ON THREE®

The Magazine For Apple III Owners and Users

Volume 4, Number 10

October 1987
$4.00

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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 merely $49.95 plus 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 six-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 a glance which file you at 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.

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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.

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The Magazine For Apple /// Owners and Users

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GAMES GALORE! Whatever your game is, why not play it on your ///? From gambling to arcade games to crossword puzzles, ON THREE encourages ///'ers to take time out this month to play a few games.

Smart users select the

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  - */// E-Z Pieces*

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***Selector ///* is a state-of-the art program switcher.**

A program switcher is a utility that functions as your computerized personal secretary. Its purpose is to make instantly available to you, without rebooting, a wide range of applications programs stored on your hard disk or high capacity floppy (such as UniDisk). Programs such as AppleWriter ///, Quick File /// and more than two dozen others.

Each time you require a different application, just tell your personal secretary, *Selector ///*, with a couple of keystrokes, and it will be there in seconds. No need to find your way through sub-directories or paw through a stack of floppies.

When you start your system up in the morning, just boot *Selector ///* and that's it for the day. Smart users are switching to and with *Selector ///* now.

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- ✔ Apple /// Pascal
- ✔ AppleWriter ///
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- ✔ BPI
- ✔ Business Basic
- ✔ Business Graphics
- ✔ Cobol
- ✔ Draw ON ///
- ✔ Easyterm
- ✔ Graph'n Calc
- ✔ Haba Merge
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Apple.Sauce

by Paula Sheppard

Computer cravings

Often computer operators who use their systems for both business and pleasure find it hard to turn away from reading about the latest computer technology. I am going to list the 12 steps in de-computerizing computerholics. No, friends, I am not serious.

Actually, I would like to share with readers some of the latest developments that I have heard about and even seen from various sources. For me, graphics is most appealing. However, I wouldn't mind a bit if I had a computer to clean my house like in the old cartoon George Jetson. Film producers such as George Lucas and others in the sci-fi world have brought the computer world into many households. My favorite example of a computer-influenced movie was "Space Balls," with Mel Brooks. The sattire, which hit on most every industry and every personality, threw in an R2D2 character named *Dot Matrix* for Apple fans as the matron of honor. I think I was the only one in the theatre who understood that bit of humor!

Back to reality, though, the closest thing I have found to any of the sci-fi dreams is a car that looks almost as nice as Kit in Knight Rider. Even though the red Ferrari is not real, it sure looks like the real thing when it is on an Apple IIGS. By the way, the car I am referring to comes from a program called "816/Paint." Wouldn't it be great to get these type of graphics on the ///? Graphics programmer Mel Astrahan has provided the /// world with his expertise in this field and has produced some fantastic graphics programs and games. The best part, though, is that he has shared some of his insight so other programmers can benefit!

Speaking of Mel, he put together a version of the only arcade game I am comfortable with these days - Miss PacMan. I tried a new arcade game called "Outrun" which would have been my best arcade buddy but I felt as though I was riding a bucking machine as my seat twirled around the corners as I raced down the freeway headed to Malibu beach in this marvelous make-believe game, which was too real for me. The big surprise came when I ran into another car on the freeway and a man and woman pop out of the car - dead! So I gladly escaped to Miss PacMan. Mel's version of Miss PacMan or PacMan, Mr. Sandman is fantastic! You don't know what you're missing until you see your favorite little friends, Grouchy, Harpy, Chicky and the Woz appear on your ///'s color monitor! See our friends on this month's cover. Aren't they enticing you to play Mr. Sandman?

Also in the animation department, there is a program for the Apple II series of computers which allows a user to make his or her own animated scenes with backgrounds to show on a VCR or use as part of a movie!

Mel Astrahan has produced some fantastic graphics programs and games.

On a more serious level, computer graphics have aided the law enforcement tremendously. One of the best examples I can give is that of computerized graphics used to help find missing children. In television specials concerning missing children, the ability to age a child's photograph has proved to be successful, leading many missing children home. This is just one example of computerized photography. Whether it is in the darkroom or in desktop publishing, computers have made what started out as a peep hole in a tent an easy computerized chore!

Besides graphics, speed has played an important role in the computer world. A few months ago I talked about the speed gained by using telecommunications packages. As a person becomes more and more familiar with services such as CompuServe or the ///'s Company bbs, it only takes about five minutes to connect, grab the files you want to view, leave a couple of messages and be off-line! Speed also comes in handy in everyday life. Recently, I needed an update on my credit line at a local department store. My good standing credit line was established in another state, and much to my surprise, within 10 minutes, everything was updated without any difficulties. The computerized system worked great! Loans are approved almost instantaneously along with credit checks in this same manner.

Some of the most outstanding improvements I have noticed in software development include speed. Tasks which a person would think would take hours to complete, only take 30 minutes. Could you imagine loading an 80 page documentation? Not on a ///, of course, but on another one of Apple's fine computers, such as a Macintosh. In one program, it only takes about 30 minutes! I had expected the system to bomb - but no, it did just fine!

Of course, there are many /// tasks that I sometimes can hardly believe. One of my favorites, is on Earl Brelje's Super Disk No. 2 for the Desktop Manager. I love the print screen menu which allows a user to form feed or line feed to the printer, while the printer is on-line. It is a nifty little device for those of us who are a bit lazy. Secondly, I truly enjoy the ability to view an entire file within a file. I save a lot of time with this process as I get out the clipboard tools and do wonders with cutting and pasting from one file to the next. If you haven't bought Earl's Super Disk, you're missing out on a lot of nifty little tasks which help speed up your everyday usage of the ///!

Perhaps I have merely touched base as to why there are so many computer-

holics today, but each of us could talk for weeks about our own experiences in the "Computer World." Instead, *ON THREE* has chosen a way for everyone to benefit from some of the computer graphics. Just look at the back cover of this issue and see what kind of special *ON THREE* is offering on /// games.

Just for you

This month, I have taken to heart some of the cries for variety in the magazine. Programmers, we have heard your questions and now are answering them in print! *ON THREE* programmer Tim Harrington put together the article, "Programmers' Paradise" for all programmers to enjoy.

Also, as promised, I have devised a way to test beginners and new *ON THREE* subscribers on what they have been learning in the magazine recently. Look for our first crossword puzzle! It's a great way to test your knowledge and it's better than any pop quiz. I trust you won't cheat and look at the answers in the back of the magazine.

For everyone, *ON THREE* has felt all along that the subscribers are special breed of ///'ers. Because you make this magazine happen, we want to help you add to your software collection so each month we will be featuring a software product on sale, just for subscribers. Also, you may find some cash floating around in the pages. Just pick it up and send it in with your order.

Forum fanatics

It is important to note that we have been receiving a lot of mail asking if we are going to make certain hardware products for the Apple ///. As Lavona and Richard Rann noted this month in Ranntings, each letter answered costs about $10 to write and send out. *ON THREE* president Bob Consorti has asked that those ///'ers who want to know what will or will not be made for ///, just simply make your request of what you would like to see and don't expect *ON THREE* to respond to these types of letters. We will no longer be answering these letters, but rather adding your name to a wish list along with a description of the product you would like to see produced. The chances are very slim that any more hardware will be made for the Apple ///. So please refrain from asking for hardware.

One more request, all letters written to *ON THREE* must include the users name, full address and signature on the letter. This is vital for answering questions.

We still need to see more questions for forum, just make sure they fall under the above mentioned guidelines. We want your letters to help other ///'ers.

Rannsacked

Lastly, I hope that the beginners do not panic as "The Beginning ///" column has somehow been left out of this issue. It is not gone forever. *ON THREE* has allowed time for authors Richard and Lavona Rann to watch a few football games and recover from the hard work they have put into Phase III - which we should have a report on in the near future. Instead, we suggest that beginners follow along in Bob Graham's tutorial on /// E-Z Pieces for the next three months. Although Richard and Lavona are in front of the television, they have not forgot about the Ranntings column (they wrote during commercial breaks), so enjoy! -///-///-///-

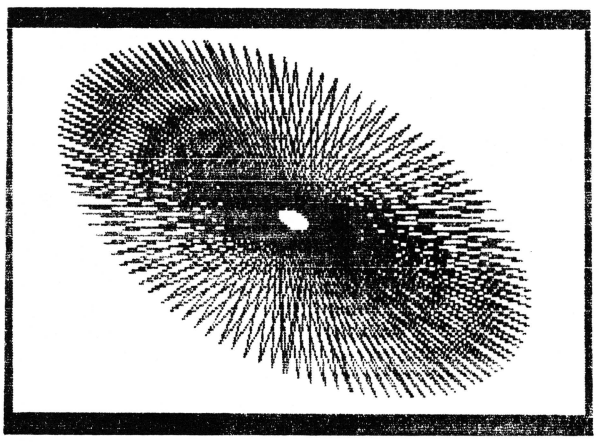
Draw ON /// - The Graphics Tool for the Apple ///

$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!

Three E-Z Pieces

by Robert Graham

Powerful word processing

(Editor's note: This is the first of a three-part series on /// E-Z Pieces)

Three E-Z Pieces is a powerful, integrated program which combines the three most used types of computer applications: word processing, data base, and spreadsheet, into one package. Since /// E-Z Pieces is integrated, a user can move data with ease from one file to another or from one application to another. For example, one can copy a column of figures from a spreadsheet file into a business letter on a word processor file, and address the letter by copying the necessary information from a database file.

While /// E-Z Pieces is a large, complex, and powerful program, it is easy to learn and use. Three E-Z Pieces uses a *desktop* metaphor to help zip through it. The program automatically reserves a portion of the ///'s memory as a *desktop* which can pile up to 12 data files. Each time one of the program's functions is invoked (like "Add files to the Desktop") a picture of a file folder is displayed. Listed on the file folder is a menu of program functions. To choose a function, simply enter the number of the function you want, or move the cursor to the choice and press RETURN. In moving through various functions, folder after folder will appear to open up the screen. These file folders are clearly marked so you're always where you are, where you have been, and where you can go within the program.

Move data from one file to another by using the *clipboard*, another reserved portion of the Apple ///'s memory. It acts as a buffer onto which you can temporarily store up to 225 lines of text or other data before moving it into another file (Move this data into a file or you will lose it when you quit the program).

The user can also *jump* between files on the desktop by pressing the OPEN APPLE Q keys. A window will appear listing all the files on the desktop. Choose the file you want by using the arrow keys and press RETURN. When jumping back to the file, /// E-Z Pieces will put you back exactly where you were.

The program's command structure is easy to remember since it always uses the "Open-Apple" combination. Pressing OPEN-APPLE-C copies data and OPEN-APPLE-D deletes data. Three E-Z Pieces even cuts down the number of commands to learn. For instance, pressing OPEN-APPLE S, will automatically save whatever file you're working on, whether it's a word processor, spreadsheet, or data base file. If you should ever forget a command, just get help by pressing the OPEN-APPLE and "?" keys.

Three E-Z Pieces is a relatively *foolproof* program. Whenever you are about to do something that might destroy a lot of work, like deleting a file, or quitting the program without saving a file, the program will always ask, "Do you really want to do this?"

AppleWorks and /// E-Z Pieces can read each others files directly without any modification whatsoever.

Users can format floppy disks, list files, delete files, and change the printer configuration without exiting from the program. With a clock chip installed in your Apple ///, /// E-Z Pieces will automatically date and time stamp your files. Three E-Z Pieces can read from and print to ASCII, DIF, Quick File, and VisiCalc files. With this program, all of these features are available at all times without the headaches of constantly having to boot up different programs.

Three E-Z Pieces is the Apple /// version of AppleWorks - the Apple II series program which has sold more than 500,000 copies and is one of the most popular software programs in the world. Almost all of the information available on AppleWorks pertains to /// E-Z Pieces; however, the latest release of AppleWorks (Version 2.0), has a few small features that /// E-Z Pieces lacks, they are minor quibbles aside, the exact same program.

Perhaps even more important for ///'ers is the fact that AppleWorks and /// E-Z Pieces can read each others files directly and without any modification whatsoever. If you use an Apple //e or //c at home, work, or at school with AppleWorks, you can work on the exact same files with /// E-Z Pieces on your Apple ///. Furthermore, all spelling checkers, grammar checkers, chart makers, and accessories available for AppleWorks and running on an Apple II (or even better, an Apple /// equipped with a Titan /// + //e card) will work perfectly with /// E-Z Pieces files.

The most important feature of /// E-Z Pieces, though, is its flexibility. Word Juggler has more features than the /// E-Z Pieces word processor, Omnis /// is a more powerful data base, and Advanced VisiCalc can create larger spreadsheets, but none of these programs can rival /// E-Z Pieces' ability to handle a wide variety of computing tasks simply, quickly, and well.

Any Apple /// can run this program, but unless you're fond of swapping the program and data disks, you'd be well advised to invest in an external floppy disk drive or a hard disk. Since this is a large program (it takes two disks to boot and load it), the amount of RAM (random access memory) that your /// has becomes very important. If you're using a /// with 128K of RAM, you'll only have a desktop of about 55K (the equivalent of about 18 single spaced pages of

text). This is the same skimpy desktop that most II'ers have to contend with. With a 256K ///, you'll have a good sized 180K desktop of about 70 single spaced pages. If you've sprung for the 512K upgrade you'll have a whopping 440K desktop-- plenty of room for your files and an accessory program such as *ON THREE*'s Desktop Manager™. It's easy to keep track of the desktop available at any time. The program also shows exactly how much room is left by pressing the *help* keys.

Three E-Z Pieces supports a wide variety of popular printers such as Apple's ImageWriter, Epson's MX and RX series printers and those printers that use Qume Sprint emulation. It allows one to create one *custom printer* by entering your printers' codes. A user can designate up to three printers for his system, and can easily switch between these printers whenever printing files.

Three E-Z Pieces comes with a boot disk, a program disk, a sample files disk and a 250 page manual. Both /// E-Z Pieces and AppleWorks were written by R.J. Lissner. Although Apple Computer Company publishes and supports AppleWorks, it neither publishes nor supports /// E-Z Pieces. It is published by Haba Systems and is available from *ON THREE*.

As I mentioned before, Apple has released version 2.0 of AppleWorks (it now boasts a mail-merge feature and some new spreadsheet functions.) I have tried this new version on my Apple /// , using a Titan /// + //e card. Overall, I found the improvements to be worthwhile, especially the mail merge feature, but certainly not dramatic. Frankly, I wouldn't have noticed any changes had I not been looking for them. The addition of mail merge does not really create any file incompatibility between the two programs since it uses existing data base and word processing files, but the new spreadsheet functions might cause problems. I'll address this issue in my next article.

No upgrade is planned for /// E-Z Pieces, a consequence of interest by the Apple /// community being deemed too small to make such an upgrade profitable (see *ON THREE*'s April issue). Even without the upgrade, however, /// E-Z Pieces remains a solid performer.

The word processor

As one article cannot do justice to /// E-Z Pieces' extensive compliment of

Three E-Z Pieces supports a wide variety of popular printers...

features, I will concentrate in this article on /// E-Z Pieces' simple and elegant word processor. Later articles will explore the spreadsheet and data base portions of the program.

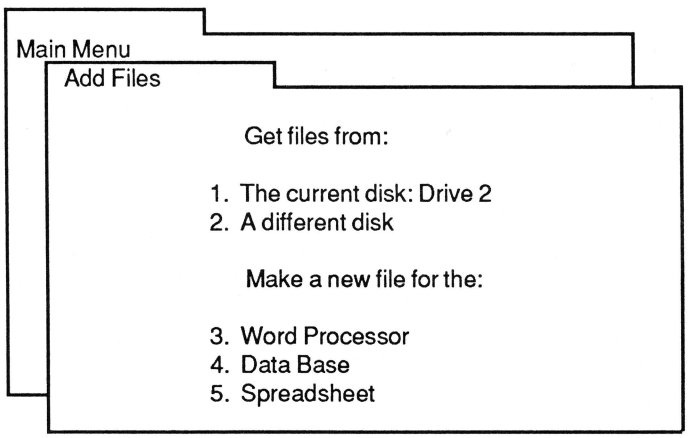
Starting up /// E-Z Pieces is easy. Simply insert the boot disk in the internal drive, and turn your Apple /// on. After a few seconds, a message will prompt you to insert the program disk and press RETURN. Once you've done this, you can put away the boot disk. It is only used to start up the program.

Three E-Z Pieces users who are only using their internal disk drive will receive prompts from the program as to when they should swap their pro-

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

gram and data disks. Otherwise, simply insert a formatted data disk in the external drive and it's ready. With a hard disk, /// E-Z Pieces will install easily under Catalyst or Selector ///.

To create a word processor file, select option number one, "Add Files to the Desktop," from the file folder shaped Main Menu. An "Add Files" file folder will then appear on top of the Main Menu showing the various ways to add a file to the desktop. You can get an existing file from the disk drive designated as "the current disk," you can get a file from another disk, or you can create a new word processor file.

If you choose to add an existing file to the desktop, a third file folder will appear, listing the volume name of that disk, and, in alphabetical order, every /// E-Z Pieces file on that disk. The last date you saved each of the files will be shown. If your Apple /// has a clock, both the date and time will be shown. To select an existing file, simply use the DOWN arrow key until the file you want is highlighted, and then press RETURN.

If you choose to create a new file, the program will ask you to type a name for the file.Three E-Z Pieces gives you great versatility with naming files. The only rules are that they must begin with a letter and be 15 characters or less in length. AppleWorks, though, only allows 12 character file names. The program lets you change the file name whenever you'd like by simply pressing OPEN APPLE N.

Once you've selected a new or existing file, /// E-Z Pieces will send you to the Review/Add/Change portion of the program. If you've created a new file, you'll be greeted by a mostly blank screen. Across the top of the screen you'll see the name of the file and where the ESCAPE key will bring you (to the Main Menu). The bottom of the screen tells the line number and column number that the cursor occupies, how to get help. Unlike many other word processors, /// E-Z Pieces does not display a page number. In order for the program to calculate what page you're on, press OPEN-APPLE-K (for "Kalculate,"), then tell the program which printer to use. The page breaks are then clearly displayed on the screen.
The cursor is usually in the *insert mode*. When typing with the cursor in the insert mode, new words are inserted wherever you place the cursor. Everything to the right of the cursor is *pushed* over. This method of insertion is simple, logical, and eliminates the need for an insert key. By pressing OPEN-APPLE-E, shift the cursor into the *strike-over* mode. You can *type over* existing parts of the file.

Since the standard Apple /// keyboard lacks a delete key, /// E-Z Pieces automatically turns the back slash into a delete key. Pressing the back slash key at the upper right hand corner of the keyboard will delete the last character typed. If you have an Apple /// plus, as I do, you already have a delete key, and don't need /// E-Z Pieces to turn the back slash key into a delete key. It does it anyway. Luckily, there are very few times in life when one must type a back slash. OPEN - APPLE D delete blocks of text quickly and easily. Deleting text is one of the few areas where /// E-Z Pieces is not *fool proof*. When deleting sections of text from a file, this program will do it without question and there is no way to restore the deleted data.

It gives you great versatility with naming files...

By pressing OPEN-APPLE-? a display of all basic editing commands will be seen. These include the *cut and paste* commands. To copy text use OPEN-APPLE C or move text within the document or the clipboard for use in another file with OPEN-APPLE M. To set or clear tabs, use OPEN-APPLE T. There is also the powerful *find*, OPEN-APPLE F, and to *replace*, use OPEN-APPLE R.

The find command is used to find any given word or group of words anywhere in a document. You can also set up to 256 *markers* to find a given part of your document. The replace command will let you replace one word with another. If you decide to change the name of a character halfway through your novel. For instance, the replace feature will find the character name every time you've used it and replace it with a new name. It can also be used to speed up your typing. In this article, for example, I never typed the name of the program. I simply typed an asterisk (*) and had the program replace every asterisk with "/// E-Z Pieces" after I was finished with my writing and editing. There is also a *sticky space* (OPEN-APPLE space bar) which will override the word wrap feature and keep a series of words all on one line.

The printer options menu is displayed by pressing OPEN-APPLE O. Across the top of this menu is a bar of inverse print which lists the current printer options. Below this is a wide assortment of printer options, along with the two letter code you must type to insert them in your file. Among the options to choose from are justification (both sides of the document are even, like the columns in this magazine), centering, indenting (including *hanging* and bulleted paragraphs), the number of vertical lines per inch, the type size, expressed in characters per inch (from 4 to 24, depending on your printer), and two different types of proportional printing (which produces handsome output-- especially on the ImageWriter or Apple DMP). You can also change margins, add a single line header or footer to each page, and have the program print the page number on each page. You can even ask the program to *skip lines* so that they appear on the screen, but not on the print out. Underlining, boldface, and subscript commands can also be inserted here. There is even a new page *bang* command that will override the programs' page breaks and start a new page wherever you choose.

One nifty printer option is Enter Keyboard. When entering this option, it inserts a caret (^) in the file. Later, when printing, the printer will stop at that point and let you enter one line (up to 50 characters) of text. Hit RETURN, and the computer will print what you've just typed, and resume printing the entire file. This is perfect for printing a series of form letters where only the name or address must be changed on each letter.

A new page *bang* command will override the programs' page breaks and start a new page wherever you choose.

Many word processing *experts* feel

that the ideal word processor would feature a *WYSIWYG* display (it would look exactly like the print out). The program comes close to this, but it is not a true "WYSIWYG" program. Words that are underlined or boldfaced do not appear that way on the screen. Instead, a caret is shown at the beginning and the end of the text to indicate underlined or boldfaced text. To find out what the carets in the file represent, simply move the cursor over the caret and a message such as "Boldface Begin" will appear at the bottom of the screen. This only causes problems if when preparing a document that requires a great deal of underlining, such as a term paper, where you'll soon find yourself with more carets than Bugs Bunny! Make sure that every "Underline Begin" has an "Underline End" or the rest of the document will be underlined.

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The other printer options selected are normally *imbedded* in the file, and you cannot see them on the screen. But they can be *zoomed in*, making them visible, by pressing OPEN-APPLE Z. Press these keys again, and the options will disappear. I prefer to leave these commands displayed. It lets me know exactly what I'm doing at all times, and helps prevent /// E-Z Pieces from becoming a "What You Don't See Is What You Get" program.

Using OPEN-APPLE commands and the options menu is so easy that even some experienced users might not know (or have forgotten) that the program also accepts a limited number of *control* commands. Two of these commands allow inputting a printer option without pressing OPEN-APPLE O and displaying the options menu. CONTROL L is for marking off words to be underlined and CONTROL B does the same thing for bold facing. For documents that require a great deal of underlining or bold facing, these control commands can save a lot of time. There is also CONTROL Y, which deletes everything on one line to the right of the cursor. This is particularly useful when clearing out an entry in the "find", "replace", or "change file name" functions.

Depending on your computer's memory, documents can be up to 3584 lines long.

This program also allows you to create fairly large documents. Depending on your computer's memory, documents can be up to 3584 lines long. That's about 66 single-spaced pages of text.

Moving through even the largest file is quick and painless, thanks to the ///'s built-in two speed arrow keys, and the variety of cursor commands that /// E-Z Pieces employs. By pressing OPEN-APPLE UP ARROW you move the cursor up a full screen (about 20 lines of text), while OPEN-APPLE DOWN ARROW you move down a full screen. OPEN-APPLE RIGHT ARROW moves to the next word in the document while OPEN-APPLE LEFT ARROW moves to the previous word. Move through the file by pressing OPEN-APPLE and a number. This is is possible because /// E-Z Pieces automatically divides a file into eight equal sections. OPEN-APPLE 1 will bring you to the beginning of the file, OPEN-APPLE 2 through 8 to various points in the file, and OPEN-APPLE 9 to the end.

To print a file press OPEN-APPLE P. The program will begin printing from any place designated. The program asks where it should print the file, listing the printers that you have designated (and have installed printer drivers for on the boot disk). You can also print to a text (ASCII) file on a disk. It then asks how many copies you want and prints the file. There is no printer spooler in this program. A user must wait until it is finished printing before doing anything else.

When quitting the program (by choosing option #6) from the main menu, the program will make sure that you have saved all changes made to your desktop files. If you haven't, it will display each file and ask if you want to save or throw out the changes.

What features does this program lack? As I mentioned, /// E-Z Pieces does not have automatic mail merge or a print spooler. This program does not support multiple columns, different fonts, or glossaries (macros). There is no built-in communications software, and no built-in spelling checker. However, these options are available by running some of *ON THREE*'s Desktop Manager modules in the background.

Use the Desktop Manager's Macro Manager module for macros. *ON THREE* may be releasing a spelling checker for /// E-Z Pieces. Hard disk users who have Catalyst already have a spooler. And as I mentioned before, all the II accessories for AppleWorks will work perfectly with your files.

Thus, while /// E-Z Pieces lacks some advanced features available on standalone word processing programs like Word Juggler or AppleWriter /// with WPL, it manages to pack a wide variety of features into an easy to use format that is perfect for the beginning or advanced Apple /// user. It has all the features needed for 95 percent of all word processing tasks, and it builds them into one module of a powerful, integrated, three-piece program.

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

TCM, XModem Matchup

by Edward N. Gooding, Sr.

Comparing features

Last month, we just got started into the review of the two most powerful /// communications programs the Communications Manager (TCM) and Xmodem /// (X3). This month, let's continue by comparing the programs' functions. Remember, information about TCM will appear in italics and X3 information will be in bold.

ASCII Terminal mode - This allows your /// to access other micro or mainframe computers. For instance a user can dial CompuServe, or my ///'s Company bbs, or the Dow Jones Investment service. When in this mode, you are basically presented with a blank screen, and whatever is typed in will be transmitted to the computer you are connected to. Whatever is typed in on the other end of the line will be displayed on your screen.

When using this mode, make sure both your computer and the computer at the other end of the phone line are talking the same language, known as protocol in telecommunications lingo. Both users need to be sending data at the same baud rate, sending the same number of bits per character, and using the same parity, and duplex. If these attributes are not in sync, garbage will show up on your screen or you may see nothing at all. If the duplex is out of sync, you may even see double! Fortunately, both TCM and X3 allow a user to dynamically change these attributes to modify settings at any time - even in the middle of a connection. When dialing to a bbs, and you are obviously not seeing what you expected, just invoke the terminal settings menu from either program and make adjustments until you get the desired effect.

The Terminal Settings menu for TCM looks like the display in Figure 5. Like Access ///, it is invoked with the Open Apple/S key sequence. Use the up/down arrows to select options to change, and the right/left arrow keys to select the setting for that option. To permanently save terminal settings so they will always be set a certain way when booting TCM, use the option on the menu for that. Of course, these default settings can be dynamically changed once the program has been started.

The terminal settings menu in X3 is invoked by pressing the Open Apple/T key sequence (Figure 6).

As you can see, X3's options are not quite as extensive as TCM's. A person can't use the /// as a Digital Equipment Corp. VT52 terminal, select/deselect XON/XOFF Ascii protocol, elect to utilize wraparound (how the terminal program handles a data line longer than 80 characters), or set tab stops. It does have the basics for adjusting your protocol to another computer's, however.

Figure 5

The Communications Manager's Terminal Settings Menu

```
Terminal Settings

-> Terminal Emulation Type :                ASCII  VT52
   Duplex :                                   Full   Half
   Send Line Feed After Carriage Return :     Yes    No
   Use XON/XOFF Protocol :                    Yes    No
   Automatic Wraparound :                     Yes    No
   Bits Per Character :                       <7>    <8>

   Speed :   110   300   1200   2400   4800   9600
   Parity :  None  Odd   Even   Mark   Space

   Tab Stops                          ESCAPE To Exit Menu
   Save Current Settings              RETURN To Accept
   Resume Terminal Operations         ARROWS To Select Item
   Quit The Communications Manager    *? For Help
```

Figure 6

Xmodem /// Terminal Settings Menu

Terminal Settings		
Speed	Format	Duplex
110 baud	7 bits, odd parity	Full
134.5 baud	7 bits, even parity	Half
300 baud	7 bits, MARK parity	
600 baud	7 bits, SPACE parity	
1200 baud	8 bits, no parity	Add
1800 baud	6 bits, odd parity	Linefeed
2400 baud	6 bits, even parity	
4800 baud	6 bits, MARK parity	NO
9600 baud	6 bits, SPACE parity	YES

When in Ascii terminal mode, you will be presented with an almost completely blank screen to type in data to send to the computer on the other end of the line. Both TCM and X3 use a line at the screen's top. TCM uses one line to display status and help information such as whether Ascii Recording Mode is ON or OFF, whether the Recording Filter is ON or OFF, and directions to invoke the File Transfer Menu, Terminal Settings Menu and Help Menu. Refer to Figure 10 for an example of the TCM Status/Help Line. TCM users can opt to remove the display from the screen by pressing Open Apple/Z, which works like a toggle switch for this line.

X3 uses the top line of the

screen as a Help screen. All command key sequences for X3's available functions are displayed on this line, including the key sequence to invoke the online help screen. Refer to Figure 11 for an example of this Help Line.

Figure 10
The Communications Manager Status/Help Line

```
Recording: OFF  Filter: ON   *S: Terminal Settings, *F: File Setup, *?: Help
```

Figure 11
Xmodem /// Help Line

```
XMODEM /// Terminal program -- *Q *R *W *A *E *Z *S *F *T *P     *? for help
```

File transfer/receive mode - After using the /// in "dumb" terminal mode for awhile, you will eventually want to send or receive an Ascii file to or from another computer. This feature allows a user to prepare a file using a word processor or VisiCalc, or create a print file from /// E-Z Pieces or another data base program, and send it to another computer without typing each character in again, which is how it would be sent using Ascii terminal mode instead.

Some of my CompuServe friends use this type of feature to save online connect charges. They will dial CompuServe and record all of their mail and public messages from their favorite forum. They will then hang up and use word processors to read all that they recorded. After preparing separate replies to the mail and messages, they will call CompuServe back and use the Ascii File Transfer function of their favorite terminal program to send their replies. This is much faster than keying their replies online, and in the case of CompuServe, can save a significant amount of money over a year's time.

Both TCM and X3 have a screen you invoke to set up file transfer options before receiving and sending files back and forth. Open Apple/F will invoke this screen in both programs. TCM's File Setup screen is displayed in Figure 7.

Use the Set Recording File Name and Set Transmitting File Name before recording or transmitting Ascii files. That way, you can dynamically turn recording or transmitting on and off as desired.

Transmit Character Delay and Transmit Line Delay will not normally have to be used. However, if you call a mainframe computer or a busy online service like CompuServe during peak caller hours, you will note that the system you are connected to may seem slower than usual. Sometimes the system that you are connected to sends a prompt character before it will allow you to send each line of your file. One must compensate for this slowness, or the lines of data sent will be ignored. This is where the Character Delay, and particularly the Line Delay can be used. If I notice that CompuServe's prompts are slower on a particular day, and I want to upload an Ascii file, I will set the Line Delay at maybe 50, or even 100. This will make TCM wait longer before transmitting the next line of data, and ensure that all transmitted data is received properly.

Use the Toggle Filter ON/OFF feature to screen the characters that are being received by your modem. If certain control characters are allowed through to your ///, they can cause havoc on your monitor. If you are recording incoming data to your printer, certain control characters will cause the printer to change printing pitch, or tab, or skip to the top of the next page, or other undesirable effects. The filter function of TCM will prevent this from happening if a user chooses to toggle it ON.

The Change File Type function is an added bonus within TCM. If you use the Xmodem protocol to send and receive binary files, note that Xmodem will not send the actual SOS file type along with the file's data. Your /// will receive the file as a binary data file. If the file is a Business Basic program and you try to RUN it after receiving it, a "File Type Mismatch" error message will be issued from the Business Basic iinterpreter TCM has included a utility function for users to change the file type after receiving the file, and before starting up Business Basic. A Basic program can be run immediately upon entering the Business Basic system.

The Toggle Turbo ON/OFF option is an enhancement to TCM, added in version 1.2. By using it, the user can decrease the amount of time spent uploading and downloading by as much as 50 percent! Turbo mode is used with either Xmodem or Binary II protocols. Use it when you are confident that the connection between your /// and the computer is noise-free. It disconnects the automatic retransmission of bad blocks of data. If Turbo mode is selected and TCM detects a transmission error, it simply aborts the transmission, instead of resending the bad block. This is why it should only be used when the phone line seems to be "clean." This disconnection really speeds up what is already a fast implementation of Xmodem and Binary II, however.

Figure 7
The Communications Manager File Setup Menu

```
File Setup

Set Recording File Name
Set Transmitting File Name          ESCAPE to Exit
Set Transmit Character Delay        RETURN to Accept
Set Transmit Line Delay             ARROWS to Select
Toggle Filter On/Off                *? For Help
Change File Type
Toggle Turbo On/Off

                    Current File Settings

Record To File : [.profile/STARTUP  ]
Transmit File  : [STARTUP           ]

Filter Is :                    ON   Turbo Downloading:      ON
Recording Is :                 OFF
Transmitting Character Delay :  005
Transmitting Line Delay :      010
```

X3's File Transfer Setup menu is displayed in Figure 8. It is similar to TCM's, but several of its options bear mentioning.

The Prefix selection will display the default pathname when X3 is started and may be changed to any legal SOS pathname.

The After a Line is Sent option will direct X3 to either wait a specific amount of time, or wait for the other computer to send a specific prompt character before transmitting the next line of data. Along with this option, set one of the two options below it. If you elect to have X3 wait for a prompt character, use the next option below to specify what prompt character to wait for. If you elect to have X3 wait a specific amount of time before sending each line, use the bottom option to specify the amount of time to wait.

The Xmodem Error Checking selection allows a user to specify which error detection protocol is desired. This would normally be set for CRC. If you are using CRC, and the computer you are connected to starts using Checksum, X3 will automatically switch, but it will not switch from Checksum to CRC automatically.

The user can also select when to use Binary II protocol from the File Transfer Settings menu. When connected to another Apple computer it is generally advantageous to use Binary II, as the file name, file type, and physical end-of-file data are sent with the file's data. This ensures that the file will be ready to use immediately after it is transmitted. When connected to non-Apple computers, do not select Binary II protocol.

The Xmodem Timeout option allows one to specify the approximate number of seconds that X3 will wait before it terminates the file transfer function and returns the user to the Ascii terminal mode screen. Normally, a user would not change this option.

The Use Path in Binary II option allows the user to control how much of a pathname is prefixed to a received or transmitted file using the Binary II protocol. Generally, use this feature when transmitting files to a similarly configured system as yours.

A direct comparison of these two File Transfer Setup functions between TCM and X3 shows that TCM offers more functionality. The ability to set default recording and transmitting file names, to utilize the turbo Xmodem/Binary II feature, and the built-in SOS file type changer add much more convenience to TCM. Also, the turbo transfer feature can result in lower connect charges with some online services, which could ultimately make TCM pay for itself.

Now that I have discussed how to set up TCM and X3 for file transfers, let's discuss how to actually start sending our prepared files.

Figure 8
Xmodem ///'s File Transfer Settings Menu

File Transfer Settings

Prefix
XMODEM3

After a line is sent	Xmodem Error Checking	Use pathnames in
Use Delay	Use Checksum	Binary II
Use Prompt	Use CRC	Neither
		Upload only
Prompt Char	BINARY II	Download only
:	Off	Both
	On	
Delay Value		
1	Xmodem Timeout	
	20	

Figure 9
Xmodem /// Ascii File Transfer Window

Transmit Ascii

Filename:

With TCM, the name of the file to transmit has been established via the Open Apple/F menu discussed above, you simply press Open Apple/T to start transmitting the file. Use the Ascii terminal mode to dial into the other computer, type in any log-on information such as a password, and then transmit the prepared file when appropriate.

With X3, press the Open Apple/E key sequence to transmit. When invoking this function, you will be presented with a window (Figure 9). After entering the pathname of the file to transmit, press Return.

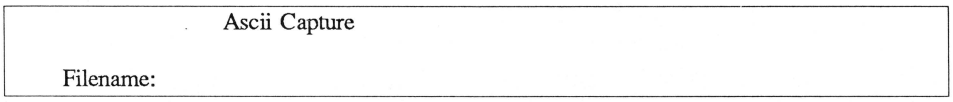
Now, let's learn how to capture, or record information sent from the computer on the other end of the phone line. The information can be recorded to your printer, or to a file on one of your disk drives. I personally hardly ever record to my printer. I prefer to capture the data to disk, where I can later review it with my word processor, edit out the parts that I'm not interested in, print it with the formatting of my choice, and keep the file around for later use.

If you have already specified the pathname of a recording file via the Open Apple/F menu in TCM, toggle the recording mode on and off as you wish by pressing Open Apple/R (for record). This allows you to bypass capturing information that you are not interested in. The TCM Status Line will keep you informed about whether the Recording mode is ON or OFF. To change to another file to store recorded data, invoke the Open

Apple/F menu.

In X3, use the Open Apple/A command sequence to cause X3 to display the window in Figure 12. Then enter the pathname of the file to be used to capture data. X3 also allows one to toggle the capture mode ON and OFF by pressing Open Apple/Z. X3 does not indicate whether the capture mode is ON or OFF, so you must keep track of this. X3 offers a screen dump feature with both the Open Apple/A and Z command sequences. When holding down the Shift key while invoking these, the contents of the screen will automatically be captured and recorded to the capture file specified. This allows one to first view a screen full of data, make a decision about whether it is needed or not, and then capture it after the fact, instead of having to toggle capture mode ON and the other computer resend the last screen of data.

Figure 12
Xmodem /// Ascii Capture Window



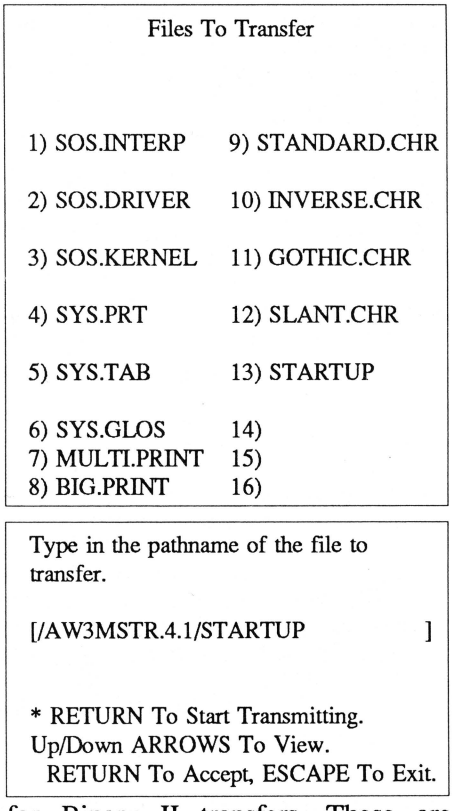
Xmodem and Binary II file transfer mode - *To transmit a file with the Xmodem/Binary II protocol from TCM, press Open Apple/U (for Upload). A menu will appear and ask you to select either the Xmodem or Binary II protocol. When selecting Xmodem transfer, a window will prompt you for the file pathname for the transmission. After entering the pathname, press Return and TCM will begin transmitting the file. When the file has been successfully transmitted, you will be notified via a window on your screen, and after pressing Return, you'll be in Ascii terminal mode.*

After selecting Binary II transfer protocol, a different screen will be shown to allow you to queue up to 16 different SOS or ProDOS files. You can transmit all 16 files, one after the other, without any further intervention after initiating the first file transfer. This is a truly fantastic feature! It is not only a great convenience, but also a cost-saving feature, as you will not have to enter each file name after each file has been transmitted. With long distance transmitting, this will definitely save money over time, and help pay for TCM.

See Figure 13 for a sample of the Binary II screen, where I have queued up several files from my AppleWriter boot disk to transfer to a friend, who is still using version 2.0 and wants to try out my version 4.1 "Super" AppleWriter. I had my friend receive these files directly to a floppy in .D1, so that when he hung up, he could exit TCM and press CONTROL/RESET, and his updated version of AppleWriter would immediately boot and let him start using it.

Here are several other practical uses for Binary II transfers. These are taken from my actual experiences with this program:

Figure 13
The Communications Manager
Binary II Upload Screen



- I constructed two different SOS. DRIVER files for a ///er in Texas. He needed one for his home ///, and one for his office ///, since he had a different type of printer at work. He telecommunicated one evening and I transmitted both files to him so he could be up and running by the following Monday morning. If I had mailed him a diskette, he would not have received it until the end of his business week.

- As a Beta tester for both *ON THREE* (OT) and Pair Software (PS) I am constantly receiving programs to test. I live in Virginia, and of course both OT and PS are in California. It takes at least five days to receive a program upgrade for testing via U.S. Mail. Now, either one can call me up, transmit an update, and I can resume testing immediately. This helps the developers get their products to market faster and helps me maintain my momentum when testing a particular program, rather than having to restart on it every five to seven days. When testing Desktop Manager modules, I have the programmers transmit directly into my .PROFILE/DESKTOP subdirectory, where I can use the new module immediately after hanging up.

Recently, a friend of mine in Montana purchased Draw ON /// and The Graphics Manager from OT. He knows that I have a large library of both foto files and font files, and I agreed to share them with him. When he called me, I queued up group after group, and within a half hour he had a nice library of graphics files and fonts to start playing with.

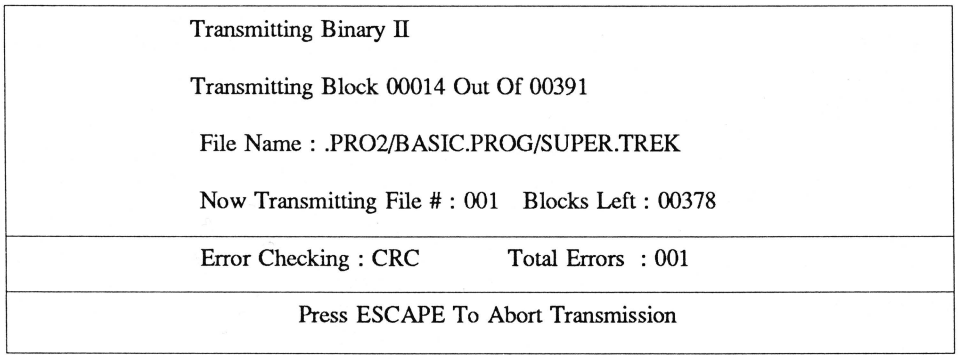
Several weeks ago, a friend in New York called and frantically told me that Backup /// was refusing to read some backup disks that he needed to restoreto his Corvus hard disk. He said that if he could not retrieve the data from the backup disks, he would have to re-enter his entire Accounts Receivable System. He needed the data restored by the next morning, Monday. I could not help him, but referred him to my friend Dan Martin in New Hampshire, who had recently written a Pascal program that he called the Brain Surgeon, which was to be used to extract data from contrary Backup /// diskettes. Tom called Dan, and Dan was able to transmit the Pascal codefile so that Tom could use it immediately. If Dan had to mail the program, Tom would have received it

Tuesday or Wednesday. By the way, Tom uses Xmodem /// and Dan uses The Communications Manager. You can see from this incident that the two programs can talk to each other, so you will be able to transmit files to other ///ers, no matter which programs they own.

As you can see, an Xmodem/Binary II transfer program cannot only be an item of convenience, it can also be a business saver in times of need. Not even Apple Computer, Inc. could supply this kind of support, but your fellow ///ers can if you have a modem and either TCM or X3.

As you are transmitting your file(s), TCM informs you of what is happening via a window that counts down blocks and files as you go. If the transmission aborts, or finishes successfully, you are also notified via another window. See Figure 13.a for an example of the Transmission Status Window.

Figure 13.a
The Communications Mgr.
Transmission Status Window



To transmit an Xmodem or Binary II file in X3, press Open Apple/W. A pathname window like that in Figure 14 will appear. Simply enter the pathname of any SOS or ProDOS file that you wish to transmit. The file will be sent in either Xmodem or Binary II protocol, depending on which you specified on the Open Apple/F - File Transfer Settings menu. Unlike TCM, X3 will only transmit one Binary II file at a time. To send more than one file at a time will require user intervention for each file.

Xmodem and Binary II file receive mode - *To receive an Xmodem or Binary II file with TCM, key Open Apple/D (Download). A window will appear on your screen similar to the display in Figure 15. Always type a complete pathname, including file name. This is because TCM will automatically sense whether the incoming file is either Xmodem or Binary II and set itself up properly to receive it. It won't really need the file name for Binary II, but it will take care of it by deleting the file specified, and creating a new file by using the header information sent with the Binary II data.*

Figure 14
Xmodem /// Xmodem/Binary II
Transmit Window

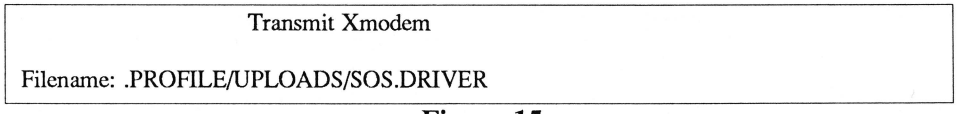
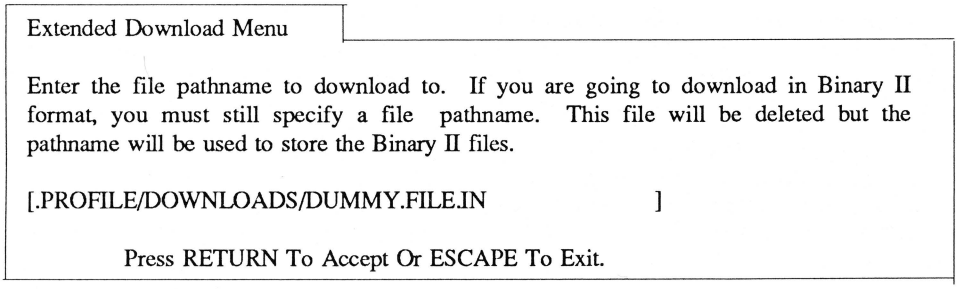


Figure 15
The Communications Manager -
Xmodem/Binary II Download Window



Extended Download Menu - *Enter the file pathname to download to. If you are going to download in Binary II format, you must still specify a file pathname. This file will be deleted but the pathname will be used to store the Binary II files.*

As in the file transmission function, TCM displays a window during receives that keeps you informed of the progress and status of your download(s). See Figure 15.a for an example of such a screen.

To receive an Xmodem or Binary II file in X3, key Open Apple/R (Receive). X3 will display a pathname prompt window (Figure 16) to specify where you want the incoming file to be stored. If the file is to be stored in the default subdirectory as specified in the File Transfer Settings screen, just enter a file name, otherwise enter a full pathname.

As you can see from Figures 15 and 16, I have set up a subdirectory on my hard disk called /DOWNLOADS. I would recommend that you also do this to receive files during downloads. Receiving files into other subdirectories, like I talked about when receiving Desktop Manager modules, can be dangerous during Binary II downloads if you are not absolutely sure of what you are receiving and what is already in the subdirectory you are receiving the file(s) into. **Remember:** Binary II transfers include the file name, and if you have a file existing in the subdirectory where you receive your download with the same name as the file being transmitted, then the existing file will be written over. If the transmitted file is not a replacement for the existing file, then the existing file is gone. For this reason, it is a good idea to create a subdirectory just to receive downloaded files. Use System Utilities or Disk Manager to copy the downloaded files to other subdirectories after hanging up.

The bottom line

Both TCM and X3 worked well for me during my testing and use. Neither program aborted on me, and both functioned as they were intended to at all times. The initial release of TCM would not transmit files larger than 64K using the Xmodem or Binary II protocols, but this was corrected with version 1.2.

If I had to recommend one program over the other, I would have to give the nod to The Communications Manager. It has more functionality than Xmodem ///, in that it has the Turbo Xmodem/Binary II option,the SOS File Type Changer utility, and the Extended Binary II option that allows one to queue up many files to be transmitted without user intervention. Two of these features actually save in long distance connect charges, and thus make TCM more cost beneficial than X3.

TCM is also more user friendly than X3, given the fact that it uses more windows to keep the user informed of what is going on during file transfers and it displays windows to assure the user that file transfers have successfully terminated. Two other important factors to consider are the price and customer support. TCM and X3 are in the same price range but TCM offers more features, so it certainly is a better value. TCM also has two program versions for the same price, it can be a stand-alone interpreter and a Desktop Manager module. *TCM was programmed by Tim Harrington, a full time employee of ON THREE. This means you can call OT and talk to the programmer if you have problems or questions. The company also employs at least two other full time personnel who can offer support and answer questions.*

Figure 15.a
The Communications Mgr. Download Status Window

```
                    Receiving Binary II

                Receiving Block 00013 Out Of 00391

File Name : SUPER.TREK
Now Receiving File # : 001      Blocks Received : 00013

Error Checking  : CRC           Errors This Block    : 000

Timeout Counter : 000           Total Errors         : 000

                Press ESCAPE To Abort Transmission
```

Xmodem /// was programmed by Gary Kato, who only uses Pair Software to market his work. If you want support, call Frank Moore at PS. He is a very busy guy as he markets other software from other contract programmers, maintains a Public Domain library for ///'ers, sells microcomputer hardware and copier machines, publishes an Apple /// periodical and a bi-monthly newsletter for Apple /// and // Forth users, and runs a debt collection agency. To say Frank is overcommitted is an understatement, and something that the potential buyer should consider, especially if the potential buyer is a novice at telecomputing and expects to have easy access to support personnel.

Figure 16
Xmodem /// Xmodem/Binary II Receive Window

```
                    Receive Xmodem

Filename: .PROFILE/DOWNLOADS/DUMMY.FILE.IN
```

The Bottom Line: purchase The Communications Manager by *ON THREE.*

Conclusion

I'm sure that all of you are sadly aware of the ever declining support for the mighty Apple ///. The number of companies actively supporting the /// can be counted on one hand these days. If you want to keep your /// for the next 2-5 years, then there is no question that you'll need to turn to user groups like TAU in Chicago, WAP in Washington, D.C., and ATUNC in Northern California for help. You can also take advantage of the support offered by the /// Special Interest Group (SIG) on CompuServe or my ///-dedicated bbs, (804-747-8752) via modem. The third source of help is from other ///'ers like myself, who you can call and ask questions, or have send files and programs to you. This is where the importance of having an Xmodem/Binary II program enters the picture. The days are over when you run to an Apple dealer to configure the SOS.DRIVER file for you. Most of today's Apple dealers have never even heard of the Apple /// (aren't you tired of those blank looks that you get from dealer personnel?) Well, if you have either of these two programs, just call someone like myself to configure a driver file and send it to you via modem. Or, if you would like to have the most current version of AppleWriter or System Utilities, you can acquire them with your modem and TCM or X3. Telecommunications is the only way you will be able to get fast, responsive support for your /// in the future, and TCM and X3 will not only replace your Apple dealer, but will enable you to get support during times that even the best dealer could never support you. Just ask the guy who frantically called me on Sunday night.

In conclusion, I cannot overemphasize the importance of acquiring a modem and either The Communications Manager or Xmodem /// if you intend to ride your /// all the way into the sunset.

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

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.

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The Communications Manager has all of the easy to use features of other **ON THREE** products, and it's the most powerful communications package available for your Apple ///. It's the ***only*** communications package available today for your Apple /// that completely supports the powerful **Xmodem *and* Binary II** protocols. Included with this package is a version of **The Communications Manager** which runs as a stand-alone program and a version that can be installed as an accessory under **The Desktop Manager**.

If you have The Desktop Manager, you get the best of both worlds. You can be inside /// E-Z Pieces or VisiCalc and send a spreadsheet or data base file directly! The hundreds of Apple // AppleWorks templates available on bulletin board systems like CompuServe and others can now be yours! Thousands of pictures and other graphics images on CompuServe and other systems can be downloaded to your Apple /// with ease - with **The Communications Manager**. All this for ***only*** $49.95 plus $3 shipping and handling. Order your copy today!

We're giving you TEN! ON THREE subscribers have always been at the top of our list. Now, to say thank you for the continued support, we're giving you $10 off any software purchase over $40.

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*Offer not good with sale items.

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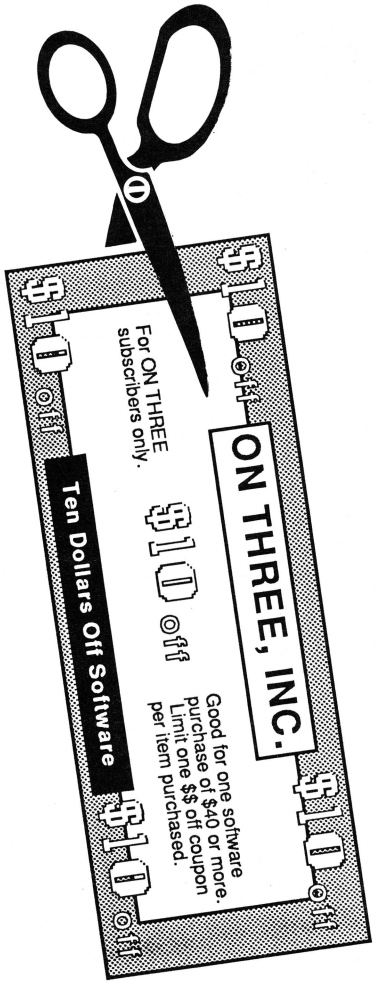
			Grand Total		



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Fruit machine (Slot machine game)	$19.95	$2.00
Card machine/ Fruit machine combo	$39.95	$3.00
Crossword Scrambler	$9.95	$3.00
Desktop Manager	$129.00	$6.00
Communications Manager**	$49.95	$3.00
Desktop Manager/ON THREE O'clock combination	$163.95	$8.00
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RAM Diagnostic Disk*** Specify 128K, 256K or 512K	$15.00	$2.00
Sandman** (Arcade game)	$19.95	$2.00
Selector /// program switching utility	$99.00	$7.00
/// E-Z Pieces	$135.00	$3.50
Unidisk ///.5 disk and documentation only	$50.00	$3.00
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Apple /// Unidisk ///.5 (800K 31/2" disk drive w/interface, driver & documentation)	$499.00	$10.00
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Visa, Mastercard, American Express accepted. 3% Surcharge on American Express California Residents add 6% sales tax. Items returned subject to 15% restocking charge. All items returned without prior authorization will be shipped back to the customer. No software returns.

Ranntings

by Richard and Lavona Rann

Tech support from another angle

Several happenings over the past few months have brought the topic of software support back into our consciousness. This has come up, not just in the context of support of the ///, we all know that there is only a precious few who do that, but in a larger context of what responsibility any software company has to owners of its products. We have, or at least know of people who have, purchased software that will not do what we expected and needed it to do. Often when we ask for help from the company, our requests are ignored. The question we raise is: Just what responsibility does a software company have? Or, to be more specific, how much support do they owe the purchasers, and how long should they be responsible? Do they have a perpetual and infinite commitment, or is there some limitation?

This is not an easy question, nor a clear cut one. One thing that makes the question difficult is whether one is asking about legal or ethical obligations, or just a reasonable level of expectation for purchasers. The legal question is probably the most simple to address, in spite of the number of lawyers handling cases concerning this topic. The legal answer is usually based on the long standing principle of "let the buyer beware". If this sounds too strong, just read the fine print on software that you have purchased lately. Generally, the products are not guaranteed to do anything at all. If there is not a specific written guarantee that a program will do a specific thing, or that a certain specific number of technical support hours will be made available, you'll probably have little, if any, legal claim except to buy disks that do something (Almost anything at all will meet the strictest legal interpretation).

The ethical answer would tell us what to expect in a perfect world, but practical answers are of more use to most of us. So, what should we expect and/or demand from software publishers?

The answer involves money. This is clearest when looking at the component of how long support should be supplied. How can a company which is no longer making money supply support? It cannot. An inflow of money is necessary for any business concern to flourish. We cannot, and do not, expect free support. Ideally, it is paid for in the same way the rest of the software package is, i.e., it is normally considered part of the retail price. Some companies have recognized that their products will require a higher support level than they feel they can add into the price. One approach is to offer a few free support hours and publish prices for additional support in terms of extended time periods or hourly rates. Simply stated, the expense of software support will be born by the purchasers, one way or another.

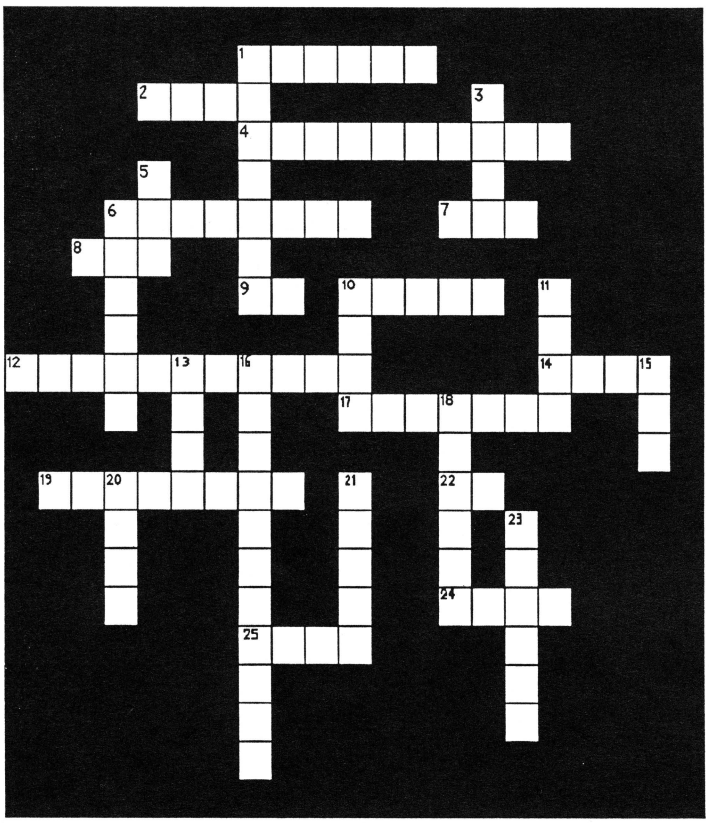
Problems usually arise when a limited support arrangement is not indicated and users don't get the support level they deem as appropriate. Emotions are easily aroused and cloud the real issues. Of course, buyers expect products to work when buying. And, of course, we define *work* to be whatever we want to do with the product. Expectations can be very high, and often have little relationship to the price paid for the product. There have been people very unhappy with TAU even after TAU has spent many hours trying to help them understand and use a piece of public domain software from the library. Their frustration in not being able to do what they wanted was vented back to the provider of what they expected to be a solution. A for-profit business cannot afford to provide days of *free* support, not even for a moderately priced product. Support salaries have to be paid.

The legal answer is usually based on the long standing principle of "let the buyer beware."

Correct level of support

It is not easy determine the quantity and quality of support a company should give. Support issues are especially difficult for a startup company, or a company serving a limited market (like the /// market). The problem of defining the *correct* level of support would be simpler if the microcomputer software industry was older. As it is, there are few successful models which one can use as a pattern or guideline. Dave Winer of Living VideoText (LV) addressed the problem recently. His company was founded with the concept that it should provide the support necessary to keep products running. At first, this support concept posed few problems. LV was small and had only one product, ThinkTank ///. Dave's product was excellent and sold well, but the company was still small enough that the few employees were unable to do several tasks in a single day. Providing support for customers was one way to get feedback directly from the marketplace. As new versions of ThinkTank followed, David's company grew. Soon, he had to pay large bills for an 800 number and long distance calls returned to users. The major expense came when hiring people to run a support facility and answer letters. LV has had several successful products, but is losing money.

The problem LV faced, is that the product's profit was not large enough to pay for support. Other companies have faltered with the same problem, and more will as time goes on. A simple business letter costs most companies $10 or more to write and send. Salaries, phone bills, and office space can easily eat up the income from product sales, leaving nothing to pay for development costs, invest in future development, or make a profit.



Across

1. Function of backslash key in /// E-Z Pieces.
2. Eight bits
4. _____-Escape.
6. Plugs into Port B when using the Graphics Manager.
7. Abbrev. for one of *ON THREE*'s products.
8. Erased when booting a disk.
9. One of the Desktop Manager's calculator functions.
10. A Hayes _____.
12. American Standard Code for _____ Interchange.
14. An RS-_____ interface.
17. Type of drive.
19. Needed when loading a document.
22. Type of error.
24. _____ and Write.
25. System Utilities will allow you to _____ a file.

Down

1. Type of interface utilized in /// E-Z Pieces
3. Type of interface card.
5. This cannot be changed by software.
6. Computer terminology.
10. When booting Selector ///, you will first be presented with a _____.
13. _____Logic Board.
15. Central Processing Unit.
16. This is necessary to learn to understand Apple /// manuals.
18. .console
20. One of Business Basic's key words.
21. 512 bytes on a disk.
23. Apple Computer's software company.

Crossword Answers on page 30

NEW LOW PRICE!

Graphics Manager $39.95 plus $3 s/h.

If you've been holding out for a lower price on the Graphics Manager for the ///, here it is! Take advantage now. The complete graphics utility for the Apple /// interfaces to **Draw ON** ///™ and all graphic programs and allows printing enlarged or reduced portions of the graphics screen, normal or inverted, single or double density with four rotation values.

For the first time you can load directly any DOS 3.3 or ProDos Hires or double Hires graphic files (including "Print Shop") and of course SOS fotofiles or other binary graphic images.

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.

Still Dave feels as though he has an obligation to support ThinkTank ///. He does. In fact, one year ago they were still selling it at a level of 10 to 15 copies a month.

Dave's problems did not all stem from the /// product. The success of ThinkTank for the Mac and the latest offering *More*, have really plunged the company into a huge support business. Now LV is included in Apple's Mac Business Marketing Shows. LV representatives are asked to speak at user group meetings and business conferences. Dave deems it necessary to exhibit in expositions like MacWorld. This is good for the company's potential market, but it takes money and additional employees. Dave was forced to do something that no one wants to be forced to do - sell part of the business and raise prices just to stay in business.

Support costs and lack of support have been part of the cause and effect of much difficulty in the past couple of years. Support costs are a primary reason many companies with reasonable or even good products have gone out of business. The software sales slump and increased competition caused prices to drop. Many companies did not recognize the importance of charging enough to pay for future support costs. Others could not get buyers to pay higher prices. The result was that the costs the retail prices were set to cover were limited to initial development and documentation costs, advertising, and some small factor for profits. Many, if not most, companies either did not budget for ongoing support, or grossly underestimated the expenses that would incur. Bankrupt companies don't provide support to users.

There are also companies interested only in product sales and purposely do not provide support, e.g. Apple Computer. The company never evolved the apparatus necessary to support software they marketed. That was one issue that led Apple to spin off a separate company, Claris, to market what was once Apple labeled software. Claris does not have the same locked-in market that Apple had and will be forced to compete; one of the key areas of competition is support.

Companies that won't provide any support for their products are real problems for users. The typical tactic is not to return telephone calls. What has become known in relations with the government as *stonewalling*. They are polite to callers, take down the name and phone number, but that is where it ends. They never return calls or answer letters. If they do, weeks have gone by. Any business that depends these companies' products can be easily out of business long before a response.

Updates

These companies also tend to exercise a form of highway robbery in the guise of product upgrades. When serious bugs develop they habitually sell a fix for $20 or more as an upgrade which does not add features, but only corrects problems that should not have existed with the original product. It is like buying a used car and coming back the week later to pay extra for the motor. This is the worst sort of non-support. If some useful features were added in addition to fixing bugs, one could be expected to pay for the enhancements, but to pay again for what you bought is not reasonable.

We, the consumers, are much to blame for the support situation. It is our responsibility to search out information about products and publishers before we purchase products. One of our questions should be about support. We should ask about *fix* support as well as *help* support. We should not be guilty of shopping only for price. The product's price without support should never be compared on an equal footing with a well supported product.

The buyer must vote with his dollars in terms of which type and how much support is adequate. Does Aldus have the best solution? Buy their expensive PageMaker package and receive a minimum amount of support time. (In their case five hours *free* then buy a service contract for anything over that amount. In all truth this is enough help for most people to get the package up and functioning. The company is charging for consulting help to master the advanced techniques.) Is Dave Winer's solution better? Have everyone pay a little more up front for all the help you need. This question will never be fully answered, but answered in part in the marketplace. Consumers will chose to buy software from companies which provide the *right* amount of support, and in the long run we will see the winners. We feel that when a company sells a software package it has an ongoing commitment to the customer. The buyer has a right to be informed about limitations of that commitment before purchasing the product. On the other hand, we recognize that the commitment cannot last forever and cannot be unlimited in scope. It should last at least 12-18 months, or longer if a revised or upgraded product has not been released. If a product has a very low price, it should have a lower level of expected commitment as reasonable people cannot expect the price to cover salaries and other expenditures for more than minimal support.

Support costs are a primary reason many companies with reasonable or even good products have gone out of business.

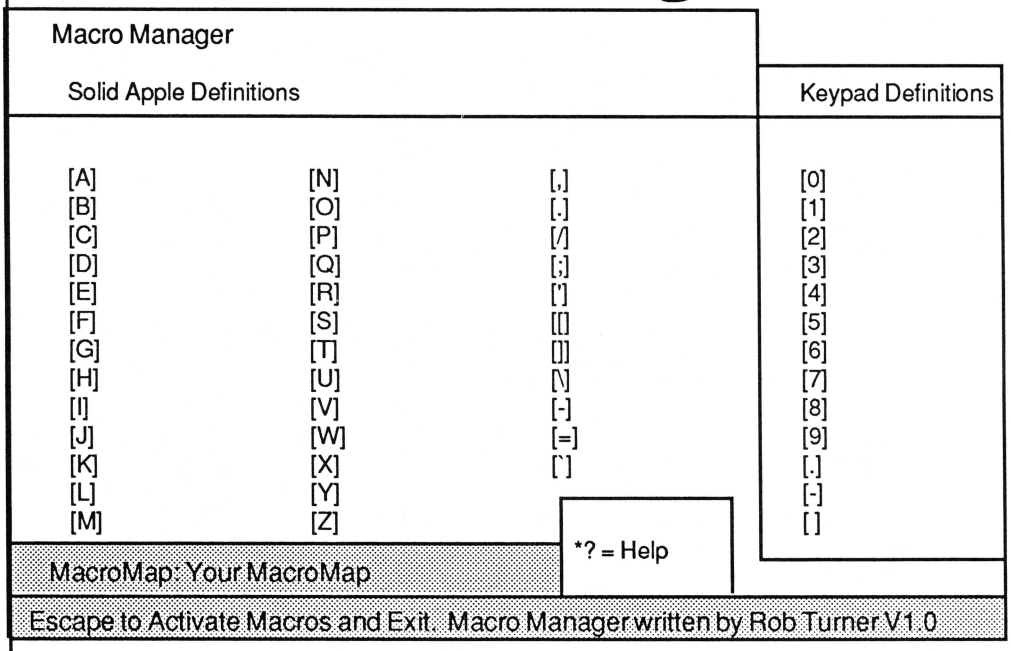
We applaud companies which support their products and go out of our way to purchase from them. In the Apple /// world, we have seen some of the best and some of the worst. We are fortunate in having people like Al Bloom who provides support to his public domain software, and vendors like Great Plains, Living VideoText, and *ON THREE*. Great Plains has not sold an accounting package for the /// for more than three years now, but the company still support its /// product. In turn, GP keeps customer goodwill. Those people and others will turn to GP for accounting packages for eventual replacement machines.

What software consumers and companies must recognize is that support is an investment in the future. For companies, it is much the same as R&D. For consumers, it is critical to the ongoing usefulness of the purchased product. Software is not consumed as food; it is purchased for future use. If a software company arbitrarily curtails that future, then it is injuring its own credibility. Like other businesses, it is wrong to think only of results for this quarter. The long term success of a software publisher requires attention to the future and support is a major factor.

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

ON THREE presents...

Macro Manager



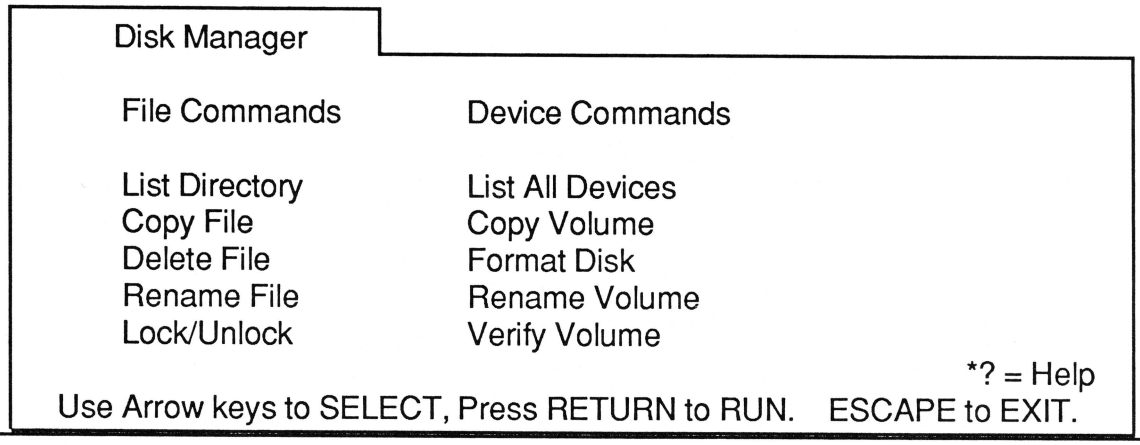
Macro Manager allows you to define a single keypress as a series of keystrokes you can play back anytime. You can also record over 2,000 keystrokes as you type and invoke them later by pressing one key. One MacroMap™ can hold 50 defined keys, called macros.
With Macro Manager, you can create up to 200 different MacroMaps, so you need never type repetitive information again. Let Macro Manager, a Desktop Manager module, do it for you! Order today for $44.95 plus $3 s/h.

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.



Programmers' Paradise

by ON THREE developers

Helpful hints for programmers

Welcome to Programmers' Paradise, which may become a new monthly feature found exclusively in *ON THREE* magazine. This article is designed for those advanced ///ers who are either beginning to program or have been at it for awhile but just want a few tips now and then. Whether it be BASIC, Pascal or Assembly language, don't hesitate to jump in and enjoy. If you have any questions, be sure to write to *ON THREE* and watch for your answer in an upcoming issue.

Quote of the month:

Weinberg's law - If builders build buildings the way programmers wrote programs, then the first woodpecker that came along would destroy civilization.

Q: I do a lot of programming in BASIC and I love it. I can make a change and immediately see how that change looks. The only draw back of BASIC is that it doesn't have a very good editor. If you wanted to change the name of a variable, you would have to hunt through the entire program for any reference to that variable. There is no way to tell if you missed one until your program crashes. Is there any easier way to edit a BASIC program?

A: You can edit a BASIC program with almost any word processor that can save the edited program as an ASCII file. AppleWriter is probably the best as it saves all files this way. When entering the program into your word processor make sure you follow the same rules as entering them in BASIC. When you are done editing the file, save it as you would any ASCII file. Then while at the BASIC prompt type...

)EXEC *filename*

where *filename* is the name of the file you saved. The EXEC command will take whatever characters are in your file and enter them as if you were typing. When it is done entering the program, type...

)SAVE *progname*

This will save it as a regular BASIC program. Now you can run it and operate on it as any other BASIC program.

If you already have a program in BASIC and want to then edit it with your word processor, you must first list it to and ASCII file. To do this type...

)OPEN#1;"*filename*":OUTPUT#1:OUTREC=255:LIST:CLOSE

where *filename* is the name of the file you want the program to be listed to. Now you can load this file into your word processor and edit it. To get it back into BASIC, just follow the instructions above.

I'm starting to write some assembly language programs for my ///. Below is an example of how I define a write block.

```
Write_Buffer      .ASCII    "This is a sample"

Write_Block       .Byte     03              ;Parameter Count
Write_Reference   .Byte     00              ;Reference Number For Write
                  .Word     Write_Buffer    ;Write Buffer Pointer
                  .Word     0016            ;Write 15 Characters
```

Q: I'm tired of having to hand count how many characters are in my write buffer. After all, isn't that what computers are for? This example is pretty easy, but when you have to count over 100 characters it gets to be a little too much. My question is, is there any way to have my /// figure out how many characters to write?

A: You're in luck. Here is your example reworked to have the computer calculate how many characters to write.

```
Write_Buffer.     .ASCII    "This is a sample"
Write_Length.     .Equ      *-Write_Buffer

Write_Block.      .Byte     03              ;Parameter Count
Write_Reference.  .Byte     00              ;Reference Number For Write
                  .Word     Write_Buffer;   ;Write Buffer Pointer
                  .Word     Write_Length    ;Write 15 Characters
```

Everything is the same except for the new variable WRITE_LENGTH. The *WRITE_LENGTH EQU *-WRITE_BUFFER* will calculate how many characters are between the two variables *WRITE_BUFFER* and *WRITE_LENGTH* and automatically put that value in your write block.

Q: I purchased a 65C802 chip from you a while ago and I'm just now experimenting with it. I'm doing all my programming in assembly in order to get the added power out of the 65C802. Everything seems to be working fine except the new 16 bit mode. Everytime I switch into this mode with the appropriate REP command, the system seems to hang. Any clues of what this could be?

A: The Apple /// was never intended to use the new 65C802 chip. But that doesn't mean it can't. Your problem has to do with interupts occuring while the processor is in the new 16 bit mode. The interupt handlers expect the machine to be in a certain mode when an interupt occurs. If it's in 16 bit mode, it just dies a horrible death. In order to the new mode on the Apple /// you need to turn off interupts while you are in 16 bit mode. Be sure to turn off interupts in the following manner as is recommended by Apple Computer.

```
PHP     ;Save the old interupt status.
SEI     ;Turn off interupts.
...     ;Your 16 bit code goes here.
PLP     ;Restore old interupt status.
```

Q: I have Pascal 1.2 and I really like the file selection in the editor. I'd like to add that file selection into my Pascal programs but I dread having to figure out and write that code. Is there any way I can just 'tap' into the file selection that's already in Pascal 1.2?

A: Yes. There is a library unit called DIRSTUFF in Pascal 1.2. The instructions on how to use this unit in your Pascal programs is in the Pascal 1.2 documentation.

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

$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

Program Version Update

by David Ottalini

A guide to /// software

One of the greatest frustrations about owning a computer that no longer is supported by its manufacturer is not knowing what the latest or last version of a particular program or driver is. In too many instances I've seen people (not to mention businesses) using older versions of programs, drivers and of SOS itself without knowing that they are missing out by not using the latest upgrade. It hurts the performance of the Apple /// and prevents the user from getting the most out of the machine.

This article is an attempt to provide an up-to-date listing of at least some of the programs /// users continue to work with on a daily basis.

To begin with, however, one should know it's nearly impossible to find out the latest version numbers of many programs. In some cases, there was never a *version* indicated anywhere on the disk, the documentation or in the program itself (such as with Apollo Software's Font Generator /// program). In such a case, the best one can do is go with the last date indicated on the disk as to when the program was created or saved as an indication of the latest version.

You'll notice a few blanks spaces as I've left them in with hoping that loyal *ON THREE* readers can provide the missing numbers. That way, we can have an update sometime in the future. I'd also be interested to know the version number of any program *not* listed.

Please also note that the *company* listing does not necessarily mean that company still sells the product or supports it (most products are available from other sources, like *ON THREE*, Pair Software and Sun Systems Remarketing). Lotus, for example, bought out VisiCorp, the original developer of VisiCalc. And Apple no longer supports any /// products. Haba/Arrays has also disappeared from the scene as far as I can tell.

There are a few small companies which have produced products for the /// that can be contacted, such as Sourceware of Littleton, Colo., Southeastern Software of New Orleans, La. and Living VideoText of Mountain View, Calif.

Company	Program	Version	Company	Program	Version
Apple Computer	Access ///	1.1	On Three	Crossword-Scrambler	1.0
Apple Computer	Access /// Interp Version	3.2(x)	Pair Software	Data Base ///	4.2.0
Apple Computer	Access 3270	1.1	Southeastern Software	Data Capture ///	1.3
Action Research	Aida		Sourceware	Data File ///	1.0
ADI America	Aladin	2.6	Pair Software	Data Graph ///	TBA
Apple Computer	Apple File ///	6/83	Micro Lab	Data Manager ///	1.00
Apple Computer	Apple Speller	1.0	Pair Software	Data Window ///	1.2
Apple Computer	Apple Writer	2.0	Link Systems	Datafax	2.1
Apple Computer	Apple Writer-Super	4.1	On Three	Desktop Manager	1.2.0
Experience in Software	Art of Negotiating		On Three	Desktop Manager Toolkit	1.0
Apple Computer	Backup ///	1.0	Lotus Development	DeskTop Plan ///	1.0
Pair Software	Basic GTO	2.02	Sourceware	Directory Labeler ///	1.3
Pair Software	Basic Utilities	1.25	Quark	Discourse (Catalyst 2.1)	3.0
Pair Software	Basic XRF	1.40	Pair Software	Disk Window ///	2.06
Pair Software	Basic XT	1.30	On Three	Draw On ///	2.1
BPI Systems, Inc	BPI Gen Accounting	2.0.0	Sun Systems	Easyterm ///	2.1
State of the Art	Budget and Financial Rptg		Pair Software	Electronic Mailman	3.1
Apple Computer	Business Basic	1.23	Apollo Software	Font Generator ///	9/82
Apple Computer	Business Graphics	1.0	Apollo Software	Font Pak for Font Generator	
Data Pak Software	Calendar Pak ///	6/84	Sun Systems	Fontwriter	1.0
On Three	Card Machine	1.0	Apple Computer	Fortran Compiler	2.0
Quark	Catalyst	2.1	On Three	Fruit Machine	1.0
Pair Software	Checkbook ///	4.0	State of the Art	General Ledger SOA	
Apple Computer	Cobol ///	1.0a	Pair Software	Go Forth	3.4
Apple Computer	COBOL Animator	1.0	Haba/Arrays	Graph 'n Calc	2.1?
Apple Computer	COBOL Compiler	1.0	On Three	Graphics Manager	2.5
Apple Computer	COBOL Forms2	1.3	Great Plains	Great Plains Accounting	3.02
Digital Microware	Copy ///	5.0	Haba/Arrays	Habadex	
Sun Systems	CP/M	2.21	Haba/Arrays	HabaMerge	1.0

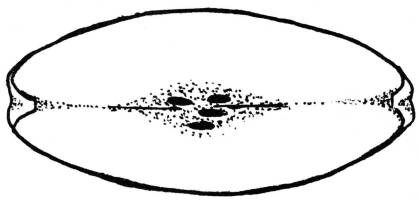
Company	Program	Version
Sun Systems	Infonet	2.0
SSR	Infotory Inventory Mgmt.	D
Foxware	Inkwell	
State of the Art	Inventory Control	
Great Plains	Inventory Management	3.0
CFS	IRA Amortizations and Savings	
Keystone Software	Keystone Accounting System	1.0
Brock	Keystroke Data Base	A-1
Brock	Keystroke Report Generator	A-1
On Three	Lazarus	2.0
Quark	Lexicheck (Spelling Checker)	2.0
Apollo Software	Macstuff	9/85
Apple Computer	Mail List Manager	1.1
Quark	Mail List Manager Interface	
On Three	Memory Test, 512K	2.1
	Menu ///	2.0
Microcom	Micro Courier	1.0
On Three	Mr. Sandman	1.3
Blyth Software	OMNIS 3	3.0?
Pair Software	PASCAL	1.2
Apple Computer	PASCAL Compiler	2.0
D.A.DataSystems	PC Copy	1.41
Software Publishing Co.	PFS File	B.02
Software Publishing Co	PFS Graph	B.01
Software Publishing Co.	PFS Report	B.03
Apple Computer	Pmove	1.0
Pair Software	Post Master	2.0
Pair Software	Power Cat	1.22
Pair Software	Power Keys DM+	2.32
Pair Software	Power Keys Module: AsciTbl	2.30
Pair Software	Power Keys Mod.: DiskMgr	2.32
Pair Software	Power Keys Mod.: FileDump	2.01
Pair Software	Power Keys Mod.: FileScan	2.01
Pair Software	Power Keys Mod.: FontLoad	2.01
Pair Software	Power Keys Mod.: Lockout	2.01
Pair Software	Power Keys Mod.: Moduload	2.04
Pair Software	Power Keys Mod.: NotePad	2.30
Pair Software	Power Keys Mod.: PrintMgr	2.30
Pair Software	Power Keys Mod.: QuickCalc	2.12
Pair Software	Power Keys Mod.: QuickCat	2.31
Pair Software	Power Keys Mod.: QuickCrpt	2.02
Pair Software	Power Keys Mod.: QuickDial	2.30
Pair Software	Power Keys Mod.: QuickMon	2.05
Pair Software	Power Keys Mod.: QuickScrn	2.35
Pair Software	Power Keys Mod.: ShowTime	2.30
Pair Software	Power Keys Mod.: TypeRite	2.03
Pair Software	Power Print Parallel	1.20
Pair Software	Power Print Serial	1.30
Beaman Porter, Inc.	PowerText	1.75
Sun Systems	Pscreen	1.0
Sourceware	Public Domain ///	
Apple Computer	QuickFile ///	1.1
	Random Number ///	1.0
Apple Computer	RPS ///	
BPS	Screen Director	
On Three	Selector ///	1.0
Apple Computer	Senior Analyst ///	1.1
Apple Computer	Sort Directory	2.2
Sun Systems	SOStran	2.2
Pair Software	Source Window ///	1.30
Stemsoft	Stemwriter	
Smith Micro Software	Stock Portfolio System	2.1.4
Apple Computer	System Utilities	1.2
On Three	TDM Module: ASCII Chart	1.0
On Three	TDM Module: Chg. File Type	1.0
On Three	TDM Module: Change Font	1.0
On Three	TDM Module: Comm. Mgr	1.3
On Three	TDM Module: Desktop Setup	1.3
On Three	TDM Module: Disk Manager	1.0
On Three	TDM Module: File Print	1.0
On Three	TDM Module: File View	1.0
On Three	TDM Module: Labeler	1.0
On Three	TDM Module: Macro Manager	1.0
On Three	TDM Module: Make Subdir.	1.0
On Three	TDM Module: Menu Manager	1.0
On Three	TDM Module: Monitor/Enable	1.0
On Three	TDM Module: PKASO/U	1.0
On Three	TDM Module: Printer Setup	1.0
On Three	TDM Module: Print Screen	1.0
On Three	TDM Module: Reload and Exit	1.0
On Three	TDM Module: Screen Dump	1.0
On Three	TDM Module: Show Time +	1.0
On Three	TDM Module: Typewriter	1.0
On Three	TDM Module: Warning	1.0
Sun Systems	Telephone Access Program	1.0
Quark	Terminus	1.0
On Three	The Apple /// Card Machine	1.0
On Three	The Apple /// Fruit Machine	1.0
Pair Software	The Retriever	1.21
Living VideoText	ThinkTank	1.0
Haba/Arrays	/// E-Z Pieces	1.1
C&H Taxes	Timesaver Taxes	
D.A. DataSystems	Two-N-Fro ///	Beta Test
Sourceware	Type Conv ///	1.9
Applied Software Technol	Versaform	1.3 re2
Lotus Development	VisiCalc	1.0
Lotus Development	VisiCalc Advanced	10/82
	VisiCalc Format Aids ///	2.0
Lotus Development	VisiSchedule ///	1.00
Quark	Word Juggler	2.6.4
WOS Data Systems	WOSBase	1.45
Pair Software	XModem ///	1.6
Action Research	Zardax ///	6.0

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.

Apple.Slices



Survey respondents needed!

In the June issue of *ON THREE*, Dr. Allan Bloom submitted a two-page survey for *all* Apple /// owners and users to fill out. "The response has been pretty foul," Dr. Bloom said recently. The information collected was intended to be used for a panel discussion entitled, "The Future of Apple /// Software." However, at this point, Dr. Bloom says that the information is statistically meaningless. *ON THREE* in conjunction with Phase III would like to include an article with the survey results in an upcoming issue. Without every subscribers input, though, the article will not be possible. Dr. Bloom urges all subscribers to kindly tear out pages 19 and 20 of their June issues of *ON THREE* magazine, fill them out and send them in. The correct mailing address to send them to, is listed on the bottom of page 20 on the survey!

Fonts

With the release of Earl Brelje's Super Disk No. 2 for the Desktop Manager, ///ers will have fun experimenting with the screen font changer.

Already, you notice a different font here.

But, if you don't like the font you chose, change it! However, this is only a screen font and cannot be printed by using the screen font changer.

/// desktop publishing

Want to learn about desktop publishing on the ///? One year ago, *ON THREE* published an article by Ken Johnson who uses desktop publishing on the ///. He encourages ///ers who would like to learn more about desktop publishing, other than the information in his article, to contact him at JAM Graphics, P.O. Box 79, Granby, MA 01033 or call (413) 467-7722. He will gladly assist ///ers.

Did you know?

Did you know that before the Apple /// was discontinued by Apple Computer, over three years ago, there were more than 300 application software products available for the ///? It is hard to believe this. If you would like to learn more about the various products, a good reference book is "Will Someone Please Tell Me What an Apple /// Can Do?" The book can be purchased through *ON THREE*. I was appalled at some of the programs set up for the ///. It was surely intended to be a powerful computer and for those of us who still use a ///, it is still a mighty one! - *Editor.*

Cleaning kits

There is quite a wide variety of cleaning kits available for both disk drives and printers. Clean Image of San Francisco, Calif. is one such company that manufactures cleaning kits for dot matrix or daisy wheel printers. Their latest, the Printer Head Cleaning Kit, is a cartridge which snaps into the printer in place of the ribbon cartridge.

Ohm Electronics of Palatine, Ill. puts out a disk drive cleaning kit for both 3.5 disk drives and 5 and 1/4 inch drives. Periodic head cleaning protects the software and hardware on your /// and helps prevent read/write errors. The company has a toll free order line 1-800-323-2727 and (312) 359-6040 for Illinois residents.

New products

If you have just bought an Apple IIGS and are in need of a few items, you may want to contact *ON THREE*. Right now, you can order The Desktop Manager™ for the IIGS as well as dust covers. Dust covers are $9.95 plus $2 s/h. For further information about the GS Desktop Manager, call *ON THREE* at (805) 644-3514.

Phoneflex

Phoneflex, a new product, is a portable data jack that enables transmission of data by hooking up modems, portable computers, fax machines, telex machines, fax board for PCs, video photophones, etc. to any office or mobile telephone.

According to Barbara Scott of TVMP, the makers of Phoneflex, the product is the only coupler that overcomes the need for dedicating a single phone line for data transmission. It works with Hayes computer modems and Rockwell fax modems.

For further product information, call

1-800-762-3361 or in Texas call, (713) 266-9779.

Disassembling

Whenever a user disassembles an Apple /// computer for any reason, remember to power down before touching anything!

Organizing

When receiving *ON THREE*'s new Super Disk No. 2, it works best to make it a subdirectory on the menu. Just use the Menu Manager on Super Disk No. 1. A great way to distinguish a subdirectory from a module on the Desktop Manager menu is by using extra spaces, like a tab in the Option List. Here is an example:

Note Pad
Calendar
Calculator
Macro Manager
Disk Manager
Graphics
File/Disk Util
  Super Disk #2

Doesn't that make it easier to spot the Super Disk directory?

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

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
Pickering, **Ontario**
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.
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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

British Apple Systems User Group
(BASUG) Apple /// S.I.G.
P.O. Box 174
Watford Herts, England WD2 6NF
0727 7339/72728

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.

ON THREE - the only company which offers technical support for all Apple /// products for free or a minimal fee.

ON THREE, Inc. warrants all of its products and offers full technical support for a period of up to 90 days. This has always been the company's policy and **ON THREE** will continue to help valued customers as much as possible. However, lately, the abuses to the limited technical staff have been overwhelming. Every day **ON THREE** receives dozens of calls from /// users with questions on products that were purchased years ago, questions on software the caller frankly admits he/she has copied from a friend or other source but "doesn't have the manual and can you step me through the program?" Also, there are calls concerning products that were purchased from companies and dealers that have gone out of business or refuse to support Apple /// products. Due to these type of phone calls and the abuse of toll free order lines for technical support questions, **ON THREE** has changed its policy of unlimited free technical support.

For those Apple /// owners and users who are interested in technical support here are some guidelines and further information:

Technical support line: (805) 644-3514
Hours: Mon. thru Thurs. 9-noon, 1 - 5 p.m.; Friday 9-noon PST

Guidelines

ON THREE offers free assistance on products purchased from **ON THREE** in the last 90 days.
ON THREE offers assistance for a minimal fee on products that:
1. Were not purchased from **ON THREE** within the last 90 days
2. Are not **ON THREE** products
3. Were obtained from an unauthorized source

When calling for technical support, be sure to give the operator your name and address, product name and purchase date. If it falls into the free assistance category, you will be transferred to a technician. If it falls into the paid support category, you will be asked for your credit card number and expiration date. The call will be timed from the second you are connected to the technician until you hang up.

Fees - $5 for the first 3 minutes and $1 per minute for each additional minute. Minimum credit billing to the customer's Visa, MC, or AE is $15.

One, Two, /// Forum

Wish list

Thank you for your kind telephone support over the past few months. I recently purchased the 65C802 chip but as yet have not had the chance to install it. Quickly, would you tell me the location of the chip it replaces?

I am also looking forward to the future releases of Spelling checker for /// E-Z Pieces which I previously expressed interest in. Also, I am interested in SOS and Pascal updates. One SOS function I would like to see expanded is the space for and number of device drivers. Using Selector ///, I have just about exhausted the driver space and I have about 1K left.

ON THREE is the only magazine that I read from cover to cover the day that it arrives and I have saved them all! I look forward to receiving it each month.

John C. Laughlin,
Honolulu, Hawaii

Thank you for the kind remarks about our tech support line and our magazine.

Concerning your remarks about the Spelling Checker, make sure you tell every ///'er who has /// E-Z Pieces to write to tell us that they would like to purchase the Checker. Due to the /// economy, we may not be producing the Spelling Checker unless we get enough response from people like yourself. The more people who call in to purchase it, the better chance there is that the Spelling Checker will be made. SOS and Pascal updates are also being considered, but the same rule applies, the users will now decide what will and will not be made. We will put your letter on the wish list for these products.

Also, the 65C802 chip replaces the 6502 chip, right next to the 522 chip.

AppleTalk LAN

Thank you for sending the programs and Apple /// Service Manual which I ordered recently from you. All programs run just fine and Lazarus /// is great.

The company I work for has several Macs, Lisas and IBM PC's hooked up to an AppleTalk LAN. Is it possible to connect an Apple /// to this network and what software/hardware is required? The answer might be of interest to more people than I know.

"We are trying to increase the level of enthusiasm among a group sure to feel left out..."

Thank you for your excellent magazine and products.

Jos Wils,
New Zealand

I am glad that you like your new programs and enjoy our products and magazine. Thank you for the compliments.

Your question is one that may interest many /// users. Unfortunately, there is not any hardware made to connect your /// up to this type of setup.

New approach

I read with trepidation and dismay the mailing sent out in early July. The wailing and lamentations seem to indicate someone who has lost a favorite toy and isn't quite sure where to lay blame. The dilemma faced by *ON THREE* is not new not is it unusual; witness the poor showing for the update to /// E-Z Pieces.

We who support and use the Apple /// must accept that the new family of users are not financially secure businesses but are private citizens who probably acquired the /// for a small sum from an employer or a university who *switched* to "Big Blue" or a clone thereof. We are in the unenviable position of trying to increase the level of enthusiasm among a group that is sure to feel left out and confused by Apple, the lack of new material and the misguided minions of Jobs that dumped on the ///.

Okay, what is the approach to take? You all have started with programs and support for the rest of the Apple family of computers. Where is it written that a single system must be totally self-supporting? I think that a good product introduced and sold within the larger II community can help carry the good old /// for many years to come. Surely Bell Telephone hasn't been totally wrong all these years.

Let's not give up for the sake of an outdated economic principle! We do need a sound company producing new material for the /// and supporting that material but we do not need a source of just Apple /// software and hardware enhancements if a combination of efforts will pay off just as well for all of us. Think on that for awhile, it appears that the *ON THREE* group is headed that direction anyway so why not be up front and say so instead of trying to scare the users about the problems of supporting the /// in a standalone mode.

The new software and hardware items you are considering can surely be ported over to the IIe and the IIGS and maybe even the new family of Mac's. What do you say to this proposal? Can we get on with the business of supporting a fine machine and still make a living from the rest of the bunch? I think it can be done and we don't need another mailer like the last to those that do support the firms that develop material for the ///.

Incidentally, just to lay your fears at rest, I did purchase several items from the flyer in a vain attempt to

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

Classified Rates: $1 per word, $25 minimum. Copy must arrive 35 to 40 days prior to cover date, e.g. **October 23 for December issue.**

Subscriber Discount: 50 cents per word, $12.50 minimum.

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

NEW from *ON THREE* -

Memory Board Insurance!

Have you ever wondered what would happen if your Apple /// suddenly went bad? Has your machine ever sputtered to a halt? How would you get things done while you waited for your Apple /// to be fixed by a place halfway across the country?

Well, *ON THREE* has the answer with **256K and 512K Memory Board Insurance!**

For only $50 (or less!) per year, *ON THREE* will provide an unlimited extended warranty on your Apple /// 256K or 512K Memory board. If your memory board goes bad, we will ship you via overnight mail a replacement 256K or 512K memory board. As soon as you get the new memory board, send back the faulty one in the handy package we provide.

All current 256K and 512K Apple /// owners are eligible to participate. Simply phone in your order or send in a check for $50. At the time of the order you must specify if you're using a 256K or 512K system. An official *ON THREE* Insurance certificate will be issued in your name and immediately mailed to you.

We even offer **multiple purchase discounts.** The per year premium on two 256K or 512K memory boards is $40 per board. If you have three boards the costs is $35 per board and if you have four or more memory boards, the fee will be $30 per board.

Hurry, order your insurance policy today - before it's too late!

512K Memory Upgrade Sale! $324 plus $10 s/h

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 ///.

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

For larger spreadsheets, databases, 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:

- Δ Complete installation and guide for use.
- Δ System Utilities 1.2 which permits larger driver files.
- Δ Industry leading 90 day warranty!
- Δ Ultra-fast RAMDisk driver with demonstration programs.
- Δ 512K Upgrade utility which updates your programs.
- Δ Free technical support on the 512K upgrade
- Δ And of course, an Apple /// 512K memory board with state-of-the-art 256K memory chips.
- Δ 512K Memory Confidence Program which tests all memory and ensures that your 512K /// is working properly.

insure all of you that there are faithful customers out here even now. Now that that is out of the way, how about a little assistance? Do you have a current address for the Interactive Structure folks? I also want you to know that I have a PKASO/U card that I use with Draw ON ///, works great and the driver you provided works with other applications, too. Hang in there and keep the /// alive for a few more years.

David C. Ellis,
Fairfield, Iowa

Regarding your remarks about **ON THREE***'s approach to the new breed of /// owners and users, who as you suggested, probably purchased their ///'s for use at home, this company can only survive by programming on other Apple computers, such as the* IIGS *and the IIc and e. By making new software products for the /// first and then porting over to the* IIGS*, the company has barely been able to stay alive.*

Due to the /// economy, programs will be made by **ON THREE** *for the II family and if there is enough interest generated in the /// world for the product, it will be ported over to the ///. It simply does not pay to program on the /// for less than 10 percent of all /// owners to purchase the product. Also, you cannot port hardware over from the /// line to the II line or vice versa.*

We feel as though we have been up front about our programming on other computers. Please re-read former editor, Lynne Denicola's "Apple Sauce," in Vol. 4 No. 1. You may also notice that not only did Lynne refer to **ON THREE***'s programming on* the IIGS *in that article, but I assure you the Apple* IIGS *has been mentioned before in the Ranntings columns. We do like to keep as much* IIGS *information as we can out of the magazine as we want the magazine to be for /// people! Sometimes, though, it is important to inform Apple /// owners, who are looking for other systems to add to their collection, what is available that is similar to the ///. Overall, a ///-only magazine is currently one of the only connections ///'ers have among one another.*

We are not trying to scare ///'ers about the problems, we are simply letting them know what is going on. If we didn't say anything and cancelled the services we provide to ///'ers without any warning calls, there would be a lot more people furious wanting to know why **ON THREE** *didn't say something! Some people just forget that we aren't in business for fun and games. They need to be reminded that in order to keep the /// world going, they need to support one of the only Apple /// companies that provides free support eight hours a day for its products! We realize that you are one of the supporters, but what about the people who call for tech support and have never bought anything from* **ON THREE?** *There are people like that. And, of course, they are the ones who need our flyers. When receiving our flyers, please don't take everything personally. You know whether or not you have been playing your part as a dedicated ///'er and* **ON THREE** *customer. (And, of course, you have been - thank you!) That's what matters, so just take advantage of the low prices!*

By the way, you may want to try the manufacturers of Shufflebuffer to see if they have a copy of the manual.

Your request for Interactive Structures' new address prompted me to do some investigative work. I finally tracked down the company, which is still located in Pennsylvania. According to a company spokesperson, Interactive Structures has regrouped and is now known as Daisi Electronics. Yes, they still have the PKASO interface cards. You can contact them at the following address and phone number.

Daisi Electronics
P.O. Box K
Newtown Square, PA 19073
(215) 644-8877

Thank you for your continued support and input. May you have many nice /// years, too.

Mail, De Classifieds

I went through the trauma earlier this year of relocating from Idaho to California, a temporary residence, and finally purchasing and settling in our own home. In the process of moving, the February 1987 issue of *ON THREE* never caught up with me. I have the January (old address) and March through this month (new address). Could you please check and see if the Post Office sent it back to you or what? I would really appreciate receiving that issue. There are too many good things to miss.

Just a few words about your De Classifieds. I wanted to put an ad in the August issue but having to do it so far in advance, well...is just a bit long. I suggest that *ON THREE* makes some changes aimed at publishing ads expeditiously.

Rev. Jared Jenkins,
King City, Calif.

We are sorry to hear that you missed your February issue due to a move. When a subscriber moves, bulk mail, such as **ON THREE** *magazine, is not forwarded by the postal service. Therefore, it is necessary to let all magazines that you subscribe to know your new address about two months in advance. For instance, for this issue we would have needed the new address by August 1st in order to make the correction on the mailing label. Please, though, if you know at an earlier date that you'll be moving, let us know.*

Due to your request, and many others, like yours, I have managed to bump the deadline for the De Classifieds up a bit. Starting next month, the deadline date for De Classifieds payment and copy is nearly five weeks before the publication it should appear in instead of eight weeks. For instance, the ad copy would need to be at the **ON THREE** *offices by Oct. 25 for the December issue. This is as close to the publication date as we can get for ad copy. I hope you and others will take advantage of this.*

Underscoring with AppleWriter

The answer which appeared earlier this year (April issue) about underscoring in AppleWriter was correct as far as it went. The [\][BS] before a punctuation mark will neither underscore the punctuation mark nor leave a space between the underscored text and the punctuation mark. There is a similar problem with leading punctuation. The string (**ON THREE...** will leave a non-desired space between the open parenthesis and the underscored text, like this:

(ON THREE...

To avoid this, you must have a [BS][\] after the punctuation mark. The asymmetry is due to the way AppleWriter handles new lines. If an

underscored word starts or ends a printed line, AppleWriter prints funny without it.

There is an elegant solution to both problems for those with AppleWriter Versions 2.0 or 4.0. I added two special commands to the GLOS.KEYPAD file (the one that turns the numeric keypad into single-stroke AppleWriter commands). those two commands are (1) Open Apple-Backslash (**OA-**) key combination to begin underscoring and (2) **"OA-/"** to turn underscoring off. The **OA-** sends the underscoring and the (2) **OA-/** turns the underscoring off. The **OA-** sends a backspace to the printer before sending the \ underscore toggle. The **OA-/** sends a backspace to the printer after sending the \ character.

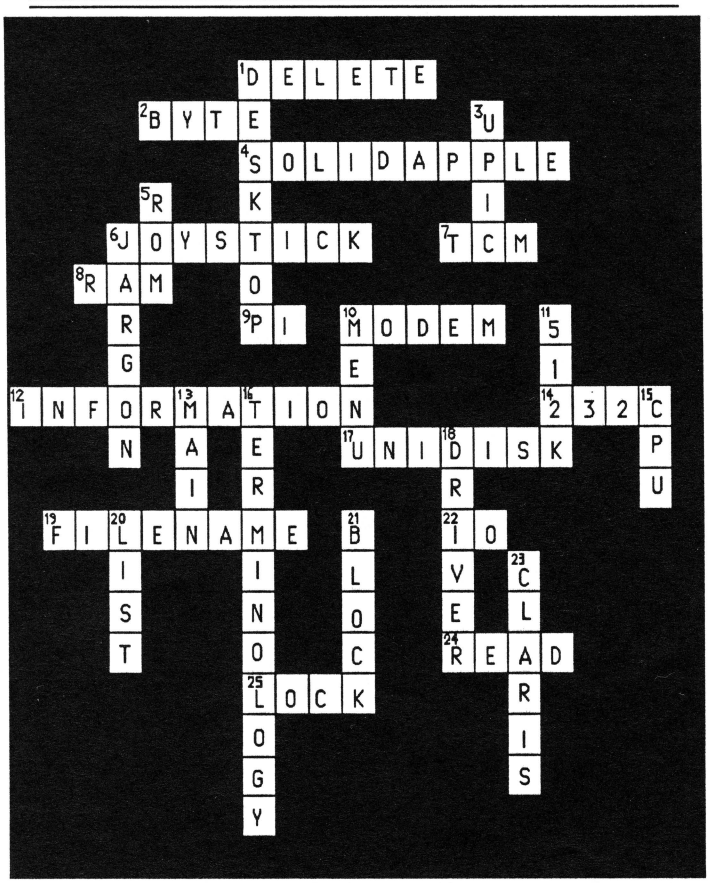
It's pretty straightforward to enter the new commands in the GLOS.KEYPAD file. Load GLOS.KEYPAD into AppleWriter and go to the end of the document. For the "start underscore" command, type the following eight keystrokes:

1	2	3	4	5	6	7	8
\	x	[v]	<--	[v]	x	\	RETURN

The **[v]** is CONTROL-V and the **<--** is the left arrow. For the "stop underscore" command, type these eight keystrokes:

1	2	3	4	5	6	7	8
/	\	x	[v]	<--	[v]	x	RETURN

Answers to the Crossword from page 18



The **x** characters are there because you cannot enter a CONTROL-V into an AppleWriter file directly. And the backspace must be flanked by CONTROL-V's. You can, however, enter **[v]** with the find and replace command. Just find the four occurrences of **x** and replace each with a CONTROL-V **(Find:/x/[v]/)**. When properly done, the added GLOS.KEYPAD lines have five characters each:

1	2	3	4	5
\	SV	BS	SV	\
/	/	SV	BS	SV

Then just save GLOS.KEYPAD. From the "additional functions" menu, reload the glossary file and you are ready to go. Note that this method means that **HELP** is now available only by pressing the **OPEN APPLE-?** combination.

Allan Bloom
Blacksburg, Va.

Thank you for the nice step-by-step procedure to help others with underscoring problems out. I am certain there are quite a few AppleWriter users who have been waiting for this information to beat the underscoring blahs!

TCM updated

I have been told that you have revised the Communications Manager to remove the bug that caused characters to drop when capturing the screen using 2400 baud or higher. I understand there is an upgrade.

Tom Betz,
Yonkers, N.Y.

Yes, there is an update to the Communications Manager that has taken care of this small bug. It is TCM version 1.3 and is recommended that all TCM owners who use 2400 baud or higher send in their TCM version 1.2 for an update. Please include $1 postage as well.

How do you spell--relief with Speller ///?

I have been having SOS interrupt conflicts between Apple Speller and the Desktop Manager. Since the problem is unique to me, despite my fours years of experience with the Apple ///. I would like to pass the facts on to you as they stand.

I have an Apple /// with a 512K upgrade. I am using a Quark QC10 hard disk which has been upgraded to a QC20 by Quark. I have AppleWriter 2.0 installed under Catalyst v. 2.1. I also have a Titan /// plus IIe card and a 65c802 chip. All of this is probably not relevant to the problem that I experienced but will give you an idea of what equipment is involved.

Initially, I installed AppleWriter on my hard disk volume "/QC" using Catalyst's install program. This automatically created the file: QC/CATALYST/APPLEWRITER from the original program disk file /AW3MASTER/SOS.INTERP and copied the various subdirectory utility files as well as setting up the Catalyst menu. AppleWriter was used in this configuration for

several months prior to the decision to also begin using Apple Speller.

After reviewing the Apple Speller manual and several articles written in *ON THREE* magazine and other periodicals regarding others who have had problems with Apple Speller on the hard disk, I proceeded to install the program myself.

At first I used the subdirectory path /QC/CATALYST/SPELL. Efforts to address the speller from within AppleWriter were responded with varying malfunctions. The most frequent were SOS Error #44, System Failure #06, File Not Found or a display of the Macro Manager's first MacroMap. This last is what gave me the impression the the speller calls were conflicting with the Desktop Manager. Making a new subdirectory with the path /QC/Spell gave similar results when tried.

After talking to your technician, Dave Christenson, I followed his suggestion to remove the Desktop Manager driver to try again without having the Desktop Manager program active. This also produced the same results, however. It opened the lead that the Catalyst program could be causing the difficulty.

I then made a new subdirectory /QC/Applewriter and using System Utilities copied the Catalyst generated file QC /Catalyst/Applewriter to the new subdirectory QC/Applewriter/SOS.interp. The AppleWriter utility files were also copied to this subdirectory. This necessitated a change in the Catalyst menu for both the initial path and pathnames (#1 &#9) to /QC/Applewriter/SOS.interp. The speller program was left /QC/Spell.

The speller program now works perfectly from the AppleWriter *Other Functions* menu items *K* and *L* both with the Desktop Manager active and without. I just press the menu item *M* and respond with the macro /QC/Spell/ then proceed to the spelling checker or utility.

The problem described may be confined to my specific equipment setup and is offered as a reference only. I thought it might be helpful to you, should others make a relative inquiry. It is my conclusion that Catalyst 2.1 somehow attempts to respond to the AppleWriter inputs when Catalyst is part of the pathname, causing the SOS confusion.

Fred W. Borrish,
Douglasville, Ga.

Of course, your problem seems to be unique to your specific setup but it is still worthwhile to share the information with other magazine readers. Your conclusion also seems to be quite right, especially when looking at the route you took to rework the AppleWriter program. Thanks for sharing the information.

Sider solutions?

I have been considering purchasing a Sider hard disk but have a few questions to ask before I commit to such a large expense item.

I operate my ///, 256K RAM with the Titan /// plus IIe cards with the following software: /// E-Z Pieces, Word Juggler, VisiCalc, Draw ON /// and Manage Your Money in the IIe mode. I also have the Desktop Manager.

Can the Sider be compartmented so that I can use perhaps 2-3 megabytes in the IIe mode and the remainder in the /// mode?

If I purchase Selector /// can I still use my Word Juggler and VisiCalc disks? Will the software that I listed above work with Selector ///?

Will I still be able to operate programs that are not stored on Selector /// on the hard disk?

Albert C. Lauer,
APO New York

Xebec, the company that make the Sider as informed us that the Sider 10 is no longer available and that they do not have any more interface cards that will fit the Apple /// for any of their products. However, ON THREE is still selling Sider 20s for $950 plus $35 s/h. ON THREE has decided to help our Apple II friends by providing hard drives for the II world. For further informaltion about the Apple II hard drives, call ON THREE at the regular number, (805) 644-3514.

For you and others, here are the answers to your questions. First of all, the Sider can be compartmented. Regarding your questions about Selector, here is a list of programs Selector supports:

Access ///
Access 3270
Advanced VisiCalc
Apple II Emulation
Apple File ///
Apple Speller ///
Apple /// Pascal Develop. Sys.
AppleWriter ///
Backup ///
BPI
Apple /// Business Basic
Apple /// Business Graphics
Cobol
Desktop Manager
Draw ON ///
EasyTerm
Graph-N-Calc
Haba Merge
Keystroke Data Base
Keystroke Report Gen.
Lazarus ///
Multiplan
Nexus
PFS: File
PFS: Graph
PFS: Report
Quick File ///
Script ///
Senior Analyst ///
VisiCalc ///
/// E-Z Pieces

You will not be able to boot any programs from your hard disk in the normal manner not in the Selector /// menu. But why would you want to? Selector allows practically any program to be added to the menu and it is very simple to use. You can modify the menu as outlined in the program's manual.

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

SPELLING CHECKER

For those ///'ers who want to see the development of a Spelling Checker for /// E-Z Pieces, please call or write in to put your name on the list.

CALL (805) 644-3514
or Write: ON THREE, Attn. Spelling Checker, 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.

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

"Swapping floppies is the disease and a hard disk is the cure!"

A hard disk is a mass storage device which allows a user an incredible amount of storage space to retrieve data with a few keystrokes. Forget the "Out of room on volume" messages that a user usually receives on other drives. But now you have decided to use a hard disk, there is one name you should keep in mind:

Sider 20 mb $950 plus $35 s/h

from *ON THREE* and Xebec (First Class Peripherals)

Compare the speed of a Sider hard disk to a profile hard disk.

Sider —Access time —85msec

ProFile—Access time—180msec

Combine a Sider with *Selector ///*, the disk switching utility, for an incredibly fast hassle-free system. For speed, accuracy and dependability at a great price, call *ON THREE* for a Sider 20!

Fly high with . . . Super Desktop!

That's right! ON THREE's new Super Desktop Manager™ Accessories Disks No. 1 and No. 2 are worth jumping off skyscrapers for. But don't go that far, just call ON THREE's order line today!

Disk No. 1 contains:

***Printer Setup** - Allows you to send complex control codes to your printer via easy to use menus.

***TypeWriter** - Turns your Apple /// into an intelligent typewriter.

***Labeler** - Prints labels you define, one at a time or even multiple copies.

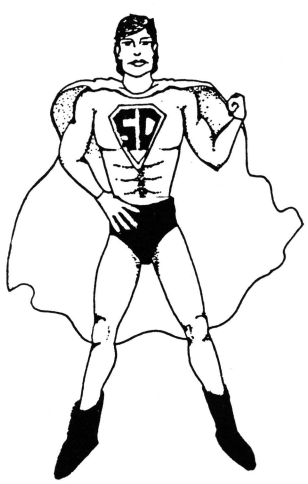
***New Desktop Setup** - Allows better control over the ClipBoard.

***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.

BULK RATE
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Permit No. 90
Ventura, CA

Crossword Scrambler

Mr. Sandman

♫♫ Special of the Month ♫♫

Now more than ever *ON THREE* subscribers can sing about their favorite magazine as each month *ON THREE, INC.* will be offering a special price to subscribers only!

Fruit Machine

Card Machine

Four games for the price of two!

Buy the Card Machine/Fruit Machine combo for regular price and receive Crossword Scrambler and Mr. Sandman for free! Just place your magazine mailing label for this month in the mail along with your VISA, AE, MC number, check or money order for $39.95 plus $7 s/h and save nearly $30 !

ON THREE presents ...

$99 plus $7 s/h

StemWriter ///

Have you been waiting for a word processor that does it all? Enough waiting, try *ON THREE*'s latest word processor - StemWriter ///, an Australian program via StemSoft, Inc.

StemWriter can help you!
This program seems to be just what the doctor ordered for writers, office managers, desktop publishers and secretaries.

***Design your very own form template**
***Make your own headlines**
***Utilize on-screen bold text and underlining**
***Make sharp, attractive footnotes**
***Adjust your column width**
***Utilize on-screen overstrike**
***Date-stamp your documents**
***Word-sentence count**
***Labels**
***Personalized form letters**
***Utilizes a desktop just like /// E-Z Pieces**
***Four levels of superscripts and subscripts**
***Utilizes the four arrow keys to "see and point."**
***Predefined numerical keypad**
***File managing on built-in utilities program.**
***Views two files simultaneously.**