ON THREE®

The Magazine For Apple /// Owners and Users

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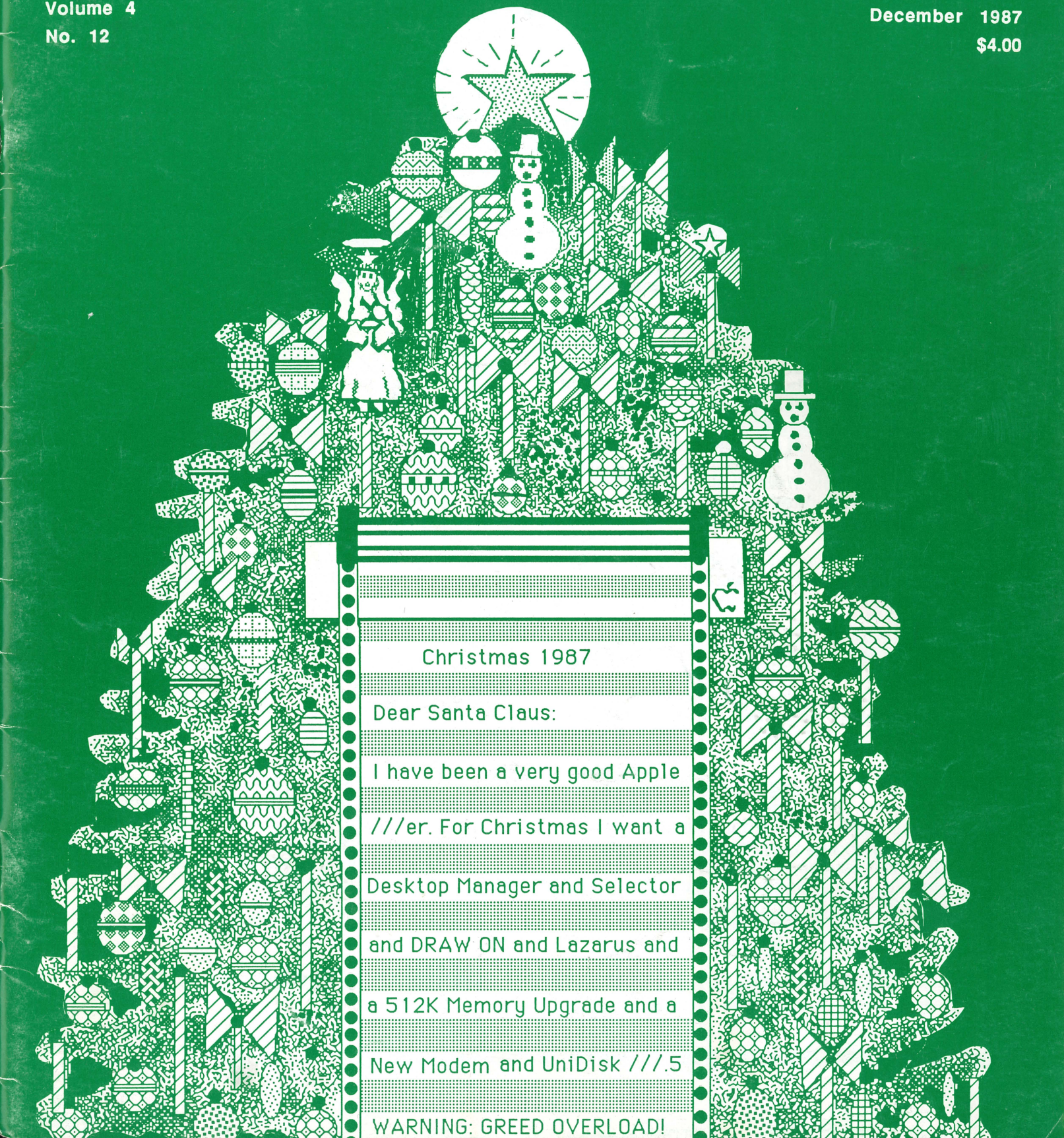


Christmas 1987

Dear Santa Claus:

I have been a very good Apple

///er. For Christmas I want a

Desktop Manager and Selector

and DRAW ON and Lazarus and

a 512K Memory Upgrade and a

New Modem and UniDisk ///.5

WARNING: GREED OVERLOAD!

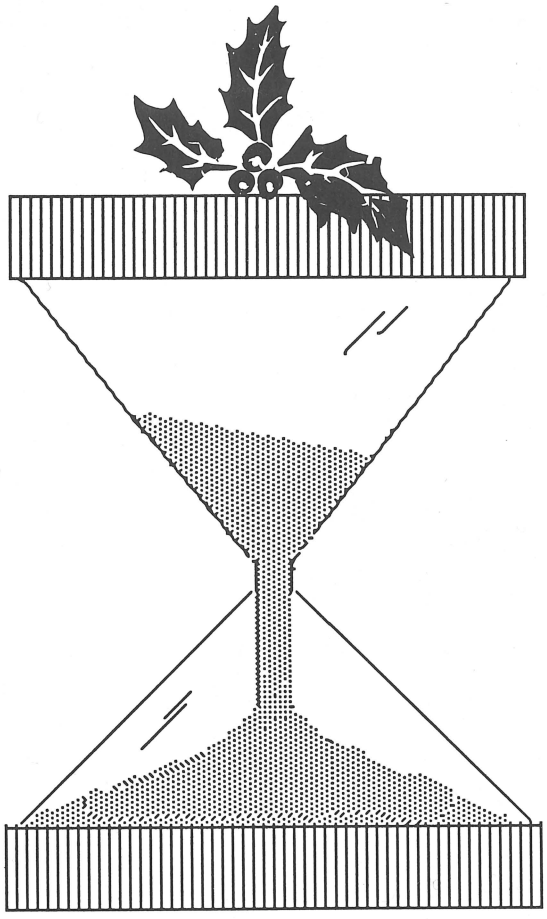
Give yourself the gift of time with the ON THREE O'Clock!

Look what the ON THREE O'Clock can do for you!

Imagine this -

An insurance broker is using his Apple /// for all of his small business' accounting needs. However, he can't remember when he had last entered updated information about the latest insurance firm he is representing. A client walks into the office and needs this type of information to consider switching his policy to the latest insurance company his broker is representing. What does the broker do? Well, if he doesn't have a clock chip installed, he may remember how helpful it would have been and immediately call *ON THREE* so the same problem doesn't occur again or he may already have the chip and can easily check the time and date stamped file to see when he had updated the file.

Remember, when the Apple /// was first released, the supplier of Apple Computer's clock chips could not supply a working clock. As a result, the /// did not have a clock of any sort. But, not too long after that, *ON THREE* developed a clock for the Apple /// which plugs in right where the never-released Apple clock was supposed to go.



For only $49.95 plus $3.00 shipping and handling, you won't have to worry anymore about your updated files. This easy-to-install, SOS-compatible clock can be yours. It comes with comprehensive instructions and *ON THREE*'s three-month limited warranty and it does not use any of your machine's precious slots.

With a clock installed, whenever you save or modify any type of file, the current time and date will be added to the directory listing so you can always tell at a glance which file you last worked on, and when. But that's not all. Business Basic has two reserve variables, DATE$ and TIME$, which return, respectively, the current date and time to your BASIC program. These reserved variables can then be used whenever you want to print the date and/or time in a BASIC program.

Special Combination Offer

There's a great deal more you can do with *ON THREE*'s O'Clock if you have the *Desktop Manager*. Wherever you want, you can display the current date and time on the screen with one keypress. Since this is a background function, you can be word processing with AppleWriter or entering data in VisiCalc and with one keystroke you can obtain updated time information. In addition, you can use the *Desktop Manager*'s appointment calendar to enter appointments or messages. Like magic, no matter what you are doing, the system will alert you of the appointment.

The *Desktop Manager* also includes a calculator and a notepad for your convenience. Purchased together, *ON THREE* offers the clock and the *Desktop Manager* for only $165.95 plus $8 s/h.

Desktop Manager/ ON THREE O'Clock Combo
$165.95 plus $8 s/h

Publisher:
Bob Consorti

Editor:
Paula Sheppard

Controller:
Joseph Consorti

Logistics:
Janet Schanz

Customer Service Coordinator:
Lynne Miller

Service Manager:
Dave Christenson

Research & Development:
Tim Harrington

Order Department:
(800) 443-8877 (toll-free)
(800) 331-1418 (in California)

Technical Questions:
(805) 644-3514

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The Magazine For Apple /// Owners and Users

Volume 4, No. 12 — December 1987

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ON THE COVER:

Seasons Greetings to all our subscribers from everyone at ON THREE. We wish you the happiest of holidays! This months cover "Christmas Wishes" is by Cathy Consorti. Please don't forget to leave Santa a printout of *your* Apple /// wish list!

ON THREE Presents . . .

LAZARUS ///

$49.95

File Recovery System

plus $2 s/h

- *A wrong keystroke can lose hours of work*
- *The correct keystroke with Lazarus /// can undelete those lost files. Need we say more?*
- *Not copy-protected—Installs easily on Selector ///, Catalyst*

$129.95 plus $6 s/h

The Desktop Manager

This is the most complete and sophisticated desk accessory program ever written! Finally you can unclutter your desk the Desktop Manager way. The Desktop Manager places all of the desk accessory utilities you need -- appointment calendar, notepad and calculator -- within every program you own, so you can use them as if they were a part of your original programs. While you are using your program, you cannot see the Desktop Manager. However, by pressing only two keys the Desktop Manager menu appears, ready for your use from within *any* application!

Note Pad - This handy tool has multiple pages per note, word wrap, automatic repagination, pick up and paste, and many other features usually found only in a word processing program. On-line help screens (a standard Desktop Manager feature) make using the Note Pad effortless as well as convenient.

Appointment Calendar - Set multiple appointments daily through December 31, 1999. As your appointment is due, a reminder appears on your screen regardless of what application you're using. The daily and weekly appointments are shown at a glance and, as with all Desktop Manager options, help screens are only two keystrokes away.

Calculator - A powerful electronic workhorse, the Calculator has full 16-digit accuracy and advanced functions such as SIN, COS, TAN, LOG's, x to a power, square root pi, memory and base conversions in addition to the basic add, subtract, multiply and divide functions. Also, you can invoke a simulated scrolling paper tape for printing later or pasting into another document.

Disk Manager

Disk Manager

File Commands	Device Commands
List Directory	List All Devices
Copy File	Copy Volume
Delete File	Format Disk
Rename File	Rename Volume
Lock/Unlock	Verify Volume

*? = Help

Use Arrow keys to SELECT, Press RETURN to RUN. ESCAPE to EXIT.

This Desktop Manager module features the most frequently used applications of Apple's System Utilities and makes them available to your from within any program. Copy, delete, rename, lock/ unlock and list all of the files on your disk without leaving the program you're using. Copy, format, rename and verify *volume* commands are available as well, so you will never again lose data because you exited a program to format a disk. All for $44.95 plus $3 s/h.

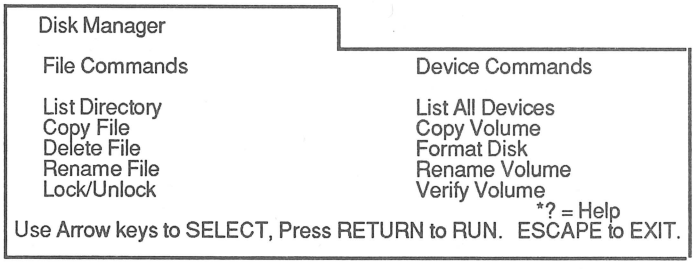
ASCII Chart

This Desktop Manager module lists the decimal, hexidecimal and corresponding character values of all ASCII keyboard characters. A second screen shows the decimal and hexidecimal equivalents of keypresses which include the control key. This keypress table can be invaluable when you need to know printer commands to enable different printer modes. The ASCII table is a necessary tool for programmers of all skill levels. Why not have them both at your fingertips? Only $9.95 plus $3 s/h.

Order the Desktop Manager module you need today!

Disk Manager - $44.95 plus $3 s/h

ASCII Chart - $9.95 plus $3 s/h



Apple.Sauce

by Paula Sheppard

What's to come

Happy Holidays to all Apple ///er's! It's time to begin thinking about things to come in 1988. As expected, *ON THREE* magazine will continue to provide ///'ers with all of the updated information about /// products, including product reviews. We will have a review on StemWriter /// and beginners can expect the Beginning /// series by Richard and Lavona Rann to be back in full swing next month.

This month, *ON THREE* is featuring data bases. Writer Jeffrey Fritz gives an overall view of data bases in the first of a two-part series. In the last of Robert Graham's /// E-Z Pieces series, the /// E-Z Pieces data base is reviewed in quite some detail.

If you think you were gyped when purchasing an Apple ///, due to Apple's cancellation of the machine some four years ago, Ranntings will let you know that there are other Apple fans who are in the same boat. Even the million plus Apple IIe owners cannot use some of the newest programs on the shelves at local Apple dealers. Richard and Lavona Rann examine the problems with the newest Apple developments, including the Macintosh SE. They also offer advice in this article to lead Apple owners out of any type of dilemma they may be facing.

If you enjoyed Earl Brelje's review of Super Disk No. 1, then you should enjoy Dan Martin's review of Super Disk No. 2, by Earl Brelje. Earl was so excited about Super Disk No.1, he developed a Super Disk of his own, known as Super Disk No. 2. Hopefully, we can look forward to more Super Disks by Earl.

Before printing the article, *The ///'s For Me*, we are waiting for more entries before deciding which ones to use. If you have not submitted a piece for *The ///'s For Me*, be sure to do so by following the directions given in the September issue of the magazine.

ON THREE has started a new column, "Ask Doc" by Dave "Doc" Christenson. Doc will discuss the many technical problems which are asked over the phone and in letters each month. This is a great place to look for answers for any questions you may have about the ///. General questions will be answered in Forum each month.

Another reminder to all - *ON THREE* has been forced to raise the price of 512K memory boards due to the unexpected rise in computer microchips. The company cannot promise that the price of the boards will remain stable at $354 compared to the former price of $324. The price may raise again, unfortunately. So, to save money, if you have been considering purchasing an upgrade, **now is the time to do so!**

Phase III news

Lavona Rann, president of the Phase III conference, has promised an overall review of the Phase III conference held in early October. We are looking forward to the review next month. Those who missed the conference may be regretting it after reading Lavona's article. What will it take to make this an annual conference? How can ///'ers help out? Why did so many Apple II'ers attend this conference? Did TAU (Third Apple Users) lose money on the conference? Lavona will have all of the details in her article.

Coupons, galore!

ON THREE has a new policy for those who want to take advantage of the coupon specials but are reluctant to cut up their *ON THREE* magazines. Just photocopy the coupon and your mailing label and enclose them with your order. We can not honor a discount coupon *after* the expiration date on the coupon and you may not use more than one coupon in any given month. We will not be able to honor your discount coupon unless you enclose a copy of your mailing label with your order. Thanks for your cooperation.

New drivers?

ON THREE has been busy again this last quarter of the year designing a Universal Device Drivers disk, with the help of many ///'ers. If you would like to help in this project, call *ON THREE* developers at (805) 644-3514.

-///-///-///-

NEW from *ON THREE* -

Memory Board Insurance!

ON THREE is now issuing purchasers of the *ON THREE* 512K memory boards, an insurance policy that offers the ultimate in protection and peace of mind. Whenever you bought your 512K memory board, you will be eligible for the is valuable protection.

ON THREE has always given a full, unconditional 90 day warranty on its 512K memory upgrade, including repair, replacement, parts and technical assistance. After the original 90 day warranty has expired, *ON THREE* now offers all registered owners of *ON THREE* 512K memory upgrades an insurance policy that will cover, in the event of failure of the 512K memory upgrade, the immediate shipment of a replacement 512K memory board. This insurance also includes free parts replacement and unlimited technical assistance (pertaining to the 512K memory upgrade) for the life of the policy.

When you purchase *ON THREE*'s 512K memory board insurance at the same time you buy the *ON THREE* 512K memory upgrade(s), or if you purchase the memory board insurance within the 10 day grace period allowed after you have purchased and received the board(s), the yearly premium is $50 per year for the first 512K board, $40 per year for the second board and $35 per year for each additional board purchased. When you purchase insurance at the same time you purchase the upgrade, your 512K warranty is extended from three months to a full 15 months of protection.

Any original registered owner of an *ON THREE* 512K memory board is also eligible to purchase this valuable protection. When you purchase the *ON THREE* 512K memory board insurance at any time after the elapse of the 10 day grace period (as described in the preceding paragraph) the cost for a full year's protection is $75 per year for the first board, $65 for the second board, $50 for the third board and $40 per year for each additional *ON THREE* 512K memory boards insured.

To apply for this valuable protection, send your name, address, telephone number, number of boards you want insured, date(s) of purchase, where the boards where purchased from, and your check, money order or VISA, MC or AE number and expiration date to *ON THREE*. An official *ON THREE* Insurance certificate will be issued in your name and mailed to you immediately upon receipt of payment.

512K Memory Upgrade

We know that there are still **90,000+** Apple ///'s out there that have not upgraded to 512K of memory and we are committed to letting all Apple /// owners enjoy the benefits of an enhanced Apple ///.
For larger **spreadsheets, data bases, word processing documents** and **faster program utilization,** you can't lose! If you have any questions about the upgrade, feel free to call **ON THREE.**

The 512K Memory Upgrade includes:

Complete installation and guide for use.
Ultra-fast RAMDisk driver with demonstration programs.
System Utilities 1.2 which permits larger driver files.
512K Upgrade utility which updates your programs.
Industry leading three month warranty!
Free technical support on the 512K upgrade during the warranty period.
State-of-the-art 256K memory chips.
512K Memory Confidence Program

$354 plus $10 s/h

Send in your old 256K board for $35 software credit toward your next purchase. Installation is $50! Available by appointment only.

256K Memory Upgrade

If you don't want to upgrade your Apple /// all the way to 512K, but want more memory for your ///, order the 256K Memory Upgrade today! It's specially priced at only $189 plus $10 s/h Hurry, supplies are limited. With a 256K equipped Apple ///, you will be able to use the newer programs that require a minimum of 256K. Programs like Selector ///, Catalyst, Draw ON, The Desktop Manager, Lazarus and more! The price of the 256K Memory Upgrade may never be this low again. If you decide that you want to upgrade to 512K, we even offer a generous rebate on your 256K board.

The 256K Memory Upgrade includes:

Complete installation and guide for use. Industry leading three month warranty!
Free technical support on the 256K upgradeduring warranty period.
Apple /// 256K memory board.
256K Memory Confidence Program

$89 plus $10 s/h
Order today!

Three E-Z Pieces

by Robert Graham

Powerful data base

(Editor's note: This is the last in a three-part series) So far, we have covered the word processing and spreadsheet portions of the program. In this final part we will cover the data base and the integration of different files. If you're not familiar with /// E-Z Pieces, read the first two parts before reading this part.

A data base is nothing more than a logical, flexible, highly organized filing system. Businesses use data bases for inventory, order processing, customer lists, billing, and personnel information. Hobbyists find data bases to be helpful in storing information about stamp, record, book and recipe collections. Homeowners can keep track of bills, taxes, addresses and phone numbers.

There are two types of data bases: relational and non-relational. A relational data base, like Omnis ///, uses a sophisticated hierarchical filing structure and is very powerful, but it can be difficult to use. A non-relational data base, like the one found in /// E-Z Pieces, uses a simpler *flat* filing structure and is very easy to use.

The data base

The /// E-Z Pieces data base displays entries in a single or multiple record format (up to 15 records at a time). You can toggle between seeing a single record or multiple records by pressing Z. The manual lists the maximum file size for a 256K Apple /// as being 2300 records, assuming an average record size of 75 characters. There are up to 30 user-definable categories (or fields) per record, and records can be up to 1024 characters long. You can define a calculated category, and designate a formula for its calculations. You can also produce group totals.

When choosing to create a new data base, /// E-Z Pieces automatically puts you into the *insert new records* section. You then type a name for each category, and can begin to type all the information you want in each record. The records will be displayed one at a time with all the categories and data displayed (single record format). After typing several records, you can *zoom* out to see all the records on your screen (multiple record format). The records will each be displayed on one line, with 15 records shown at any one time. By using the arrow keys, you can scroll through the records or move through the file by using the *ruler* (1 through 9).

There are up to 30 user-definable categories per record...

These records can be arranged by any category either alphabetically, numerically, or chronologically. Chances are that unless you have very small records all the categories will not show on the screen. Unlike a spreadsheet, you cannot scroll right to see these categories. By using the layout function (L) you can remove unnecessary records from view, or reduce the size of some categories until they all fit on the screen.

Entering data

Data entry can be done in the multiple record format, but it is much easier to do in the single record format, therefore, /// E-Z Pieces' insert mode is always a single record format. From the *Review/Add/Change* portion of the program, a user can choose the place to insert new records with the cursor and press I (insert mode). Press ESCAPE to leave this mode.

The editing features available include deleting an entry (CONTROL Y), deleting one or more records (D) deleting a single character (delete), making multiple copies of a record (C), moving a record to or from the clipboard (M) and moving past existing information without changing it (left and right arrows). When an entry is satisfactory, add it to the data base by pressing RETURN or ENTER. You can do this even if the cursor is in the middle of an entry without truncating the entry. As with every other part of /// E-Z Pieces, both the insert and overstrike cursors are available.

Three E-Z Pieces allows you to create *Standard Values* for each category. If you are making a data base full of names and address, for example, and almost everyone on the list is from Boston, you can use V to make *Boston* a standard value. Once this is done, /// E-Z Pieces will automatically insert *Boston* into the *Town* category

for each entry. For those people who do not live in Boston, you would simply type in another town name.

In a multiple record layout, one can *ditto* entries so that the information in one record will be duplicated in the entry directly below it by pressing ".

One particularly nice touch is /// E-Z Pieces' ability to standardize the format of all time and date entries. Type in September 17, 1987 or 9/17/87 or Sept. 17, 1987 and /// E-Z Pieces will automatically convert them to Sep 17 87 as soon as you press RETURN or ENTER. The same rule applies for time entries. They will all be converted into a "7:00 AM" format. The data base will even convert 24-hour time to the AM/PM format automatically. (If you don't want date/time conversion, simply don't use date or time in your category name).

Finding data

Imagine that you're a business person who wants a list of Texan clients who've done more than $1,000 worth of business with you in the past year. Or perhaps you need the phone number of someone named Marvin, but you can't remember his last name. The /// E-Z Pieces data base can provide this information quickly and easily.

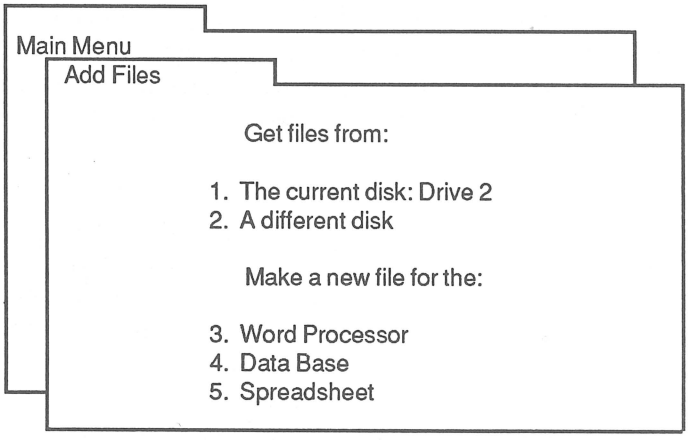
There are two methods of displaying certain records from the /// E-Z Pieces data base. The simplest way is to use OPEN-APPLE F, which invokes the *find* feature. The program will ask you to type in comparison information. If you type in *Marvin*, it will list every record in your data base that contains *Marvin*. There you will find Marvin Jones, whose last name you couldn't remember, and his phone number but you may also find Jim Marvin, Mary Allen, who lives on Marvin Court or Sid Samuels of Marvin Industries. The slightly more complicated, but much more powerful, method, is to use OPEN-APPLE R. OPEN-APPLE R allows *rules* to be set for record selection. This is done quickly and easily by selecting a category, and a comparison (such as "is greater than" or "contains" or "does not begin with") from those listed on the screen. The data base also allows one to use one or two *connectors* (like "and" or "or") between categories. Thus selecting *State* as a category, the business person would choose *Equals* as a comparison, type in *Texas*, select the

One can *ditto* entries so that the information in one record will be duplicated in the entry directly below it...

New to the /// community?

Welcome aboard! Have you been thinking about buying a word processing, data base and spreadsheet program? We have just one program for you that does it all!

Three E-Z Pieces is not merely a word processor but it combines the three most common computer applications into one package. Get ready for word processing, data base and spreadsheets. All sections use similiar commands and easy to follow pop-up menus.



Speed - Although the spreadsheet is not as powerful as Advanced VisiCalc, it is much faster. **Loading** and **saving files is** from **20 to 30 times faster.**

Efficiency - The data base section is just like the popular QuickFile ///, but better. It can handle as many as **3,000 records per file** and double the number of fields per record. Look forward to sophisticated record selection, sorting and printing combined with lightning fast sorts and searches - all in /// E-Z Pieces data base!

Comparison - The word processor rivals programs like AppleWriter and Word Juggler in speed and in use. Advanced options such as the ability to cut and paste information between your data base, spreadsheet and word processor make the program a must for all ///'ers.

/// E-Z Pieces

$135 plus $3.50 s/h

connector "and", choose the category *Net Sales*, the comparison "Is Greater Than", and type in *1000*. By pressing ESCAPE, /// E-Z Pieces begins to sort. In a few seconds, one can see all the customers in Texas who had done more than $1,000 worth of business.

Arranging records

Three E-Z Pieces allows you to arrange records in many different ways. You can arrange by any category you wish. Simply move the cursor to that category and press ⌘A. The program will then display the different ways you can arrange the records. They could be alphabetical, reverse alphabetical, highest to lowest numerical, lowest to highest numerical, chronological, or reverse chronological, depending on what is contained in that category.

Creating reports

Much like a spreadsheet, a data base shown on your Apple ///'s screen is a worksheet. In order to print out the records you want, you must create a report. Three E-Z Pieces allows you to create either a table or label style report. A table style report shows records across the page with the various categories shown in vertical columns, like the multiple record screen layout. A label

The program allows up to eight different report formats for each data base.

style reports shows each record grouped individually in a single vertical column. Each report format can include different categories or records from your data base. This program saves each as part of the data base, and each report format is available to the user whenever that data base is on the desktop.The program allows up to eight different report formats for each data base.

Pressing ⌘P (for Print a Report) brings you to the report menu. You can choose to get an existing format, create a new table or labels format, duplicate an existing format, erase a format, or keep working with a format already in use. Three E-Z Pieces allows for flexibility in deciding what to include in your report, and its appearance. Using ⌘R, can change the record selection rules to include all or any part of your data base. You can delete categories (they will remain unchanged in the database file), switch the positions of categories, make the categories wider or thinner, arrange records, and right justify categories for a professional look. If you change your mind, simply switch things back to the way they were. You can even insert a previously deleted category. Unlike the worksheet, you can scroll right to see all the categories in the Report Format.

In your data base report, /// E-Z Pieces allows one to create a *calculated category*. Use this to determine the total value of an inventory, for example. By placing the cursor at the appropriate category and pressing ⌘K, you define which category will be calculated. Then type in the formula for calculation. Using ⌘T, /// E-Z Pieces allows one to see group totals or subtotals printed in your report.

Pressing ⌘O shows the printer options. The data base allows a full compliment of printer options, and calculates the report's width in characters. A user can print a report on any of the printers designated (up to three). One can also print to the screen, the clipboard (for moving your report into a word processor file), or to a text (ASCII) or DIF file on disk.

One final note: An article in the May 10, 1985 issue of the /// Newsletter reported a bug in the /// E-Z Pieces data base program. According to the article, the bug occurs only in data bases that have more than 25 categories, and only when a sort is attempted on one of the last five categories. The bug reportedly causes garbage to appear on the screen, and the only safe way out is to press ESCAPE and leave the sort routine. I have never encountered this bug.

In summary, the /// E-Z Pieces data base is a simple, easy way to organize, file and report on fairly large amounts of data. Considering its many features, and integration into the rest of /// E-Z Pieces, this data base is a top choice for the home user or the small business user with modest filing needs.

Much like a spreadsheet, a data base shown on your Apple ///'s screen is a worksheet.

Program integration

What I've tried to show in this series is that any of the three parts of /// E-Z Pieces would make a nice stand-alone program by itself. With /// E-Z Pieces, however, you get all three applications, all using the same commands, with the ability to switch between them instantly. Further, you get the ability to *cut* information out of one application (like a spreadsheet file) and *paste* it into a different application (like a word processor file).

The way that /// E-Z Pieces does this is with a special portion of your Apple ///'s memory called the clipboard. The clipboard is meant only as temporary memory. Whenever you put new information on the clipboard, the old information is lost. If you do not move clipboard data into a file and save it to

disk, it will be lost when you quit the program. The clipboard can hold about 250 lines of information at one time. In Figure 1 is a summary of how you can transfer data using the /// E-Z Pieces clipboard.

As you can see, there are limits to the integration of /// E-Z Pieces, but even within these limits, the program can do some pretty impressive things.

Overall evaluation

Since /// E-Z Pieces is the only integrated program available for the Apple ///, there's no sense in calling it the "best." For many Apple /// users, though, it may very well be the best program they can own. It combines ease of use with several important advantages:

File integration capability
No rebooting to run different applications
Easy to remember commands that are similar or identical in all applications.
Full help menus for every application
Direct file compatibility with AppleWorks

For experienced Apple /// users who need these features, I would strongly recommend /// E-Z Pieces. For beginning Apple /// users, I would recommend it without hesitation.

-///-///-///-

Figure 1

Source	Method	Destination
Print to Clipboard	—— Word Processor	
Data Base File		File
Copy or Move to	——— Data Base File	
Clipboard		
Print to Clipboard	—— Word Processor	
Spreadsheet File		File
Copy or Move to	——— Spreadsheet File	
Clipboard		
Word Processor File	Copy or Move to ——— Clipboard	Word Processor File

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Two Short - Fini!

by David Ottalini

Fiddlin' with System Demonstration

At the start, let me admit to all my Apple /// friends and users that I am not a programming whiz. Nor do I have that analytical ability to look at a problem in such a way that it can be boiled down to a 1000 line Business Basic program and work the first time (or even the second!).

What I do enjoy doing from time to time is **fiddling**. Fiddling with programs that are already out there to see if I can't adapt them to be more useful for my own specific purposes. Frankly, I find it to be kind of fun on occasion, although the frustration factor can be very high at times (there's always that single little bug that causes everything to hang like a wet noodle...).

One program I've found to be particularly interesting is the Apple /// System Demonstration program. If you haven't run it lately, you might want to fire it up to refresh your memory a bit. It's a great little program designed to show off some of the things the /// can do.

When booted, you are presented with a *marquis border* (in color if you have a color monitor) within which is scrolling a choice of five different demonstrations. Among them is a program allowing you to reset the date and time, a graphics demonstration, and a demonstration of the type-ahead buffer.

After you have chosen one of the programs, it will run and then allow you to return to the main menu to try something else. My demo disk, by the way, was for the Apple /// plus and is listed as being version 2.2. I can't tell you what earlier versions looked like, but suspect there is little difference.

If you load the program into Business Basic and then list it, you will find a fairly compact program the provides decent documentation through the **REM** statements. The program is basically broken down into a number of easily identifiable sections (which is what made it easy for me to tear it apart).

Basically, the screen is set up, data for the demos is read in and then the *marquis border* is printed one space at a time. The program uses the 40 column, 16 color mode. The scroll subroutine is next followed by the subroutine that allows you to choose the demonstration you'd like to see run. At that point, the program is instructed to run the particular demonstration you have chosen (the demos themselves are separate programs on the disk). Once the demonstration is run, you are given a choice of returning to the main menu or quitting.

There are two pieces within this program that intrigued me enough to do a little fiddling - the *marquis border* program and the scroll program. Each can be included as subroutines in other programs, perhaps as part of a "Hello" program, message board or other use.

In any case, let's examine the *Marquis Border* program as shown in Figure 1.

Figure 1

```
00  REM ******************************************************
01  REM *              Marquis Border Program                  *
05  REM *  From The Apple ///+ System Demonstration Program    *
06  REM *            Adapted by David Ottalini                 *
07  REM *                 Copyright 1987                       *
08  REM *                  by ON THREE                         *
09  REM ******************************************************
10  TEXT
15  LEFT=8:RIGHT=9:DOWN=10:UP=11
20  COLORS$=CHR$(19)+CHR$(15)+CHR$(20)+CHR$(1)
30  PRINT CHR$(16);"1";:REM SET 40-COLUMN, 16 COLOR MODE
35  PRINT CHR$(1);:REM SET VIEWPORT
40  PRINT COLORS$
```

(Continuation of Figure 1)

```
45  HOME:VPOS=2:HPOS=2
50  PRINT CHR$(21);CHR$(0);:COLOR=5: REM ALL AUTO TEXT OPS OFF
55  FOR X=2 TO 38:GOSUB 200:PRINT CHR$(RIGHT);:NEXT
60  FOR Y=2 TO 22:GOSUB 200:PRINT CHR$(DOWN);:NEXT
65  FOR X=39 TO 3 STEP-1:GOSUB 200:PRINT CHR$(LEFT);:NEXT
70  FOR Y=23 TO 3 STEP-1:GOSUB 200:PRINT CHR$(UP);:NEXT
73  PRINT CHR$(21);CHR$(13);:REM STANDARD TEXT OPTIONS ON
75  PRINT COLORS$;:WINDOW 4,4 TO 38,22
80  HOME:PRINT"THIS IS A GREAT APPLE /// BORDER"
85  GOTO 220
200  COLOR=COLOR+1:PRINT CHR$(20);CHR$(COLOR);" ";
210  RETURN
220  END
```

Figure 2

```
00  REM ************************************************
01  REM *                  Scroll Program                *
02  REM * Taken from the Apple ///+ System Demonstration Program *
03  REM *          Adapted by David Ottalini             *
04  REM *                  Copyright 1987                *
05  REM *                   by ON THREE                  *
06  REM ************************************************
07  HOME
08  INVERSE
10  DATA THIS PROGRAM SCROLLS
20  DATA FOR YOU AND CAN BE USED
30  DATA IN MANY APPLICATIONS. TRY IT!
35  DATA THIS IS ADAPTED FROM THE
37  DATA APPLE /// DEMO DISK.
39  DATA PRESENTED IN ON THREE MAGAZINE.
40  DATA <<END>>
42  NUMDEMOS=5:K1=2:K2=NUMDEMOS-K1
50  WINDOW 20,5 TO 60,18
55  SEEK=0
60  PRINT CHR$(9)
80  RESTORE:DEMO=1
90  READ A$:IF A$="<<END>>" THEN ROUNDS=ROUNDS+1:GOTO 80
95  IF ROUNDS>=5 THEN SEEK=1
100  PRINT DEMO" . ";A$
110  IF SEEK=1 THEN GOTO 300
120  IF SEEK=0 THEN FOR TIME=1 TO 300:NEXT TIME
130  PRINT
140  IF SEEK=0 THEN FOR TIME=1 TO 300:NEXT TIME
150  PRINT
160  DEMO=DEMO+1
170  GOTO 90
300  PRINT:PRINT:PRINT"  **** STANDBY: HERE'S THE PROMPT!
305  FOR X=1 TO 1000:NEXT X
310  TEXT:NORMAL:HOME:END
```

The subroutine at line 200 in Figure 1 is actually used to print each colored square, beginning at screen location 2,2 and then moving right, down, left and up. The actual window within the border is set at line 75 and the heading is read in at line 80. The program sets the 40 column, 16 color mode at line 30 while the screen is initialized at line 20. Since I only have a Monitor ///, I cannot attest to what the border actually looks like in color. But I suspect it is *mahvalous.*

The best part of *fiddling* is that you can learn a bit about how a program is put together.

The second program taken from the demonstration (see Figure 2) is a simple scroller which I have adapted to let you insert any message you might want and have it move from bottom to top within an inversed window on the screen.

The size of the window in this program is set at line 50. The program will scroll five times (it counts <<END>> five times to do that) and then print the message located at line 300. The message is held with a simple countdown subroutine at line 305 before returning to Business Basic (I added that part). You can set the speed of the scroll at lines 120 and 140. The original program set time = 1 to 460, which was a little slow for this demonstration.

I think the best part of *fiddling* is that you can learn a bit about how a program is put together. That helps me understand Business Basic a little better. And sometimes the end result is something that is even useful!

-///-///-///-

Super Disk No. 2

by Dan Martin

Is Super Disk 2 for you?

This article is a review of the Super Disk #2 Accessory disk for the Desktop Manager developed by *ON THREE*. The modules were developed by Earl Brelje who reviewed the first Super Accessory Disk in a previous edition of *ON THREE* magazine. The modules are a little rough in spots but, as a recent convert to Desktop Manager from Power Keys, I feel privileged to comment on them. Let's get right to work!

Show Time +

Show Time + is Earl Brelje's version of a SOS clock utility. It pops up a window with the current SOS date, time and day of the week and offers the ability to set them, to activate an clever "stopwatch" type feature and to move the window around on the screen.

The access to time/date and the ability to set them is certainly a handy addition to any application, but this feature is available already via the Calendar function. The elapsed time feature works very handily with Time Zero established each time the user presses E. I found the elapsed time feature handy for timing phone calls, but due to the fact that it resets elapsed time whenever the user pops back out to the application, its utility is limited to engaging your /// as a rather large stopwatch.

Earl might consider implementing a version wherein a snapshot of the clock is stored as the module is departed so it can be used to calculate the total elapsed time when the user returns to the Show Time + function.

One minor annoyance is the window position established by the M command and cursor keys is not saved when the module is exited as it is in the Calculator Module, for example.

File Type Changer

Super Disk #2 also includes an extremely handy utility for Xmodem protocol users or anyone who finds it necessary to change a file type. When downloading an Xmodem protocol file, as opposed to a Binary II format file, the new file will be stored simply as a Binary filetype (Hex 06). This filetype is almost always unusable on a /// unless it is used as a data file by a program that doesn't even check filetype. For example, if you download a nifty font via xmodem, the filetype should be changed to Hex 07 prior to using. Not doing so will often generate an error by the application you are using.

I found the elapsed time feature handy for timing phone calls...

This module, or any such module, will not allow violation of Apple/// Pascal conventions, I'm afraid. Converting a Pascal program that you download from a BBS or CompuServe as an Ascii file (Hex 04) to a Pascal Text File (Hex 03) would result in two blocks of text being chopped off of the from of the file. The reason for this is that Pascal textfiles reserve the first two blocks of the file for markers, compiler errors and other "Set Environment" type things. Allowing this particuler change by either pasting in the two leading blocks when going from ascii-to-textfile, or chopping of the two leading blocks when going the other way would move this from a very good module to a great one.

The function displays a fairly comprehensive list of commonly and not-so-commonly used filetypes as a reference. The user is prompted for a pathname for a file and then shown the current filetype. Filetype changes are then entered as a two digit Hex code.....the most widely used convention it seems for the various manuals covering such topics. Very quick and effective. The module is somewhat more conservative in its user interface than the filetype function imbedded in the Communications Manager's F function, but compensates with the comprehensive reference of codes.

Print Screen

Super Disk #2 continues the arduous journey toward the ideal screen dump utility. Earl includes two excellent additions in this rendering: Form Feed and Line Feed. This allows a screen dump on a new page without grinding through a Printer Setup entry first. Line Feed rounds out the finer level of page positioning of the dump.
My frustration centers around the fact that no screen dump I have seen yet allows me to define the upper left and

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- ✔ AppleWriter ///
- ✔ Backup ///
- ✔ BPI
- ✔ Business Basic
- ✔ Business Graphics
- ✔ Cobol
- ✔ Draw ON ///
- ✔ Easyterm
- ✔ Graph'n Calc
- ✔ Haba Merge
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- ✔ Keystroke Report Generator *
- ✔ Lazarus ///
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lower right corner of a segment of the screen. This is the *only* bastion of superiority left for the once widely used Power Keys from Daryl Anderson and ironically the best Power Keys Screen Dump was written by *ON THREE*'s own Tim Harrington!

In all fairness, TDM permits this via Clipboard commands. I just find that it takes too many keystrokes to get what I want that way.

Warning!

Earl's Warning Module is a light security module for preventing passerby keyboard ticklers from messing with your machine. It works simply and nicely and even pops up a challenging message to those foolhearty souls that decide to take it on. The reason for the expression, "light", above is that rebooting the machine will remove the obstacle. This is reminiscent of locking cash bags. It will stop the casual tamperer, but won't stop anyone from taking the whole bag!

Power Keys, for example, would allow you to do a file view, but it was one-way only.

Great for an office environment or at home for keeping the kids from trashing Chapter 4 of the novel you haven't saved yet.

PKASO/U Commands

As a PKASO/U owner, I was delighted to see this addition to the Desktop Manager family of modules. I can never seem to find that yellow card that comes with the manual. Earl also did us the courtesy of converting the lead-in character on the command references to the default Apple /// value of "~" (Hex 7E), instead of the Apple II CONTROL-I as appears on that yellow card I can never find.

Since one of the big discriminators behind using a PKASO/U is its graphics capability, I was disappointed that Earl had not included a more complete listing of commands beyond the text/font commands. I'll still have to fumble for the card or the manual to cover those functions.

Change Fonts

Earl has finally made a font changer out of me. For five years now I have been very content with the good, ole Standard font. I never messed around much with fonts before because of the awkward and inconvenient means available to do the change. This module changes all of that. Simply enter the pathname of the new font and .....POW, you're looking at it. A four-character command to the PKASO/U printer board via Printer Setup and you're printing it, too!

Now I'll have to go look for fonts other than those on the AppleWriter /// disks! There is a real dilly in the Data Library for the /// Subtopic 7 on CompuServe, entitled "Wierd". Boy is it ever! I found that when writing articles such as this one that Gothic font puts me in the mood without sacrificing legibility.

Print File

This module permits printing of Ascii Files, but is most notable in that it also permits appropriate printing of Pascal Textfiles without scrambling in the first two blocks of header information and /// E-Z Pieces Word Processor files. The module also offers a modest degree of control by permitting left, top and bottom margin control. There is no word wrap feature. A minor annoyance is that the settings must be entered each time the module is invoked, rather than providing the option of changing the default settings. I really like its use for Pascal Textfiles!

Simply enter the pathname of the new font and .....*POW* you're looking at it.

File View

Earl's File View is the best of this type of function I've seen. As with File Print above, it works appropriately with Pascal Texfiles and /// E-Z Pieces Word Processing files. The really great feature is the ability to reposition within the file. Power Keys for example would allow you to do a file view, but it was one-way only. You could start and stop,but if something went by, you had to go all the way back to pathname entry to see it again.

An example of use that I value is when getting an error in the midst of a Pascal compilation, I can view the text file to decide if this is an isolated minor error (in which case I continue the compilation) or if it's a dummy like forgetting to declare a variable that's used 20 times (in which case I kill it). Hey, this is almost Engineering Workstation kind of stuff! (Don't worry Sun Microsystems! The /// is only getting a facelift!)

Super Disk No. 2 (continued on page 15)

ON THREE presents...

Macro Manager

Macro Manager

Solid Apple Definitions

[A]	[N]	[,]
[B]	[O]	[.]
[C]	[P]	[/]
[D]	[Q]	[;]
[E]	[R]	[']
[F]	[S]	[[]
[G]	[T]	[]]
[H]	[U]	[\]
[I]	[V]	[-]
[J]	[W]	[=]
[K]	[X]	[`]
[L]	[Y]	
[M]	[Z]	

Keypad Definitions

[0]
[1]
[2]
[3]
[4]
[5]
[6]
[7]
[8]
[9]
[.]
[-]
[ ]

*? = Help

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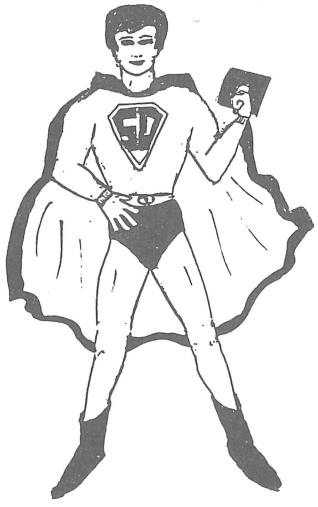
***TypeWriter** - Turns your Apple /// into an intelligent typewriter.
***Labeler** - Prints labels you define, one at a time or even multiple copies.
***New Desktop Setup** - Allows better control over the ClipBoard.

***Make Subdirectory** - The one we forgot in the Disk Manager.
***Screen Dump** - Prints a copy of your current text screen at any time.
***Menu Manager** - gives the Desktop Manager's main menu submenus, so you can have an infinite number of accessories on your trusty old Apple ///.
Priced separately, they would cost over $250. Order your copy today for only $39.95 plus $2 s/h.



Please specify disk when ordering!

Disk No. 2 contains:

***Show Time** - Now you don't have to go back to System Utilities to change the time or date. Plus, there is an elapsed timer included in this module!
***Change File Type** - This module allows you to change the file type in the disk directory.
***Change Font** - You can now change screen fonts while using TDM.
***File View** - Ever wanted to view another file within a file? This module lets you do just that.
***File Print** - Besides viewing a file within a file, you can print it, too.
***Print Screen** - Just like Screen Dump, but better! You can opt to Print Screen, Form Feed Printer or Line Feed Printer.
The disk also contains Reload & Exit, PKASO U commands and the Warning Module.
Order the latest TDM disk - No. 2 - for only $24.95 plus $3 s/h.

Super Disk #2 (continued from page 13)

Summary

In summary, Super Disk #2 offers some new and unique additions to the wonderful world of Desktop Managing. My ranking of the modules in descending order of importance and quality is:

1. File View
2. Chg. File Type
3. Change Font
4. Print Screen
5. PKASO/U
6. File Print
7. Show Time +
8. Warning

The disk is definitely worth the price of admission and Earl Brelje is to be commended and welcomed as a developer of TDM modules. Keep up the good work, Earl! We will be looking forward to your next contributions to TDM functionality.

-///-///-///-

Ramtings (continued from page 18)

upgrade again. As Apple /// owners, we know that we don't have to keep up with the technology, but also we are well aware of the costs of not keeping up. It may not be pleasant, but it is wise to keep in mind that technology is changing rapidly and it is expensive to keep up to date. With our experiences from the ///, we should have a much better perspective, than most computer buyers, from which to evaluate future purchases, in terms of their ultimate cost and usefulness.

-///-///-///-

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PFS Report

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SOS Device Driver Writers Guide

Apple /// T-shirts and sweatshirts

RAM Diagnostic Disk

Draw ON /// printer update

See page 16 for complete price list and ordering details!

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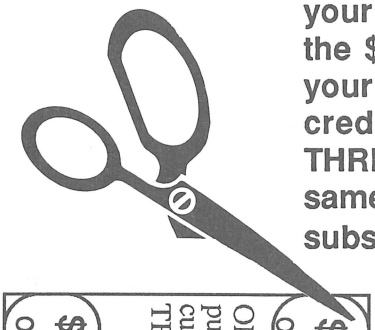

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Disk Manager	$39.95	$3.00
The Communications Manager	$49.95	$3.00
TDM Toolkit	$39.95	$5.00
Dust Covers	$9.95	$2.00
4 MB Ram Card with 0K	$149	$10
With 1,024K	$449	$10
With 2,048K	$749	$10
With 3,072K	$1049	$10
With 4,096K	$1349	$10

Product	Price	S/H
Software		
Apple File ///	$99.00	$7.00
Apple /// Fortran (req. Pascal)	$99.00	$5.00
Apple /// Pascal	$99.00	$5.00
Apple /// Pascal Update Debugger version 1.2	$49.95	$7.00
Backup ///, users guide and disk#	$50.00	$3.00
BPI General Accounting	$99.00	$7.00
BPI Accounts Payable	$99.00	$7.00
Business Basic	$99.00	$3.00
Card machine (Black Jack game)	$24.95	$2.00
Fruit machine (Slot machine game)	$19.95	$2.00
Card machine/ Fruit machine combo	$39.95	$3.00
Crossword Scrambler	$9.95	$3.00
The Desktop Manager ///	$129.00	$6.00
Communications Manager**	$49.95	$3.00
The Desktop Manager /// - ON THREE O'clock combination	$163.95	$8.00
Disk Manager* (utilities)	$44.95	$3.00
Graphics Mgr . ///, //c, //e**	$39.95	$3.00
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Super Accessories No. 1*	$39.95	$2.00
Super Accessories No. 2*	$24.95	$3.00
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Disk of the Month (D.O.M.)	$14.95	$2.00
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/// E-Z Pieces	$135.00	$3.50
ThreeWorks	$39.95	$3.00
Unidisk ///.5 driver and documentation only	$50.00	$3.00
Unprotect Driver	$29.95	$2.00
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Apple /// Unidisk ///.5 (800K 31/2" disk drive w/interface, driver & documentation)	$499.00	$10.00

Product	Price	S/H
Apple //e Mouse & Interface Card (Use with Draw ON ///, TDM & Games)	$160.00	$5.00
Interlace Kits	$75.00	$3.00
ON THREE O'Clock	$49.95	$3.00
Reconditioned 512K Apple /// w/monitor ///	$899.00	$50.00
256K Apple /// w/ monitor	$549.00	$50.00
256K Memory Upgrade, 128 to 256K	$89.00	$10.00
512K Memory Upgrade, 256K to 512K (Receive $25 credit when old 256K board is retd.)	$354.00	$10.00
65C802 Chip	$90.00	$2.00
Silentype printers (used)	$49.95	$10.00
Silentype paper (1 roll)	$5.99	$2.00
1200 BAUD Modem	$159.95	$10.00
2400 BAUD Modem	$259.95	$10.00
Other services and products		
Device Driver Writers Guide	$19.00	$3.00
Standard Drivers Manual	$39.95	$3.00
Draw ON /// Printer Update	$15.00	$2.00
Dust Cover for Apple ///	$11.95	$2.00
/// Dust Cover with profile	$12.95	$2.00
Grafix Manager Update	$15.00	$2.00
I ❤ My Apple /// T-Shirts sm., med. , lg., x-lg. yellow, blue, white, silver	$11.95	$3.00
I ❤ My Apple /// Sweatshirts sm., med., lg., x-lg. yellow, blue, white, silver	$18.95	$3.00
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Ranntings

by Richard and Lavona Rann

Computers in the same boat

Maybe you have not noticed, but Apple has been giving the Apple /// a lot of company lately. They have introduced more new products in the past year than they have in any year previous in the entire history of the company. Along with the introduction of new and exciting products there is an aging process with the products that are already in the field. What they did to the Macintosh was to take the top of the line and, in just six months' time, turn it into the bottom of the line. On the day before AppleWorld 1987, Mac Plus was the most powerful Macintosh that money could buy; on the next day, it was the least powerful. It didn't change, but in the year after its introduction, the world passed it by. It is possible to upgrade a Mac Plus, but money and upgrades will never turn it into an Mac II, nor even a Mac SE. By introducing the new Macintoshes, Apple put a cap on the upward evolution of the Mac Plus.

Over the years the same thing has happened many times in every technological field. New ideas replace older ones, and new products push out those based on the old ideas. Perhaps it is more noticeable in computers, but we have seen countless instances of new replacing old. Color replaced black and white in television; jets replaced propellers in airplanes. Refrigerators replaced ice boxes. Most people today have never started a car with a crank, but it has not been too many years since the electric starter was introduced. The acceptance of change is built into our society so there is no movement to fight fuel-injected automobiles, but with microcomputers it is different. Part of the reason may be the speed at which technological changes are coming.

It is almost overwhelming. When we got our first ///, it had the power of the largest commercial mainframe computers of the prior decade. It was awesome to walk past our *computer room* and see that little box that did what was difficult for rooms full of machinery. The time line between the IBM 1460 and the

New ideas replace older ones, and new products push out those based on the old ideas.

Apple /// was about as long as the time necessary for a child to go from kindergarten through junior college. Not long, when compared to the time between the early airplanes and the first commercial jets, or the time between the first ice box and the electric refrigerator.

We don't know how much longer the pace of technological change in computing can continue to increase, but it is still speeding up. That pace is one of the things that hurt the /// in its early days. The golden opportunity of being *first* with new technology was bungled when the machine came out with design problems. Those of you who had an early ///, know all about the problems. The machine was released much later than expected, and when it was, the first year and more was fraught with problems. Apple had to take the clock out of the machine because the batteries kept melting onto the boards. Chips wouldn't stay seated and there were several more normal, little problems. While Apple valiantly worked at correcting problems, technology was continuing to push forward. By the time the /// was working as planned, there should have been a /// Plus. When one company looked at the /// and saw an eight bit chip, when IBM had a microcomputer with a 16 bit chip, the automatic, knee-jerking, reaction concluded that the /// was already on its way to becoming obsolete as there wasn't any indication of when a faster chip would be available. Unfortunately, they were right. A ///+ did come out, but the changes were minor. Most /// users can't tell which /// they have until told to check the positioning of the arrow keys. There just wasn't much to the product change.

If you get depressed when thinking about your /// and its *obsolescence*, we suggest you think how it must be for the buyers of the first Macintoshes. There were more of them than there were /// purchasers and their machines, too, faced early retirement. The big difference was that they did have an official upgrade path if they wanted to spend the money. It has been nearly four years since $3,000 has been the price tag for a 128K Mac with an unreliable operating system, and almost no software. If this sounds like a familiar scenario it is because it should. They bought a machine that went through

Ever feel like you are at a swap meet behind your ///?

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Comes complete with full documentation and diskette containing standalone SOS interpreter and ***ON THREE***'s Desktop Manager module. All popular printers, serial and parallel interfaces supported and limited color graphics capability is included.

three expensive upgrades to make it a Mac Plus, which in our opinion was the first Mac that was an effective business machine. Many followed that route and now have reached the end of the Apple upgrade path for the original Mac. They spent $500, or more, per year upgrading their Macs and still they are now out of date. There is no Apple upgrade to an SE or MAC II.

All of those who did not upgrade from the original Mac cannot use any of the new MAC software, not even the last few releases of the operating system. The newest Apple system software requires a minimum of 1 meg of memory to function and ROMS that are available only by upgrading. If they don't buy a very expensive upgrade, those who own 128K Macs are in the same position as Apple /// owners. They do not have access to new technology and cannot run most of the MAC software currently for sale. The Mac Plus owners will someday be in the same spot, you can feel it coming. They, like the /// owners, will be in a position where they will not have the option of buying an upgrade *at any price*, unless a third party develops and markets one.

In reality, the announcement of the IIGS was the death knell for the //e.

The same type of process is happening in the Apple II family. The IIGS raised the standards for the Apple II. Most new software now being written for the Apple II family is being written for the IIGS. It was marketed as a 256K machine, but most are being sold with a memory upgrade. The standard is quickly moving up to at least 1 meg.

Most of the new software requires 512K and the new operating system (ProDOS 16). This fact alone is making the new software unworkable for people running //e's. Whether they recognize the fact or not the Apple IIe has reached the end of its product cycle. Apple may still sell it for a couple more years, but they probably will not make any more upgrades for the machine.

In reality, the announcement of the IIGS was the death knell for the //e. Apple hedged its bet against people not accepting the IIGS, by announcing a new //e in the platinum box and with a 10 key pad, but now the IIGS is obviously entrenched as the direction of the Apple II line. The million or so Apple IIe owners can no longer use the newest software. Apple gave them an upgrade path by making the old software run on the new machine, but the upgrade is only available for //e owners. People that did not upgrade their II+'s cannot move up without starting with an entirely new computer.

What has this to do with the Apple ///? Nothing directly other than to show that we are not alone. Apple ///'ers aren't different from Apple II+ and Mac 128 owners whose machines have become obsolete. It would actually be cheaper for us to keep our ///'s and buy a new MAC or IIGS, than it would have been to buy a II+ or a MAC 128K and all the upgrades to get to the newest machines, and be faced with the fact that upgrades to MAC SE or MAC II are not available. There is one difference - they can use their old software. The difference is to some degree a pleasant illusion. We have a IIGS that runs AppleWriter and Word Juggler and we have those packages just like we do on the ///. When it comes down to it, we don't use them because they are *obsolete*. We use newer software written to use the newer capabilities of the machine. It may be comforting to know you can use your old software, but new software is the major reason for buying a new machine. Why else would we want a Mac II or a IIGS except for what it can do, and it is the software that controls that? What software we have may be familiar, comforting, even useful, but the new machine will have something better. If you are happy with the software available for your ///, keep it and don't waste your money on a new machine.

Our data is the only thing of value that we need to take with us into a new computer. As Apple /// owners we have a lot invested in the product of our computing over the past many years. The programs we use are only means to working with our data, they are tools. With a new system there are new and generally better tools. Fortunately, conversion of data is not difficult. An Apple /// owner can move data to a IIGS or a Mac and lose very little.

We cannot stop progress and probably wouldn't want to. In a few years the Mac II will join the Apple ///, Apple II and Lisa. We must realize that if we want to keep up with the changes we must commit ourselves and our money to doing what is necessary to keep up.

An Apple /// owner can move data to a IIGS or a Mac and lose very little.

Our one meg Mac SE, that isn't even a year old, is showing signs of being obsolete. The newest programs and multi-tasking operating environment will work in 1 meg, technically, but they really require two meg or more. To stay current, the SE owner will have to

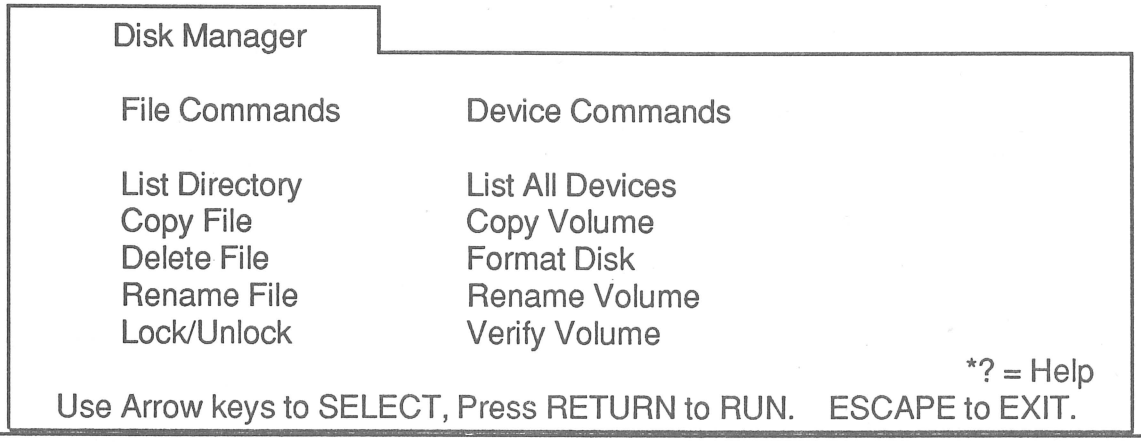
Ranntings (continued on page 15)

ON THREE presents...

Disk Manager

$44.95 plus $3 s/h

This Desktop Manager module features the most frequently used applications of Apple's System Utilities and makes them available to your from within any program. Copy, delete, rename, lock/ unlock and list all of the files on your disk without leaving the program you're using. Copy, format, rename and verify *volume* commands are available as well, so you will never again lose data because you exited a program to format a disk.



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The Communications Manager

The Communications Manager is a powerful tool that allows your Apple /// to communicate or *talk* to other computers or services such as CompuServe™. If you are familiar with other telecommunication programs such as Access /// or Terminus, you should be pleasantly surprised. VT-52 terminal emulation makes the program as powerful as any other Apple /// communications package. You can record incoming text to a printer or disk file for later viewing and transmit standard ASCII and Pascal Textfiles automatically. **The Communications Manager** has almost every feature of those popular programs plus an important extra.

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Data Base ///

by Jeffrey Fritz

What can a base do?

Apple /// computer literacy came as quite a shock and not by learning some new way to manipulate data on my Apple ///. Nor was it the discovery of some deep, dark secret about SOS. Computer literacy came when I realized that I could not survive without my trusty /// by my side.

I had accepted a new position as director of engineering for MetroNews, a statewide radio network in West Virginia. The new job was about 250 miles from home. When I started the job, I left my wife, two children, dog and Apple /// behind. Minutes after sitting down at my new desk, I found files to organize, budgets to prepare, inventories to track and reports to type.

A data base enables the user to view the event with different filters.

Engineering data is frequently updated. When was the multi-track tape recorder in production studio A last adjusted to specification? What was its performance at the time? What work is scheduled for the talk show studio? With nine studios in two cities, maintenance records can become confusing very quickly. It boggles the mind just to keep everything straight. These are conditions that challenge the sanity of an engineer and call for the power of a personal computer with a good data base.

I'll admit that I did try to avoid transporting my /// from home. I kept maintenance records on 3" x 5" file cards. Each card represented an item of studio equipment such as a tape deck, control board, compact disk player, and so on. Given the sheer volume of equipment and the frequent preventive maintenance done, file cards were not nearly versatile enough. Changes and updates soon made the cards impossible to read. I found myself wondering how they did it in the *dark ages* before personal computers. There is just something about being computer literate that makes even a Selectric typewriter seem akin to carving letters in stone!

Three months later when my family was still 250 miles away. But my trusty Apple /// was sitting right in front of me, processing away! Computer literacy had come in full force!

Purpose of a data base

Data bases are used for record filing, information management and reports. They offer the ability to view the same information from several different angles. It is said that no two witnesses view the same event in the same way. Each is perceiving the event through his own filter based on experience, prejudice and perception. In the same manner, a data base enables the user to view the event (information) with different filters. The difference is that while witnesses can confuse facts, data base software clarifies information. In a sense, data base programs allow multi-dimensional views of the same information.

To better understand how this works, let's consider a fictional radio station, KRUM, with the following staff:

Department	Last Name	First Name	Position	Salary	Hired
Engineering	Diode	Bucky	Engineering Director	$25,000	May 87
	Jones	Charles	Assistant Engineer	$10,400	Nov 67
Management	Carlson	Arthur	General Manager	$56,700	Dec 66
	Getbuck	James	Sales Manager	$39,650	Jan 85
	Makegood	Terri	Executive Secretary	$14,500	Feb 81
	Marlow	Jennifer	Receptionist	$32,780	Jul 76
	Porters	Bailey	Business Manager	$16,950	Aug 78
Operations	Fever	John	Air Personality	$22,500	Jul 77
	Flytrap	Venus	Air Personality	$23,025	Aug 77
	Nessman	Les	News Anchor	$18,900	Oct 54
	Smith	Wilson	Operations Manager	$26,500	Mar 81
	Travis	Andrew	Program Director	$26,000	Jun 77
	Zanadu	Michael	Air Personality	$21,600	Jul 86
Sales	Marc	Nathan	Salesperson	$32,180	Mar 81
	Neal	Joanna	Salesperson	$35,200	May 74
	Renee	Deborah	Salesperson	$11,200	Nov 83
	Tarlick	Herb	Salesperson	$17,650	May 69

Suddenly, one dark and gloomy day, KRUM is sold. The new owner of this enterprise, Mr. Knowsall, is concerned about the station's excessive labor costs. He wants to have a list of people in each department who are salaried at $25,000 or more a year.

File: KRUM Personnel
Report: Axed Personnel July 11, 1987
Selection: Salary equals $25,000
or Salary is greater than $25,000

Last Name	First Name	Position	Salary
Diode	Bucky	Engineering Director	$25,000
Carlson	Arthur	General Manager	$56,700
Getbuck	James	Sales Manager	$39,650
Marlow	Jennifer	Receptionist	$32,780
Smith	Wilson	Operations Manager	$26,500
Marc	Nathan	Salesperson	$32,180
Neal	Joanna	Salesperson	$35,200
Travis	Andrew	Program Director	$26,000

The bottom line is too close to the bottom. Mr. Knowsall decides that these expensive people will receive pink slips with their next check.

Mr. Knowsall has just sold an unprofitable station, WXZZ, to help finance his purchase of KRUM. He has an undying allegiance to his old sales staff and plans to transfer all of them to KRUM. The present sales staff can use their sales abilities to find a new line of work. Knowsall wants to know which people on the KRUM staff are not in sales and make less than $25,000. Below are the lucky ones who are going to stay employed.

File: KRUM Personnel
Report: Retained Personnel July 11, 1987
Selection: Salary is less than $25,000
and Department does not contain SALES

Department	Last Name	First Name	Position	Salary
Engineering	Jones	Charles	Assistant Engineer	$10,400
Management	Makegood	Terri	Executive Secretary	$14,500
	Porters	Bailey	Business Manager	$16,950
Operations	Fever	John	Air Personality	$22,500
	Flytrap	Venus	Air Personality	$23,025
	Nessman	Les	News Anchor	$18,900
	Zanadu	Michael	Air Personality	$21,600

Mr. Knowsall realizes that it will take time to find replacements for the soon to be terminated KRUM personnel. So before the axe falls, he arranges a formal dinner for the entire staff. At the dinner, Mr Knowsall will make a speech assuring the staff that no personnel changes will be made by the new management. He will say the dinner is in honor of those with 10 years of dedicated service to KRUM. The honored staff will be seated at a special table in order of their hire date. Mr. Knowsall wants a list of personnel ordered by tenure. Once again we go back to our data base.

File: KRUM Personnel
Report: Tenure July 11, 1987
Selection: Hired Date is before Aug 77

Hired	Last Name	First Name
Oct 54	Nessman	Les
Dec 66	Carlson	Arthur
Nov 67	Jones	Charles
May 69	Tarlick	Herb
May 74	Neal	Joanna
Jul 76	Marlow	Jennifer
Jun 77	Travis	Andrew
Jul 77	Fever	John

Since we are in the know, we might wonder which of the honored will not be axed the following payday. The answer comes from our data base listed above.

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Send to *ON THREE developers!*

File: KRUM Personnel
Report: Retained Honored July 11, 1987
Selection: Department does not contain SALES
and Salary is less than $25,000
and Hired Date is before Aug 77

Last Name	First Name	Position	Department	Salary	Hired
Fever	John	Air Personality	Operations	$22,500	Jul 77
Jones	Charles	Assistant Engineer	Engineering	$10,400	Nov 67
Nessman	Les	News Anchor	Operations	$18,900	Oct 54

Slim pickin's indeed!

What we are really doing with our data base is looking at the same information from different viewpoints using "selection criteria". We have organized the information (alphabetized, numerical order) in different ways. All of this makes information more clearly understood. This is really the fun and power of using a data base.

Types of data bases

There are two basic types of data base programs, electronic filers and data base managers. When most people refer to a "data base" they generally mean an electronic filer, like an electronic Rolodex. Information is easily stored, easily retrieved, but not very detailed. As a general rule, Electronic Filers are quicker to learn, easier to use and much less expensive than their bigger electronic brother - the data base manager.

Data base managers are descendants from powerful programs written for mainframe computers. They are better suited for more complex applications. Many data base managers are relational, which means that they can use data from other related files. They also have more powerful report generators. Which type is best? The answer largely depends on the task. If your /// is used to keep a phone/address directory of business acquaintances, then a filer is plenty versatile. If you manage large amounts of data from many interrelated departments a data base manager might be a must. For most applications a decent electronic filer will be adequate.

Files, records and strawberry fields forever

Files, records and fields are terms used with data base programs of any type. Think of an address book. It has "fields" where information is to be entered. Name, address, and telephone number are all examples of fields. A "record" is a collection of fields. If our example had one person per page, each page would be a record. The entire address book is a "file". Simple enough?

Desirable features

A decent file manager should allow at least four level sorts. This means that sort can be done by at least four columns (or fields) at the same time. For example, we sorted the KRUM personnel file first by department, then by last name, and finally by first name. That was a three level sort.

A report generator can output data in an organized manner. More often then not, the output is sent to a printer. But reports also are sent to a modem, a disk file or a monitor. Report generators can be part of the data base or separate programs. More powerful report generators tend to be separate programs. Some allow calculated fields, statistics and a wealth of helpful features. The ability of the report generator to do mathematical or logical operations on certain fields is important. It can be used to provide totals, averages, subtotals and counts.

One feature which can be very important is the ability to reconfigure the record after the data base is set up. When the form was designed, a field may have been overlooked. Or perhaps a field would make more sense in another location on the form. Some data base programs are downright unforgiving if you forget a category and want to add or change it later. They will destroy your reports or record layouts.

Others will re-configure your data to accommodate the change. Since a computer is supposed to facilitate changes, an overly restrictive data base program can cause real grief when you have to change a record layout.

Akin to the ability to change records is the ability to repair damaged files. Although it is not a pleasant thought, data base files can be damaged. Improperly exiting the program, a power line glitch or an unsuccessful modification of the data base record can cause damage. Some data bases will attempt to repair the files themselves. They will leave damaged information out of the reconstructed files and prompt you in repairing the damage. In a data disaster, this can literally save the day.

The ability to transfer information to and from other sources is important. Some popular Apple /// sources are DIF, ASCII, and Quickfile/Three Easy Pieces files. DIF (Data Interchange Format) files can be used to transfer information with spreadsheets and some other data bases. ASCII ("text"

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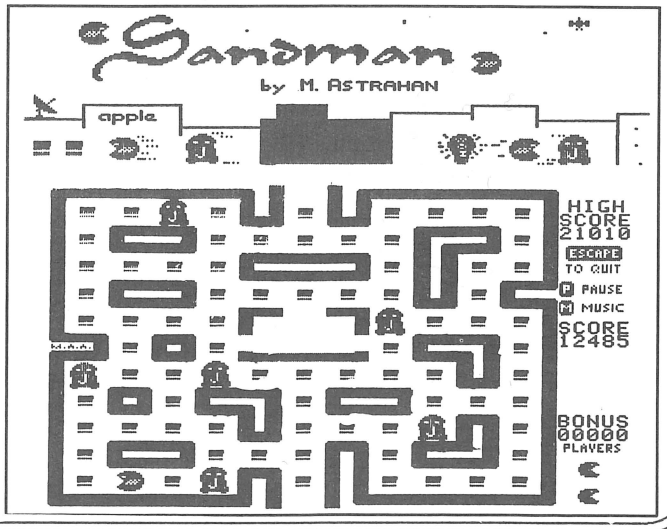
The objective of SANDMAN *is to score as many points as possible. Salvage all of the Apple ///parts discarded throughout the halls of Apple's labyrinthian research lab to receive points.* WARNING! *The lab is haunted by the ghosts of* JOBs*...if they catch you, you're done for!*

Your only weapon against the JOBs *is to find the* WOZ *who wanders about the lab peeking in on various projects. For a short time following a meeting of* SANDMAN *and* WOZ *the* JOBS *turn blue and may be exorcised if you can catch them.*

"—Brilliant, colorful and fast moving, Sandman will provide hours of fun."



files) are used primarily for word processing and communications programs. The ability to merge data with other programs (mail merge, for example) is valuable.

Investigate the different data types that are allowed by the program. Some programs have special features for entering characters, numbers, dollars, dates, Social Security Numbers and repetitive entries. This is especially important if another person will be working with the files later on. Data types reduce the chances of errors and make it easier for the other person to enter data in the form.

Holly macros

In the early days of word processing, the company I worked for purchased an expensive, dedicated word processing system. The most fascinating feature of this megabuck machine was its ability to memorize keystrokes typed by the operator and play them back on demand. It was sort of a digital instant replay. Today we call this feature a "macro". Some data base programs come with their own built-in macro functions. They can be real time savers in printing reports, or selecting records based on complicated criteria. A macro eliminates the need to endlessly re-key the same keystrokes again and again. All the individual keystrokes are recorded by the macro as the operator types them in. The next time the same report is needed, it can be executed with a just a few keystrokes. By the way, it is important to execute the macro from the same place each time. The computer can do some very interesting things if a print macro is executed from the data entry menu!

Some programs have special features for entering characters, numbers, dollars . . . and repetitive entries.

Other nice features include scratch pads, calculator and abundant help screens.

To relate or not to relate

A relational data base can search two or more files simultaneously for related information. Usually, there is one "key" field common to each file which the relational data base uses to extract information from the files. Relational data bases are easier to illustrate than explain, so let's consider Funkauto's eastern regional office. Several data base files are kept by Funkauto personnel. One file is a list of models that Funkauto manufactures. This file includes model numbers and specifications such as color, engine size, fuel economy and options on the models. Another file contains a list of models located at local dealers. Each record contains the model number, dealer's name, address and telephone numbers. There is also a file of customers in the region who have purchased various models from regional dealerships. These records have the customer names, addresses, telephone numbers, car models and purchase dates. It would be very difficult to keep all of this mostly unrelated data in one large "flat" (non-relational) data base.

By using a relational data base, a complicated task can be done very quickly.

One day, Funkauto discovered that after 6,000 miles the left front wheel of the Z-311 Deluxe model develops a tendency to fall off at speeds above 35 miles per hour. The regional office was instructed to send out recall letters to customers and dealers. As a precaution, all Z-311 Deluxe models were to be brought to the dealerships for inspection. Funkauto's regional office used its relational data base to print a list of customers and dealers who have the Z-311 Deluxe. Notice that all three files have a common field, the model. The relational data base will seek out records from all three files based on the Z-311 Deluxe model since that is the key field. The key field, then, "links" all three files together. By using a relational data base, a complicated task can be done very quickly. (We wish we could say the same for Funkauto's service departments.)

While this kind of power is very impressive in action, it really is not needed by everyone. A simple, flat filer can go a long way towards meeting the needs of most users.

What's next?

In our next installment, we will consider some of the better known data base programs written for the Apple ///. We will look at some programs that represent sophisticated data base managers,simple electronic filers and somewhere in between. For comparison, we will consider AppleFile by Apple Computer, Aladin by A.D.I. America, Keystroke by Brock Software and /// E-Z Pieces. QuickFile and AppleWorks by Haba Systems and Apple Computer will be examined as well.

-///-///-///-

Apple /// User Groups

California
Sacramento Apple /// User Group
1433 Elsdon Circle
Carmichael, CA 95608
(916) 482-6660

Orange County Apple ///
User Group
22501 Eloise Avenue
El Toro, CA 92630

LA-So. Bay Apple ///
Users Group
P.O. Box 432
Redondo Beach, CA 90277
(213) 316-7738

Apple /// Users of
Northern California
220 Redwood Highway #184
Mill Valley, CA 94941

International Apple Core
Apple /// S.I.G.
908 George Street
Santa Clara, CA 95054
(408) 727-7652

Canada
Apple **British Columbia**
Computer Society Apple /// S.I.G.
P.O. Box 80569, Burnaby, BC
Canada V5H3X9

The Astronic Club
1453 Highbush Trail
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Canada L1V1N6
(416) 839-7779

Colorado
Colorado Apple Three User Group
P.O. Box 3155
Englewood, CO 80112

Connecticut
Apple /// Society of South Conn.
34 Burr School Rd.
Westport, CT 06880
(203) 226-4198

Florida
Sarasota Apple /// User Group
c/o Computer Center
909 S. Tamiami Trail
Nokomis, FL 33555
(813) 484-0421

Georgia
Atlanta /// Society
385 Saddle Lake Road
Roswell, GA 30076
(404) 992-3130

Illinois
TAU, c/o Lavona Rann
1113 Wheaton Oaks Drive
Wheaton, IL 60187
(312) 665-6319

Kansas
Kansas City Apple /// Users Group
5533 Granada
Roeland Park, KS 66205
(913) 262-3355

Maine
So. Maine Apple Users Group
Casco St.
Freeport, ME 04033
(207) 865-4761 ext. 2249

Maryland
Apple /// S.I.G. Chairman
Washington Apple Pi
8227 Woodmont Ave. #201
Bethesda, MD 20814
(3011) 654-8060

Minnesota
Minnesota Apple Corps User Group
P.O. Box 796
Hopkins, MN 55343

New Jersey
North Jersey Apple /// Users Group
c/o Roger T. Richardson
P.O. Box 251
Allamuchy, NJ 07820
(201) 852-7710

North Carolina
North Carolina Apple /// User Group
2609 North Duke St. #103
Durham, NC 27704

Ohio
Cincinnati Apple /// User Group
5242 Horizonvue Drive
Cincinnati, OH 45239
(513) 542-7146

Apple **Dayton** - Apple ///S.I.G.
P.O. Box 1666
Fairborn, OH 45324-7666
(513) 879-5895

Oregon
Oregon Apple /// Users Group
1001 S.W. 5th Ave. #2000
Portland, OR 97204
(503) 645-6789

Overseas
Apple /// Users
Belgium/Netherlands
c/o H. Van der Straeten, Vestinglaan 49
2580 Sint-Katel ijne-Waver
Belgium
(015) 205328

Apple User Group **Europe** e.V.
Box 11 01 69 D-4200
Oberhausen 11
West Germany
0049-6195-7 3917

Apple /// User Group
Belgium/Netherlands
c/o J. Woretshofer
Ganzerikweerd 22
NL-6229 TG Maastricht
The Netherlands
(043) 611704

Le Club Apple
43 Avenue de la Grande-Armee
75116 Paris, **France**

Apple /// User Group
c/o Canberra Accounting Services
P.O. Box 42
Duffy A.C.T. 2611
Australia

Texas
Apple Corps of **Dallas**
Apple // S.I.G.
P.O. Box 5537
Richardson, TX 75080

River City Apple Corps /// S.I.G.
Box 13349
Austin, TX 78711
(512) 454-9962

Houston Area Apple Users Group
(Apple /// Division)
P.O. Box 610150
Houston, TX 77063
(713) 480-5690 or 974-5153

Virginia
Charlottsville Apple /// User Group
216 Turkey Ridge Road
Charlottsville, VA 22901
(804) 642-5655

Greater Tidewater Apple /// User Group
Route 2, Box 216
Hayes, VA 23072
(804) 642-5655 or 898-3500, ex. 2671

Apple THREE Group International
c/o H. Joseph Dobrowolski
P.O. Box 913
Langley AFB, VA 23665
(804) 865-7520

If you wish to meet other Apple /// owners and exchange ideas, contact one of the user groups listed above.

Presenting Six New Enhancements For Your Apple IIGS

4 MegaByte Memory Expansion

Wouldn't it be nice if you could get a large capacity memory expansion board for your Apple IIGS that didn't come with a ridiculously high price? That dream has come true with ON-BOARD from *ON THREE*.

Up to 4 **MegaBytes** on one board! Start with an empty board and add the memory you need: Use 1-2-3 or 4 Megabytes (4,096K) on a single card. ON-BOARD works perfectly with all DMA devices and doesn't interfere with cards in slot seven. Uses standard 1MB x 1 ram chips. The 4 MegaByte ON-BOARD includes a memory test program, a list of ram chip vendors and a full **FIVE-YEAR WARRANTY! ØK $149.95**

The Best Apple IIGS Desk Accessories

New for the GS is **The Desktop Manager** (TDM), by far the best desk accessories available on **any** micro-computer. TDM is a set of powerful utilities that you can use at any time and from within any application. Don't settle for accessories that only work within AppleWorks™ or a few selected programs.

Only **TDM** works within virtually ALL ProDOS 8 and ProDOS 16 programs. From AppleWorks to PaintWorks *Plus*™ **TDM** is always there when you need it. A single keypress suspends the current program and lets you use one of hundreds of accessories.

TDM comes complete with a Note Pad, Appointment Calendar, Calculator, Printer Manager, Envelope Labeler, Ascii Chart, Accessory Manager, Control Panel, Device Configuration, Clipboard Tools, an installation utility, the ability to save any text or graphics screen and print any text screen with a single keypress. Also built-in is a feature to pickup and paste textual information from any application to any other application! Not copy-protected. Requires 512K minimum. **$89.95**

The Disk Manager gives you the features of the System Utilities program from within all other programs. This **TDM** accessory lets you list, copy, delete, rename and lock/unlock files at any time. It also allows you to list the disk volumes, copy, format, erase, rename and verify disks whenever you want. **$39.95**

The Communications Manager is a TDM accessory that gives you a full-featured communications program within all of your current applications. VT-52 terminal emulation combined with complete support for XModem and Binary II transfers makes it one of the most powerful comm. packages for your GS. **$49.95**

Super Accessories #1 is a set of TDM accessories that provides 10 new utilities that increase the power and usefulness of your Apple IIGS. A Keyboard Lock, Show Time with job timer, Character Ruler, File Type Changer, Text Screen Printer, Hex./Regular File Viewer, Hex./Regular File Printer & a Disk Block Editor are included. **$39.95**

The TDM Toolkit shows how easy it is to create TDM accessories. It's all thoroughly explained in this guide. Includes APW examples with source code and macros on disk. **$39.95**

ORDER TODAY! See your local dealer for all of *ON THREE*'s products or order by calling toll free:

(800) 443-8877 or (800) 331-1418 in California.
For information please call (805) 644-3514.

ON THREE, Inc.
4478 Market Street Suites 701-702
Ventura, California 93003

Ask Doc

by Dave "Doc" Christenson

Dead mouse?

I own an Epson MX-100 printer with the Dots-Perfect upgrade kit connected via an Apple UPIC card.
Something I have run into with my printer that has me confused me is the underline mode. When I tell /// E-Z Pieces that I have a MX/Graftrax + printer, the printer doesn't stop underlining once it has started. I can't tell which is at fault. The Dots-Perfect manual says to send ESC-O (write (printer,CHR(27),'-',CHR(O)) to turn off the underline. When I look at the output from /// E-Z Pieces, it sends the equivalent of write (printer,CHR(27),'-') which is what Dots-Perfect says is wrong (see page 19 of the Dots-Perfect manual)! Which is right? If the Dots-Perfect ROM is wrong, am I better off waiting for a fix to the ROM before getting Draw ON // so I have a MX with Graftrax +?

I recently purchased an Apple IIe mouse and interface card (in anticipation of Draw ON ///) and am having some troubles with it. I thought I'd try it out with the Desktop Manager, but it doesn't seem to work. I installed the console and mouse drivers from the Desktop disk into the SOS.driver file for Selector and the system wouldn't boot unless I had the interface card in my system (which I assume is normal). With the following Desktop setup mode:

Use the Up and Down Arrows
To Highlight Desired Option.
Press RETURN to CHANGE Option.
Mouse Button -> RUNS DESKTOP
Direct Access -> ENABLED
Print Options -> <RET> + <LF>
Printer Name: .PRINTER

The mouse button starts desktop, but a double click does nothing and moving the mouse does nothing. Does the mouse you sell have a different ROM on the interface card? Here is the information off my interface card:

Front serial number 670-0030-C
Back serial number 820-0104-B
ROM at A2 342-206A
ROM at B2 341-0285-A
ROM at B4 342-0270 Rev C
Mouse Model Number M0100

Robert Sudduth,
Helmstedt, S.D.

Please review your installation of the updated mouse driver from the Desktop Manager Installation disk to your hard disk. Follow the instructions on page 80 and 81 exactly in your TDM manual. Your system will hang unless your mouse interface card is installed in the correct slot. It was unnecessary to install the additional .console driver into Selector ///'s sos.driver file. Our mouse interface cards are direct from Apple Computer without any modification. Only the driver software is different.

I am unable to answer your question relating to your printer and /// E-Z Pieces.We support /// E-Z Pieces but not your particular printer. In order for me to provide tech support it would be necessary to charge for this service as it falls under this category when those items were not purchased from us within the last 90 days.

Dazzled Diagnostic

I have a question regarding the diagnostic test of the Apple ///. My Apple /// has the 512K Memory Upgrade installed and it apparently is operating OK. A Confidence Disk was included with the deal when I purchased my machine secondhand three years ago. Testing the machine status with this program indicates "Machine Status OK" however, I understand that it only checks 256K RAM. The self-diagnostic routine (F6E6G routine) indicates some problems. The first grid RAM checks OK but the second grid indicates several faulty chips. This second grid is not always consistent but generally it indicates the following:

Diagnostic
RAM
111..11.
.....
.....1
.....
111.1.1.
.....
.....1
.....

I have made no attempt to check for loose or corroded chips since the machine seems to be operating satisfactorily. Sometimes it fails to boot on the Catalyst disk a couple of times but I attribute that to static, dirt or improper

seating of the disk since it always has worked eventually.

My question is "Does the 512K Upgrade make the seld diagnostic test invalid or should I think about purchasing the Memory Board insurance for the 512K board I purchased from *ON THREE*?"

Thank you and the rest of the staff for *ON THREE* magazine. I enjoy it immensely.

Charles W. Hodgson,
San Antonio, Texas

Your desacription of the problem describes intermittent memory chip errors in the addressing sequence. This can be caused by many things which are:

a. Chips are loosening in their sockets due to heating and cooling.
b. Corroded pins of chips causing poor contact.
c. Loosening of the prom chips at C13 and C12 on the logic board.
d. Loosening of the 6522 chip in the 40 pin socket on the logic board.
Any of these can cause the problems you describe in your letter.

Does the 512K memory upgrade make the self test invalid? Yes, to a point the test is invalidated due to the fact that there is more memory addresses that are not checked during the test. The 512K upgrade cam with three disks of which one was a memory test and the others allowed conversion of your programs to accept the increased memory and created a RAM disk. It sounds to me that you have not used these disks to check your system. If you don't have them they can be purchased for $15 each plus $3 s/h.

Our service department does in-house repairs of computer systems. The cost is a $50 minimum service charge plus parts cost and return shipping of your system. We have a 48 hour turnaround. All work is warrantied for 90 days. Please feel free to call for further information.

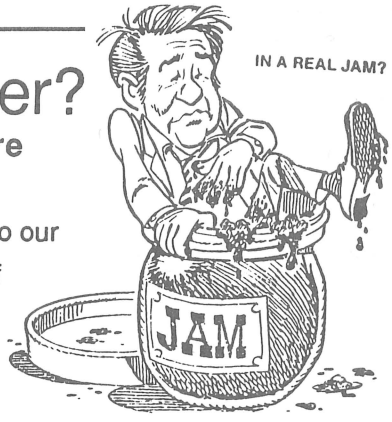
Technical Support Line:
(805) 644-3514
Hours (PST):
M-Th 9 am to noon, 1 to 5 pm
Friday 9 am to noon only

-///-///-///-

RX for your Apple /// Got a sick computer?

Don't know where to get it fixed? Tired of taking it here and there only to find out that they don't fix ///'s anymore?

Well, worry no more! ON THREE is pleased to announce the addition of Dave Christenson to our staff, as Manager of our Technical Service Department. Dave comes to us with many years of Apple /// experience. He trained at Apple, Inc. when the /// was not as yet released. Dave and his staff will be able to diagnose any /// and fix your problem at a reasonable cost.

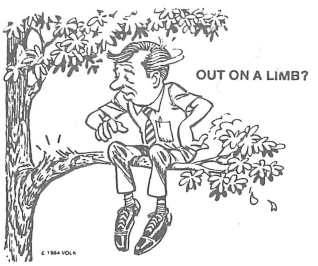


Our service department is now offering in-house repairs of Apple /// computer systems. The cost is $50.00 per hour labor, with a minimum service charge of $50.00 plus parts cost and return shipping of your system. We offer a 48 hour turnaround, (weekends and holidays excluded). All work is warrantied for 90 days. Please feel free to call for further information. As a get aquainted offer, our service department will clean your internal drive and do a complete system testing for only $50.00 plus parts cost plus $35.00 shipping. This is a great deal! Drive cleaning is normally $30.00 alone. This offer expires December 30, 1987.

Please call the technical support line listed below for a repair authorization number (RMA) prior to shipping your system. Any package received without an RMA mumber is subject to refusal. We suggest that you package your system in its original packing container (if still available), or another large box with sufficient space to add plenty of protective packing material such as foam or 'peanuts', write your RMA number on the outside of the box, include a cover letter and ship it to us via U.P.S. Blue Label (second day service). If down time is an important factor to you, check with Dave, he may be able to offer Red Label service for an even faster turnaround. RMA's take priority over any other work. Your system must be shipped to this address:

ON THREE, Inc. - Attn: Repair Dept. - 4478 Market Street - Suites 701-702 - -Ventura, CA 93003
RMA_____

One, Two, /// Forum



Unidisks

More than a year ago I purchased the Unidisk ///.5 driver and now plan to purchase a disk drive. Will the Unidisk ///.5 driver work with the new Apple platinum drives with the Apple IIe card and the Universal Disk Controller card by Central Point Software?

Fred Abramowski,
Edmonton, Alberta

We sell and service the Apple Unidisk ///.5. Our company wrote a device driver that will allow the drive to work on the Apple /// computer. This driver, written specifically for the ///, only works with the Apple interface card that comes with the unidisk drive.

The unidisk driver we make will not work with the Apple platinum drives with the IIe card. It has not been tested on the Universal Disk Controller card from Central Point Software.

Mail merging

For the past four years I've used Quickfile and AppleWriter (the first version) to do form letters via Quickfile files (names and addresses) to AppleWriter. I use a personalized version of the maillist program to merge names and addresses in a form letter.

I've just purchased /// E-Z Pieces and AppleWriter v. 2.0 and would like to do the same thing. Could you tell me how to do this?

Natalie Gomillion,
Tampa, Florida

Unfortunately, /// E-Z Pieces does not have mail merge capability. However, the files can be merged by using a program called Habamerge that functions in the same manner AppleWriter's merge utility does. Three E-Z Pieces files can be read by Quickfile and vice versa. AppleWriter /// v.2.0 does have mail merge and you can use all the files you created in v.1.1. Certainly with this information, you can be on your way to happy computing with /// E-Z Pieces and AppleWriter!

From old to new

For the most part I would like to be as compatible with current Apple technology as soon as possible so that should I eventually get a new machine I will be able to transfer files and hardware. With this in mind is it possible for me to obtain further information on the following products mentioned in your magazine?

The products are: /// E-Z Pieces, Titan /// plus IIe, Unidisk /// .5 with interface card and Apple IIe mouse with interface.

Do you have a list of the contents of back issues of *ON THREE* magazine which cover these topics?

Since I have been using my /// in Cp/M mode I have been able to use only 64K. The increased memory capability of the /// looks very attractive. My /// says it has 128K on the bottom but the store receipt says it has been upgraded to 256K. The machine did not come with Business Basic or Pascal and I bought it when I was working in Singapore so I just can't pop into the store and have them show me. How can I tell how much memory I have? Furthermore, can I install the 512K upgrade without shipping my computer to California? I have done a variety of non-soldering upgrades to my Apple II+ such as the Videx keyboard enhancer without any problems.

Craig Lamison,
Houston, Texas

The Titan /// plus IIe boards are not available from ON THREE *at this time. They may be made available in the near future. We will notify readers of any changes as soon as possible. Due to the tremendous demand Unidisk ///.5s are not always in stock. Please call before ordering.*

Most people can upgrade their computers without any problems so if you are considering an upgrade, you will most

Hurrah for ON THREE!

ON THREE is America's leading Apple /// support group and independent producer of quality software and hardware products, and ON THREE magazine, America's leading Apple /// magazine is the official publication of ON THREE.

ON THREE magazine contains enlightening articles and programs about Pascal, BASIC, and assembler; technical hints, reviews, material for the novice and the advanced programmer, and in addition, you will always find news of exciting new and current ON THREE products, user group listings and hot line consultants, plus the popular and informative "Three Questions" readers' forum.

Chances are your ON THREE subscription is about to run out. If so, renew now and don't miss out on any of the interesting articles in future issues nor announcements of new and sophisticated ON THREE products. ON THREE Magazine, your bible of Apple /// information. Twelve issues for just $40.00, back issues available at $5.00, postpaid.

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Signature _____
*3% surcharge on American Express.

ON THREE presents...

Uncopyprotect Driver

$29.95 plus $2 s/h

ON THREE has not changed its position regarding duplicating copyrighted programs for profit or to give away, but since many Apple /// software products are no longer supported, owners of AppleWriter ///, VisiCalc, and Advanced VisiCalc are facing a problem of what to do when a diskette "crashes." After much consideration ***ON THREE*** decided to proceed with a product to solve that problem. **The Uncopyprotect Driver** will allow a person to make back up floppies of the above programs. For the first time, a user can put the master disk in a safe place and boot on the duplicate.
Economically priced at **$29.95 plus $2 s/h,** the **Uncopyprotect Driver** comes with full documentation and will work with Selector /// so you will no longer require a "key" diskette. The **Driver** is sold for legitimate Archival purposes only. ***ON THREE*** does not condone and will not condone duplicating a disk for any other purpose.

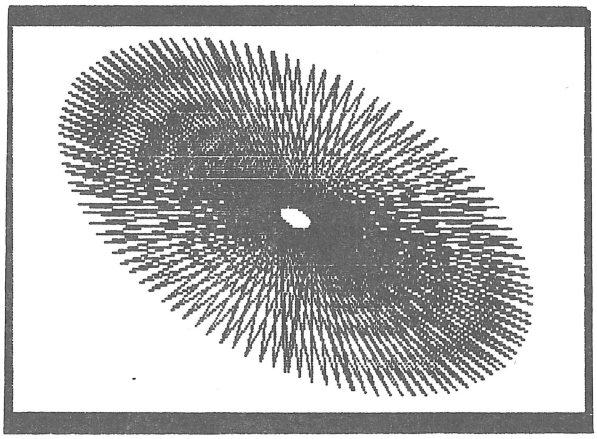
Draw ON /// - The Graphics Tool for the Apple ///

$179 plus $5 s/h

ON THREE is very proud to announce Draw On ///. **Draw ON** brings the power of LisaDraw and MacPaint to your Apple ///. Powerful cut and paste facilities let you create almost anything that you can visualize. Very fast, **Draw ON** lets you "pick up" objects on the screen and "Drag" them around in real-time. This is the most exciting package ever for the ///. With **Draw ON** you can become a one person graphic arts studio!

Since it works in any of the Apple ///'s color or B/W graphic modes and can quickly print out any picture you create, **Draw ON** is the first program to fully take advantage of the Apple ///'s tremendous graphic capabilities. Complex, pseudo three-dimensional figures are easy to create as you can place objects in front of or behind previously drawn objects. CAD is also possible with the powerful "rubber-banding" and grids available.

Ever been bored with some of the graphics that your business charting programs create? Would you like to add different titles? Change the "Look" of the graphs? Use different colors or even texture your graphs? It's all a snap with **Draw ON** /// ! Built-in help screens help you master this powerful program and there is a top quality instruction manual that rivals the beautiful books that Apple itself makes.



This picture was created with an Apple /// and Draw ON ///. *The program requires an Apple /// with 256K or an Apple /// plus.*

Don't Miss Out On This Offer!

likely be able to complete it in your home. To determine whether or not your computer is 256K, run the 256K Confidence program. Should there be any further questions on this matter, feel free to call. Also, you may want to note that the price of microchips have sky-rocketed causing a price hike for the 512K upgrade. The sooner you order, the better as **ON THREE** *does not know when the next microchip increase will cause another price increase. We encourage all readers who have been thinking about upgrades to make decisions quickly, due to the unfortunate price increases with the microchips.*

A list of all the articles for the first three years of **ON THREE** *magazine are listed in the January 1987 issue of* **ON THREE.** *This should help answer any questions about products as there are several product reviews listed. When considering a new Apple computer, you may want to read over the November "Ranntings" column as well as this month's column. I am sure they will be quite helpful to you.*

-///-///-///-

Call ON THREE Orderlines!

1-800-443-8877
or 1-800-331-1418
in California

VISA, MC, AE, checks, money orders accepted. 3% Surcharge on AE. No software returns. Items returned subject to 15% restocking charge. All items returned without prior authorization will be shipped back to the customer. No software returns. California residents add 6% sales tax.

ON THREE **introduces...**
DISK OF THE MONTH NO. 11 AND NO. 12

Disk No. 11
IMAGEWRITER

This disk contains Bob Consorti's printing utility ImageWriter for both Apple DMP or ImageWriter printers. Rotate your drawings and print them either large or small with this Pascal or Business Basic program. The disk also includes graphics and audio demos.

Disk No. 12
LOTTERY ///

Learn how to pick lottery numbers randomly; catalog a disk by two way scrolling the directory; and find text files on a disk, read the files to the printer, console or another disk on this DOM. It also includes programs to make beautiful designs such as random shapes and even diamonds.

Order both DOM's today and save nearly $5 off single disk price!*

*DOM's are $14.95 plus $2 s/h. Order two or more and you pay only $12.50 per disk, add $4 s/h.

DE CLASSIFIEDS

For Sale: 256K Apple /// - $600. 128K Apple /// - $475. Computers include monitor, manuals, CPM card and word processing software. 10 meg ProFile - $700. 5 meg ProFile - $450.MicroSci A143 (new) with pack of disks - $275. Ashton-Tate dBase II - $150. (501) 247-3199. Will consider trade for Titan III plus IIe card.

For Sale: Apple ///+512K, external 5 1/4" disk drive, two 5K ProFiles (hardly used, containing many programs) with interface boards, a 25D 2x1 communications switchbox with modem adapter cable and $700 misc. original software and documentation! Must sell due to stock market crash!! $2500 or best offer! (408) 353-2360 after 7 pm PST daily.

Classified Rates: $1 per word, $25 minimum. Copy must arrive 60 days prior to cover date, e.g. **December 25 for February issue. Subscriber Discount:** 50 cents per word, $12.50 minimum.

Send ad copy with check to:
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De Classifieds
P.O. Box 3825
Ventura, CA 93006

Call Three: Hotline

The Call Three Hotline is a service whereby Apple /// owners and users with questions can call an area number for answers. The individuals answering you calls are fellow Apple /// users who volunteered to help those in need over some rough spots. They are not compensated for this service, so we owe them a resounding "three cheers" for their kindness and generousity.

If you are willing and able to aid others by answering questions, please write to ON THREE and provide the necessary information. If you have questions, feel free to call our consultants listed below. Please observe the calling hours shown, and, before placing a call, double check the time zone so you don't inadvertently wake someone. No other restrictions apply to this service.

For your reference, the accompanying table lists subjects and abbreviations used in the "Subjects" column of the consultant listing.

Name	Area	Telephone	Days	Hours	Zone	Subjects
Colville Woodburn	NH	(603) 863-5590	M,Tu,Th,F	7-8 p.m.	Eastern	BB,CT,GE,MI,QU,WP
Ken Johnson	MA	(413) 536-7502	Su-Sa	6-9 p.m.	Eastern	BB,PA,MD,WP,MI
Don Loosli	MI	(313) 626-3848	M-F	9-5 p.m.	Eastern	GE,WP,SS,DB
Harry T. Hanson	NJ	(201) 467-0712	M-F	6-9 p.m.	Eastern	GE,PA,BB,CT
Edward Gooding, Sr.	VA	(804) 747-8751	Su-Sa	6-9 p.m.	Eastern	CO,SS,PR,MD,CT
Jeff Fritz	WV	(606) 353-9493	M-Sa	8-11 p.m.	Eastern	BB,DB,GE,MI,SS,TC,EP
Al Johnston	FL	(904) 739-1600	M-F	9 -6 p.m.	Eastern	GE
Paul Sanchez	FL	(305) 266-5965	Su-Sa	10-4 p.m.	Eastern	SS<PR,CT
R.B. Thompson	NC	(919) 787-1703	Su-Sa	10-10 p.m.	Eastern	BB,DB,GE,SS,WP
J.Donald Glenn	NE	(402) 291-9177	Su-Th	7-10 p.m.	Central	GE
Scott Weddel	NE	(402) 572-7543	Su-Sa	4-10 p.m.	Central	GE, TC
Jim Ferencak	IL	(312) 599-7505	M-F	10 -5 p.m.	Central	GE,EP,DB
Paul Thomas	MS	(601) 494-8736	Su-Sa	6-10 p.m.	Central	GE,AC,BB,CP,DB,FI,MI,PA,PR,SO,SS,TC, EP,WP
Earl T. Brelje	MN	(612) 455-6405	M-F	4-9 p.m.	Central	CT,DB,WP,GE,Quick File, Omnis 3
Ron Maupin	TX	(512) 280-0144	Su-Sa	8 a.m.-10pm	Central	AL,CO,CT,EP,MD,PA,QU,SS,TC,WP
Rodney Hendricks	TX	(214) 581-0524	Su-Sa	6-9 p.m.	Central	DB,EP,GE,MD,QU,SO,SS,TC,WP
Terri Wiles	CO	(303) 850-7472	Su-Sa	10-6 p.m.	Mtn	PA
William Prince	OR	(503) 254-6465	M-F	9-4 p.m.	Pacific	GR,TC,Corvus
Karl La Rue	WA	(509) 582-6459	F-Su	6-10 p.m.	Pacific	MD,GE,EP,WP,TC,SS,CP
Pat Holwagner	CA	(415) 433-2323	M-F	10-6 p.m.	Pacific	GE,SS,WP,CT,DBSU,AE,EP
Viincent F. Latona	CA	(818) 703-0330	M-F	9-5 p.m.	Pacific	GE,WP,BB,SS,AE
Dennis R. Cohen	CA	(818) 956-8559	Su	10-10 p.m.	Pacific	GE,PA,MU,WP,DB,SO
			M-F	7-9 p.m.		
			Sat	noon-6		
Kelly C. McGrew	WA	(206)943-8533	Su-M,Th-Sa	7-9 p.m.	Pacific	DB,GR,SS,PR,MD,CT
Larry E. Kalland	AK	(907) 272-4968	Su-Sa	12n-11pm	Alaska	AC,CT,GE,SS,EP,WP
H. Van der Straeten	Belgium	(015) 205328	Su-Sa	7-10 p.m.	Europe	BB,CT,DB,GE,PA,PR,SS
Robert C. Sudduth	Germany	(0531) 35851	Su-Wed	6-9 p.m.	Europe	AL, GE, PA, SO (German or English)
Arnaud Trache	France	21 03 04 21	Sa-Su	10-7 p.m.	Europe	AC,BB,DB,AE,FI,GR,MD,PR,SS,TC,EP,OT
J. Woretshofer	Netherlands	043-611704	Su-SA	9-12 a.m	Europe	CT,FO,GE,PA,QU,SO,WP,AE,EP
Salvador Garcia	Spain	(91) 234-5068	Su-Sa	7-10 p.m.	Europe	BB,GE,PA,MD,CT

Abbreviation Table

Subject	Code	Subject	Code	Subject	Code	Subject	Code
Accounting	AC	Agriculture	AG	Assembly Lang.	AL	Business Basic	BB
Catalyst	CT	Cobol	CO	CP/M	CP	Data base	DB
Education	ED	Emulation	AE	Financial	FI	Fortran	FO
General	GE	Graphics	GR	Micro-Sci	MI	Modems	MD
Modula-2	MU	Pascal	PA	ProFile	PR	Quark	QU
SOS	SO	Spreadsheets	SS	Telcom	TC	/// E-Z Pieces	EP
Word Proc.	WP	On Three Prod.	OT				

ON THREE'S HELPLINE:

If you live in an area without a user group or free consultant, you may want to call *ON THREE* from 8 a.m. to 5 p.m. Pacific time. *ON THREE* will give free help as long as the products purchased from *ON THREE within the last 90 days.* Help under any other circumstances will cost $5 for the first three minutes, and $1 per minute, thereafter.

StemWriter /// $99 plus $7 s/h

Have you been waiting for a word processor that does it all? Enough waiting, try the latest word processor - StemWriter ///. This program, available through ON THREE, can help you! It seems to be just what the doctor ordered for writers, office managers, desktop publishers, secretaries and any-one else who needs a sophisicated word processor.

Only 128K Apple /// required

*Design your very own form template
*Make your own headlines
*Utilize on-screen bold text and underlining
*Make sharp, attractive foot-notes
*Adjust your column width up to 240 characters wide
*Utilize on-screen overstrike
*Date-stamp your documents
*Count your words, sentences
*Make your own labels
*Personalize your form letters

With this latest ***ON THREE*** product, modes are almost discarded entirely. Forget the "insert mode" and the "delete mode" routine. You can also discard all of your possible questions about printers as StemWriter files are standardized and may be printed on any printer without alteration. Just zip into the printer control code table. For those people who haven't been satisfied with other word processors, here are some comforting words about StemWriter's capabilities:

*Utilizes a desktop just like /// E-Z Pieces, except it can store up to 8 documents in the computer's memory.
*Gives users four levels of superscripts and subscripts to choose from. It is very easy to make a character a superscript or subscript. Right before your eyes on the screen, you'll see the difference.
*Utilizes the four arrow keys to "see and point."
*Predefined numerical keypad makes loading, saving and other tasks simple! If you don't like the definitions, StemWriter will allow you to change them!
*File management, sorting/selecting segment records, formatting a volume, creating a vanilla file and other important tasks can be performed from within the StemWriter Utilities program. Save valuable time using this program.
*Allows you to view two files simultaneously.

ON THREE presents...

ASCII Chart

Ascii Conversion Table

Dec	Hex	Cr	Dec	Hex	Cr	Dec	Hex	Cr	Dec	Hex	Cr	Dec	Hex	Cr	Dec	Hex	Cr	Dec	Hex	Cr
0	00	NUL	19	13	DC3	38	26	&	57	39	9	76	4C	L	95	5F	_	114	72	r
1	01	SOH	20	14	DC4	39	27	'	58	3A	:	77	4D	M	96	60	`	115	73	s
2	02	STX	21	15	NAK	40	28	(	59	3B	;	78	4E	N	97	61	a	116	74	t
3	03	ETX	22	16	SYN	41	29	)	60	3C	<	79	4F	O	98	62	b	117	75	u
4	04	EOT	23	17	ETB	42	2A	*	61	3D	=	80	50	P	99	63	c	118	76	v
5	05	ENQ	24	18	CAN	43	2B	+	62	3E	>	81	51	Q	100	64	d	119	77	w
6	06	ACK	25	19	EM	44	2C	,	63	3F	?	82	52	R	101	65	e	120	78	x
7	07	BEL	26	1A	SUB	45	2D	-	64	40	@	83	53	S	102	66	f	121	79	y
8	08	BS	27	1B	ESC	46	2E	.	65	41	A	84	54	T	103	67	g	122	7A	z
9	09	HT	28	1C	FS	47	2F	/	66	42	B	85	55	U	104	68	h	123	7B	{
10	0A	LF	29	1D	GS	48	30	0	67	43	C	86	56	V	105	69	i	124	7C	|
11	0B	VT	30	1E	RS	49	31	1	68	44	D	87	57	W	106	6A	j	125	7D	}
12	0C	FF	31	1F	US	50	32	2	69	45	E	88	58	X	107	6B	k	126	7E	~
13	0D	CR	32	20	SP	51	33	3	70	46	F	89	59	Y	108	6C	l	127	7F	DEL
14	0E	SO	33	21	!	52	34	4	71	47	G	90	5A	Z	109	6D	m			
15	0F	SI	34	22	"	53	35	5	72	48	H	91	5B	[	110	6E	n			
16	10	DLE	35	23	#	54	36	6	73	49	I	92	5C	\	111	6F	o			
17	11	DC1	36	24	$	55	37	7	74	4A	J	93	5D	]	112	70	p			
18	12	DC2	37	25	%	56	38	8	75	4B	K	94	5E	^	113	71	q			

RETURN for more
ESCAPE to leave.

This Desktop Manager module lists the decimal, hexidecimal and corresponding character values of all ASCII keyboard characters. A second screen shows the decimal and hexidecimal equivalents of keypresses which include the control key. This keypress table can be invaluable when you need to know printer commands to enable different printer modes. The ASCII table is a necessary tool for programmers of all skill levels. Why not have them both at your fingertips? Only $9.95 plus $3 shipping and handling.

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All the knights and maidens from the enchanted ON THREE kingdom would like to extend our best wishes to all Apple ///er's for a New Year filled with peace, prosperity, health and good will.