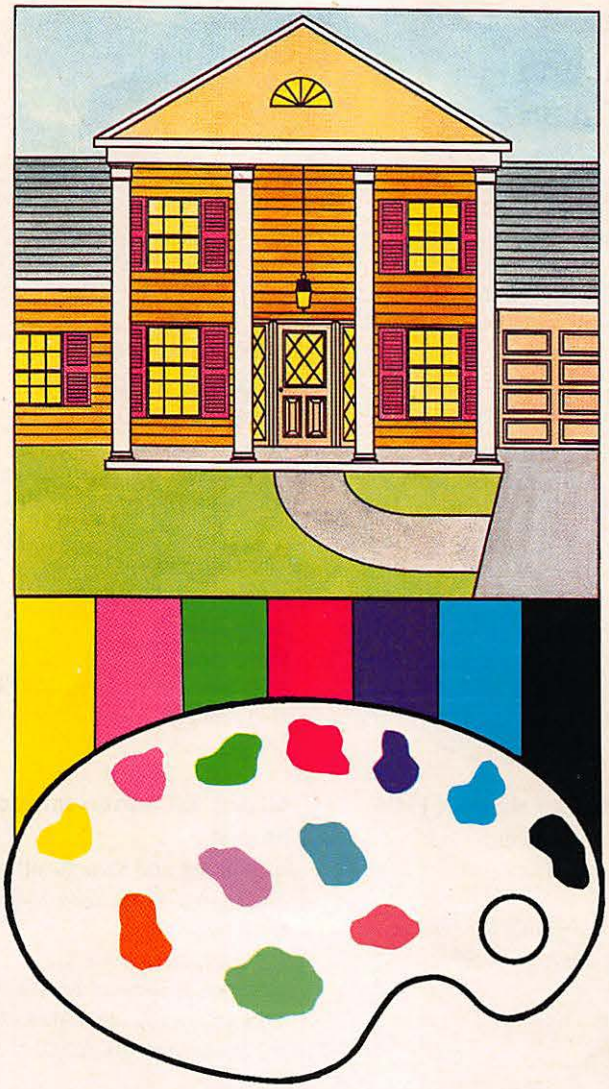
ThinkFast
Memory improvement
Any Macintosh.
$39.95 retail
BrainPower, Inc.; 24009 Ventura Blvd.; Calabasas, Calif. 91302; 818-884-6911

WordPlay
Word game
Any Macintosh.
$49.95 retail
Palantir Software; 12777 Jones Rd., Suite 100; Houston, Texas 77070; 800-368-3797

Personal and Home Finance

■CFD
Creative financing
512K or larger Macintosh.
CFD is a self-prompting, menu driven program that enables a user to structure or analyze virtually any type of loan arrangement.
The program allows a user to deal with a standard fixed rate, fixed term loan; adjustable rate loan; adjustable payment loan; or balloon payment loan.
Features include structuring wraparound contracts, analyzing yields to maturity or prepayment, determining maximum loans for which a buyer could qualify and more.
CFD also allows a user to change initial input information and instantly see the impact of the changes on original assumptions.
Unlike work sheet programs that require searching for specific work sheet cells that are to be changed, *CFD* displays a menu of information presently in memory.
$195 retail
Randle, Coray & Associates, Inc.; PO Box 1228; USU Station; Logan, Utah 84322; 801-753-5681

MacPalette



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Install MacPalette™ on your application disk, then use the PRINT command to print in color from MacDraft®, MacDraw®, MacWrite®, JAZZ®, Chart®, MacProject®, and all other object orientated programs (not MacPaint®). MacPalette™ gives you the ability to mix an almost infinite number of color patterns.

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MacDraw, MacWrite, MacProject, & MacPaint are ™ of Apple Computer. MacDraft is a ™ of Idd, Inc. JAZZ is a ™ of Lotus. MacPalette is a ™ of Microspot.

Circle 54 on Reader Service Card

Personal and Home Finance

Check Book Manager
Financial management
Any Macintosh.
$25 retail
RW Software Co.; 1239 Teeup Ln.; PO Box 147; Red Wing, Minn. 55066; 612-388-4602

Checkwriter
Checking-account management
Any Macintosh.
$69.95 retail
Orion Training Systems; PO Box 94; Dallastown, Pa. 17313; 717-757-7721

Dollars and Sense
Financial management
Any Macintosh.
$149.95 retail
Monogram; 8295 S. La Cienega Blvd.; Inglewood, Calif. 90301; 213-215-0529

Dow Jones Market Manager PLUS
Investment management
Any Macintosh; modem.
$199 retail
Dow Jones & Company, Inc.; PO Box 300; Princeton, N.J. 08540; 800-257-5114

■EZTax-Plan
Tax planning
Any Macintosh; Multiplan *or* Excel.

Eztax-Plan is an individual tax planning package that uses *Multiplan* or *Excel* spreadsheets to develop a present and future tax plan.

The program includes current and proposed tax reform laws and allows for comparisons of any combination of assumptions and multiple situations. It also computes and prints multiyear projections.

Eztax-Plan can be integrated with *Taxprep* by the same company. This allows automatic generation of a complete tax plan from the most recent tax return.
$95 retail
EZWare Corp.; PO Box 620; 29 Bala Ave.; Bala Cynwyd, Pa. 19004; 215-667-4064

Financial Cookbook
Financial analysis
Any Macintosh.
$50 retail
Electronic Arts; 2755 Campus Dr.; San Mateo, Calif. 94403; 415-572-2787

Forecast
Tax planning
Any Macintosh.
$69.95 retail
Monogram; 8295 S. La Cienega Blvd.; Inglewood, Calif. 90301; 213-215-0529

Haba CheckMinder
Bill paying; check writing
Any Macintosh.
$49.95 retail
Haba Systems, Inc.; 6711 Valjean Ave.; Van Nuys, Calif. 91406; 818-901-8828

The Housekeeper
Insurance management
Any Macintosh.
$59.95 retail
Aegis Development, Inc.; 2210 Wilshire Blvd., Suite 277; Santa Monica, Calif. 90403; 213-306-0735

Income Tax Solver; Investment Tax Analyst
Income tax and investment analysis
Any Macintosh; Microsoft Multiplan *or* Lotus Jazz.
$65 retail; *Income Tax Solver*
$95 retail; *Investment Tax Analyst*
AIS Microsystems; 1007 Massachusetts Ave. NE; Washington, D.C. 20002; 202-547-9113

■Investment IRR Analysis
Tax analysis
Any Macintosh.

The *Investment IRR* (Internal Rate of Return) *Analysis* program computes after tax IRR for any stock, conventional bond, tax exempt bond or real estate situation and displays a complete year-by-year cash flow analysis.

The cash flow analysis provides details for your tax bracket, such as taxable income, income tax, cash flow after tax and more.

The program provides potential or current investors with internal rate of return and year-by-year (up to 40 years) cash flow analysis.

It also computes a revised IRR, which includes the effects of reinvesting the after tax cash flows from the investment, at a rate earned on a selected reinvestment.

Each analysis is concluded with the results of both the IRR calculation (without reinvestment) and the revised IRR calculation (with reinvestment).
$89 retail
Larry Rosen Co.; 7008 Springdale Rd.; Louisville, Ky. 40222; 502-228-4343

The Investor
Portfolio management
512K or larger Macintosh.
$150 retail
P3, Inc.; 949 Parklane Ctr.; Wichita, Kan. 67218; 316-686-2000

MacCheck
Checking-account management
Any Macintosh; Microsoft BASIC.
$39.95 retail
Innovative Software; 4909 Stockdale Hwy., Suite 169; Bakersfield, Calif. 93309; 805-832-6698

MacInTax
Tax preparation and planning
Any Macintosh.

A stand-alone income-tax preparation and planning program that displays 25 IRS forms on the screen, automatically computes and links all forms, allows itemizations, has the complete IRS booklet stored on line, and prints the entire form and all data—IRS approved. State supplements also available. Updated yearly.
$75 retail; *Macintax Federal*
$30 each retail; *Macintax Supplements* (business and states)
SoftView; 315 Arneill Rd., Suite 215; Camarillo, Calif. 93010; 805-388-2626 or 800-622-6829 or 800-622-8439 in Calif.

Moneylink
Computerized banking
Any Macintosh.
Monogram; 8295 S. La Cienega Blvd.; Inglewood, Calif. 90301; 213-215-0355

Money Maker
Self help
Any Macintosh; Macwrite.
$29.95 retail
The Professor Corp.; 959 NW 53rd St.; Ft. Lauderdale, Fla. 33309; 305-771-6498

Personal Accountant
Financial management
Any Macintosh.
$89.95 retail
Softsync, Inc.; 162 Madison Ave.; New York, N.Y. 10016; 212-685-2080

Personal Tax and Financial Planning
Tax planning, financial analysis
Any Macintosh.
$100 each retail; *Estate Tax Planner, Stock Option Planner,* and *Financial Decisions* ($50 each if purchased with *Taxcalc Tax Planner)*
$150 retail; *Taxcalc Tax Planner*
TaxCalc Software, Inc.; 4210 W. Vickery; Fort Worth, Texas 76107; 817-738-3122

■PFP
Personal financial planning
512K or larger Macintosh.

PFP, based on federal income and estate tax laws, provides year-by-year planning forecasts in up to 40 areas of an individual's financial life.

Included in a typical *PFP* run are analyses of income requirements for all family needs, including costs of education; suggestions as to how insurance, gift or investment programs can be structured; forecasts of Social Security survivor and retirement benefit schedules; projections of retirement plan contributions, accumulations and withdrawals for as many as three different tax qualified retirement plans; projections of estimated federal and state estate tax liability; and recommended short- and long-term life insurance requirements.

The program asks the user detailed questions in 10 menu categories. Whenever there is uncertainty as to what the answer to a question should be, the program furnishes a default value to allow computation. Such values may be replaced as more accurate information becomes available.
$195 retail
Randle, Coray & Associates, Inc.; PO Box 1228; USU Station; Logan, Utah 84322; 801-753-5681

Profit Stalker II
Stock, commodity analysis
512K or larger Macintosh.

Features bar charts, line charts, point-and-figure charts and unattended dial up, data acquisition, and log off without using any other communications program.

A modem is required if downloading is desired, and *Profit Stalker II* is compatible with a hard disk.
$250 retail
Button-down Software; PO Box 19493; San Diego, Calif. 92119; 619-463-7474

Queue Software
Bookkeeping; financial management
Any Macintosh.

Features *Address Book, Scheduler, Check/Bookkeeper, Income Property Analysis,* and *Homeowner's Financial Analysis.*
$34.95 retail; *Check/Bookkeeper*
$39.95 each retail; all others
Queue, Inc.; 562 Boston Ave.; Bridgeport, Conn. 06610; 203-335-0908 or 800-232-2224

VersaTerm-PRO™

New! Now Shipping

Powerful Tek 4105 Workstation Graphics Communications • Terminal Emulation Program for the Macintosh™

Terminal Emulation	• Tektronix 4105 • DEC VT100 • Tektronix 4014 • Data General D200
File Transfer	• TEXT • MacTerminal™ XModem • Text XModem Protocol • MacBinary XModem • Text/Binary Kermit Protocol

Requires a 512K Mac or Lisa, and optionally an ImageWriter or LaserWriter printer and numeric keypad.

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Special upgrade price for registered VersaTerm Owners.

Features
- Create TekPrint, MacDraw, MacPaint and MacWrite documents.
- True interactive Zoom and Pan in memory with either the 4105 or 4014 graphics.
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- Very high quality graphics may be printed on either the ImageWriter or LaserWriter.
- Color output supported with ImageWriter II.
- Supports 4105 host and keyboard Macros.
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- Supports ALL Auto-Dial Modems.
- Supports the Hard Disk 20 with HFS.

VersaTerm™ Terminal Emulations
- DEC VT100
- Tektronix 4014
- Data General D200

Graphics and Text terminal emulation and communications. Supports XModem, MacBinary XModem and Kermit Protocols.

"This solid program (VersaTerm) should be looked at by all power users, especially those with VT100 and Tektronix emulation needs." — MacUser, Premiere Issue '85

Requires a 128K or 512K Mac or Lisa
List Price $ 99

TekPrint™
Zoom, Pan, Rotate and Print High Resolution Tektronix Graphics on the ImageWriter or LaserWriter Printer. Create MacDraw Documents. Use VersaTerm to preview and create TekPrint documents.

Registered VersaTerm Owners including a free VersaTerm update — **List Price $ 79**

VersaTerm Plus Package including VersaTerm and TekPrint — **List Price $175**

VersaTerm-HP™
Same general features as standard VersaTerm, except the VT100 emulation is replaced with a Hewlett Packard 2621 emulation.

Requires a 128K or 512K Mac or Lisa
List Price $ 99

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Circle 55 on Reader Service Card

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Personal and Home Finance

■REMS Investor 2000
Property analysis
512K or larger Macintosh.

REMS Investor 2000 is a real estate analysis program that allows a user to perform a detailed analysis of any commercial or residential property in minutes.

Input options include 5- or 10-year analyses, partial-year analysis in year of acquisition, up to 10 loans from 11 different types, refinancing capabilities, variable assumptions from year to year, latest depreciation schedules for real and personal property and more.

Output features include before and after tax cash flows, internal rate of return, financial management rate of return and more.
$295 retail
REMS Software, Inc.; 526 NW 2nd St.; Corvallis, Oreg. 97330; 503-757-8887

Soft Start—Personal Finance
Financial analysis templates
Any Macintosh; Multiplan.
$49.95 retail
Allegro Software; 79 Milk St., Suite 1108; Boston, Mass. 02109; 800-343-0664 or 800-322-1238, ext. 5500

Stock Portfolio System
Portfolio management
512K or larger Macintosh.

An investment-accounting, record-keeping, and control system designed to quickly provide users with personal financial information.

Hayes Smartmodems or Apple modems are supported.
$225 retail
Smith Micro Software, Inc.; PO Box 7137; Huntington Beach, Calif. 92615; 714-964-0412

■Stock Watch
Investment management
Any Macintosh.

A stock market and mutual fund investment package that tracks weekly, monthly, and yearly investment activities.

Features include data entry, data manipulation, data storage, on-screen graphics, reporting in data form or graphics, gains/losses, commission, summaries and printing options.
$19 retail
Encycloware; 715 Washington St.; Ayden, N.C. 28513; 919-746-3589

■TaxEase
Tax planning templates
Any Macintosh; Excel, Jazz *or* Multiplan.

Taxease contains federal income tax spreadsheet templates for use with *Excel, Jazz* or *Multiplan.*

The program calculates tax and refund and compares different tax options so a user can determine how to file and make transactions for the lowest legal tax.

Taxease includes Form 1040; Schedules A through G, R, SE and W; and Forms 4562, 3468, 2441, 6251, 2119, 3903, 2106 and 5695.

Also included are ACRS and Straight Line depreciation schedule templates with supplemental gains and losses and investment tax credit recapture upon sale.
$59.95 retail
L.W. James and Associates; 1525 E. County Rd., #58; Ft. Collins, Colo. 80524; 303-484-5296

Tax Master
Tax preparation
Any Macintosh; Multiplan; *printer.*
$99 retail; without *Multiplan*
$249 retail; with *Multiplan*
$15 retail; demo disk
Mac Products; 20231 San Gabriel Valley Dr.; Walnut, Calif. 91789; 714-595-4838

TaxPlan
Tax management
Any Macintosh.
$59 retail
FutureVest; 542 W. 112th St., Suite 6F; New York, N.Y. 10025; 212-222-1607

Tax Planner '85-'86
Personal tax preparation
Any Macintosh; Microsoft Excel.

The program prepares IRS Form 1040; Schedules A through G, SE, and W; and Forms 2106, 2119, and 2211 exactly as the actual forms are written.
Apropos Software, Inc.; 64 Hillview Ave.; Los Altos, Calif. 94022; 415-948-7227

Tax-Prep '86
Tax planning and preparation
Any Macintosh; two disk drives; Multiplan *or* Excel.
$99.95 retail
$15 demo; *Multiplan* only
EZWare Corporation; PO Box 620; Bala Cynwyd, Pa. 19004; 215-667-4064

TaxWizard '84/85
Tax planning and preparation
Any Macintosh.
$64.95 retail
Gamma Productions, Inc.; 817 10th St., Suite 102, Santa Monica, Calif. 90403; 213-451-9507

Other Software

31 All-Time Favorite Programs 3.0
Miscellaneous
Any Macintosh; Microsoft BASIC 1.0 *or* 2.0.

Thirty-one programs on one disk includes home-management software, games, educational programs, and utilities.
$29.95 retail
Brownbag Software; 8208 N. University St.; Peoria, Ill. 61615; 309-692-7786

Dinner At Eight
Recipe collection; filing system

A collection of recipes from the chefs of restaurants across the country as well as a wine tutorial and listing of suggested wines. It is also a personal recipe filing system. It automatically calculates ingredients required for any number of servings and prints out step-by-step directions and will combine any number of selected recipes into a combined grocery list.
$59.95 retail
Rubicon Publishing; 6300 La Calma Dr., Suite 100; Austin, Texas 78752; 512-454-5004

Eat N.Y.

A data base of over 4,200 New York restaurants, complete with recent information and ratings and more than 700 reviews by free-lance reviewer Michael Hodges.
$49 retail
KIN Inc.; 10 Columbus Cir., Suite 1260; New York, N.Y. 10019; 212-333-7854

Hippo Computer Almanac
Any Macintosh.

A collection of over 35,000 useful, intriguing facts ranging from what time it is in Switzerland to how to say "hello" in Swahili.
$34.95 retail
Hippopotamus Software, Inc.; 985 University Ave., Suite 12; Los Gatos, Calif. 95030; 408-395-3190

■Hippo Jokes and Quotes

Any Macintosh.

Fast access to thousands of jokes, one-liners, puns, and quotations. Search for specific jokes or quotes by keyword or author. A digitally recorded laugh sound track is included.

$34.95 retail

Hippopotamus Software, Inc.; 985 University Ave., Suite 12; Los Gatos, Calif. 95030; 408-395-3190

IRS Time Keeper

Any Macintosh.

Allows a computer recording log of business and personal use of the Macintosh to keep an accurate data file of records for the IRS.

$19 retail

Encycloware; 715 Washington St.; Ayden, N.C. 28513; 919-746-3589

■Los Angeles Restaurant Guide

Any Macintosh.

This Macintosh-based Southern California and Los Angeles restaurant guide contains over 3,500 of the best and most unique restaurants from Ventura to San Diego.

$19.95 retail

Hamilton Data Management Services; 2105 Myrtle Ave., Ste. 7; PO Box 724; Monrovia, Calif. 91016; 818-303-5368

MacBible

Any Macintosh.

A 25-disk volume of the King James Bible or International Version with chapter and verse search. Includes Bible graphics, maps, and charts.

$169 retail

Encycloware; 715 Washington St.; Ayden, N.C. 28513; 919-746-3589

MacConcord I

Any Macintosh.

A two-disk volume Concordance of the New Testament.

$42.95 retail (U.S.); $49 retail (outside U.S.)

Medina Software; 2008 Las Palmas Cir.; Orlando, Fla. 32822; 305-281-1557

MacMuscle

Health and fitness software

Any Macintosh.

Teaches muscular anatomy using 24 major muscles, generates a personalized weekly workout schedule, and demonstrates exercises by animation.

$69.95 retail

Tech2000 Software, Inc.; 263 Lugonia St.; Newport Beach, Calif. 92663; 714-650-7240

Macnutriplan

Diet analysis

512K or larger Macintosh; Microsoft BASIC 2.0.

Allows users to compute the nutritional value of meals and compare it to the recommended daily allowance (RDA).

$75 retail

Micromedx; 187 Gardiners Ave.; Levittown, N.Y. 11756; 516-735-8979

MacPDS

A newsletter/catalogue dealing with Macintosh public domain software and Macintosh enhancement products.

MacPDS; PO Box 85097; Seattle, Wash. 98105; 206-742-4360

MacScripture I

Any Macintosh; Macwrite.

A four-disk volume of the King James Version of the New Testament.

$59.95 retail (U.S.)

Medina Software; 2008 Las Palmas Cir.; Orlando, Fla. 32822; 305-281-1557

Orlando A La Carte!

Any Macintosh; second drive and printer recommended; Macwrite.

An up-to-date alphabetical listing of hundreds of Central Florida's restaurants arranged according to cuisine. Each entry includes information regarding house specialty, price range, dress code, address, phone number, credit card information, business hours, wheelchair access, and children's menus. Available in English or Spanish.

$19.95 retail (U.S.); $23 retail (outside U.S.)

Medina Software; 2008 Las Palmas Cir.; Orlando, Fla. 32822; 305-281-1557

Public Domain Software

Steep Brook Software; 110 Baldwin St.; Fall River, Mass. 02720; 617-678-6282

Public Domain Software

Computer Concepts; 2697 Lavery Ct., #6; Newbury Park, Calif. 93020; 805-499-0583

Public Domain Software

Educomp Computer Services; 2139 Newcastle Ave.; Cardiff by the Sea, Calif. 92007; 619-942-3838

Public Domain Software

$3 retail; catalogue

The Public Domain Exchange; 673 Hermitage Pl., Ste. R; San Jose, Calif. 95134

■ResuMaker

Professional resume writer

Any Macintosh.

Allows the user to create an unlimited variety of customized resumes; chronological, analytical and functional.

$49.95 retail

Steep Brook Software; 110 Baldwin St.; Fall River, Mass. 02720; 617-678-6282

Scripture Bits

Bible reference and calendar

Any Macintosh.

Macwrite documents containing a library of Bible references available in English or Spanish.

$22 retail (U.S.); $25 retail (outside U.S.)

Medina Software; 2008 Las Palmas Cir.; Orlando, Fla. 32822; 305-281-1557

■Southern California News Media Directory

Any Macintosh.

An up to date directory for the news media and press that lists the most used "media" telephone numbers from Ventura to San Diego. Two versions are available: data base format and a Datafiles disk for use with *Sidekick.*

$19.95 retail

Hamilton Data Management Services; 2105 Myrtle Ave., Ste. 7; PO Box 724; Monrovia, Calif. 91016; 818-303-5368

■Southern California Scanner Frequency Directory

Any Macintosh.

Contains over 7,000 hard to find and most used scanner radio frequencies for the Southern California area. Includes local and nation wide usage for most federal frequencies, and covers frequencies from 20 MHz to 1.3 GHz.

$19.95 retail

Hamilton Data Management Services; 2105 Myrtle Ave., Ste. 7; PO Box 724; Monrovia, Calif. 91016; 818-303-5368

Macintosh Plus And Laserwriter Plus

The Macintosh Plus has the same compact design and distinctive, visual user interface of other Macintosh personal computers, but provides 1MB of internal memory and a new internal floppy disk drive with 800K of storage for applications and files.

The storage capacity can be expanded further with a variety of peripheral devices, including high-speed storage systems based on the Small Computer System Interface (SCSI), an industry standard interface for peripheral devices that is built into the back panel of the Macintosh Plus.

With a full megabyte of memory—equal to about 500 pages of text—the Macintosh Plus can handle very large spreadsheets, data bases, graphics and text documents. In addition, its internal memory is designed to be expanded to up to 4MB when high-density, one-megabit RAM chips become available in quantity.

The system's double-sided floppy disk drive provides 800K, or about 400 text pages, of storage. The new drive can read either double- or single-sided 3 1/2-inch diskettes. Double-sided diskettes can also be formatted for use in the single-sided drives (on one side only), which are built into Macintosh 512K computers.

Apple will offer applications, such as *Macdraw* and *Macproject,* in both single- and double-sided formats during 1986 and expects other software publishers to offer double-sided versions of their products, as the number of installed Macintosh Plus systems increases.

The Macintosh Plus supports all Apple Macintosh peripherals and the growing number of third-party storage systems, printers and communications products. An Appletalk Personal Network connector is built into the Macintosh Plus. It supports all current third-party Appletalk products.

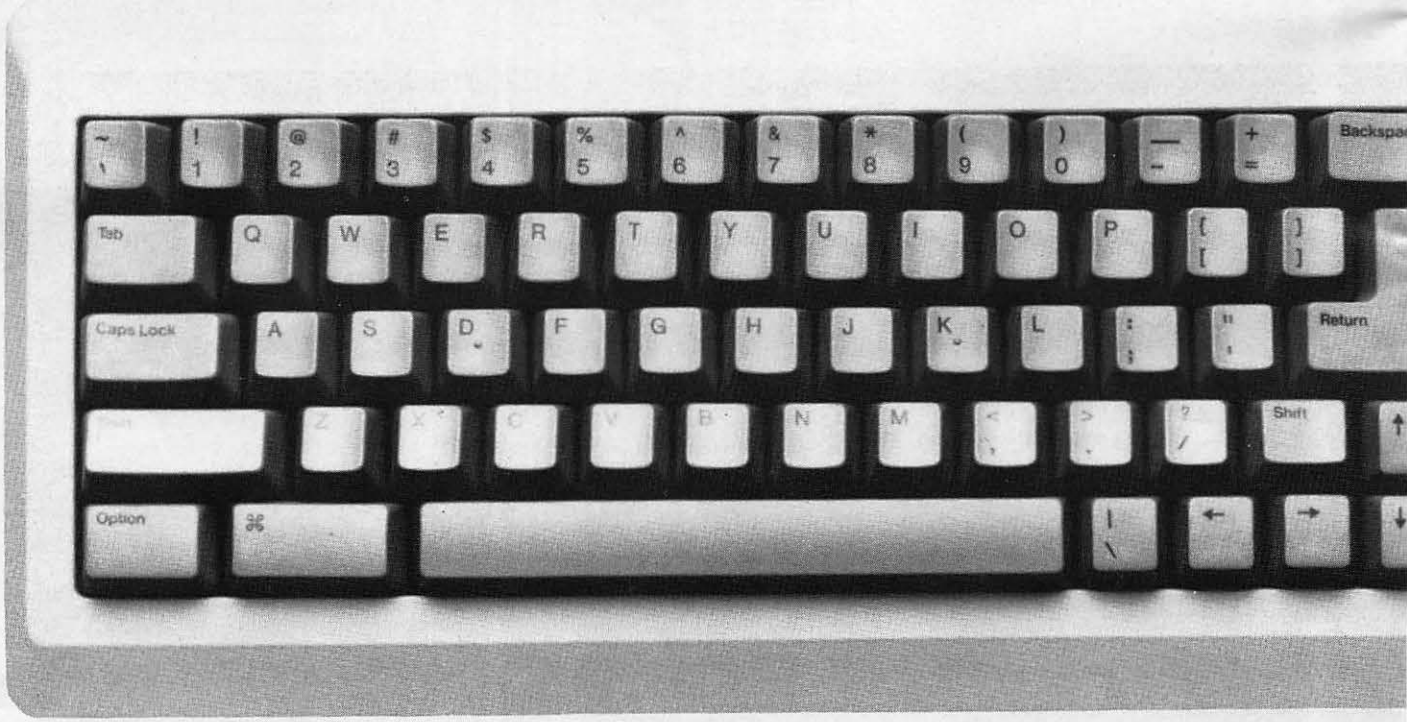
The Macintosh Plus uses a RAM cache technique that enables software applications to load, run and quit up to twice as fast. Frequently used parts of a program can be stored in the computer's memory.

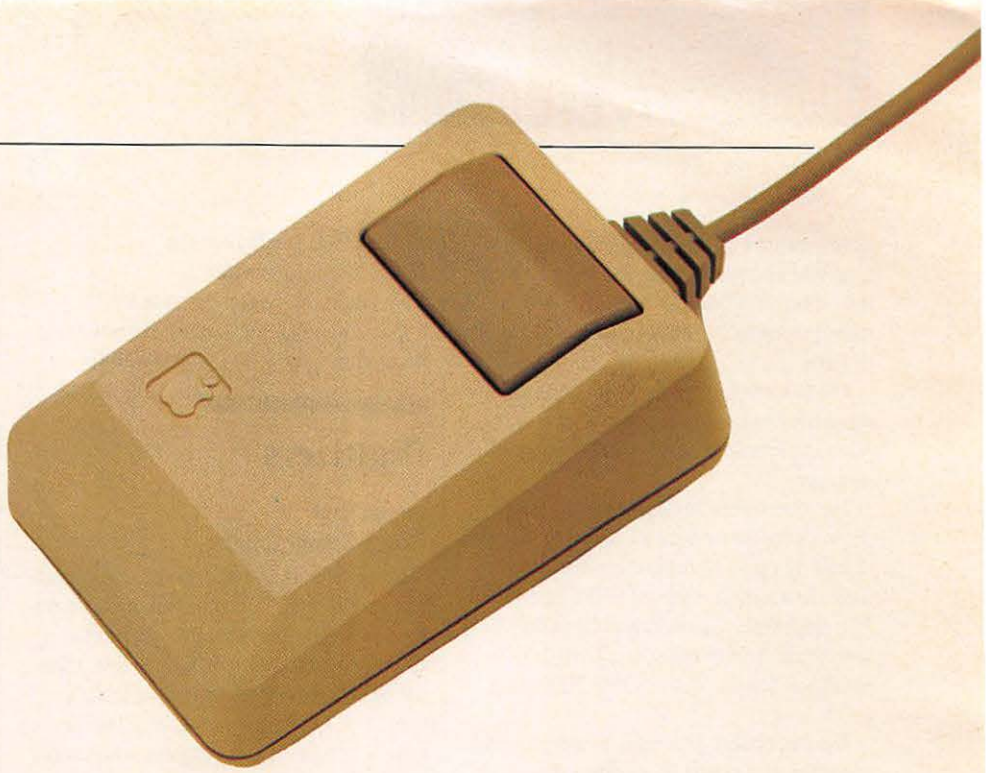
The computer's new operating system contains a Hierarchical Filing System (HFS) that lets users organize thousands of documents and applications into a logical hierarchy. The number of files that the HFS can manage is limited only by the capacity of the storage devices connected to the computer.

In addition, the Macintosh Plus includes a new keyboard that provides a numeric keypad to the right of the alphanumeric keys, as well as directional arrow keys for cursor control. The keyboard can be purchased separately by current Macintosh 128K or 512K owners.

In fact, upgrade kits are available so that owners of Macintosh 128K or 512K computers can add all of the Macintosh Plus features to their systems.

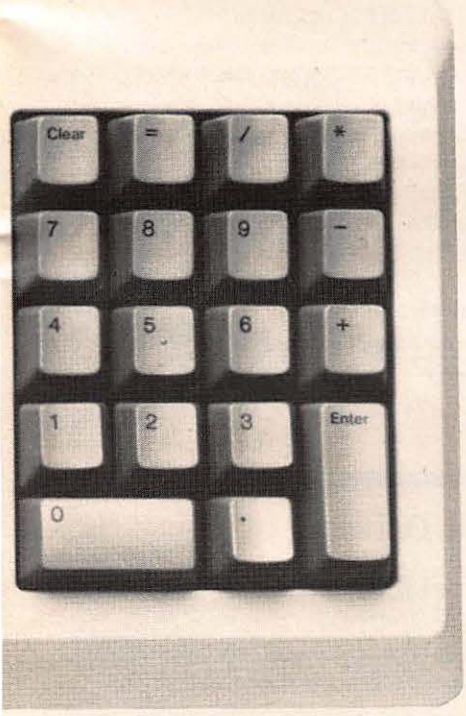
The Macintosh Plus Disk Drive Kit doubles disk capacity, increases system speed and provides the new system software. The kit,





which requires dealer installation, includes a double-sided, 800K internal disk drive, the new ROM chips, the Macintosh Plus System Tools Disk and a guide to the new features.

The Macintosh Plus Logic Board Kit is for Macintosh owners who want 1MB of internal memory, the option of expanding to up to 4MB in the future and the SCSI port. A new main logic board, new rear case to accommodate the new ports, an adapter cable and the *Macintosh Plus Owner's Guide* are included.

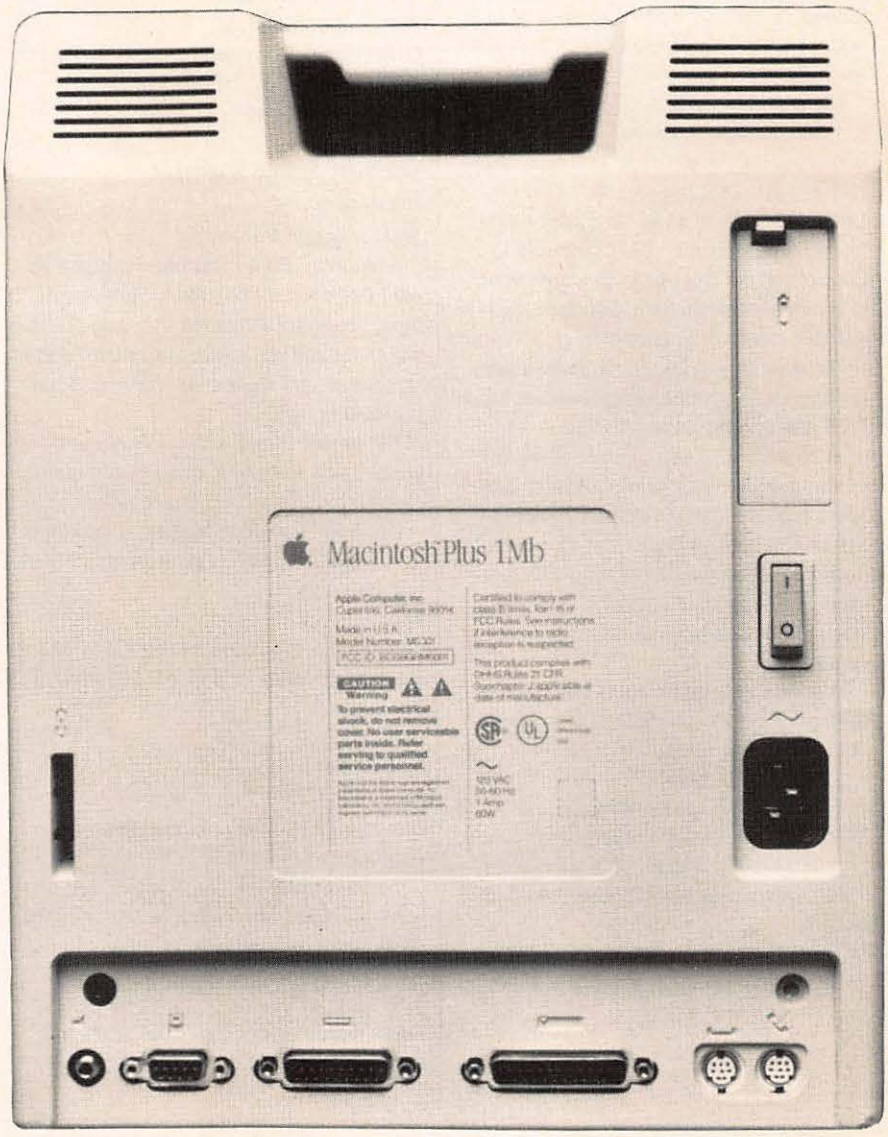


To take advantage of the Logic Board Kit upgrade, which also requires dealer installation, existing Macintosh customers must purchase the Disk Drive Kit.

Laserwriter Plus

The Laserwriter Plus is a new member of the Laserwriter printer family that prints typeset-quality text and graphics from a Macintosh. It requires a 512K or larger Macintosh.

The Laserwriter, Apple's previous typeset-



quality printer, is capable of printing full-page text and graphics at 300 dots-per-inch resolution. It contains a 12MHz, 68000 microprocessor, 1 1/2MB of RAM and 1/2MB of ROM.

The Laserwriter printer is based on Canon's LBP-CX laser-xerographic engine and Adobe System's *Postscript* page description language.

The Laserwriter has Appletalk Personal Network hardware built in, allowing it to be shared by up to 31 networked Macintosh users. In addition, users of UNIX- and IBM PC-compatible systems can print to the Laserwriter. It also includes a Diablo 630 emulation feature that lets IBM PC owners use it.

The Laserwriter Plus adds greater printing versatility and power to the Macintosh computer/Laserwriter printer system. It includes all of the previously mentioned advanced features of the Laserwriter and its ROM has been expanded to 1MB to store an additional seven font families.

The new font families—Palatino, New Century Schoolbook, Helvetica Narrow, ITC Bookman, ITC Avant Garde, ITC Zapf Chancery and ITC Dingbats—are built into the Laserwriter Plus, in addition to the original four in the Laserwriter: Times, Helvetica, Courier and Symbol. All fonts are available in a variety of styles, providing users with 35 different typefaces to choose from.

The Laserwriter Plus also includes a new printer installation disk that allows Macintosh 512K, Macintosh Plus and Macintosh XL users to print with any member of the Laserwriter or Imagewriter printer product families; a new Font/Desk Accessory Mover that lets Laserwriter and Laserwriter Plus users load onto a disk only those typefaces they need; and support of additional downloadable fonts available from third-party companies.

Existing Laserwriter owners can upgrade their printers to a Laserwriter Plus through a dealer-installable upgrade kit.
$2,599 retail; Macintosh Plus
$499 retail; 800K external drive
$129 retail; Macintosh Plus keyboard
$299 retail; 800K internal disk drive kit
$599 retail; Macintosh 512K logic board upgrade kit
$799 retail; Macintosh 128K logic board upgrade kit
$6,798 retail; Laserwriter Plus
$5,999 retail; Laserwriter
$799 retail; Laserwriter upgrade kit
Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-996-1010

Digitizers

Image Blue
Optical scanner/printer

Image Blue is an optical scanning system that can be used to capture an image to display on screen, store to disk, transmit as a facsimile signal over a telephone line, transmit directly to a local or remote desktop computer, or use the system as a line or graphics printer. Once scanned, images may be modified using *Macpaint*. The system is compatible with *Macwrite*.
$1,295 retail; hardware
$80 retail; software
Image Communications, Inc.; 640 W. Putnam Ave.; PO Box 4809; Greenwich, Conn. 06830; 203-661-0607

MacNifty Sound Digitizer
Digitized sound

512K or larger Macintosh.

A hardware device that turns standard audio (plus/minus 1 volt) into a digital waveform, providing a digitized sound source that outputs sound via a 512K Macintosh's built-in synthesizer and speaker. An external speaker may also be used.

The device comes with a software program, called *Soundcap*, that allows a user to capture, modify, and play back sounds.

Using the *Soundcap* program, a developer or hobbyist can garnish game programs with real sound, etc.
$129.95 retail
Kette Group, Inc.; 6860 Shingle Creek Pkwy.; Minneapolis, Minn. 55445; 612-566-0221 or 800-328-0184

MacVision
Video digitizer

Any Macintosh; video camera, VCR, or videodisc.

Comes with an additional application on the disk, called *Morevision*, which gives the user eight more digitizing techniques to use with Macvision.
$299.95 retail
Koala Technologies Corp.; 2065 Junction Ave.; San Jose, Calif. 95131; 408-946-4483

MAGIC
Graphic digitizer

Any Macintosh.

A Macintosh graphics input controller that lets a user enter drawings and photographs via a black-and-white or color video camera, videocassette recorder, or laser disk.
$399 retail; without camera
$549 retail; with camera
New Image Technology, Inc.; 10300 Greenbelt Rd., #104; Seabrook, Md. 20706; 301-464-3100

■SpectraFAX Scanner
512K or larger Macintosh.

The scanner digitizes black-and-white or color photographs and art. It comes with a special version of *Softstyle's Colormate* software that allows users to scan color documents directly into *Colormate;* touch them up; bring in *Macpaint, Macwrite* or *Microsoft Word* text and graphics to be colorized; and print the resulting document on the Imagewriter II in eight colors. It also includes *Paintscan* software, a desk accessory that allows users to scan black-and-white images directly into *Macpaint.*
$3,995 retail
SpectraFAX Corp.; 2000 Palm St. S; Naples, Fla. 33962; 813-775-2737

ThunderScan
Digitizing scanner for Imagewriter printer
$229 retail
Thunderware, Inc.; 21 Orinda Way; Orinda, Calif. 94563; 415-254-6581

Disk Drives

QC10 and QC20
Hard disk drives

The QC10 and QC20 hard disk drives can store 10 to 20MB of information respectively, and can be segmented into smaller storage areas called volumes.
$1,295 retail; QC10
$1,795 retail; QC20
Quark Peripherals, Inc.; 2525 W. Evans Ave., Suite 220; Denver, Colo. 80219; 800-543-7711

AppleTalk Network Servers
Hard disk drives

512K or larger Macintosh; Appletalk Personal Network.

These hard disk, mass-storage network

Reader Service Card

Many companies have free product/service information available by mail. To receive further information, circle the numbers on the card that correspond to the numbers at the bottom of the advertisements for which you want more information. Then print or type your name and address on the attached card, detach, and mail. We will forward your requests to the appropriate companies.

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Company _____ Title _____

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City _____ State _____ Zip _____

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Spring 1986

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servers for the AppleTalk Personal Network come in two sizes—20MB and 40MB. The 20MB Bernoulli Box includes two 10MB cartridges, and the 40MB version includes two 20MB cartridges.

Each unit also includes AppleTalk support software and utilities such as whole-disk copying, partitioning, password protection, and formatting.

$3,750 retail; 20MB version
$4,695 retail; 40MB version
IOMEGA Corporation; 1821 West 4000 S; Roy, Utah 84067; 801-776-7330

■AST-4000

Hard disk; tape backup

A large-capacity, hard disk storage and streaming cartridge tape backup subsystem that offers 74MB of formatted disk capacity and can be expanded to a full 370MB with optional AST-4000 expansion units.

$6,995 retail
AST Research, Inc.; 2121 Alton Ave.; Irvine, Calif. 92714; 714-863-1333

BAL Series 500

Compatible 3.5-inch disk drives

$249 retail; single sided
$349 retail; double sided
Microtech International, Inc.; 29 Business Park Dr.; Brandford, Conn. 06405; 800-626-4276

■DataFrame

20MB hard disk

Dataframe is specifically engineered to communicate via the Macintosh Plus Computer's Small System Interface (SCSI) port. Using SCSI, Dataframe transfers data up to 10 times the speed of older drivers. In addition, it runs under Apple's new hierarchical file system so that partitioning of the disk is not required.

$1,095 retail
SuperMac Technology; 1901 Old Middlefield Way; Mountain View, Calif. 94040; 415-964-8884

■DiskPlus

Disk drive

Diskplus allows 3Com's 3Server Expansion Disk to be attached to the SCSI port on the Macintosh Plus for use as an expansion disk drive. Up to seven drives can be daisy chained together to provide up to almost 490MB of disk storage. The design of the Diskplus system provides operating speed improvements of up to a factor of eight times over floppy drives.

Diskplus consists of the 3Server Expansion Disk and an accessory kit with cable and software.

$4,995 retail; 3Server Expansion Disk
$150 retail; Diskplus accessory kit
3Com Corporation; PO Box 7390; Mountain View, Calif. 94039; 415-961-9602

DS 800

Double-sided, 800K external disk drive

Plugs directly into the external drive port and does not require any software modifications. It will read and write standard disks that have been initialized on the Macintosh's internal drive. When a disk is initialized on the DS 800, it automatically formats both sides of the disk giving the user 800K.

$549 retail
DataSpace Corporation; 205 Riviera Dr., Unit

Now you can bridge the IBM-Apple gap!!

PC MacBridge

Puts your IBM PC on the AppleTalk Personal NetWork. The PC can now tap the power of the Macintosh Office and Networked Devices such as PostScript Printers(like the Apple LaserWriter!). With the LaserWriter, a whole new dimension in printing immediately opens up for you. Our *LaserScript* software turns PC word processors, like Wordstar and MultiMate into page processors.

For graphics, we give you presentation quality graphics from Lotus 123, as well as our own *LaserGraph*. Unbelievable output from Data-Copy Scanners can be placed within the text in Wordstar and MultiMate, with others on the way.

With our MailBox software, you can transfer files between PCs(Both Macs and IBM)on the Network. Finally Lotus to Excel and Jazz mean something. You can even send Microsoft Word file from the PC, and work with them in Word on the Macintosh. If you've ever wanted high quality print from your PC, PC MacBridge is the Way.

PC MacKey

PC MacKey is a superior keyboard for the Macintosh modelled after the IBM PC AT keyboard. There is the normal Selectric style main keyboard, as well as a numeric keyboard and 10 function keys that may be used with popular macro programs. Word processing operators will be pleased that in Microsoft Word there is no need to remove their hands from the keyboard since the cursor keys work--no mouse necessary!

For additional information and quantity pricing call your dealer or:

TANGENT TECHNOLOGIES,LTD
5720 PEACHTREE PKWY. NORCROSS, GA 30092
404-662-0366

IN CANADA: McKenzie-Brown, call 416-593-6880

FOR EUROPE: Trade Ventures 703-860-3316

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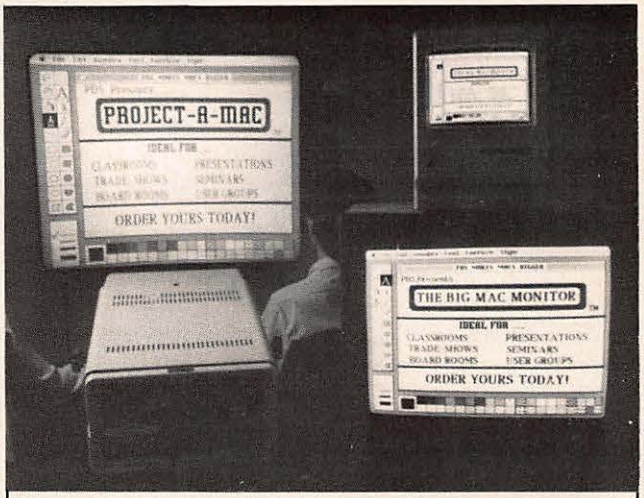

PROJECT-A-MAC™
VIDEO PROJECTION SYSTEM

Clearly reproduces any Mac display including fine text and high-res graphics onto screens up to 20 feet wide. An image as sharp as your Mac's. Controls for brightness and contrast adjust for room lighting conditions. Includes everything you need: projector, PDS External Video Card, 25' video cable, and complete instructions.

COMPLETE SYSTEM $4,495.00

BIG MAC MONITOR™

Delivers 23" of sharp high resolution black and white display, enclosed in a durable, attractive Apple-beige cabinet. Will clearly reproduce any Mac screen image, including fine text and high-res graphics. Several can be connected in series where multiple displays are required. Includes everything you need: the Monitor, a PDS External Video Card for the Mac, 25' video cable, and complete instructions.

COMPLETE SYSTEM $1,995.00

FREE EXTERNAL VIDEO CARD INCLUDED:
The PDS External Video Card for the Mac is specially designed to work with our systems, providing the highest possible resolution

Available now from: **PDS VIDEO TECHNOLOGY, INC.**
Specialists in Video Display Systems for the Macintosh
1152 Santa Barbara St. • San Diego, CA 92107
ORDER HOTLINE: (619) 222-7900

Circle 58 on Reader Service Card

Disk Drives

9; Markham, Ontario, Canada L3R 2L6; 416-474-0113

HabaDisk 800
Dual-sided, 800K, variable-speed floppy disk
$599 retail
Haba Systems, Inc.; 6711 Valjean Ave.; Van Nuys, Calif. 91406; 818-901-8828

■HD-20 and HD-30
External hard disks

The HD-20 and HD-30 are 20 and 30MB external hard disks for the Macintosh Plus. They utilize 5¼-inch, half-height Winchester drives with an internal power supply. An internal fan is incorporated to maintain constant temperature within the case, and they come complete with all hardware to plug directly into the computer.
$1,095 retail; HD-20
$1,595 retail; HD-30
MDIdeas, Inc.; 1111 Triton Dr., #205; Foster City, Calif. 94404; 415-573-0580

HyperDrive
Internal hard disk

Available with print spooler software, an application that allows a user to print documents while performing other tasks; and *Backup,* a program that allows the user to backup and restore information from the hard disk to and from floppies.
$1,695 retail; Hyperdrive 10MB hard disk
$2,195 retail; Hyperdrive 20MB hard disk
General Computer Corporation; 215 First St.; Cambridge, Mass. 02142; 617-492-5500 or 800-422-0101

■HyperDrive 2000
Coprocessor board; internal hard disk

Replaces the Macintosh CPU with a 12MHz 68000 microprocessor that doubles the computer's internal processing speed. It includes a 20MB internal hard disk drive, an additional 1.5MB of RAM and a floating-point 68881 coprocessor for high-speed numerical calculations.
Available April, 1986; $3,195 retail
General Computer Corporation; 215 First St.; Cambridge, Mass. 02142; 617-492-5500 or 800-422-0101

The Keeper
Mass storage; file server; print server/spooler
512K or larger Macintosh; AppleTalk Personal Network.

Can be used with multiple Macintoshes on AppleTalk or with a single Macintosh computer. In a network situation, the Keeper's file server lets multiple users read and write to the same volume with no special software required.

It is available in six configurations including combinations of fixed hard disks and 5MB, removable hard disk cartridges. Capacities range from 10 to 35MB.
$2,295 to $5,395, depending on hard disk chosen
Micro-Design; 6301 Manchaca Rd.; Austin, Texas, 78745; 512-441-7890

■LoDown

Lodown is a hard disk and tape backup for the Macintosh Plus that offers storage capacities of 10, 20, 40 and 80MB per device as well as a 22 or 60MB tape backup. Up to eight Lodown hard disk/tape backups can be connected to a single Macintosh Plus, increasing data storage capacity to a total of 640MB.
$995 retail; starting price
LoDown; PO Box 5146; Pleasanton, Calif. 94566; 415-426-1747

Macbottom 20
Hard disk drive
$1,595 retail
Personal Computer Peripherals Corp.; 6204 Benjamin Rd.; Tampa, Fla. 33614; 813-884-3092 or 800-622-2888

MacDrive
$1,995 retail; Macdrive5
$3,290 retail; Two Macdrive 5
$1,995 retail; Macdrive 10
$3,290 retail; Macdrive 10+5
Tecmar, Inc.; 6225 Cochran Rd.; Solon, Ohio 44139; 216-349-0600

Macintosh Hard Disk 20

The Macintosh Hard Disk 20 is a a self-contained mass-storage system for the 512K Macintosh that provides 20MB of storage capacity. It comes with all necessary cables and software and is suited for accounting, word-processing, financial-analysis, mailing-list management, and data-base management applications.
Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-996-1010

MegaMac Plus 20 Expansion System

The system is an expansion upgrade specifically for the Macintosh computer, adding a 1MB memory board and an internal 20MB fixed disk to the existing computer. The standard upgrade configurations allows the computer to work at speeds 12 times faster than with the conventional Macintosh configuration.
$2,495 retail
MicroGraphic Images Corp.; 7334 Topanga Canyon Blvd., Ste. 115; Canoga Park, Calif. 91303; 818-992-1190

MegaMac Professional Expansion System
512K or larger Macintosh; color monitor optional.

The system possesses a 20MB internally mounted hard disk drive that utilizes a 3.5-inch hard disk. A port is also provided for another external hard drive. The system provides 1.5MB of RAM. With a 512K, the memory expansion will provide a total of 2MB of usable RAM. Two kinds of external video are provided with the system: external monochrome video and external color video.
$3,495 retail
MicroGraphic Images Corp.; 7334 Topanga Canyon Blvd., Ste. 115; Canoga Park, Calif. 91303; 818-992-1190

■MicahDrive 10 AT and 20 AT
Internal hard disks

Both systems utilize the HFS file manager and come complete with archival/restore

software that will backup the system to either 400K or 800K floppy disks. An SCSI interface is also included.
$1,495 retail; 10 AT
$1,895 retail; 20 AT
Micah; 15 Princess St.; Sausalito, Calif. 94965; 415-331-6422

■Mirror Magnum
800K drive

The Mirror Magnum doubles the capacity and power of the Macintosh. It will recognize single- and dual-sided disks, writing to and reading from them accordingly. Using the Macintosh, Apple's Hard Disk 20 and the Magnum, the user can have 800K of powerful, fast backup.
Mirror Technologies; 2209 Phelps Rd.; Hugo, Minn. 55038; 612-426-3276

Paradise MAC-10 and MAC-20
Hard disk subsystems
$999 retail; 10MB
$1,399 retail; 20MB
Paradise Systems, Inc.; 217 East Grand Ave.; San Francisco, Calif. 94080; 415-588-6000

ParaServ
File, print server
512K or larger Macintosh; AppleTalk Personal Network.

A file and print server that works with the Appletalk Personal Network. It is designed to serve the Macintosh, Macintosh XL, Apple IIe and II+ personal computers.
ParaMIS Corporation; 1011 Brioso Dr., Suite 101; Costa Mesa, Calif. 92627; 714-646-1633

The Sider
10MB hard disk

Features Winchester disk technology, direct booting without floppies, self-contained power supply, and compatibility with all the most popular Apple software. Included are cables, software, and manual.
$995 retail
First Class Peripherals; 3579 Hwy. 50 East; Carson City, Nev. 89701; 800-538-1307

■SlimLine
Hard disk subsystem

The subsystem includes a 20 or 30MB fixed Winchester hard disk drive mounted vertically above a 10MB, removable cartridge hard disk drive.
$2,795 retail; starting price
Univation, Inc.; 1037 North Fairoaks Ave.; Sunnyvale, Calif. 94089; 408-745-0180

■SydeWynder
3.5-inch disk drive

The micro floppy drive is based on a proprietary custom CMOS microprocessor ROM design. Data transfer is 489.6K bits per second. The unit weighs 3.5 lbs. and offers 400K of storage space. The drive comes with a case and connecting cable.
PKI, Inc.; 2539 West 237 St., Unit E; Torrance, Calif. 90505; 800-821-3733 or 213-539-2123

■Tecmar Hard Disk Upgrades
$500 retail; up to 10MB fixed
$900 retail; up to 5MB removable
Computer Concepts; 2697 Lavery Ct., #6; Newbury Park, Calif. 93020; 805-499-0583

Memory Upgrades

■512K Macintosh Upgrade

Upgrade your 128K Macintosh to 512K bytes of memory. Includes a 120-day warranty. Complementary ramdisk is also included.
$2,500 retail
GW Instruments; 3 Ames St.; Cambridge, Mass. 02139; 617-577-1524

512K Upgrade
$229 retail
FutureVest; 542 West 112th St., Suite 6F; New York, N.Y. 10025; 212-222-1607

512K, 1MB, 1.5MB, 2MB Macintosh Upgrades
VOAD Systems; 3304 Pico Blvd.; Santa Monica, Calif. 90405; 213-450-2929

■FastMac
1, 1.5, and 2MB upgrades
MassTech Development Labs, Inc.; 773 Boston Rd.; Groton, Mass. 01450; 617-448-3450

Levco 2-Megabyte MonsterMac
Memory upgrade
$799.95 retail; kit
$899.95 retail; installed
Levco; 6160 Lusk Blvd., Suite C-203; San Diego, Calif. 92121; 619-457-2011

Mac Expanded Memory Upgrades

Upgrades are 128K ot 512K and 512K to 2MB+ in 512K increments. 1MB, 1.5MB and 2MB upgrades are clip-on types.

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Memory Upgrades

$279 to $995 retail
MACohm Projects; 129 N. Randolph; Macomb, Ill. 61455; 800-851-2753

■Macintosh Upgrades

$225 to $900 retail
Computer Concepts; 2697 Lavery Ct., #6; Newbury Park, Calif. 93020; 805-499-0583

MacMEGABYTES and Mac MEGABYTES ROM Enhancement

Memory expansion board; ROM upgrade

MacMEGABYTES—a plug-in replacement board that brings a 128K or 512K Macintosh up to 1024K or RAM.

MacMEGABYTES ROM Enhancement—allows users to run contiguous 1MB of memory instead of 512K split.

$549 retail; 1,024K upgrade for 512K Macintosh
$849 retail; 1,024K upgrade for 128K Macintosh
$149 retail; ROM Enhancement
Micah; 15 Princess St.; Sausalito, Calif. 94965; 415-331-6422

■MacSuper 20
MacSuper 20 FP

The Macsuper 20 consists of a Motorola 68020 processor with 1, 2 or 4MB of RAM, an enhanced SCSI port and a socket for the Motorola 68881 floating-point coprocessor. The Macsuper 20 FP includes the floating-point unit.
Levco; 6160 Lusk Blvd., Suite C-203; San Diego, Calif. 92121; 619-457-2011

Memory Upgrade

Upgrades 128K Macintoshes to 512K RAM, and upgrades 512K in .5MB increments to 1MB, 1.5MB or 2 full megabytes of RAM. A whisper quiet fan is included and all upgrades are guaranteed for a full year.
$250 to $895 retail (depending on amount of memory)
Centa Systems; 5308 Derry Ave., Suite C; Agoura Hills, Calif. 91301; 818-889-6246

■QuickDrive

The basic unit provides 510K of disk-style storage implemented in its own external RAM memory. Quickdrive does not utilize Macintosh memory space. Up to three 510K expansion modules may be installed to provide over 2MB of storage.

The device permits more rapid switching from one application to another. Performance is also enhanced by a user-defined print spooler.

It connects to the Macintosh via the printer or modem port. An output port on Quickdrive provides the interface to the printer. It can also be used in the Appletalk network.
$499 retail; 510K
$169 each retail; 510K expansion modules (up to three)
MacVentures; PO Box 6123; Aloha, Oreg. 97007; 503-645-9696

Solderless Upgrade Kits

Kit includes 17 256K, 150ns NEC DRAMS; 18 special sockets, illustrated instruction manual, multiplexer circuitry, special Macsnippers, Macopener tool kit, 20-minute guided tour videotape and soldering tools needed for installing the multiplexer circuitry. There is no soldering required in the RAM area.
MACohm Projects; 129 N. Randolph; Macomb, Ill. 61455; 800-851-2753

■Three to One Touch Board

Doubles processing speed by increasing the Macintosh's 8MHz processing speed to 12.5MHz. Features include an additional 1.5MB of RAM, an additional 384K of ROM space and expansion capabilities that allow access to the microprocessor bus.
Human Touch Computer Products Corp.; 401 Rt. 70 East, Ste. 200; Cherry Hill, N.J. 08034; 609-429-6300

Modems

Apple Personal Modem

The Apple Personal Modem is a 1,200/300-baud modem that allows a Macintosh to communicate with other computers of any size. Anything that can be stored on a disk can be transmitted via this modem.
Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-996-1010

HabaModem

Hayes-compatible, 300/1200-baud modem
$299.95 retail
Haba Systems, Inc.; 6711 Valjean Ave.; Van Nuys, Calif. 91406; 818-901-8828

Maccessories Portable Modem

Small, 300-baud, battery-powered modem
$140 retail
Kensington Microware Ltd.; 251 Park Ave. S; New York, N.Y. 10010; 212-475-5200

Mercury Modem

A 103/212A Bell Standard Modem that is 100 percent compatible with Hayes Smart Modem 1200.
$265 retail
Computer Friends; 6415 SW Canyon Ct., Suite 10; Portland, Oreg. 97221; 503-297-2321 or 503-292-2156

Professional 2400

Modem

Contains *Mite* software and has synchronous as well as asynchronous operation.
$895 retail
Novation, Inc.; 20409 Prairie St.; PO Box 2875; Chatsworth, Calif. 91311; 818-996-5060

ProModem 1200M

An expandable, 1200/300-baud intelligent modem that comes with *ProCom-M* software and a Mac-to-modem cable.
$549 retail
Prometheus Products, Inc.; 4545 Cushing Pkwy.; Fremont, Calif. 94538; 415-490-2370

Visionary 1200XT

1200/300-bps intelligent modem
$495 retail; 8K RAM
$20 retail; each additional 8K
$595 retail; full 48K RAM
Visionary Electronics, Inc.; 141 Parker Ave.; San Francisco, Calif. 94118; 415-751-8811

Network Products

AppleTalk Personal Network

General-purpose network
Any Macintosh.

Lets computers using The Macintosh Office concept share peripherals and connect together within a work area of approximately 1,000 feet. It can connect up to 32 devices, with computers and peripherals configured in any combination.
$50 per connection
Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-996-1010

■HyperNet

File server

512K or larger Macintosh.

Hypernet is a file server software program that lets users share hard disk storage capacity, files and programs among as many as 32 Macintosh computers linked through the Appletalk network.

Available May, 1986; $295 retail

General Computer Corporation; 215 First St.; Cambridge, Mass. 02142; 617-492-5500 or 800-422-0101

■InterBridge

Local/remote connection

512K or larger Macintosh.

Interbridge is designed for use in connecting several Appletalk Personal Networks to enable access from one network into another for more efficient use of Macintoshes, file servers, modems, Laserwriter printers, and other output devices.

A remote bridge consists of two networks, each equipped with *Interbridge,* using modems over the public telephone system to link networks.

The program is equipped with two Appletalk connectors and two RS-232 ports, which may be activated simultaneously. The Hayes Smartmodem 2400 is supported.

Available April, 1986; $799 retail

Hayes Microcomputer Products; PO Box 105203; Atlanta, Ga. 30348; 404-449-8791

The NETWAY 1000A Communication Server

Communications

512K or larger Macintosh; Appletalk connection.

Allows Macintosh users on an Appletalk network to access an IBM host computer. By emulating an IBM 3274 controller, this hardware and software system establishes a link between Macintoshes and an IBM host system, allowing the Macintoshes to operate as 3278-2 terminals while communicating with the host system.

$2,525 retail; BSC

$2,725 retail; SNA

Tri-Data; 505 E. Middlefield Rd.; Mountain View, Calif. 94043; 415-969-3700

Network Cables, Assembly Plugs, Extenders

H-B Associates; PO Box 857; Union City, Calif. 94587; 800-423-3014 or 800-423-4224 in Calif.

Omninet Network Interface

Local area network

512K or larger Macintosh.

Omninet Network Interface provides an alternative to Apple's Appletalk Network. The interface enables 512K Macintosh users to connect to Corvus' *Omninet* network along with IBM PC, AT, and compatibles, as well as Apple IIe microcomputers.

$395 retail; network interface per station

$395 retail; disk management network software per network

Corvus Systems, Inc.; 2100 Corvus Dr.; San Jose, Calif. 95124; 408-559-7000

PCMacBridge

IBM PC to AppleTalk access

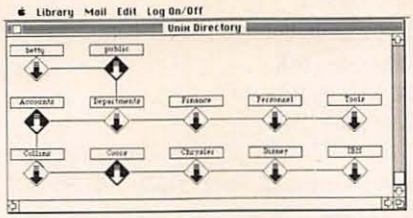
An expansion card that permits use of an IBM PC or most compatibles on the Appletalk Personal Network.

$595 retail

Tangent Technologies; 5720 Peachtree Pkwy., Suite 100; Norcross, Ga. 30092; 404-662-0366.

■Ultra-Office

Multi-user, multitasking system



512K or larger Macintosh.

Ultra Office is a software/hardware system that allows Macintosh and IBM PC workstations to communicate with each other, share information and use common system resources.

Ultra-Office uses Unix-based host processors, such as the Zilog System 8000, IBM PC AT and Sun Microsystems family, to expand the processing power of each attached workstation. Accounting systems, multi-user data base management systems, resource management systems and many other Unix-based applications are available to all workstation users.

Ultra-Office supports small-office systems of less than 10 users and large corporate systems comprised of thousands of users. It can be integrated with existing corporate information systems, and it provides gateways to corporate facilities through common communications protocols such as Ethernet and SNA.

The system includes the following information management capabilities: Library, which allows a workstation to store information in a common library that is available to all system workstations; Mail, which supports communications between workstations (Macintoshes, IBM PCs and Unix terminals); Print, which allows workstations to share common system printers, including the laserwriter; Term, which allows workstations to tap into a Unix host processor; Disk, which allows a workstation to use the Unix host's hard disk; and *Net,* the basic information management and network communications software that supports Ultra-Office.

$300 retail; per Macintosh

$2,000 retail; Unix component (including hardware and software)

Lutzky-Baird Associates; 5601 Slauson Ave., #222; Culver City, Calif. 90230; 213-649-3570

Zilog System 8000

Unix-based microcomputer; cluster processor

Up to 30 Macintoshes; Ultra-Talk; and the Appletalk Personal Network.

Supports clusters of Macintoshes on an Appletalk network. Lutzky-Baird's *Ultra-Office* software package provides electronic mail, shared files, spooling (including Laserwriter), and more. Macintoshes can be "diskless." Optionally, users can select access to UNIX and multi-user UNIX applications software.

Zilog's long-haul communications protocols, (2780/37800, 3270 SNA/SDLC and Bisync, X.25) can be employed for mainframe access and communication with remote work groups. Ethernet is available for local area networking.

Zilog, Inc.; 1315 Dell Ave.; Campbell, Calif. 95008; 408-370-8000

Printers and Enhancements

■AP-80

80-column dot matrix printer

Features both hardware plug and full software compatibility with the Apple Imagewriter, prints drafts at 75 characters per second and business letters in near letter-quality mode at 15 characters per second.

$379 retail

Epson America; 2780 Lomita Blvd., Torrance, Calif. 90505; 213-539-9140 or 800-421-5426

Printers and Enhancements

Apple ImageWriter II

Works with any Apple personal computer system, offers three print modes, allows printing in as many as seven colors, handles cut-sheet or continuous paper, features push-button paper loading for single sheets, and with suitable software, supports standard text enhancements.
Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-996-1010

AYN Interface

Epson printer interface
$99.95 retail
Dresselhaus Computer Products; 837 E. Alosta Ave.; Glendora, Calif. 91740; 818-914-5831

Granny Smith Connection

Hardware parallel-expansion interface
Includes hardware parallel expansion box with built-in shielded cable and connectors, Parallel Print Disk printer drivers, and user's start-up guide.
$114.90 retail
Z.A.P. Logic Corporation; 290 Larkin St.; Buffalo, N.Y. 14210; 416-225-8815

Hamlet Act II

Connects the Macintosh with major Centronics parallel dot matrix and letter quality printers. It converts the Macintosh serial data to parallel, up to a maximum of 8 bits, allowing both text and graphics. Comes complete with AC/DC adapter and all required shielded cables.
$149 retail
Belkin Components; 4718 W. Rosecrans Ave.; Hawthorne, Calif. 90250; 213-644-3184 or 800-223-5546

■Harmonizer

Serial or parallel connection
A serial to parallel or parallel to serial converter all in one. Allows users to quickly adapt printers, etc., to devices they normally can't work with.
$99 retail
Applied Creative Technology, Inc.; 2156 W. Northwest Hwy., Suite 303; Dallas, Texas 75220; 800-433-5373

LaserWriter

512K or larger Macintosh.
The Laserwriter prints typeset-quality text and graphics from a Macintosh computer. It is capable of printing full-page text and graphics at 300-dots-per-inch resolution, and contains a 12MHz, 68000 microprocessor, one and a half megabytes of RAM, and half a megabyte of ROM. It has the Appletalk network hardware built in, allowing it to be shared by up to 31 networked Macintosh users.
$5,999 retail
Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-996-1010

■LaserWriter Plus

Apple Computer, Inc., see article on page 124

Macintosh and Imagewriter II Serial Printer Cables

$24.95 retail
Belkin Components; 4718 W. Rosecrans Ave.; Hathorne, Calif. 90250; 213-644-3184 or 800-223-5546

Mac Master

Universal buffer and printer controller
$299 retail; 64K
$450 retail; 250K
$700 retail; 1MB
Computer Friends; 6415 SW Canyon Ct., Suite 10; Portland, Oreg. 97221; 503-297-2321 or 503-292-2156

Mac Switch

Allows two printers to share one computer or two computers to share one printer. Its two versions are Centronics parallel and RS-232 serial.
$75 retail
Computer Friends; 6415 SW Canyon Ct., Suite 10; Portland, Oreg. 97221; 503-297-2321 or 503-292-2156

Max

Printer buffer
Max comes with 256K of RAM and is expandable to a full 1MB. It has a single-sheet select and a unique gas gauge-type indicator that shows its available space. It is Appletalk compatible.
$549 retail
DataSpace Corporation; 205 Riviera Dr., Unit 9; Markham, Ontario, Canada L3R 2L6; 416-474-0113

Printer Optimizer

Printing control center; print spooler
$527; with serial option 64K
$647; with serial option 256K
$50; additional for *Dentalmac* option
Applied Creative Technology, Inc.; 2156 W. Northwest Hwy., Suite 303; Dallas, Texas 75220; 800-433-5373

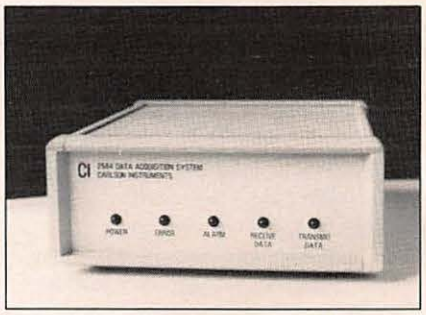
Universal Printer Buffer

A 64K or 256K buffer that includes four interfaces in one unit.
$269 retail; 64K
$329 retail; 256K
Johnathon Freeman Designs; 1067 Dolores St.; San Francisco, Calif. 94110; 415-822-8451

Other Hardware

■2584 Data Acquisition System

Analog measurement and control



Simplifies the connection between real world analog inputs, digital I/O, and the Macintosh. The 2584 provides an RS-232C port for a direct interface with the Macintosh, enabling it to monitor real world processes such as temperature, humidity, pressure, etc. It can then be controlled through simple high-level ASCII commands from *BASIC, Macterminal,* etc. The product is especially suited for collecting data and performing digital control at remote locations.
$895 retail
Carlson Instruments; PO Box 243; Warner, N.H. 03278; 603-456-2141

A+ Mouse

Optical mouse
$99 retail
Mouse Systems Corporation; 2600 San Tomas Expy.; Santa Clara, Calif. 95051; 408-988-0211

Abaton Products
Program converter; disk drive; optical scanner

The Abaton Transform translates Apple II application programs (and related files) into native Macintosh programs. It consists of a plug-in board for the Apple II, a serial cable for connection to a Macintosh, and a 3 1/2-inch diskette. Resulting programs are virtually identical to the original. $1,995 retail

The Abaton Drive 5.25 disk drive reads and writes files in more than 50 5 1/4-inch formats, runs CP/M programs, and allows the daisy chaining of additional 8-, 5 1/4-, 3 1/2-, and 3-inch diskette or tape drives. $695 retail

Scan 300 is an optical scanner that digitizes drawings, graphics, and photographs into a Macintosh for the purpose of producing high-quality printouts. Its 300-dot-per-inch resolution matches the output of the Apple Laserwriter, Hewlett-Packard, Corona, Canon, and Quadram laser printers. $2,395 retail

Abaton Technology Corp.; 1526 Cloverfield Blvd.; Santa Monica, Calif. 90404; 818-905-9399

Apple Computer Hardware
$495 retail; external disk drive
$99 retail; numeric keypad
$49 retail; security kit
$99 retail; carrying case
$225 retail; 300-baud modem
$495 retail; 1200-baud modem
Apple Computer, Inc.; 20525 Mariani Ave.; Cupertino, Calif. 95014; 408-996-1010

Avatar PA1000E
Protocol converter

A stand-alone protocol converter for attaching an ASCII terminal or personal computer to the IBM 3270 network.
$1,095 retail
Avatar Technologies, Inc.; 99 South St.; Hopkinton, Mass. 01748; 617-435-6872

BenchTop Instrument BEN-2048
Customizable data acquisition and laboratory control system
$650 retail
Metaresearch, Inc.; 1100 SE Woodward; Portland, Oreg. 97202; 503-232-1712

The Big Mac Monitor
High-resolution, 23-inch video monitor
$1,995 retail
PDS Video Technology, Inc.; 1152 Santa Barbara St.; San Diego, Calif. 92107; 619-222-7900

■BIT9 Card

This 1.00" x 0.70" circuit card plugs into a 1983-84 Macintosh Logic Board at E3. It provides all logic needed to address 512K of RAM. The upgrade requires that you desolder 16 64K DRAMs and replace them with 16 socketed 256K 200ns or faster DRAMs.
$22.50 retail
Cross Technology Company; PO Box 80242; Seattle, Wash. 98108; 206-322-2128

CadMac 9800
Workstation

Combines the power of a high performance, Unix workstation based on the Motorola 68020 CPU with the graphics environment of the Macintosh. It offers a distributed file system for Macintoshes and IBM PCs over an Appletalk network.
$21,500 retail
Cadmus Computer Systems, Inc.; 600 Suffolk St.; Lowell, Mass. 01854; 617-453-2899

■Chromatron
Video scan converter

The Chromatron is a real-time video scan conversion system that takes Macintosh video and converts it to standard television scan rates. In several modes, color is obtained free of charge.

Up to 16 colors can be created within *Macpaint* and displayed on a color video monitor. Many other colors can be created by using halftones. Macintosh screens may also be displayed, recorded, broadcast, projected, overlayed, and made into color slides.
Beck-Tech; 41 Tunnel Rd.; Berkeley, Calif. 94705; 415-548-4054

Composite Video Adaptor
Internally installed video-output unit
$199.95 retail
Mentauris Technologies; PO Box 1467; San Marcos, Texas 78666; 512-396-1565

ConcertWare+ Keyboard

Includes a four-octave musical keyboard with full-size keys and a version of *ConcertWare+*, which can accept input from the keyboard.
$219.95 retail
Great Wave Software; 104 Gilbert Ave.; Menlo Park, Calif. 94025; 415-325-2202

Datapen
Bar-code reader
$375 retail
Datalogic Optic Electronics, Inc.; 20340 Center Ridge Rd.; Rocky River, Ohio 44116; 216-333-9410

■DataSaver
Standby power supply

A battery powered unit that keeps the Macintosh computer system operating during AC power interruptions or transients. Hold-up time while running on the built-in battery is typically 5 to 15 minutes. External battery jacks are provided to allow extended running time or portability with the use of any 12 volt battery.

Features include rechargeable sealed battery, automatic battery charger, solid-state power inverter, AC line voltage monitor and cutout switch, two outlets, visual and audible alarms, remote alarm signal for interrupt-driven computer applications, overvoltage transient suppression, and EMI noise filtering.
$350 retail
Cuesta Systems Corporation; 3440 Roberto Ct.; San Luis Obispo, Calif. 93401; 805-541-4160

Infotek Products
Various hardware/software devices

Ultraport—parallel port kit that allows attachment of an external hard disk. $425 retail

Mac File Server—consists of network file-server hardware, cable, and software that can connect up to 31 Macintoshes to the file server. $1,800 to $4,900 depending on disk capacity and backup.

Personal Laser Printer. $3,300 retail

Network Laser Printer—for use with Macintosh XL or other file-server network. $3,300 (ver. 1) and $6,800 (ver. 2) retail

Color Cartridge Ink Jet Printer.

Machost—connects up to 12 Macintoshes using *Macterm.* $449 retail

BigMacRAM—two-megabyte RAM card for the Macintosh 512K and XL. $3,900 retail

Mammouthmac—Macintosh with 10- or

Other Hardware

20MB Winchester hard-disk drive, and 512K, 1, 2, 3, or 4MB RAM.

Unimac Business System—allows access to microcomputers supported by the Unix 5 operating system.

Unimac Cluster—a multi-user Unix system consisting of a modified 512K Macintosh, one to 12 Macintosh terminals, and the Unix 5 operating system.

Macnet Business System—a multi-user application system that uses business applications and data bases developed for the Macintosh.

Macpiggyback—back-mounted Winchester hard disk and 512K upgrade. $1,669 retail

512K Upgrade. $499 retail

Macmegram—2, 3, or 4MB of internal RAM. $1,199 retail

Macvid—composite video output adapter that mounts internally. $189 retail

Macdig—sound digitizer. $125 retail

Macmusic—keyboard and software that turn the Macintosh into a synthesizer and composing system. $145 retail

Macdouble—double-sided floppy disk drive for external drive. $349 retail

Stereomac—stereo synthesizer, amplifier, and speakers. $74 retail

Color Plot—24" by 24" three-color plotter. $395 retail

Digitizer Pad—plugs into mouse port and allows mouse or digitizer use. $448 retail

Infonet—Appletalk-compatible professional quality networking software. $49 per node retail

Projection Monitor.

Infotek, Inc.; 56 Camille Ln.; E. Patchogue, N.Y. 11772; 516-289-9682

KAT

Touch tablet

Installs as a desk accessory on any Macintosh disk and allows both relative and absolute cursor positioning modes.

$239.95 retail

Koala Technologies Corp.; 2065 Junction Ave.; San Jose, Calif. 95131; 408-946-4483

L.I.N.E.A.C.

Large-scale Intelligent Network for Environmental Audit and Conservation

Metaresearch, Inc.; 1100 SE Woodward; Portland, Oreg. 97202; 503-232-1712

Mac488A

IEEE 488 bus controller

$595 retail

IOtech, Inc.; PO Box 21204; Cleveland, Ohio 44121; 216-439-4091

MacADIOS Model 411

Analog/digital, input/output system

Turns the Macintosh into a laboratory workstation. Hardware features include 4 voltage outputs, 8 voltage inputs, 16 digital I/O, time, and clock. Software includes *Oscilloscope, Spectrum Analyzer, XY Recorder, Spectrogram,* and *Control from BASIC.*

$2,500 retail

GW Instruments; 3 Ames St.; Cambridge, Mass. 02139; 617-577-1524

Mac and Mac Plus Cables

Apple-equivalent molded cables that interface the Macintosh and Macintosh Plus to a variety of printers, modems and drives.

$27.95 retail; Macintosh Plus cables for Imagewriter II and SCSI Drive

$19.95 retail; Macintosh Plus to Macintosh adapter cable

$27.95 retail; Macintosh cables for Imagewriter II

$29.95 retail; Macintosh cables for serial printer

$29.95 retail; Macintosh cables for modem

N-Squared Products, Inc.; 2401 Qume Dr.; San Jose, Calif. 95131; 408-435-0227

■MacBuffer

A microprocessor-controlled hardware system that, with 256K to 1MB or RAM, is designed to reduce wait times for Macintosh print functions 50 to 90 percent. It includes a new Imagewriter driver to increase the data transmission rate to 57.6 kilobaud, six times faster than normal. The ability to connect two Macintoshes to one Imagewriter and Pause and Local copy modes are other key features.

$299 to $699 retail

Ergotron, Inc.; 1621 E. 79th St., Suite C133; Minneapolis, Minn. 55420; 612-854-9116 or 800-328-9839

MacCharlie Plus

512K or larger Macintosh.

Coprocessor that allows the Macintosh to use IBM PC software. Files can also be transferred between *MacCharlie* and a Macintosh.

$1,295 retail; 256K, single floppy drive

Dayna Communications; 50 South Main St., Suite 530; Salt Lake City, Utah; 800-531-0600

■Macintosh Plus

Apple Computer, Inc., see article on page 124

■MacMEGABYTES Hyperdrive Adapter Kit

Using a special adapter kit, both the megabyte memory upgrade board and the disk controller card of the Hyperdrive can fit inside the same Macintosh. Includes mechanical and electronic components necessary to implement the combination of the two products.

$99 retail; plus installation

Beck-Tech; Claremont Hotel; 41 Tunnel Rd.; Berkeley, Calif. 94705; 415-548-4054

MacNifty Polyphonic Keyboard

Any Macintosh.

Comes standard with a music driver. With the keyboard and *ConcertWare+*, from Great Wave Software, you can touch the keys and see the notes appear on the musical staff.

$149.95 retail

Kette Group, Inc.; 6860 Shingle Creek Pkwy.; Minneapolis, Minn. 55445; 612-566-0221 or 800-328-0184

MacNifty Stereo Sound System

Any Macintosh.

The MacNifty Stereo Sound System converts Macintosh sounds to simulated stereo by splitting highs and lows between two powerful speakers. User controls bass, treble, balance, low and high impedance output, and volume.

$79.95 retail

Kette Group, Inc.; 6860 Shingle Creek Pkwy.; Minneapolis, Minn. 55445; 612-566-0221 or 800-328-0184

Mac Proteus

A two-port buffer/switch with a method of allocating available memory according to the need (dynamic memory allocation). The initial version of Mac Proteus has 64K of memory.

$250 retail

Computer Friends; 6415 SW Canyon Ct., Suite 10; Portland, Oreg. 97221; 503-297-2321 or 503-292-2156

MacTablet

Graphics tablet

$395 retail

Summagraphics Corporation; 777 State Street Extension; Fairfield, Conn. 06430; 203-384-1344

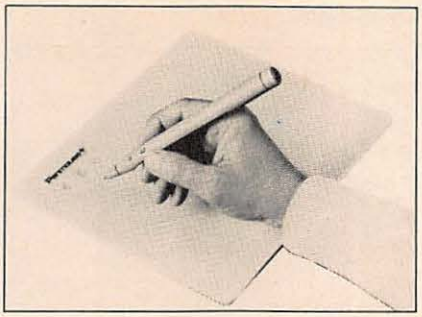
Microsoft MacEnhancer 2.0
Port-expansion system
$249 retail
Microsoft Corporation; 10700 Northup Way; Box 97200; Bellevue, Wash. 98009; 206-828-8080

■MIDIMAC Interface

Connects the Macintosh to any music synthesizer with MIDI. It attaches to the modem port, printer port, or both. It provides MIDI IN and MIDI OUT connections, which may be connected using standard MIDI cables to any synthesizer, drum machine, or other MIDI device.

Opcode Systems; 707 Urban Ln.; Palo Alto, Calif. 94301; 415-321-8977

■Penmouse+
Input device



A revolutionary new pointing device that is softkey selectable between a graphics tablet mode and a mouse mode. The two components are a cordless pen and an 8.5" x 11" x 1/4" surface. The active graphics area is 6" x 9" and it operates at 200 ppi as a tablet and 100 ppi as a mouse. The pen features three-button capability, which enables the user to emulate the majority of mice available.
$375 retail; includes pen, cabling, power supply, and software driver

Kurta Corporation; 4610 South 35th St.; Phoenix, Ariz. 85040; 602-276-5533

■PhoneLink
Autodialer hardware interface

Phonelink works with *Sidekick* enabling users to dial out automatically from the Mac-dialer, without the use of a modem. Users with a modem and Phonelink can use *Sidekick*'s autodialer to place calls, while simultaneously uploading or downloading information from any of the on-line services, such as Dow Jones, Compuserve, The Source or MCI.
$19.95 retail
Borland International; 4585 Scotts Valley Dr.; Scotts Valley, Calif. 95066; 408-438-8400

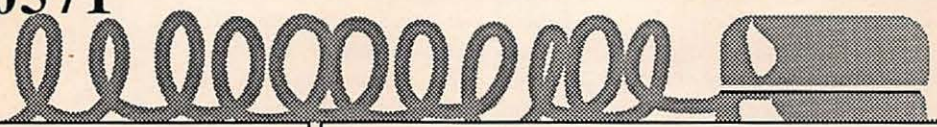
■Power Director Model P15
Power protection

The Power Director Model P15 provides Macintosh users with high-speed, transient-voltage surge suppression on AC power lines.

The unit also filters out electromagnetic and radio-frequency interference (EMI/RFI) and provides overcurrent protection. It in-

When Your Macintosh Needs an Upgrade, the Number to Call is:
(818) 407-0571

microgaphic IMAGES
The Single Source for All Your Macintosh Upgrade Needs.



MegaMac™ **SX** — Fully integrated 20-mbyte internal hard disk plus 1-mbyte of RAM, complete with RamDisk software. **$2195.00**

MegaMac™ **I** — 1-mbyte of RAM, and SCSI port with a Co-Processor port give you flexibility as well as value. **$595.00**

MegaMath I — 1 mbyte of memory with a 68881 math Co-Processor. The utmost in speed ! **$1495.00**

CINEMAC™ — External video output card will drive monitors and video projectors. **$149.50**

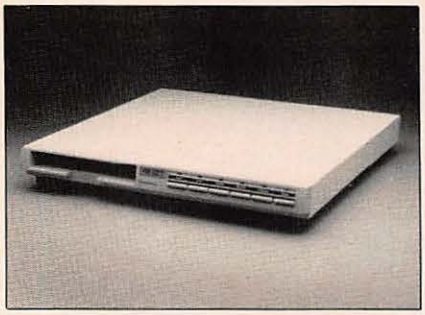
Integrated. Compatible. Upgradeable.

MegaMac is a trademark of MicroGraphic Images. Macintosh is a trademark of Apple Computer.

Dealer Inquiries Invited.

Circle 63 on Reader Service Card

Other Hardware



cludes a separate surge-suppression circuit for the protection of modems and other data-communications devices.

In addition, a static-discharge nameplate dissipates static electricity that can be harmful to data.

The Power Director Model P15 is UL approved and meets IEEE 587-1980 Class A and Class B standards, which means it can withstand a minimum of 6,000 volts at 500 amps.
$169.95 retail
Computer Accessories Corp.; 6610 Nancy Ridge Dr.; San Diego, Calif. 92121; 619-457-5500

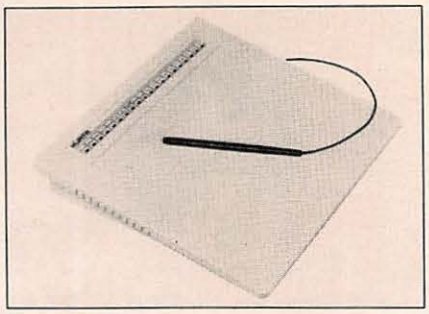
Project-A-Mac
Wide-screen projection system
$4,495 retail
PDS Video Technology, Inc.; 1152 Santa Barbara St.; San Diego, Calif. 92107; 619-222-7900

QuickStick

Combining the cursor response of a mouse with the speed and convenience of a joystick, Quickstick provides the Macintosh with a dual-purpose device allowing cursor control with joystick design and functions.
$79.95 retail
Kraft Systems; 450 W. California Ave.; Vista, Calif. 92083; 800-854-1923 or 800-542-6436 in Calif.

Sensorbus Data Acquisition System and Software
Data aquisition network
$180 retail; single module
$895 retail; five modules with accessories and software
Transensory Devices, Inc.; 44060 Old Warm Springs Blvd.; Fremont, Calif. 94538; 415-490-3333

■Series One
Graphics tablet



The injection-modeled casework of the tablet has a solid 8-degree slope and the smallest footprint in the industry. Includes pen, cabling, power supply, and software driver.
$695 retail; 8.5" x 11"
$795 retail; 12" x 12"
$895 retail; 12" x 17"
Kurta Corporation; 4610 South 35th St.; Phoenix, Ariz. 85040; 602-276-5533

Smarthome
Home automation

Smarthome is a home-control unit that links a Macintosh running *Smartpanel* software with radio and power-line carrier technologies and produces a wireless system that can provide overall security, energy savings, appliance and light control, and convenience. The computer can be used for normal functions while the Smarthome carries on its monitoring duties.
$600 retail; starter kit
$99 retail; Macintosh software
Cyberlynx Computer Products, Inc.; 4828 Sterling Dr.; Boulder, Colo. 80301; 800-732-8739 or 303-444-7733

Systemizer
Serial/parallel printer controller; data buffer; printer sharing
$299 retail; 64K model; other models available
Applied Creative Technology; 2156 W. Northwest Hwy., Suite 303; Dallas, Texas 75220; 800-433-5373

TPS Electronics
PC-380 Bar Code Reader
PC-580 Magnetic Stripe Reader
PC-3800 Bar Code/Magnetic Stripe Reader Combination
$795 retail; PC-380
$695 retail; PC-580
$995 retail; PC-3800
TPS Electronics; 4047 Transport St.; Palo Alto, Calif. 94303; 415-856-6833

Universal Microcontroller EMM-2048a

A stand-alone, MCS-51 (Intel) based microcontroller that connects serially to the Macintosh.
$750 retail
Metaresearch, Inc.; 1100 SE Woodward; Portland, Oreg. 97202; 503-232-1712

View Control System
Visual input device

Input device that moves the cursor where the operator looks on the screen. It features a lightweight headset that measures subtle changes in the rotation and angle of the operator's head and then translates these changes into cursor movement commands.
$199 retail
Personics Corporation; 2352 Main St., Bldg. 2; Concord, Mass. 01742; 800-445-3311 or 800-447-1196 in Mass.

■The Bag

The Bag is made of handcrafted Columbia leather that holds the Macintosh, keyboard, mouse and external drive. Features include padded interior, Velcro fasteners, outside pocket and adjustable shoulder strap.
$149 retail
Caribbean Computer Enterprises; 830 NE Pop Tilton's Pl.; Jensen Beach, Fla. 33457; 305-944-8718

Clean Image Ribbon Kit

Cleans the Imagewriter I and II in less than 60 seconds without removing the printhead.
$19.95 retail
Clean Image Ribbon Co., Inc.; 2215-R Market St.; San Francisco, Calif. 94114; 415-552-2440

Complimate Products

Universal Printer Stand—a solid oak stand that will fit at least 90 percent of the printer models. The UPS-S is the slant model, and the UPS-L is the level model. $15.95 each retail.

Monitor Stand—the Macintosh monitor and external drive fit on top of the stand and the keyboard stores underneath. $39.95 retail

Printer Stand—designed for the Imagewriter printer. $49.95 retail

Roll Top Disk Files—contains tabbed dividers and keyed lock, and will hold either 50 or 100 3.5" disks. $36.95 retail; 50 disk file, $49.95 retail; 100 disk file
Complimate Products; 137 S. Eucla Ave.; San Dimas, Calif. 91773; 714-599-9206

Comptrex Limited

Approved Macvideo Plus Interface—an external composite video output for connecting compatible external video monitors. Approved for Mac Plus. $188 retail

Adscan Macmonitor 23—a 23" large screen, high-resolution monitor with switch selectable compatibility. $1,490 retail

Macmonitor Projection System—projects a Macintosh-compatible white picture up to 10 feet in size. $3,980 retail

Macmonitor 19—a portable 19" medium-resolution monitor. $788 retail

Macmonitor 12—a small, desktop, 12" high-resolution monitor. $995 retail

Macmonitor 17—a large, desktop, portable, 17" high-resolution monitor. $1,120 retail

Macmonitor 23—a large, 23" high-resolution monitor. $1,290 retail
Comtrex Limited; PO Box 5500; Newport Beach, Calif. 92662; 714-673-4200 or 800-443-2751, ext. 133

CompuCover

Dust covers; disk wallets; hard covers
Send for catalog
CompuCover; PO Box 310; Mary Esther, Fla. 32569; 800-874-6391

Computer Dust Covers

Co-Du-Co; 5920A W. St. Paul Ave.; Milwaukee, Wis. 53214; 414-476-1584

Computer Table

Its 28" x 28" work space is designed for the monitor, keyboard, mouse, and printer.
$160 delivered
PREMIER Computer Furniture; 2057 South Broadway; Denver, Colo. 80210; 303-761-5671

Covers; Cases

Antistatic, waterproof, nylon dust covers.
$25.50 retail; four-piece cover set
$75 retail; Cordura carrying case
ComputerAid, Inc.; PO Box 293; Barrington, R.I. 02806; 401-245-0532

Custom Dust Covers

$36.95 retail per set (wholesale rates available)
Elegant Interiors; 855 South Knoxville; Tulsa, Okla. 74112; 918-835-5807

Designer Dust Covers

Crosby Creations; W. 3327 Alice Ave.; Spokane, Wash. 99205; 509-327-6884

■Fanny Mac

A ball bearing fan unit that fits discretely into the handle recess of the Macintosh.
$129.95 retail
Beck-Tech; 41 Tunnel Rd.; Claremont Hotel; Berkeley, Calif. 94705; 800-227-2400

Fiberbilt Cases

Mac-Mover—measures 20"x 12"x 16" and holds all the Macintosh components and an external drive. $104 retail

Mac-System Flight Case—measures 19"x 15"x 21", meets airline size and weight regulations, and holds entire Macintosh system. $225 retail

Imagewriter Flight Case—holds Imagewriter printer. $155 retail
Fiberbilt Cases, Inc.; 601 W. 26th St.; New York, N.Y. 10001; 800-847-4176

Floppiclene; Microclene

Cleaning kits

Floppiclene is a disposable disk drive cleaning system that features a wet/dry system and disposable media for effective cleaning. $34.95 retail; kit; $14.95 retail; refill

Microclene is a mouse and printer/keyboard cleaning kit. $24.95 retail
Automation Facilities Corp.; 6383 Rose Ln.; Santa Barbara, Calif. 93013; 805-684-5464

Hardcover

A set of rigid, color-matched ABS covers for the keyboard and numeric keypad.
$12.95 retail per set
Hardcover, Inc.; 242 N. Cleveland; PO Box 2240; Wichita, Kansas 67201; 316-263-6120

Hybrid Cases and Accessories

Catch Bag Hardshell—1/4" mahogany plywood covered in waterproof, rip-proof Cordura with outside pockets, latches, and handles.

Roadie—either 1/4" or 3/8" mahogany plywood with heavy ball corners, large recessed hardware, aluminum valences and binding, and thick formica laminate.

Zip Bag Hardshell—1" layer of hard ethafoam covered with Cordura, with zipper instead of catches making it extremely waterproof.

Dust covers—protective nylon.
Hybrid Cases & Accessories; 1121-20 Lincoln Ave.; Holbrook, N.Y. 11741; 516-563-1181

Infotek Accessories

$49 retail; Maccool
$12.95 retail; Mackeybase
$49.95 retail; Macamp
$19.95 retail; Mactools
$16.95 retail; Macheadphones
$19.95 retail; Macspeaker
$6.95 each retail; colored ribbons
$5 retail; black ribbon
$19.95 retail; Macinker
$49 retail; Macdesk
$4.95 retail; Mousepointer
$350 retail; Portamac
$299 retail; MacUPS
$34.95 retail; Macportswitch, 2-device switch
$49.95 retail; Macportswitch, 4-device switch
Infotek, Inc.; 56 Camille Ln.; E. Patchogue, N.Y. 11772; 516-289-9682

I/O Design Accessories

Mac Luggage—1,000 denure Cordura nylon carrying cases. *Macinware* holds the Macintosh and external drive. $84.95 retail.

Imageware holds the Imagewriter. $69.95 retail. *Imageware-15* holds the wide Imagewriter. $84.95 retail

ColoRibbons—available in red, blue, green, yellow, brown, purple, gold, silver, and orange. $9.95 each retail

Color 6 Pack—package of one each of red, blue, green, yellow, brown, and purple. $44.95 retail

T-Shirt Factory—one each red, blue, yellow, and black heat transfer ribbons. $44.95 retail

I/O Design, Inc.; PO Box 272; Rumson, N.J. 07760; 201-747-0943 or 800-241-2122

Kensington Maccessories

$49.95 retail; Circular Polarizing Filter, Surge Suppressor
$99.95 retail; Control Center
$29.95 retail; Disk Case and Disk Pocket, Disk Drive Cleaning Kit, Printer Stand
$24.95 retail; Mouse Cleaning Kit with Mouse Pocket
$9.95 retail; Mouseway, Mouse Pocket, External Drive Dust Cover
$89.95 retail; Starter Pack
$34.95 retail; Tilt/Swivel
$24.95 retail; Swivel
$12.95 retail; Travelling Disk Case
$13.75 retail; Macintosh Dust Cover, Macintosh XL Dust Cover, Imagewriter Dust Cover, 15" Imagewriter Dust Cover, Imagewriter II Dust Cover
Kensington Microware Ltd.; 251 Park Ave. S; New York, N.Y. 10010; 212-475-5200

MacAttire

Nylon covers
$21.95 retail; Macintosh
$15.95 retail; standard Imagewriter
$16.95 retail; wide Imagewriter
$7.95 retail; external drive
$7.95 retail; keypad
$26.95 retail; Macintosh XL
$23.95 retail; Laserwriter
$11.95 retail; The Clutch (wallet carrier holds 8 disks)
Environmental Software Company; 214 8th St., Suite 303; Glenwood Springs, Colo. 81601; 303-945-0366

MACBCOOL

Cooling enhancement

An efficient, quiet fan provides a continuous flow of fresh air through the computer. It is equipped with a built-in surge suppressor and EMI line filter, and operates as a control center for most power needs.
$169 retail
MPH Computer Products; 2660 Loma Ave.; S. El Monte, Calif. 91733; 800-231-2401 or 818-442-7829

■MacBreeze

A piezoelectric quadrature fan that contains no bearings, brushes, or other rotating parts, and generates no electromagnetic interference. It installs inside of the Macintosh, is almost silent, and cools by aiding the natural convection cooling and by circulating air inside the case.
$59.95 retail
Levco; 6160 Lusk Blvd., Suite C-203; San Diego, Calif. 92121; 619-457-2011

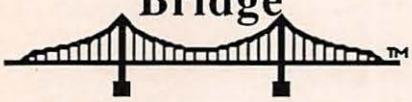
Maccessories A-B Box

Lets you connect two peripherals to one serial port and also lets you share one peripheral between two computers.
$99.95 retail
Kensington Microware Ltd.; 251 Park Ave. S; New York, N.Y. 10010; 212-475-5200

Software Bridge, Inc.

Currently bridging two gaps!

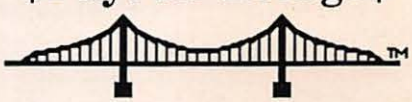
Video Bridge



Video•Bridge is a complete customer and inventory tracking system for video rental stores. It is as friendly to use as the Macintosh, with windows, pull-down menus and screen buttons. Most operations can also be performed from the keyboard. The system is fast and flexible, and can be customized to a great extent by the individual rental store.

- **Customer Tracking**
- **Inventory Tracking**
- **Cash Drawer**
- **Invoicing**
- **Bar Codes**
- **Multi-user ***

$Payroll•Bridge$



Payroll•Bridge is a combination payroll and personnel system for the Macintosh. You can record employee information, track vacation and sick-leave eligibility and usage. The Payroll allows three different rates per pay period, with both hourly and salaried employees. FICA, federal, state and local withholding is automatically calculated using either percentage or tax table methods. Complete payroll reporting includes 941, W-2 and paychecks.

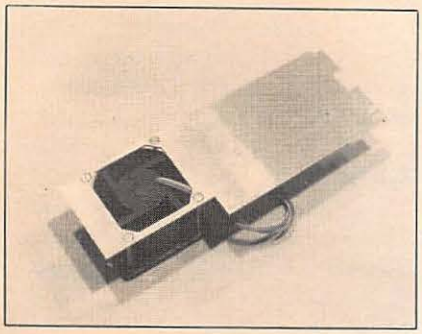
- **Easy to use**
- **Fast and Flexible**
- **Loaded with features**

To bridge either of these gaps in your business, contact your dealer or send $399 (+ $10 handling) to:

SOFTWARE BRIDGE, INC. • 6925 UNION PARK CENTER #413 • MIDVALE, UTAH, 84047 • (801) 562-2121

Macintosh is a trademark licensed to Apple Comuter Inc. Circle 59 on Reader Service Card * Additional Charge

■MacCooler



An internal, AC-powered cooling fan that is mounted on a metal plate that fits inside the rear cover.
$45 retail
Design Eight; 1061 E. Hope St.; Mesa, Ariz. 85203; 602-969-9208

MacCrisper

A cleaning kit designed to clean the interior and exterior of the Macintosh. It includes three bottles of cleaning chemicals, a bottle of compressed air, a dust brush, lint free cloths, cotton swabs, and instructions.
$24.95 retail
Jandlar Micro Products; 200 Carol Ct.; Danville, Calif. 94526; 415-820-8555

MacGard

Provides surge and static protection.
Systems Control; PO Box 788M; Iron Mountain, Mich. 49801; 800-451-6866

■MacHutch

Fits on top of a table or desk to organize and store the Macintosh, mouse, second disk drive, printer and paper, modem, hard disk drive, manuals and diskettes, phone attachments, and swivel stand. Its dimensions are 30" high, 30" wide and 12" deep.
$199.95 retail; solid oak
$166.95 retail; solid pine
$179.95 retail; wood veneer
Computer Alternatives, Inc.; 2035 Hwy. 64-70 SE; Hickory, N.C. 28601; 704-324-2040

Mac Inker

Automatically re-inks any ribbon (felt, silk, cotton, or nylon) for any computer printer that uses cartridges or spools.
$59.95 retail
Computer Friends; 6415 SW Canyon Ct., #10; Portland, Oreg. 97221; 503-297-2321 or 503-292-2156

Macintosh Case

$45 retail
American Tourister; 91 Main St.; Warren, RI 02885; 401-245-2100

MacKablit

A security device that deters theft of Macintosh computer hardware using steel cables and locks.
$39.95 retail
Secure-It, Inc.; 10 Center Sq.; East Longmeadow, Mass. 01028; 413-525-7039

MacLock

Heavy-duty antitheft kit that includes a 3/16", plastic-jacketed steel cable; desk clamp with inaccessible screws; and a hardened-steel padlock.
Boston Software Publishers, Inc.; 1260 Boylston St.; Boston, Mass. 02215; 617-267-4747

MacNifier

Magnifier

Increases size of the screen image up to 250 percent without distortion.
$29.95 retail
Activenture Corporation; PO Box 51125; Pacific Grove, Calif. 93950; 800-228-3177 or 800-652-0055 in Calif.

MacNifty Joystick Converter

Joystick Converter plugs into the mouse port, and the hyperwarp control can decide how fast your cursor moves. Joystick included.
$44.95 retail
Kette Group, Inc.; 6860 Shingle Creek Pkwy.; Minneapolis, Minn. 55445; 800-328-0184 or 612-566-0221

MacNifty Switch

Macnifty A/B—allows any port on the Macintosh to have two different peripherals attached at once and, with the turn of the knob, can switch between any two devices.
$34.95 retail

Macnifty A/B/C/D—allows any port on the Macintosh to have four different peripherals attached at once. $54.95 retail
Kette Group, Inc.; 6860 Shingle Creek Pkwy.; Minneapolis, Minn. 55445; 800-328-0184 or 612-566-0221

Mac Pro

Carrying case designed to hold the Macintosh, keyboard, and disk drive with interior padded pockets for keyboard, mouse, and peripherals.
$69.95 retail
Alpenlite; 3891 N. Ventura Ave.; Ventura, Calif. 93001; 805-653-0431

Mac Products

Mac Lock—security kit for the Macintosh, keyboard, mouse, printer, modem, and external drive that is made of bright-red vinyl-covered steel tabs and cables and includes a strong padlock. $39.95 retail

Mac Cables—custom cables to connect modems, printers, and peripherals to the Macintosh. $29.95 retail
Mac Products; 20231 San Gabriel Valley Dr.; Walnut, Calif. 91789; 714-595-4838

MacStac

Workstation/desk organizers

Macstac PS—a matching stand for the Imagewriter printer that stores over 300 sheets of paper underneath. It is designed to travel with the printer, and both will fit into any Imagewriter travel bag. $29.95 retail

Macstac—combination workstation and desk organizer. It raises the Macintosh screen to eye level and provides space underneath for external drive, modem, disks, etc. $54.95 retail

Traveling Macstac—has all the features of Macstac, and is designed so that it doesn't block the air vents or access to the reset button. It is designed to travel with the Macintosh and will fit into any Macintosh travel case. $74.95 retail
Adex, Inc.; PO Box 74142; Metairie, La. 70033

MacTable

Its surface is divided into four areas that may be independently adjusted. One area for the user, keyboard, and mouse; another for the Macintosh, which may be tilted; two areas for a printer and other peripherals; and a modular side cabinet.
$495 retail
ScanCoFurn; 1402 3rd Ave., Suite 1414; Seattle, Wash. 98101; 800-722-6263

MacTilt

Macintosh stand

An ergonomic workstation that raises the monitor 4" off the desktop, provides 30 degrees of tilt, and rotates 360 degrees. Comes standard with external disk drive outrigger that lifts a drive off of the desk.
$99.95 retail
Ergotron, Inc.; 1621 E. 79th St., Suite C133; Minneapolis, Minn. 55420; 612-854-9116 or 800-328-9839

MacTools

Set of two professional quality technician hand tools used to safely and correctly open, remove, and replace the Macintosh housing.
$24.95 retail
Mentauris Technologies; PO Box 1467; San Marcos, Texas 78667; 512-396-1565

■Modular Oak Computer Furniture

Macintosh Workstation—holds the entire Macintosh system, including Imagewriter printer with sheet or fanfold paper feed. Shelf and drawer below will hold software and documentation. $395 retail

Laserwriter cart. $260 retail
Acorn Systems Computer Furniture; 1002 West 2nd Ave.; Eugene, Oreg. 97402; 503-687-0449

Modulus Mats

The Candy Apple Mat (shaped) and Desk Mouse Mat made of plastic rubber laminate can be used on your desk or in your lap.
$11.95 and $10.95 respectively
Modulus Design; PO Box 66 MO; Shrewsbury, Mass. 01545; 617-842-0305

MouseArtist

Tracing tablet

An abrasion-resistant acrylic board with stainless steel rods and linear ball bushings that allows users to accurately trace existing graphics and artwork.
$89 retail
Village Computer Resources; PO Box 155; Lakewood, Calif. 90714; 213-421-3412

Mouse Duster

A cleaning pad that attaches underneath the mouse to pick up dust off of the work area.
$9.95 retail; set of three
Eastside Electronics; Box 328; Ashton, Idaho 83420; 208-652-3483

Mouse Mover

It snaps onto the bottom of the mouse, and its 99 ball bearings let the mouse ride and glide smoothly without sticking, grabbing, or hesitating.
$19.95 retail
Magnum Software; 21115 Devonshire St., Suite 337; Chatsworth, Calif. 91311; 818-700-0510

Mouse Pad

The Mouse Pad is a durable, plastic pad designed so that the mouse and the pad will wear at the same rate.
$12.95 retail
South Bay Software; PO Box 969; Millbrae, Calif. 94030; 415-579-5455

MouseStick

Joystick controller

The Mousestick is a joystick and mouse interface that allows you to play arcade-style games, control cursor speed, and alternate between the mouse and the joystick without throwing a switch.
$59.95 retail
Video-7 Incorporated; 550 Sycamore Dr.; Milpitas, Calif. 95035; 408-943-0101

MouseTracer

A metal pantograph (1:1) drafting arm and wooden drawing board that allows users to trace existing artwork and graphics.
$34.95 retail
Brimark Innovations; 9821 Yolanda Ave.; Northridge, Calif. 91324; 818-885-8660

Moustrak; Printer Pads

Mouse control aid; Imagewriter pads

Moustrak—a 3/8"-thick, natural foam-rubber pad. $7.95 to $10.95 retail depending on size

Printer Pads—pads for the Imagewriter printer that help reduce noise. $13.95 retail
Moustrak, Inc.; 3047 St. Helena Hwy.; St. Helena, Calif. 94574; 707-963-8179

Nortronics

Macintosh 3.5" head cleaning kit with software; mouse cleaning kit
$39.95 retail; head cleaning kit with software
$17.95 retail; mouse cleaning kit
Geneva Group of Companies, Inc.; 7255 Flying Cloud Dr.; Eden Prairie, Minn. 55344; 800-328-6795, ext. 382

Nybils

A cute, hand-washable, cuddly mouse that fits over the Macintosh mouse and includes an adjustable Velcro strap and rubber pads.
$12.95 retail
Foresight Designs; PO Box 70; Southeastern, Pa. 19399; 215-647-8534

Optimum Computer Luggage

Mactote—made of water-resistant Cordura, it holds the Macintosh, keyboard, mouse, manuals, disk drive, accessories, modem, and cords. $99.95 retail

Printtote—offers the same protection and durability as the *Mactote,* with a built-in paper stand that allows the printer to be operated without removing it from the tote.
$99.95 retail
Optimum Computer Luggage; 8334 Clairemont Mesa Blvd., #111; San Diego, Calif. 92111; 800-632-4200 or 800-447-0300

ORMSystems Products

Hugger—base with vinyl-coated aluminum arms that hold the external drive and keyboard. The base swivels 360 degrees and tilts 25 degrees. $59.95 retail

Stroller—nylon cover designed to carry the Macintosh on the *Hugger* base without disconnecting the peripherals. Zippered pocket holds disks and documentation.
$39.95 retail
ORMSystems; 1421 Ash Dr.; Bozeman, Mont. 59715; 406-587-3869

The Paper Saver

Stops tractor-fed paper from curling into the single-sheet slot.
$6 retail; Imagewriter
Ferro Enterprises; 1219 Timperpond Dr.; El Cajon, Calif. 92020; 619-588-1870

The Printer Stand

Elevates your printer to a 45-degree angle for maximum readability.
$49.95 retail; 80-column
$59.95 retail; 132-column
Synergy Products; PO Box 485; Boonville, Ind. 47601; 800-372-7980 or 812-897-5351

Ribbon Re-Inker

A motorized ribbon re-inker designed for the Apple Imagewriter I and II ribbons as well as a variety of popular ribbon cartridge models.
Bede Tech, Inc.; 8327 Clinton Rd.; Cleveland, Ohio 44144; 800-772-4536 or 216-631-4214

Ribbons, Process color

Set includes one yellow, one magenta, and one cyan ribbon.
$29.95 retail per set
Esoft Enterprises; PO Box 179; Owasso, Okla. 74055; 918-272-7616

■Screen Enlarger

Enlarges the Macintosh screen up to 250 percent. It folds for easy storage, has adjustable view angle and size, and has quick-mount Velcro fasteners.
$19.95 retail
Engineering Consulting; 583 Candlewood St.; Brea, Calif. 92621; 714-671-2009

Tosh

Ergonomic security workstation

Secures and organizes Macintosh, keyboard, mouse, and diskettes. It also tilts the Macintosh for comfortable viewing. Options include second drive security, surge suppression, and swivel plate.
$179 retail
Doss Industries; 1224 Mariposa St.; San Francisco, Calif. 94107; 415-861-2223

Two Position "D"

Apple data switches used between a common connector and two alternative connectors, with each one of them able to act as input or output. Computer output can be directed between a letter-quality printer and a high-speed dot matrix printer—or any two printers. Switch a computer port between printer and modem, or share a terminal with two computer systems.
$59 retail
Belkin Components; 4718 W. Rosecrans Ave.; Hawthorne, Calif. 90250; 213-644-3184 or 800-223-5546

Weber & Sons Products

Color Coded Disk Labels—available in red, yellow, green, orange, pink, and white. $4.95 retail; set of 120 labels

Disk File System—holds 95 3.5" disks. $9.95 retail

Disk Organizer System Kit—includes a disk file that holds 150 3.5" disks, a color code system, color coded disk labels, and color coded disk jackets with pockets.

Macintosh Kit -400—includes a disk file that holds 90-100 disks, 3 backstops, 10 dividers, 25 Staticshield disk jackets with pockets, 25 color coded and 25 white insert cards, 1 disk holder stand, 100 white disk labels, and 1 disk easel/copyholder. $49.95 retail

Staticshielding Disk Jacket—holds an insert card for information about the disk contents. $9.95 retail; set of 25

Portable Disk File—has a carrying handle and lid that latches to carry 3.5" disks. $12.95 retail
Weber & Sons, Inc.; 3468 Hwy. 9, RD #4, Dept. BG; Freehold, N.J. 07728; 201-431-1128 or 800-225-0044

Windsock Accessories

Mouse Mate II—a 10" x 12" foam mat with a non-skid backing. $8.95 retail

Macbelt—colorful stretch belt that provides both a disk slot protector and a mouse holder in one. $5.95 retail

dePlug—one-piece injected soft rubber plug for the 3.5" disk slot. $2.95 retail
Windsock Corporation; 207 Frontier Dr.; PO Box 93; Mulvane, Kan. 67110; 316-777-4926

Announcing the first USER show for the Macintosh Computer

MacExpo™

Sponsored by The MACazine
Chicago, Illinois
McCormick Place
April 25-27, 1986

- *Exhibitors*
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- *Demonstrations*
- *Announcements*
- *User Groups*
- *Speakers*
- *New Products*
- *Business*
- *Education*
- *Home*
- *Color Mac*
- *XL Support*

April 25, Friday, 10:00 am - 6:00 pm, **April 26,** Saturday, 10:00 am - 6:00 pm, **April 27,** Sunday, 10:00 am - 5:00 pm. $15 Admission

Whether you use your Macintosh computer for business, home or school, the MacExpo show will be an event you won't want to miss. See the latest in software demonstrated. Compare the newest hardware. Attend seminars designed to help you get the most out of your Macintosh. Don't miss out. Plan now to attend MacExpo!

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Circle 60 on Reader Service Card

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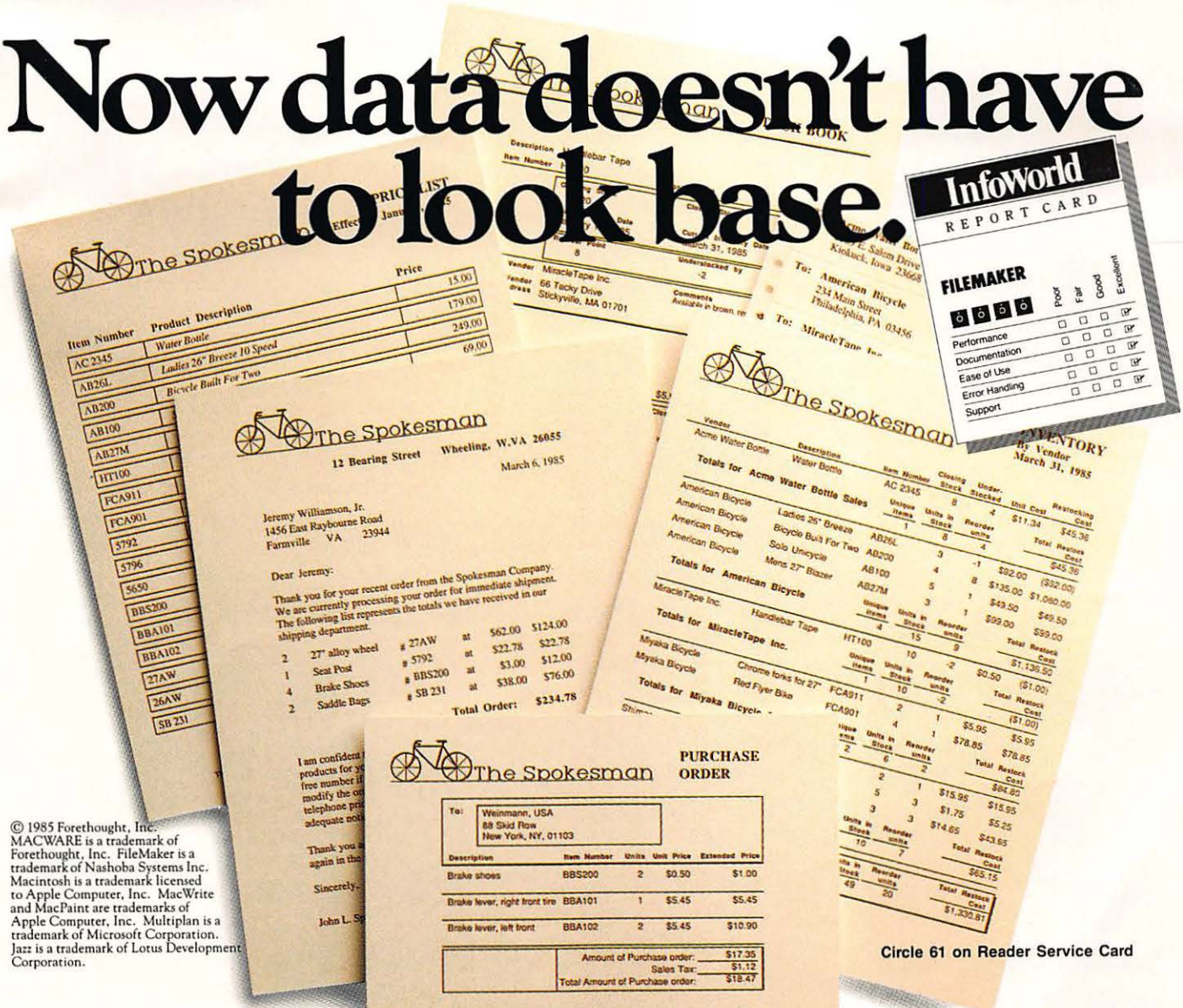

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