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Introduction

The first Special Delivery Software catalog was released in November 1980, and the response has been very positive.

"Personal Finance Manager is the most complete, versatile, easy-to-use program of its kind I've seen," wrote one satisfied customer. Another, an Apple owner who has been programming for years, said he was finding the Pascal Animation Package "really useful." A new Apple user who had no previous experience with computers praised Musicomp for being "a well-designed package, with a good, clearly written manual."

Your kind words have been an inspiration. And as we promised, our second catalog has expanded the coverage and the number of products offered through Special Delivery Software to reach an even broader audience of Apple computer users.

Inside you'll find more than two dozen unique software packages, including all your old favorites plus a variety of new programs. Many—such as APM, PLAN80, VisiCalc Real Estate Templates, and Order Tracking System—are powerful business planning tools available for the first time anywhere. Some (Circuit Analysis, for example) are designed primarily for use by engineers, professionals, or hobbyists. Still

others, such as the Bridge Tutor series or "The World's Greatest Blackjack Program," will be enjoyed by everyone.

Special Delivery Software packages come complete with easy-to-understand user manuals, and now—for your convenience and security—a free, back-up program diskette. As always, all Special Delivery Software products have been carefully chosen for quality, ease of use, and a "stand-alone" capability that allows users to put them to work immediately, without any special training. It's software, as we say, with its own "special delivery."

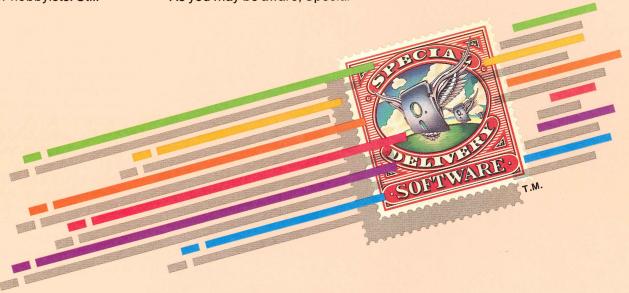
Special Delivery Software also stands for software you can lay your hands on quickly and easily. And now there's really no waiting, because you can get every one of these programs from your local dealer. Your dealer can also demonstrate the programs, and provide the kind of after-purchase support you've come to expect with Apple products. Apple has nearly 1500 dealers worldwide to serve you.

You may also order Special Delivery Software by phone or mail, if you prefer. For fast service, simply call our new toll-free number, or use the convenient mail order form in this catalog.

As you may be aware, Special

Delivery Software is committed to bringing Apple users good, independently written software at a reasonable price. But we can't do this on our own. If you've written programs with the same professional quality as the ones in this catalog, we'd like to hear from you. It makes no difference whether you're a software professional, or an amateur with a good idea. What interests us is whether your program would prove valuable to thousands of other people with similar needs. If it would, Apple would like to make it available to every one of them. Send your programs, along with documentation and a cover letter, to Special Delivery Software's Software Evaluation Group.

We hope you enjoy the programs in this catalog. Future issues should be even bigger and better, especially with your support—which is truly appreciated.



Personal Finance Manager

Wonder where the money went? Personal Finance Manager is an easy-to-use family budget management program that puts important financial information at your fingertips. It helps you keep better records of expenditures, analyze your spending patterns, validate checkbook statements, and maintain tax records. And you don't need any special expertise to use it, either.

With Personal Finance Manager you can organize your family's finances so they make sense, while at the same time sparing yourself the clutter and confusion of paperwork. On a single diskette, you can store a full year's worth of family financial records (200 entries a month for 12 months)—including detailed information on all check transactions, deposits, cash and credit card expenditures. You can even classify expenditures as tax deductible, consolidate the information for easier itemization when filing taxes, and "roll over" automatically to the next year.

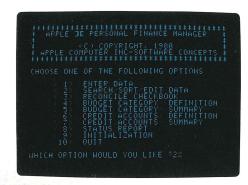
Personal Finance Manager:

- lets you define or modify up to 24 budget categories...so you can compare spending habits (by cash, check, or credit cards) with budget limits you've set;
- lets you define or modify as many as 12 credit card expenditure accounts...

so you know instantaneously just how much money you owe;

- provides monthly and year-to-date summaries of expenditures...so you can tell at a moment's glance how realistic your budget is;
- plots budget category activity, providing quick graphic comparisons of dollar amounts;
- lets you print out information at the touch of a key...so you can take your financial records to the bank, the IRS, or wherever they're needed.

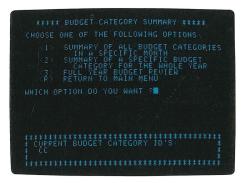
Keeping a budget that works is not just a matter of motivation—it's based on your ability to access and maintain financial information easily. Personal Finance Manager lets you do exactly that.



Using the program's Enter Data option, you can add or modify financial transactions—such as cash and credit card expenditures—quickly and easily. The Data Search/Sort option provides simple listings of monthly budget entries you specify, such as all

tax-deductible expenditures for any particular quarter. This is extremely useful when you file taxes, for example, because it allows you to quickly isolate the information you need.

Another helpful option, Reconcile Checkbook, lets you account for all checking account transactions that appear on your bank's monthly statement. The program will indicate the amount of any discrepancy it detects, helping you determine the source of the error.

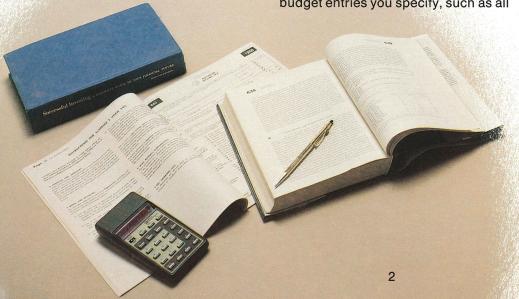


Budget Category Summary lets you analyze the status of any budget area you've defined. Three different summaries are available, two of which can be plotted as low-resolution graphs. Credit Account Summary works in a similar fashion, providing summaries and graphic presentation of defined credit accounts so you can readily analyze your charging habits.

In addition, a Status Report option shows you the amount of monthly disk space you've used, and lists the existing number of budget categories and defined credit accounts. The Initialization option lets you clear your Personal Finance Manager diskette of old financial records, and Quit allows you to exit the program without erasing any of your files.

Personal Finance Manager is written in Applesoft BASIC.

With the Personal Finance Manager package, you'll receive: 1) Personal Finance Manager program diskette; 2) back-up diskette; 3) instructions.



Goodspell

Make your Apple Writer text files letter-perfect every time!

A fast, reliable spelling verification system, Goodspell safeguards against misspellings. It helps rid your text of embarrassing typographical errors, allowing you to produce letters, documents, and presentations more accurately than ever before.

Goodspell carefully checks your every word against its 14,000-word dictionary, immediately alerting you when it come across one it doesn't recognize. Its 3000-word-a-minute processing speed allows you to check an average text file in 60 seconds or less.

An indispensable tool for Apple Writer users, Goodspell makes it easier for you to express yourself more clearly.

Goodspell:

- is simple to operate...so you need little computer experience to use it;
- allows you to temporarily add new words to its dictionary as you verify them...so individual text files can be checked for foreign, technical, and other uncommon words.

To use Goodspell, simply boot up the program diskette, verify the printer and driver slots, and wait 20 seconds while the Goodspell dictionary is loaded. You can either place your Apple Writer diskette in a second disk drive, or replace the Goodspell master with an Apple Writer diskette after the dictionary is loaded. You will be prompted for the name of the Apple Writer file you want checked. (If you don't remember the exact name, Goodspell will catalog your Apple Writer diskette for you.)



The program will quickly read your text file from start to finish, stopping at each word it doesn't recognize (misspellings or words not in its vocabulary). It will display the word with surrounding text, and ask you to verify the spelling. If the word is spelled correctly but is not in the program's permanent memory, Goodspell will add the word to its "incremental" dictionary, and pass over subsequent appearances.

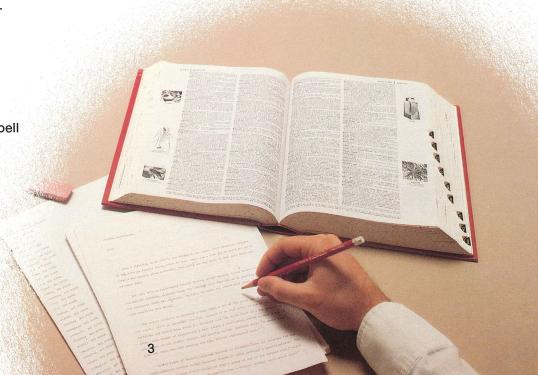
The program will automatically print out a hard copy of each misspelling. You can verify as many text files as you want at one sitting, and Goodspell will label the error printouts for easy correction later.



Goodspell is compatible only with 16-sector Apple Writer diskettes. (Note that you can convert 13-sector Apple Writer to 16-sector using the "muffin" routine on the DOS 3.3 master diskette.)

Goodspell is written in Applesoft BASIC.

With your Goodspell package, you'll receive: 1) Goodspell master diskette; 2) back-up diskette; 3) user manual.



Diet Analysis

Are corn flakes acceptable on a low-cholesterol diet? Are bananas fattening? How much protein is there in an apple?

Diet Analysis helps you analyze your diet for carbohydrates, calories, and protein, as well as for 21 vitamins, minerals, and other components, such as saturated fats and fiber. The program produces daily analyses, weekly averages, and monthly comparisons showing three different data breakdowns. It lets you monitor your intake of specific elements, or keep track of your overall diet. It also compares your diet with USDA recommended daily requirements for your age and sex.

Diet Analysis allows you to shelve your nutrition charts, calorie tables, and vitamin schedules—and monitor your diet easily and accurately on your Apple computer.

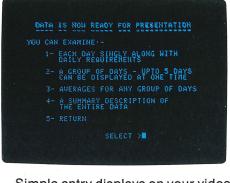
Diet Analysis:

- stores data for up to 10 people ... so you can use it for your whole household:
- tracks your intake of specific elements, such as sodium...so you can maintain dietary limits prescribed by your doctor:

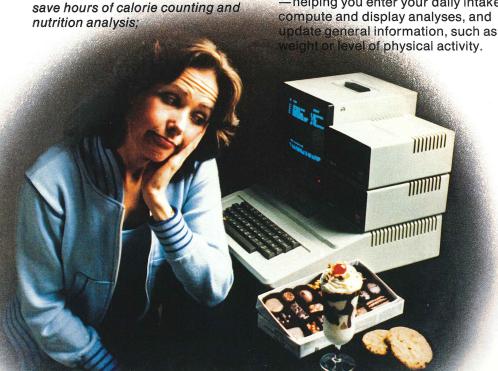
■ lets you use the power of your Apple to calculate diet information...so you

compares your vitamin and mineral consumption with USDA recommended requirements...so you can monitor vital aspects of your diet; contains an exhaustive list of foods ...so you can analyze almost anything vou eat.

Diet Analysis automatically analyzes your diet for calories, carbohydrates, protein, cholesterol, saturated fats, unsaturated fats, total fats, fiber, iron, calcium, magnesium, phosphorus, sodium, potassium, folic acid, niacin, pantothenic acid, and vitamins A, B1, B2, B6, B12, C, and E. Doctors may find Diet Analysis useful for quickly evaluating patients' dietary deficiencies.

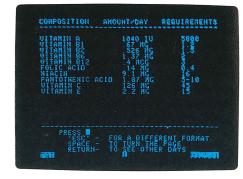


Simple entry displays on your video screen lead you through the program —helping you enter your daily intake. compute and display analyses, and update general information, such as



The food entry procedures are thorough and flexible. You can make your entries at your convenience, once a day, or after each meal. You can use the Quick Entry option to set up standard meal menus for some or all of your daily meals. With the Recipe routine, you can input foods which are not in the program's data base.

The See Data routines let you analyze your diet in several different ways. You can study nutritional breakdowns for the past 30 days of data entry, either one day at a time or in groups of consecutive days. The program automatically calculates averages for each 15-day period, and stores the data for your inspection. You can also calculate averages for any time period you choose, and display up to five averages at once.



A special weight analysis routine calculates your ideal weight on the basis of your height, sex, and frame size. The weight summary will then itemize your changing weight, caloric intake, and level of activity over any time period you choose.

Diet Analysis is written in Applesoft BASIC.

With the Diet Analysis package, you'll receive: 1) Diet Analysis Master Programs diskette; 2) back-up diskette; 3) Diet Analysis Composition diskette; 4) instruction manual.

PLAN80

Financial decision making is a demanding, difficult job requiring accurate information. The conventional pencil, paper, and calculator approach to developing business plans is highly error-prone and time-consuming, however. Producing finished reports by typewriter only heightens the inefficiency and margin for error involved.

PLAN80 is a powerful modeling tool for financial planning and analysis that lets you tackle any numerical problem that can be defined in row and column format. It performs complex calculations quickly and precisely, letting you examine "What if?" questions so you can evaluate more planning alternatives in greater detail—without tiresome erasing and recalculation.

With PLAN80, you'll get more than your calculated results—you'll know how you got them. Calculation rules are defined by simple and familiar names, such as "SALES = UNITS × PRICE," so you can review your assumptions and methods with people who have never seen PLAN80, and remember how you produced your results months after constructing a model.

PLAN80 doesn't require any knowledge of programming. Anyone in your organization can add or change data to generate updated budgets, forecasts, and financial reports in minutes. Freed from tedious clerical activity, you'll have more time to use the results to plan, analyze, and manage.

PLAN80:

- allows for consolidation of models ... so the task of designing a complete model can be shared by several people;
- lets you format and store reports exactly to your specifications... so you can create polished business

plans for your screen, printer, or to be included in written reports;

- has the ability to use separate files as the program is running...so you can define one set of modeling rules to be used by many applications, or use one application to handle an unlimited number of data sets:
- allows you to transfer files from one disk to another... so you can use the same data in different applications, or consolidate data from various files into a single, summary file.

PLAN80 can be used for any application requiring a worksheet, including cost estimating, cost center budgeting, cash management, sales projection and analysis, resource allocation, inventory planning, risk analysis, profit planning, and tax planning.

Creating a model is as simple as writing a letter, except with PLAN80 you use statements instead of sentences. First you define the framework of your model, listing row and column names in familiar terms such as UNITS, SALES, and APRIL. You may also specify heading, description, line spacing, decimal position, and other features to make your reports more visually effective.

S EXAMPLE #1"
YEAR PROFITABILITY HODEL"

5

Next you enter data values and calculation rules. Powerful mathematical functions are built into PLAN80 to help you perform complicated calculations with a single statement.

At any point in the PLAN80 model you can display or print results on your screen or printer, save all or part of those results for use by another model, or play "What if?" by inputting new values, recalculating, and then displaying or printing the new results. Because headings, rules, and data are all listed together in the program, you can instantly make changes in your model.



PLAN80 is written in Pascal.
With your PLAN80 package, you'll
receive: 1) two PLAN80 program
diskettes, including eight sample
application programs; 2) back-up
diskettes; 3) PLAN80 Tutorial and
Reference Manual.





Supermap

Wish you could make geography more enjoyable and capitals more captivating? Try Supermap, an easy, fun way to learn about the continental United States. Simply type in the name of a city. If it's contained in the program's data base (which has over 300 cities), Supermap will show you where the city's located on any one of four full-color maps, and provide you with some important facts about the city—including population, ZIP code, longitude, and latitude.

Supermap:

- displays the distance between any two cities in both miles and kilometers ... so you become familiar with metric equivalents;
- puts maps, facts, and figures at your fingertips...so you save time searching through atlases and almanacs;
- electronically highlights the locations of cities...so you're left with a lasting sense of geographic relationships.

Supermap's main menu lets you choose five options. The State Capital Quiz prompts you with a state name, then waits for you to spell correctly the corresponding capital name. If you're right, Supermap blinks the city's location and beeps that you're correct; if you're wrong, you get two more guesses before Supermap fills you in. A special Scan Cities option lets you run through the entire list of cities in the data base at your own speed, lighting up locations and beeping as you go.



Other options let you view the continental United States in four different ways. The State Map, with the 48 states highlighted in dazzling colors, allows you to study the states in relation to one another. A Features Map displays the five dominant U.S. terrains: cropland, forest, grass, desert, and swamp. When you instruct Supermap to locate a city on the Features Map, you'll have a good idea whether its inhabitants grow cacti or cucumbers. The January and July Sun Maps show mean daily solar radiation (in langleys) at ground level during those months.



Supermap is written in Applesoft BASIC.

With the Supermap package, you'll receive: 1) Supermap program diskette; 2) back-up diskette; 3) instructions.



Bridge Tutor

Are you a beginner at bridge, confused by all the rules about counting and conventions? Or are you a more experienced player, looking for a way to learn and practice advanced bidding systems?

Bridge Tutor teaches all the tricks of better bridge, starting with the basics and building to tournament-level exercises. Endorsed by world champions Michel Lebel and Pierre Jais, Bridge Tutor allows you to practice whenever you want, specialize in areas where you need improvement, and take all the time you need to consider each move. Since the program lets you run through more hands in 10 minutes than you'd see in an entire night of playing, you can take advantage of your spare time to help you develop your skills.



Bridge Tutor:

- generates practice hands randomly ...so you can use the program over and over again;
- gives you immediate, detailed feedback on your bid or lead...so you quickly learn exactly why your move was right or wrong;
- helps you learn the Standard American bidding system, and, in the expanded version, the Precision Club and Scientific bidding systems ...so you can train for any level of social or tournament play;
- has standardized "conventions" built in for each of the different systems...so you gain familiarity with widely used bridge bidding practices.

If you don't know how to play bridge, or want a "refresher" on the

fundamentals, Bridge Tutor offers a comprehensive course with full-color graphics and challenging questions to teach you rules and strategy.



Once you know the game, the program's *Bridge Quiz* format lets you practice the range of decision making you face in actual game situations. Because the expanded version of *Bridge Quiz* employs any of the three standard bidding systems, even advanced players can use it for learning and practice. It includes drill exercises that help you learn how to count points, make opening leads against no-trump hands, and make opening leads against suit contracts.

Highly interactive, Bridge Tutor asks you to identify appropriate bids and leads. If your bid or lead is incorrect, you can either try again, or ask the program to tell you the proper move and the logic behind it.



(Experienced players will appreciate Bridge Tutor's special shuffling system that produces four truly random hands with every shuffle.)

Bridge Tutor is written in Integer BASIC.

With the Bridge Tutor package, you'll receive: 1) two Bridge Tutor program diskettes, containing computerized lessons and *Bridge Quiz;* 2) back-up diskettes; 3) instructions.

The basic version includes exercises in the Standard American bidding system; the expanded version includes the Precision Club and Scientific bidding systems in addition to the basic version.

Order Numbers: C2E0006 (basic version)
C2E0007 (expanded version)



"The World's Greatest Blackjack Program"

Midnight: Las Vegas. You've got a hundred dollars riding on this bet. You hold a king and a two; the dealer shows a three. What to do?

You'd know if you had practiced with "The World's Greatest Blackjack Program." The program combines high-resolution graphics with a professional card counting system to teach you the best betting and playing strategy. It turns your Apple into your own home blackjack casino, complete with built-in dealer and opponents.

Based on *The World's Greatest Blackjack Book* by Dr. Carl Cooper and Dr. Lance Humble, the program coaches you in blackjack basics as well as the "Hi-Opt I" card counting strategy. Unlike other professional systems, Hi-Opt only requires you to count three card categories, so even the casual user can gain proficiency with it.

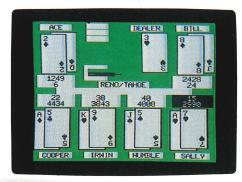
You can use the program to practice whenever you want, or let your Apple deal the cards and tally bets for your next game among friends.

"The World's Greatest Blackjack Program":

■ allows you to choose from nine

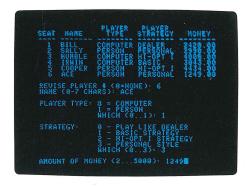
standard sets of rules (from Las Vegas, Reno, Atlantic City, and the Bahamas), or to introduce other standards...so you can simulate the rules at any casino;

- teaches basic blackjack strategy as well as the Hi-Opt card counting system...so you acquire professional-level blackjack tools;
- measures response time to quiz questions, then brings back problems that held you up the longest...so you get extra practice at troublesome blackjack situations:
- acts as the dealer for you and up to five other real or imaginary gamblers ...so you can use it for both social and solitary play.



To play "The World's Greatest Blackjack Program," simply add your name, strategy, and stake to its built-in list of programmed players, then enter the *Play Blackjack* command. A high-resolution color display will appear on the screen while the computer shuffles the cards, asks for bets, and then deals. When it's your turn, you can choose any standard casino option—hit, stand, double, pair-split, cash in on a natural, or ask for insurance.

The program allows you to change the rules or the players automatically. You can either set up your own rules or choose from pre-set options.



Two built-in practice drills help you learn advanced playing techniques that can improve your game. The *Strategy Drill* teaches both basic strategy and the Hi-Opt I system in a step-by-step instruction program. The *Count Drill* helps you build speed and expertise with Hi-Opt counting, so you'll be ready for even the fastest dealer. Your cards are quickly displayed on the screen and then erased, so you only get a brief look at each. You control how fast the cards appear—up to 75 hands per minute.

"The World's Greatest Blackjack Program" is written in Pascal, but a special run-time operating system makes it possible to run the program without the Apple Language System.

With "The World's Greatest Blackjack Program" package, you'll receive: 1) program diskette; 2) back-up diskette; 3) instructions.



VT-100 Emulator

Turn your Apple into a remote timesharing terminal! The VT-100 Emulator program allows you to use your Apple II system as a conversational terminal (with 40-character/line, upper case-only display) on RSTS/E-based, PDP-11™ systems. With this program and an Apple Communications Interface Card, your Apple computer can communicate at 110 or 300 baud with large timesharing systems, either directly or via telephone link (through an acoustic coupler).

You save money on hardware because your Apple computer performs many of the functions of Digital Equipment Corporation's expensive VT-100 terminals. And since your Apple is a powerful microcomputer, you can develop programs on it locally and reduce on-line charges. That's the kind of cost-effectiveness you just can't get with an ordinary terminal.

The VT-100 Emulator:

■ automatically configures your Apple computer as a recognizable terminal to the PDP-11 system...so you save time:

■ allows you to transfer files easily between your Apple computer and the timesharing system...so you

work more efficiently;

■ lets you use your Apple with systems having modified RSTS/E prompt sequences...so you get greater system flexibility.

To log on to any RSTS/E system, you must already have an account number and password for that system. The VT-100 Emulator then simplifies connection procedures. A few keystrokes and a telephone call are all that's usually required.

The VT-100 Emulator's helpful menu makes the program easy to use. Select *Auto Set Up* (option A), for instance, to configure your Apple system as a "recognizable" terminal to the host PDP-11. A series of commands automatically handles the task. Or select *File Transfer* (option F), to transfer files between your Apple computer and the timesharing system. The program leads you stepby-step into making your file transfers correctly.

By selecting Set Expected Prompt (option P), you're able to change the "prompt" anticipated by your Apple so you can communicate with RSTS/E systems that don't use the standard "READY" prompt. Choosing Resume Terminal Operation (option R) clears your monitor screen and returns operator control. Lastly, choosing Exit (option E) automatically "logs off" your Apple, and terminates the VT-100 Emulator program.

The VT-100 Emulator program is written in Applesoft BASIC.

With the VT-100 Emulator package, you'll receive: 1) VT-100 Emulator program diskette; 2) back-up diskette; 3) user instructions.

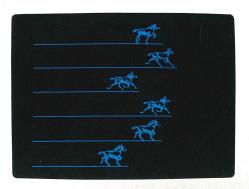




Pascal Animation Tools

Has the trick of animation been eluding you? Or are you just tired of programming high-resolution shapes in cumbersome assembly language? With the Pascal Animation Tools you can produce exciting, animated graphics as quickly and as easily as text.

Add life to your graphics! The Pascal Animation Tools lets you develop distinctive fonts of graphic shapes or pictures (a horse font, for instance, with stop-action pictures of the animal in various stages of running), then string these "snapshots" together in sequences that mimic movement. This approach also allows you to build a library of useful shapes that can be accessed quickly and used over and over again in your animations.



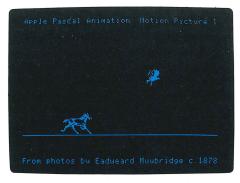
The Pascal Animation Tools:

■ lets you use Pascal to write and manipulate programs with complex, animated graphics...so you save time developing software;

■ allows you to print out highresolution shapes at text speed...
so you're able to create animations
that behave smoothly and realistically;
■ provides a ready-made, efficient
way to create libraries of shapes,
many of which can be animated with
the same movement codes...so you
reduce software development costs,
and manage animation projects more
efficiently.

The Pascal Animation Tools package uses a specially developed, binary input/output system (BIOS) that knits the Apple's high-resolution screen to its text facilities. This innovation allows you to create a set of images—the shapes of a bird in flight, for example—and treat it exactly like a character font.

In other words, if you let "A" correspond to the bird's "wings up" and "B" to its "wings down" shapes, a Pascal program that printed A, then B, then A, then B (and so on) would result in a bird flapping its wings—slowly or quickly, as wished. Intermediate images could also be



added to make the motion as smooth as desired.

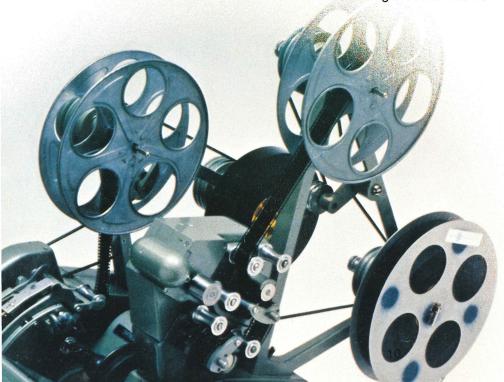
The Pascal Animation Tools package contains a number of programs, all extremely helpful for programming animated graphics. The *Animation* program—provided in source code—lets you do character cell animation under control of the Apple's HIRES1 programmable character generator. Seven demonstration programs—provided in source code—are also included in the Pascal Animation Tools package to illustrate the simplicity and flexibility of *Animation*.

Another program, Charedit, is a fast, powerful, high-resolution character editor which you can control with either your Apple's keyboard or game paddles. Teamed up with Animation, Charedit lets you use a variety of dramatic animation techniques.

Also included in the package are: two Pascal source programs that provide string-to-numeric conversions (either real or integer); source code examples showing how to interface the Apple Graphics Tablet to Pascal programs; and a helpful assembly language routine that lets you use Apple's Communications Interface Card to achieve bidirectional (full duplex) communications from Pascal. Detailed source code has been provided in lieu of extensive documentation.

The Pascal Animation Tools package is written in Pascal.

With the Pascal Animation package, you'll receive: 1) two Pascal Animation package diskettes; 2) user instructions.



Galactic Wars

Man your battle stations! Galactic Wars is a captivating game of strategy and skill that demands your boldness and cunning. As commander and warrior, you'll position baseships, build your fleet of fighter craft, and try to outmaneuver and outshoot your opponent in battle. With bravery and persistence—and if The Force is with you—you may ultimately capture the enemy's capital star system, establishing your supremacy in the galaxy.

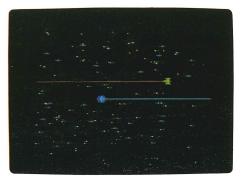
Galactic Wars:

- allows you to start playing with small, medium, or large fighting forces ...so you control the approximate length of the game;
- offers a pre-game training mode... so you can improve your fighting skills before entering the game's battle phase;
- lets you save games in progress... so you can resume play at your convenience.

Galactic Wars requires two players, teenage or older. It pits two long-standing, outer space foes—the Centrons and Krillians—against each other in tactical combat. The object of the game is to capture your opponent's capital star system.

KEILLIAMS
SPARE SYSTEM 18-8
FIGHTERS 11

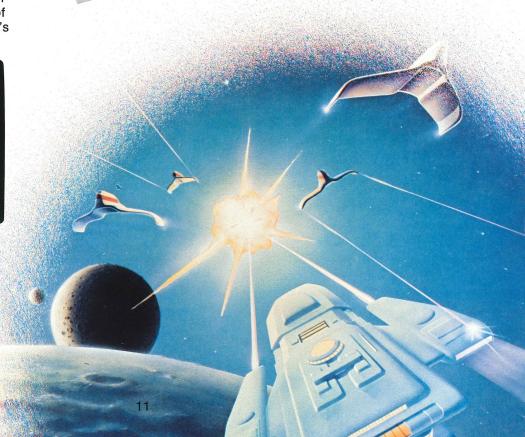
Each player defends a capital while trying to capture his or her opponent's. When taking the offensive, you try to advance your baseships and fighters toward the enemy's capital system, occupying sectors of the galaxy as you proceed. This strategy phase of the game is played on a multicolored mapboard of the galaxy. It is most fun when played using a color television or monitor.



The battle phase begins when a sector is occupied by opposing forces. Two rival fighter craft at a time are matched in laser combat (on a 3-D-like, star-studded, high-resolution screen). Success depends on your shooting skill and the size of the fighter craft fleet you already have garrisoned in the sector. As you swallow up more and more sectors and zero in on the enemy capital, control of the galaxy becomes yours!

Galactic Wars is written in assembly language.

With the Galactic Wars package, you'll receive: 1) Galactic Wars program diskette; 2) back-up diskette; 3) instructions.



VisiCalc Real Estate Templates

Want to earn the best return on your investments? The Real Estate Analyst Series of VisiCalc Templates helps you scrutinize potential realty ventures, so you minimize risk—and maximize yield—when investing in income properties.

Written using the popular VisiCalc financial modeling program, the VisiCalc Real Estate Templates utilize built-in calculations that enable property managers, brokers, realtors, and speculators to automate time-consuming property analyses. In addition to simplifying income property investment analysis, the templates feature comparative depreciation, amortization, and mortgage loan analysis options useful for projecting cash flows and estimating income tax deductions.

With the VisiCalc Real Estate Templates, you're able to pinpoint sound property investments, and screen out those that don't appear to be worthwhile.

VisiCalc Real Estate Analyst Templates:

- ■simplify data checking and comparison through their "split-screen" capability...so you can display, move, and modify widely separated entries side-by-side and see the results;
- ■include built-in template calculations that can be revised ... so you can adjust them for special circumstances;

■ provide comparative analyses of depreciation, amortization, and payment methods...so you can choose from a variety of investment strategies;

■ generate selective printouts...so you can show reports to clients without exposing sensitive information.

The Income Property Investment Templates let you calculate various combinations of financing, sales price, inflation rate, depreciation techniques, changes in income and expenses, and other investment components. Analyses can be performed using all three of the standard depreciation methods. In addition, you can project future investment performance simply by entering a new analysis date. With the Personal Financial Statement Template you can change, update, and quickly print out fiscal information, so you're just a keystroke away from presenting it to the bank. You save hours of preparation each time your financial statement requires revision.

The three amortization template options (Monthly Calculator, Monthly Schedule, and Annual Summary) allow you to compare the financial repercussions of both fully-amortized and balloon payment loans. For example, Monthly Calculator lets you substitute values for loan variables (i.e., purchase price, down payment percent, annual percent rate, and loan term) before choosing the most affordable plan.

The Monthly Schedule option details your first 36 months of payments, providing information on principal and interest payments, and balances after payment. This option also makes it possible for you to forecast a three-year cash flow.

Finally, the Annual Summary option allows you to quickly calculate the yearly payment schedule for the life of a loan, even if the first and last years are partial years. Loans for 31 years or longer take only 50 seconds to compute.

The Mortgage Loan Analysis
Template (which can keep track of up
to five mortgages) calculates: (1) the
principal balance on the acquisition
date; (2) cumulative interest and
principal from the acquisition date;
and, (3) the interest and principal
paid during the past 12 months.
Partial-year payment calculations
can be made for property owned less
than one year.

Using the Comparative
Depreciation Schedule Template, you
can calculate the tax consequences
of property depreciation by three
methods: straight line, declining
balance, and sum-of-the-year's
digits. It allows you to display all
three methods side-by-side for
convenient comparison. The template
also automatically switches from
declining balance to straight line
depreciation in the year during which
the straight line method is more
advantageous to the taxpayer.

The ability to ask "What if?" helps you select investments with the greatest likelihood of generating optimal returns.

To use the Real Estate Analyst Series of VisiCalc Templates, you'll need the VisiCalc Computer Software Program diskette, which is available from your Apple/Personal Software dealer.

With the VisiCalc Real Estate Analyst Templates package you'll receive: 1) two VisiCalc Real Estate Analyst Templates data diskettes; 2) user manual.



Artist Designer

Set aside your paints, brushes, and canvas—now you can create works of art with your Apple II system! Artist Designer is an exciting program that makes the most of your Apple's superb color graphics capabilities. Designed by an art instructor for computer art enthusiasts, it lets you "draw" and "paint" virtually any color graphics composition you wish, using your color monitor or color television screen as a "canvas."

Unlike more conventional graphics systems, Artist Designer produces irregular shapes, curves, and other forms. And you can use colored dots to fill defined areas or to introduce textures. The five vibrant colors at your command—green, yellow, orange, violet, and red—can also be mixed with black or white to produce hundreds of color tints, mixtures, and shades. You can save your masterpieces, too. Up to 35 finished or in-progress compositions fit on a single storage diskette.

One of Artist Designer's unique features redraws your designs, step-by-step—so you can "re-run" your process of creation and examine the artistic choices you made. This feature can likewise be used to experiment with "art animation," an exciting new performance art.

Artist Designer:

- has a special *Link* feature that lets you "link together" designs from different storage files...so you can build detailed compositions piece-by-piece;
- allows you to create "slide shows" of designs...so you can make tutorial presentations for use in the classroom, office, or anywhere else;
- provides complete editing capabilities, including selective erase/redraw features...so you save time by refining rather than redrawing compositions.

Artist Designer uses menus and display prompting to give you the control you need as an artist. The program's main menu allows you to draw, edit, erase, or save compositions, and to choose or change their background colors.

Once you've made a selection from the main menu, sub-menus let you focus specifically on what you want to do. Selecting *Draw*, for instance, produces a sub-menu that allows you to draw with either blocks, dots, lines, curves, or semicircles. Other submenus let you redraw, edit, fill in shapes with colors, and link designs stored in separate files.



Artist Designer comes with 20 predrawn designs, which you can modify and use in your own compositions. A special "playback" feature will redraw successively—and continuously, if you like—up to 25 designs of your choosing. Artist Designer's *Playback* feature lets you create a wide range of self-operating displays and exhibitions, without programming a line.



Artist Designer is written in Pascal. With the Artist Designer package, you'll receive: 1) Artist Designer master diskette, containing modifiable demonstration designs and a disk initialization program; 2) back-up diskette; 3) instruction manual.



APM

Project management can be mind-boggling and unwieldy, a tangle of a million and one details. But now you can use APM to schedule, track, and analyze the sequence of events crucial to a project's timely completion.

APM is CPM (Critical Path Management) for the Apple. Designed for large-scale production planning, it is a powerful, easy-to-use critical path method (or "network analysis") program especially useful for contractors.

Before building a house, for example, sub-contract work and delivery of materials must be strategically scheduled so construction proceeds smoothly. Orchestrating the efforts of suppliers, masons, carpenters, plumbers, and electricians requires a great deal of planning.

With APM you can organize hundreds of chores and activities into a single network of interrelated tasks. Approximately 2000 activities can be organized on a single diskette—enough for eight average-sized networks.

Based on time estimates you assign each task, the program computes your project's schedule and its critical path—the succession of deadlines that must be met for your work to finish according to plan.

APM is a valuable tool that can help you run complex operations more effectively. With it, you'll know if you're ahead, behind, or right on schedule.

APM:

- ■lets you use the power of your Apple to plan and track networks, as well as to generate reports...so you avoid time-consuming clerical activity;
- provides an easy-to-use interactive alternative to timesharing...so you can process data whenever you want, and analyze results immediately;
- is a powerful modeling tool...so you plan with greater foresight than you would using pencil and paper.



In order to prepare a network, you need to define and number your sequence of tasks, then estimate the amount of time each one will take. Enter this information using APM's Create/Change Network menu option.

Next, establish real-date calendar parameters—including "month/year" project start and finish dates, and working/non-working days in your week. You can either load a calendar format you've previously created (and saved to the program diskette), or choose the *System Maintenance* menu option to generate a new one. Projects will be scheduled according to your calendar parameters.

APM's Analyze/Print Current
Network option then processes and
transforms your input into a schedule
that indicates the project's critical
path. With this option, you can print

out any one of five reports to help you evaluate and refine your network, then incorporate modifications using the *Create/Change Network* option.

Once your task sequence has been refined and your project is under way, you can edit and update your network on a regular basis. All revised time estimates, as well as new, cancelled, and completed activities are entered using the *Create/Change Network* option. When you want to make changes, APM will first ask you the "Time Now," so that subsequent network analysis reflects changes made through that calendar date.

Printouts generated by the Analyze/Print Network option include: Standard Report, Selective Report, Milestone Report, and Short- and Long-Term Bar Charts. The Standard Report lists network activities, your time estimate for each, "Earliest Start," "Earliest Finish," and "Latest Start" dates computed by the program, and the current date. The report also includes a "float" column, indicating the leeway time you have to start or finish each task. The Selective Report. identical in format to the Standard Report, provides information only about network activities you specify.

The *Milestone Report* reveals the status of key network activities designated by you during the *Create Network* phase.

Short- and Long-Term Bar Charts graphically display the working and non-working days in your schedule. They allow you to visualize a network calendar from start to finish, clearly indicating your project's critical path. APM allows you to determine—based on your printer's capabilities—the length (duration) of your bar charts. (Eighty-column printers can be used to produce APM reports, although a 132-column printer is necessary to generate the long bar chart.)

APM is written in Applesoft BASIC. With the APM package you'll receive: 1) APM master diskette; 2) back-up diskette; 3) user instructions.

Hand Holding BASIC

Have you wanted to try programming in BASIC, but wished there was an easier and more effective way to learn? Hand Holding BASIC is for you.

A new full implementation of the ANSI 78 Minimal BASIC interpreter for the Apple II, Hand Holding BASIC employs a dramatic, graphical approach to teaching programming and debugging in BASIC. As you write programs, Hand Holding BASIC not only checks your input character-by-character, but also signals errors and displays suggestions to correct them. And when you run a completed program, Hand Holding BASIC lets you use six special display screens to follow the computer's every step.

If you're just beginning to learn the BASIC language, Hand Holding BASIC will give you a clear understanding of how its commands, statements, and other features work together to form programs. If you already know the language, Hand Holding BASIC gives you a "play-by-play" view of your favorite programs, and helps improve both your programming and debugging abilities.

Hand Holding BASIC:

- automatically checks your input, character-by-character...so you save time locating mistakes and learning correct syntax;
- provides a complete, easy-to-use debugging environment...so you learn how to debug programs even as you learn how to write them;
- ■uses special displays to monitor how your Apple interprets your BASIC programs...so you spot awkward routines more easily, and learn how to write more efficient programs.

Hand Holding BASIC has four distinct learning levels that let you learn BASIC in stages — and at your own pace. You choose the programming level you want.

Level 1 encompasses arithmetic expressions only, and syntax checking restricts itself to your use of numbers, pluses and minuses, asterisks, obliques, left and right parentheses, and carriage returns. In Level 2, simple

variables are added, along with the corresponding syntax-checking abilities. Level 3 programming introduces powers and functions. And when you choose Level 4, ANSI Minimal BASIC becomes available to you—along with complete syntax checking on all characters entered. Level 4 also automatically triggers display of a helpful selection array (which shows valid "next" characters) if you make two successive errors.

Hand Holding BASIC provides six special display screens that monitor programs as they run on your Apple. You control execution speed, which can be slowed all the way down to single-step mode. You can also switch back and forth between display screens.



A Command Screen is used to enter stored programs and commands, and an Execution Screen simply displays output from plans statements in your program. The Line Trace Screen shows control passing through your BASIC statements, while

the Chronological Trace Screen presents a scrolled display of source statements as they're being interpreted. A Monitor Screen shows the return stack, and displays monitored variables. And a For Loop Screen displays information about the interpretation of "FOR" and "NEXT" statements.

LEUEL4 PROGRAM IS RUNRING U2 CTRACE
PDL(1)178 143
110 PRINT N 15 "; N
120 PRINT N 15 "; N
100 LET N=N+1
110 PRINT N IS "; N
120 RETURN
50 NEXT X2
X2 5
60 NEXT X1
X1 2
30 FOR X2=1 TO 4
40 GÖSUB 80

Hand Holding BASIC provides a sophisticated debugging environment, too. You're able to set or clear breakpoints on statements; to give cross-reference listings for variables or line numbers; and to stop or restart at will.

Hand Holding BASIC is written in assembly language.

With the Hand Holding BASIC package, you'll receive: 1) Hand Holding BASIC master diskette; 2) back-up diskette; 3) user natruction

Agenda Files

Business people shouldn't have to depend on paperwork in order to stay well-organized. If your desk is strewn with calendars, reminders, and lists of things to do, chances are your productivity's suffering.

Agenda Files is a versatile, easy-to-use calendar filing system that allows you to schedule appointments and special occasions until the end of the 20th century. It also reminds you—like a tickler system—when important dates you've designated draw near.

Ideal for personal as well as business use, Agenda Files encourages a punctual approach to meeting responsibilities. With it, you can keep your future in order—and your daily schedule running on time.

Agenda Files:

- permits flexible data entry...so you can type in any descriptions you want, without fixed-format constraints;
- allows you to search, re-order, and selectively print out file listings ...so you avoid time-consuming clerical activity;

■ lets you store unscheduled events into its File for the Future... so you're able to keep track of tentative plans, then later determine their timing.

With Agenda Files you can enter information in each of the program's six files—Today, Tomorrow, Day After Tomorrow, and Future files, as well as the First and Second List files. These lists can be used to store phone numbers, addresses, "To Do" lists, grocery lists, client lists, or any other information that might be useful in planning your agenda.



When entering an item into all files other than the *List* and *Today* files, the program will automatically ask if you want notice in advance of, or on, the date associated with the event. You can specify up to 90 days' advance notice, or indicate you want none at all. This is especially effective for anyone who has to meet deadlines or file reports.



The Agenda Files menu options allow you to: delete appointments; transfer entries from one file to another; search your calendar or list for items containing a specific keyword; and re-order the contents of any file. The print option lets you print out all or any portion of an agenda file. With it, you can quickly generate up-to-date, legible, appointment schedules to take with you on the run.

Agenda Files is written in Applesoft BASIC.

With the Agenda Files package you'll receive: 1) Agenda Files master diskette; 2) back-up diskette; 3) user instructions.



Order Tracking System

If you're an independent sales representative, you can stay on the inside track to sales success with the Order Tracking System. Not only does this program track your commissions, it lets you see where time and energy are being spent *un*profitably.

Designed for independent sales professionals, Order Tracking System helps you process, locate, and analyze sales information. It's an easy-to-use sales management program that lets you keep tabs on principal revenue generators, calculate commissions, maintain monthly sales reports, and analyze sales effectiveness.

Order Tracking System eliminates the clutter and time-consuming drudgery of conventional record keeping. With it, you can help ensure that your business grows in a profitable, orderly fashion.

Order Tracking System:

- ■helps track and analyze customer, product, and sales force activity... so you know exactly where your strengths lie;
- ■tabulates daily sales information cumulatively...so you can instantly generate up-to-date monthly reports;
 ■stores up to 100 random purchase
- orders per diskette, or uses separate diskettes for each product or customer ...so your records stay organized
- ...so your records stay organized as your sales grow;
 ■computes complicated multiple
- computes complicated multiple commission rate orders automatically ... so you avoid performing inaccurate, time-consuming calculations.

* ORDER TRACKING SYSTEM U1.3A *

ORDER INQUIRY (1)

PRINTED REPORTS (2)

ORDER MAINTENANCE (3)

COMPILE SALES OATA (4)

SET TODAY'S DATE (5)

>=====SELECT OPTION=====

To use Order Tracking System, first choose the Set Today's Date

option and enter the date. Next, *Order Maintenance* lets you log orders, whether you're entering a new order or updating an existing one. For supplementary data, choose the *Order Inquiry* option, which allows you to add or recover information on partial shipments, status of purchase orders, and special commission rates. This is especially useful for keeping in touch with customer-related problems.

Order Tracking System's Compile Sales Data option lets you process and store diskette data, taking only a few moments to separate order information into proper categories. With it you can compile the necessary information to print all sales reports.

The *Printed Reports* option gives you a *Reports Menu*, which lets you generate various printouts to interpret sales factors and performance. *Sales Reports* (commission status, salesman, customer, principal, and monthly analyses) lets you generate reports on updated sales activity.

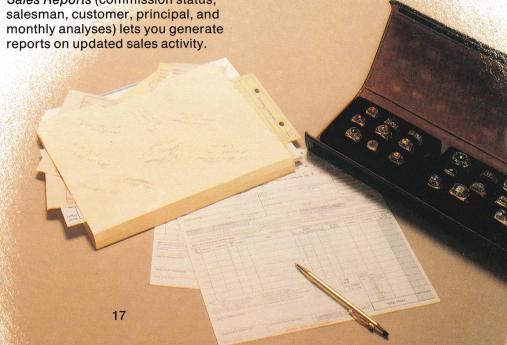
As an example, Salesman Analysis compares the performance of your individual sales people on a month-to-month basis. Used with Commission Status, it identifies which products and customers fatten your commission paycheck, and those that amount to a waste of time.

A second *Printed Reports* option, *Order Reports* (which lists orders by customer or principal, and lists all expedited orders) lets you instantly verify orders and list corresponding action items. Access to this data can save you lots of trouble. Suppose you get a phone call about a "shorted" order that has to be settled immediately. First select *List Orders by Customer* to verify the order. Then write a reminder to trace the shorted merchandise in *List All Expedited Orders*

A third *Printed Reports* option, *Copy of Purchase Order*, lets you print out purchase order data for hard-copy files. It tactfully omits commission rate information when generating customer copies.

Order Tracking System is written in Applesoft BASIC.

With the Order Tracking System you'll receive: 1) Order Tracking System program diskette; 2) back-up diskette; 3) instruction manual.



Geometry & Measurement Drill & Practice

Studying angles and circumferences? Try sharpening your understanding with these effective Geometry and Measurement Drill and Practice programs.

programs.

Recommended for students in junior high school and above, the programs test users on areas, perimeters, lengths, angles, polygons, volumes, circles—even clock time intervals. Material is presented on two separate diskettes, or "volumes," one elementary and one advanced.

You learn fast, because Geometry and Measurement Drill and Practice uses your Apple's high-resolution graphics to emphasize key points, and provides short explanations to help you when you get stuck. And, since you select the drills you want from a menu of options, the program is easy to use, too.

Geometry and Measurement Drill and Practice:

■ provides study information, drill options, and correct answers... so you can use the program as a comprehensive learning tool;
■ lets you select the number of problems you want to attempt... so you control the time you spend on any single drill;

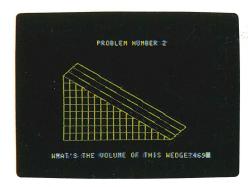
■ summarizes the number of correct answers on your first and second tries ... so you can judge your progress.

It's simple to use Geometry and Measurement Drill and Practice. For instance, suppose you choose the Volume 1 diskette. Its main menu lists the drills focusing on polygons, lengths, perimeters and areas, and clock time. To choose any drill, just type its menu number on your Apple keyboard.

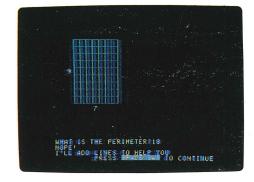
GEOMETRY AND MEASUREMENT MENU OF
AVAILABLE PROGRAMS
VOLUME 1, VERSION 1
1 POLYGON DRILL
2 LENGTH DRILL
3 EASY PERIMETER/AREA DRILL
4 CLOCK DRILL
TYPE THE NUMBER OF THE PROGRAM YOU
NANT TO RUN (TO END OR SEE
DESCRIPTIONS TYPE 8)

Let's say you choose the *Polygon Drill*. You can specify the polygon 'you'd like to be tested on—triangles, for instance—and the number of problems you want to attempt. When you've finished with the drill, your results will be automatically tabulated, summarizing how well you did. Then you'll be able to: 1) repeat the same

type of drill (but with different questions); or 2) return to the main menu to try a different type of drill; or 3) stop the program.

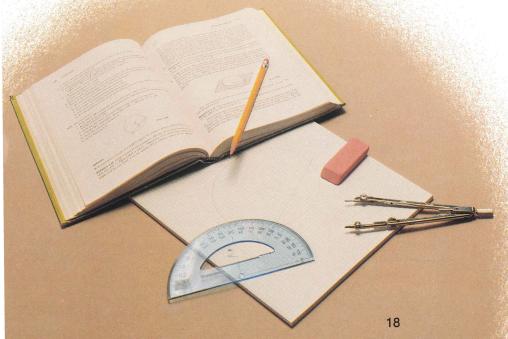


The more advanced Volume 2 programs include drills on circles, angles, perimeters/areas, and volumes/areas. If you make a mistake on your first attempt to answer a question, the program provides more assistance.



Geometry and Measurement Drill and Practice is written in Applesoft BASIC.

With the Geometry and Measurement Drill and Practice package, you'll receive: 1) Geometry and Measurement Drill and Practice program diskettes (Volumes 1 and 2); 2) back-up diskettes; 3) user instructions.



Formulex

Take control of your business forms with the Formulex Forms Package. Formulex lets you organize your paperwork into a comprehensive data system tailored to your specifications.

With Formulex, you design data entry screens that match your paperwork—whether you're using shipping orders, invoices, questionnaires, or other business forms. Once you set up the system, anyone who can use a typewriter keyboard can enter information quickly and accurately.

Formulex:

- uses simple commands for formatting screens, saving data, and retrieving forms in the Pascal system ... so it saves you programming time;
- incorporates easy-to-use forms features that aren't otherwise available in the Pascal language...so it simplifies data entry requirements:
- allows you to define exactly what kind of information should appear in each field, and what information is required on the form...so it ensures thorough handling of each transaction;
- fills redundant fields automatically
- ... so it saves input time;
- searches files selectively for the information you specify...so it

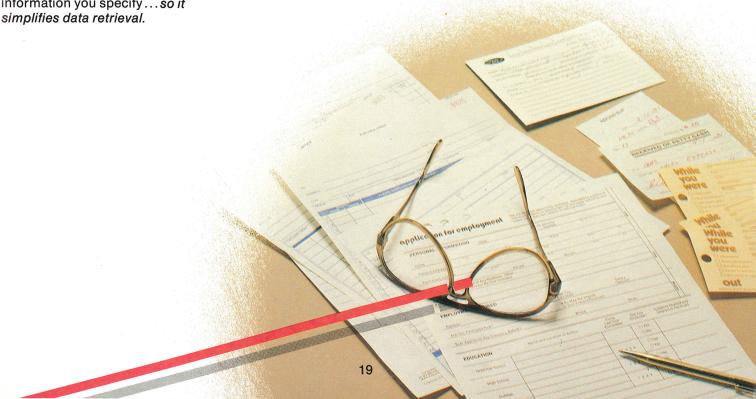
Formulex organizes data entry, the "front end" of most applications programs. Anyone—with or without programming experience—will find it easy to set up a sophisticated input procedure using Formulex's simple screen formatting commands. And since Formulex makes standard Pascal text files, you can edit files or write your own programs to access your Formulex data.



You can use up to 10 field specification commands to define precisely what kind of information will go into each field. You can instruct Formulex to reject an invalid transaction code, for example, or an incomplete mailing address.

Formulex contains built-in commands which let you add, modify, delete, and list your data files —without any programming.

Formulex is written in Pascal. With the Formulex Forms Package, you'll receive: 1) Formulex program diskette; 2) back-up diskette; 3) Formulex reference guide.



Utopia Graphics Tablet System

Liberate the masterpiece within your Apple Graphics Tablet. Utopia Software's hi-res Graphics Tablet System expands your Graphic Tablet's capabilities, giving you the features and convenience of larger graphics systems—at a fraction of the price.

The Apple Graphics Tablet turns your Apple II system into an artist's canvas. The tablet offers an exciting medium with easy-to-use "tools" and techniques for creating and displaying pictorial information. When used with the Utopia Graphics Tablet System, the number of creative alternatives available to you multiplies before your eyes.

The Utopia Graphics Tablet System includes a wide array of brush types for creating original shapes and functions, and provides 64 color options that can generate 40 unique brush shades. It also has programs to help you design patterns, charts, graphs, and animated screens, as well as a digitizer option that lets you calculate the distance and area of any shape traced on the Graphics Tablet.

Utopia Graphics Tablet System:

■ provides a relatively easy way to create intricate designs, brilliant colors, and animated graphics...

so you obtain precisely the effects you want in the shortest amount of time;

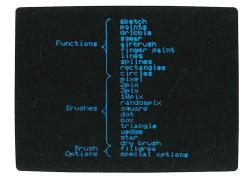
- allows you to save "galleries" of canvases...so you can make a wide variety of home, office, and classroom presentations;
- gives you pen-controlled editing capabilities...so you save time by refining rather than redrawing canvases.

The Utopia Graphics Tablet System frees you to experiment with shapes, designs, and colors. The author, recording artist and record producer Todd Rundgren, has developed some extraordinary graphics programs for the system's Paintbox, Digitize, Make-a-Brush, Shaper, Fill In, Global Options, Label/Graph, The Gallery, and Animate menus.



"I want to make computerized graphics as uncomplicated and as much fun as possible, while still allowing users maximum control over their Apple II Graphics Tablet hardware," says Rundgren.

Make-a-Brush's Finger Paint program, for example, combines your chosen palette color with its "complement," such as blue with green. It then draws this new color on the screen in a ragged, finger-painted design. The Paintbox menu's Dyna-size feature allows you to expand and shrink any shape you're working with for your artistic convenience. With the Append option from the Shaper menu, you can assemble complex new shapes using parts of original or traced canvases stored in memory.



The Utopia Graphics Tablet System is highly interactive. Its menus, sub-menus, colors, and graphics options can be selected at the touch of your pen-controlled cursor. Simply press the pen down outside the tablet's grid whenever you want to enter a menu, and without menu overlays or keyboard commands, your menu will immediately appear. It lets you build a library of useful shapes to access quickly and use over and over again.

The Utopia Graphics Tablet System is written in Applesoft BASIC.

With the Utopia Graphics Tablet System, you'll receive: 1) Utopia Graphics Tablet System master diskette; 2) back-up diskette; 3) user manual.



PSORT

Solve your Pascal disk file sorting problems with PSORT, a stand-alone program that can also be incorporated into other Pascal programs as a ready-made routine. PSORT lets you sort files through a wide variety of user-defined keys, such as name, ZIP code, age, account number, and more. A unique selection option lets you further specify which records are to be included or excluded in sort and merge processes.

With PSORT, you can choose between fixed or variable-length records and fields, and text or string files—so you enjoy a high degree of programming application flexibility and convenience. You can also select all critical system parameters, including number of sort keys, files to be merged, fields per fixed-length record, characters per record, and characters per field. And full source code is provided, so you can even modify PSORT's procedures to meet your particular needs.

SEGMENT PROCEDURE DISTRIBUTE;

VAR

F1: TEXT;
F6: F1LE OF STRINGREC;
INRECC: STRINGREC;
INRECCHAJKEY: KEZ;
SOMEONTREE: BOOLEAN;
ROOT: NODEPTR;
PROCEDURE WRITELNX(ITEM: STRINGREC);
BEGIN
IF TEXTINT THEN
ELSE
BEGIN FF1^:= ITEM; PUT(FF1)
ENO
ENO; (* WRITELNX *)
PROCEDURE REWRITEX(N: INTEGER);
BEGIN

PSORT:

■can be called as a procedure from a user program...so you cut costs by reducing development time;

■ provides up to 10 user-redefinable sort keys with mixed ascending/descending sequences...so you have comprehensive sorting capabilities at your fingertips;

■can merge up to 10 user-redefinable, pre-sorted files...so you consolidate large files more efficiently;

■ supports multiple disks for input, output, and work files...so you can fully utilize diskette storage space;
■ lets you supply parameters either

through interactive prompting, or through a control file that's set up only once...so it's easier for you and others to use the program.



Anyone with Pascal programming experience will find PSORT easy to use. Just compile the PSORT programs—provided in Pascal source code—and execute them in the usual way. PSORT leads you step-by-step through the sorting process. Merging is easily done, too. Just enter the names of the input files to be merged,

whether they reside on the same or different disks.

Using PSORT's Include/Exclude option is simple and straightforward. Suppose you're sorting a mailing label list, and you want to exclude all labels in a certain ZIP code area. Just indicate "E(xclude" when prompted, specify the field number, and enter the excluded ZIP code as the selection value. PSORT will automatically omit any label with the undesired ZIP code when sorting.

PSORT is written in Pascal.

With the PSORT package, you'll receive: 1) PSORT program diskette, containing source code, executable code, a parameter program to set up a control file, and a sample Pascal program that uses PSORT as a procedure; 2) PSORT user manual.



Musicomp

Looking to express the music in your soul? Roll over, Beethoven! Musicomp provides an electronic music sheet that lets you compose, arrange, store, and play your very own tunes. Use the Apple's built-in speaker or an external sound system. Musicomp also turns your Apple II system into a coin-free "computer jukebox," with 24 sample selections that demonstrate the kinds of compositions you can create with the program.

If you've had any training in music or music theory, you can quickly begin using Musicomp to play, record, and edit your own compositions. And even if you don't have much musical aptitude, you can enjoy Musicomp's pre-programmed tunes while showing off your Apple in a unique way.

Musicomp:

- lets you edit your compositions note-by-note...so you get precisely the music you want;
- displays each note it plays on a music staff centered on your screen

...so you learn music symbols as you hear their corresponding sounds;

■can be connected through the cassette output jack to a stereo system...so you can use your personal computer to play music with or without adding expensive equipment.



Musicomp's *Play* and *Create* options allow you to key in your own music, edit it, store, recall, and play it back. Use your Apple keyboard as you would a piano keyboard—over a full four-octave chromatic range.

In addition to setting key and time signatures, you also set the tone of every piece you create. Musicomp has three "voice" and four "timbre" settings that alter tone, allowing you to



arrange as well as compose. One combination of settings produces a tone suggestive of woodwinds, for example, while another combination sounds like a harpsichord.

Musicomp is written in Integer BASIC.

With the Musicomp package, you'll receive: 1) Musicomp program diskette; 2) back-up diskette; 3) instructions.



Circuit Analysis

Tired of endless breadboarding and testing every time you design a circuit? Circuit Analysis lets you modify and improve your circuits as much as you want—without picking up a soldering iron.

Whether you design circuits for profit or pleasure, Circuit Analysis allows you to quickly adapt AC or DC circuits to your required specifications. And, by connecting an Apple Silentype or Apple-compatible printer to your system, you can quickly record test results.

Circuit Analysis:

- calculates the effect of individual components on an entire circuit
- ...so you can zero in on the most significant parts when experimenting with changes;
- shows which components' tolerances are most critical to the success of a circuit...so you'll know exactly where it's safe to economize;
- allows you to plot data using the Frequency Analysis option...so you can instantly visualize your circuit's performance;
- lets you redefine output nodes ... so you can easily run any of the program's tests using any suitable output.

CC PART EFFECTS & MORST CASE >>

PART EFFECT ON TOLERANCE

MARE OUTPUT X TOLERANCE

WEC 85.15 0.48

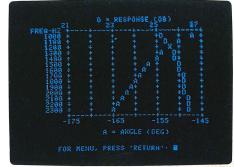
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RE 167

RE

In order to use Circuit Analysis, you must first diagram your circuit, substituting equivalent subcircuits as necessary. You then assign numbers to each part and node. Using the *Make A New File* option, enter this positional data along with values and tolerances for the components—up to 60 parts and 30 nodes for an AC circuit; 80 parts and 40 nodes for a DC circuit.

The Circuit Analysis program's Nominal Output option helps you determine the nominal voltage gain, output level, and phase shift of your circuit at a given frequency. The Frequency Response option provides a complete check. Circuit Analysis will list up to 30 frequency steps in increments of your choice, then

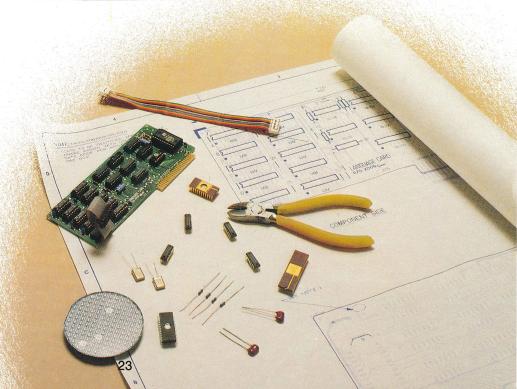


offer you the option of seeing the information displayed graphically.

Part Effects & Worst Case will alert you to exactly how each component is affecting your circuit, and the possible results if they all performed at the negative limits of their tolerances. The Optimize a Part option will vary a specific component's value to produce the voltage gain, output level, or phase shift you request. Trial Run & Test Limits provides statistical analysis of a circuit's performance under assembly line conditions telling you what the test limits should be for a one percent reject rate.

Circuit Analysis is written in Applesoft BASIC.

With the Circuit Analysis package, you'll receive: 1) Circuit Analysis program diskette, including sample circuits; 2) back-up diskette; 3) instructions.



PILOT Animation Tools

Teachers: bring your Computer-Assisted Instruction (CAI) programs to life with the PILOT Animation Package. Used in conjunction with the PILOT Author System, this program is a complete animation "tool shop." Put it to work to illustrate important points, dramatize concepts and principles, and capture your students' attention.

The PILOT Animation Package:

- lets you write complex graphics programs without prior software expertise;
- provides an easy-to-use environment...so your animation task is simplified;
- stores animation sequence files ...so you can quickly access and reuse them.

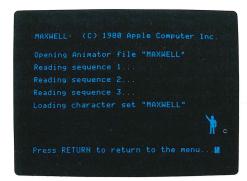
Helio. Welcome to PILOT ANIMATION
Copyright (C) Apple Computer, Inc., 1930
The lessons on this disk are:
Animator : builds animation sequences
Maxwell : an animated demonstration
Or Hemory : will answer any question
Hormus : lesson from an old scribe
Please type the name of the lesson
you wish to run, and press the
RETUREN Key.
Which lesson? dr. memory

When used with the PILOT Author diskette, the PILOT Animation Package's *Animator* program lets you build and edit special data files of images. Then you can call these files in sequences in such a way as to animate the images.

You'd begin, for instance, by visualizing the particular image you wish to animate, and breaking down the various stages of its motion into key "snapshot" images. Simply use the standard PILOT Author System's character generator to construct these key images—or assemble them from an existing character font "library" of images that you've already created and stored. Next, use the Animator program to put the images in motion. You'll end up with a data file of key images in sequence which -like the individual frames of a motion picture—create the illusion of movement. This animated sequence can also be called easily from any PILOT lesson.

The PILOT Animation Package lets you manipulate shapes with simple PILOT statements. If the character set happens to represent a kangaroo, for example, you can easily command the appropriate frame-by-frame options to make the animal bounce across the screen. Then, by transferring *Animator* files to your

PILOT lesson diskettes, you can incorporate the animation sequence into your desired program.

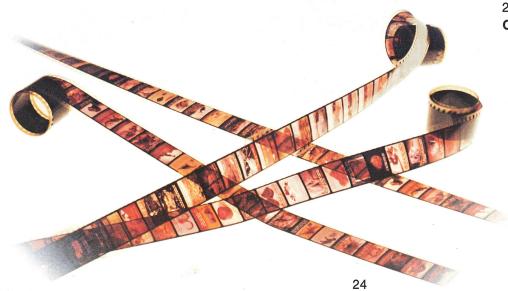


The PILOT Animation Package also includes *Maxwell*—a program demonstrating the simplicity and flexibility of PILOT animation—as well as *Hormuz* and *Dr. Memory*, two excellent sample PILOT lessons. In addition, the PILOT lesson *Immediate*—also included in the package—allows you to review your animations on the spot, without having to insert them into complete PILOT programs.

The PILOT Animation Package is written in PILOT.

To incorporate animation sequences developed with this package into PILOT lessons, you will need the Apple PILOT Author system (A2D0028).

With the PILOT Animation Package, you'll receive: 1) PILOT Animation Package program diskette; 2) instructions.



Topographic Mapping

This versatile package allows you to present topographic information with three-dimensional realism. You can create seven different types of video displays on your Apple II system, all from a single set of data.

The Topographic Mapping package also lets you display climatological trends, socio-economic data. mathematical functions, engineering models—any information, in fact, that varies continuously with location.

Topographic Mapping:

- provides a comprehensive library of graphics programs...so you can choose the most effective way of displaying your data;
- includes two programs that let you use the full 16-color graphics capability of the Apple...so you can highlight and differentiate data for the most accurate, easy-to-view graphical information:
- has five programs that let you use Apple's high-resolution graphics capability...so your three-dimensional displays give you accurate and useful topographical information:
- redraws maps from different points of view...so you can experiment to find just the right perspective for vour needs:
- provides two data entry programs that help you generate your own displays...so you can study a mountain you want to climb, map population densities or rainfall data, even create science fiction worlds—your imagination is the only limit!

There are nine Topographic Mapping Programs and seven types of displays in the software package. Each is selected from a main menu.

Two low-resolution display programs take advantage of the Apple's ability to produce 16 different colors. One, Layer, depicts specified elevation ranges, producing a multicolored, "layer cake" graphic effect. The other program, Slope, uses color to highlight different slope gradients in the terrain under study.



Five black-and-white display programs-Contour, Inclined, Block, View, and Plastic—exploit the high-resolution graphics capability of your Apple system. Contour provides a standard topographic map, showing points along grid lines of equal elevation. *Inclined* is similar, but instead of being limited to horizontal planes, you can actually choose the inclination angle of planes intersecting the terrain.

One of the most unique programs in the package is View, which produces a view of the landscape as seen from a selected point, looking in a selected direction. The effect is

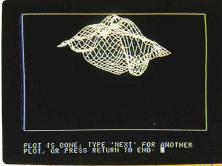
startling, as you're thrust into the program's field of view where you can get an accurate look at the landscape from whatever perspective you've chosen.

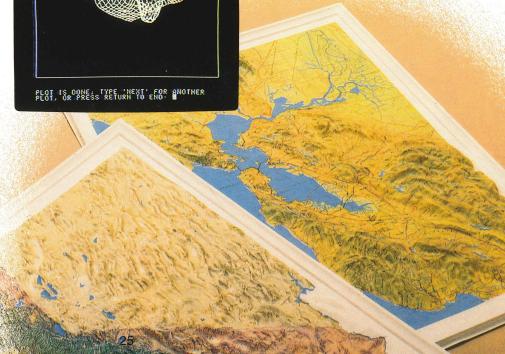
With the *Block* program, you can produce an oblique view of a map area in orthogonal perspective. *Plastic,* another program, produces a shaded relief map of terrain that looks remarkably like a photograph.

To create your own maps and data bases for Topographic Mapping. you can use either of two data entry programs. Regular lets you take data from standard topographic maps or any other sources which have a regularly spaced grid, and convert it into a video display. If your data points don't fall into regularly spaced rows and columns, you can use a second program, called Irregular, to enter the x, y, and z coordinates of relevant data points. The display programs then interpolate the data, just as they do with Regular.

Topographic Mapping is written in Applesoft BASIC.

With the Topographic Mapping package, you'll receive: 1) Topographic Mapping master diskette, including two demonstration files; 2) instructions.





Stepwise Multiple Regression

Designed especially for the professional researcher, Stepwise Multiple Regression is a statistical analysis program patterned after the UCLA BIOMED multiple regression series. The program allows you to use stepwise regression analysis to test accurately the strength of relationships between variables—up to 60 in a single run. Data is saved to and read from diskettes, with a single diskette capable of storing up to 64 observations for each of 100 variables. By using multiple diskettes, there is virtually no limit to the total number of observations possible.

Stepwise Multiple Regression determines all the customary descriptive statistics for any multivariate linear regression, including means, standard deviations, regression coefficients, multiple correlation coefficients, R², residuals, correlations, F-values, and others. The program also provides the correlation matrix and the "stepwise" additions (or deletions) of variables to the explanatory model.



A unique feature of Stepwise Multiple Regression is that it plots residual values using Apple's high-resolution display capability. If your system includes an Apple Silentype printer, you can obtain hard-copy output of these detailed graphs, too.

Stepwise Multiple Regression:

- reduces your use of large, expensive timesharing systems to perform regression analysis in your research...so you save money on computer time charges;
- frees you from the down time, restricted availability, and other disadvantages of timesharing systems... allowing you to work at your convenience;
- keeps confidential data out of large mainframe environments... so you avoid security risks;
- ■lets you conduct remote investigations on-site, anywhere there's an electrical outlet...so you're able to compute and use statistical information as you need it, without delays.

The Stepwise Multiple Regression system consists of 11 programs contained on a single master diskette—five programs for data management, four for calculations and reporting results, and two for system integration.

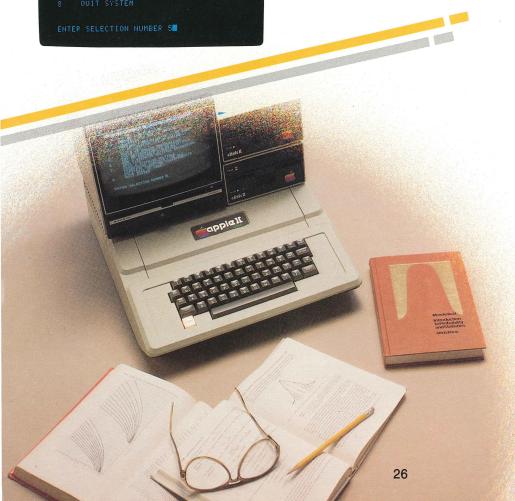
All of the programs are easily selected from a main menu, and all are linked to simplify running the system. By choosing the appropriate option on the main menu, you can: configure your system; create and prepare variable data diskettes and back-ups; update, list, and add observations to existing variable diskettes; and perform or repeat stepwise multiple regression analyses.

Stepwise Multiple Regression is written in Applesoft BASIC.

With the Stepwise Multiple
Regression package, you'll receive:

1) Stepwise Multiple Regression
master diskette; 2) back-up diskette;

3) instruction manual.



Ordering

AVAILABILITY:

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Product Information

PRODUCT NUMBERS	DESCRIPTIONS	MINIMUM SYSTEM CONFIGURATION	ADDITIONAL HARDWARE OR SOFTWARE	PRICE	PAGE
C2B0004	APM	II A48K1BR		\$235.00	14
C2H0006	Agenda Files	II A48K1BO		35.00	16
C2H0004	Artist Designer	II P48K1CN		65.00	13
C2E0006	Bridge Tutor	II 148K1BN		40.00	7
C2E0007	Bridge Tutor with				
	Scientific Club & Precision Bidding	II 148K1BN		60.00	7
C2S0003	Circuit Analysis	II A48K1BR		40.00	23
C2H0007	Diet Analysis	II A48K1BN		45.00	4
C2B0005	Formulex	II P48K1BO		75.00	19
C2H0003	Galactic Wars	II A32K1CN		35.00	11
C2E0002	Geometry & Measurement Drill & Practice	II A32K1BN		50.00	18
C2B0006	Goodspell	II A48K1BR	W	60.00	3
C2E0001	Hand Holding BASIC	II S48K1BO		100.00	15
C2H0002	Musicomp	II 132K1BN		45.00	22
C2B0008	Order Tracking System	II A48K2BO	T	50.00	17
C2B0001	Pascal Animation Tools	II P48K1BN		75.00	10
C2H0001	Personal Finance Manager	II A48K1BO		75.00	2
C2E0004	PILOT Animation Tools	II F48K1BN	F	75.00	24
C2B0007	PLAN80	II P48K1BO		185.00	5
C2B0003	PSORT	II P48K1BN		85.00	21
C2S0001	Stepwise Multiple Regression	II A48K1BO		150.00	26
C2E0003	Supermap	II A48K1CN		35.00	6
C2E0005	Topographic Mapping	II A48K1CN		65.00	25
C2B0002	VT-100 Emulator	II A48K1BN	UM	75.00	9
C2B0009	VisiCalc Real Estate Templates	II S48K1BO	V	65.00	12
C2H0005	Utopia Graphics Tablet System	II A48K1CN	G	75.00	20
C2H0009	"The World's Greatest Blackjack Program"	II S48K1BN		50.00	8

System configuration notes:

SYSTEM	LANGUAGE	MEMORY	DISK DRIVE*	VIDEO DISPLAY**	PRINTER
II) Apple II III) Apple III	A) Applesoft BASIC I) Integer BASIC S) Assembly P) Pascal	16K 32K 48K	1 2	B) B/W C) Color	N) None O) Optional R) Required

ADDITIONAL HARDWARE OR SOFTWARE

- U) Unmodified Apple Communication Card
- M) Acoustic Coupler or Modem
- G) Graphics Tablet
- D) Clock—Calendar Card

- V) VisiCalc Program
- F) PILOT Author Disk
- T) Silentype only
- W) Apple Writer

- * All disk drives are DOS 3.3.
- ** Video monitors or televisions lacking vertical hold controls may not work with an Apple Computer System. (RF modulator required with TV.)





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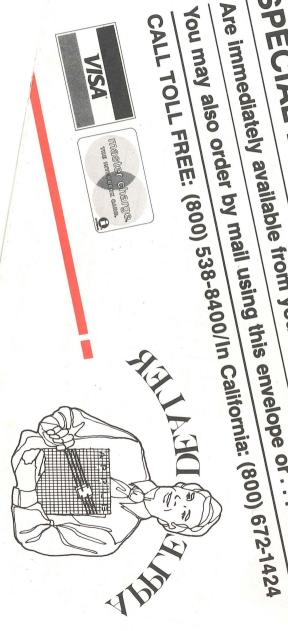
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