

# ON THREE

The Magazine For Apple III Owners and Users

®

Volume 5, No. 8

August 1988



\$4.00



# How Would You Like A

## Fast Reliable Easy To Use

### Hard Disk Backup Program?

Well, you know I'm not talking about Backup ///! After years of complaints about Backup /// being too slow and in many cases losing people's important information we've decided to do something about it. We know that many people *never* backup their hard disk because Backup /// is sooo slow or because they've had a bad experience with it losing information.

A while back we started work on a product we're calling Go Back. It's a replacement hard disk backup program for your Apple ///. If you're sick and tired of the time it takes to backup your hard disk with Backup /// or the System Utilities, Go Back is what you're looking for.

Go Back is written entirely in assembly language for speed, is four to five times faster than Backup /// and much more reliable. We guarantee it!

Now you're probably wondering why this isn't an advertisement for Go Back. Well, in a way it is. You see we were about half-way finished with the project when we stepped back, took a look at the potential market and asked ourselves, "Will there be enough sales to warrant spending the time to finish Go Back?"

If there's enough interest in Go Back we will complete it. Now we **don't** want you to send in your money, or give us a credit card number. All we want is your assurance that you will buy Go Back if we spend the effort to finish it. Actually, we want the assurance of at least two hundred people. If we know that at least two hundred people will buy it, we'll finish it.

If you want a reliable, very quick and inexpensive (around \$50) program for backing up your hard disk, drop us a note or give us a call at (818) 701-1355. Just leave your name and address so we can notify you if and when the project is finished. It's that simple!

If you've ever had problems with Backup /// or worse yet, never backup your hard disk because it takes so long with Backup ///, please give us a call. If you know of another Apple /// user who has similar problems, tell them about this offer! The more people who call, the quicker you'll get a fast, reliable and easy to use backup program for your Apple /// hard disk.

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*ON THREE* - The Apple /// Magazine is published monthly by ON THREE, Inc. 8920 Yolanda Avenue, Northridge, CA 91324. (P.O. Box 3825, Ventura, CA 93003) ISSN# 0889-6249.

For a copy of our author guidelines, please send a stamped, self-addressed envelope to the above address. The current per page rate is \$12.50.

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**Subscription Information:**

U.S.,APO, FPO: \$40 for 12 issues. First Class Service: \$12 additional, \$52 total.

Canada, Mexico: \$20 additional, \$60 total.  
South America, Europe, Pacific Islands, Asia, Australia, Middle-East: \$44 additional, \$84 total.

Back Issues are available for \$5 each.

**Postage for ON THREE products:**

U.S.: Listed next to product price.

Canada and Mexico: Double U.S. postage.

Elsewhere: Four times the U.S. postage.

All funds must be remitted in U.S. dollars drawn on a U.S. bank. We also accept direct wire transfers and U.S. Postal money orders.

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**ON THE COVER:**

**A look at the middle of our sales office's big move**

**Cover by Cathy Consorti**

# Call Three: Hotline

The Call Three Hotline is a service whereby Apple /// users can contact fellow Apple ///er's who have expertise in a particular subject(s) pertaining to the Apple ///. These individuals are not compensated for their efforts so we all owe them a resounding **Three Cheers** for their generosity.

If you have questions, feel free to call the consultants listed below, but please observe the calling times listed. It would be a good idea to check the time zone so as to *not* wake someone up in the dead of night. If you are willing to spend a little time and help your fellow Apple ///er's, write ON THREE giving the necessary info. and we will be happy to add your name to the Hotline.

Name	Area	Telephone	Days	Hours	Zone	Subjects
Coville Woodburn	NH	(603) 863-5590	M,Tu,Th,F	7-8 PM	Eastern	BB,CT,GE,MI,QU,WP
Ken Johnson	MA	(413) 536-7502	Su-Sa	6-9 PM	Eastern	BB,PA,MD,WP,MI
Don Loosli	MI	(313) 626-3848	M-F	9-5 PM	Eastern	GE,WP,SS,DB
Harry T. Hanson	NJ	(201) 467-0712	M-F	6-9 PM	Eastern	GE,PA,BB,CT
Edward Gooding, Sr.	VA	(804) 747-8751	Su-Sa	6-9 PM	Eastern	CO,SS,PR,MD,CT
Jeff Fritz	WV	(304) 599-7010	M-Sa	8-11 PM	Eastern	BB,DB,GE,MI,SS,TC,EP
Al Johnson	FL	(904) 739-1600	M-F	9-6 PM	Eastern	GE
Paul Sanchez	FL	(305) 266-5965	Su-Sa	10-4 PM	Eastern	SS,PR,CT
R.B. Thompson	NC	(919) 787-1703	Su-Sa	10-10 PM	Eastern	BB,DB,GE,SS,WP
David Galliher	TX	(214) 462-0346	Su-Sa	5-9 PM	Central	Corvus
J. Donald Glenn	NE	(402) 291-9177	Su-Th	7-10 PM	Central	GE
Scott Weddel	NE	(402) 572-7543	Su-Sa	4-10 PM	Central	GE,TC
Jim Ferencak	IL	(312) 599-7505	M-F	10-5 PM	Central	GE,EP,DB
Paul Thomas	MS	(601) 494-4476	Su-Sa	6-10 PM	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 PM	Central	CT,DB,WP,GE,QF,O3
Ron Maupin	TX	(512) 280-0144	Su-Sa	8 AM-10 PM	Central	AL,CO,CT,EP,MD,PA,QU, SS,TC,EP,WP
Terri Wiles	CO	(303) 850-7472	Su-Sa	10-6 PM	Mountain	PA
William Prince	OR	(503) 254-6465	M-F	9-4 PM	Pacific	GR,TC,Corvus
Karl La Rue	WA	(509) 582-6459	F-Su	6-10 PM	Pacific	MD,GE,EP,WP,TC,SS,CP
Pat Holwagner	CA	(415) 433-2323	M-F	10-6 PM	Pacific	GE,SS,WP,CT,DB,SO,AE,EP
Vincent F. Latona	CA	(818) 703-0330	M-F	9-5 PM	Pacific	GE,WP,BB,SS,AE
Dennis R. Cohen	CA	(818) 956-8559	Su	10-10 PM	Pacific	GE,PA,MU,WP,DB,SO
			M-F 7-9 PM	Sat Noon-6 PM		
Kelly C. McGrew	WA	(206) 943-8533	Su-M,Th-Sa	7-9 PM	Pacific	DB,GR,SS,PR,MD,CT
Larry E Kalland	AK	(907) 272-4968	Su-Sa	12 Noon-11 PM	Alaska	AC,CT,GE,SS,EP,WP
H. Van der Straeten	Belgium	(015) 516561	Su-Sa	7-10 PM	Europe	BB,CT,DB,GE,PA,PR,SS
Arnaud Trache	France	(21) 030421	Sa-Su	10-7 PM	Europe	AC,BB,DB,AE,FI,GR,MD,PR,SS, TC,EP,OT
J. Woretshofer	Netherlands	(043) 611704	Su-Sa	9-12 AM	Europe	CT,FO,GE,PA,QU,SO,WP,AE,EP
Salvador Garcia	Spain	(91) 234 5068	Su-Sa	7-10 PM	Europe	BB,GE,PA,MD,CT

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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	Omnis 3	O3	Pascal	PA	ProFile	PR
Quark	QU	Quick File	QF	SOS	SO	Spreadsheets	SS
Telecomm.	TC	/// E-Z Pieces	EP	Word Proc.	WP	ON THREE	OT

# Apple Sauce

by Bob Consorti

New Apple /// Products

A month or so ago a gentleman called asking if our Sider hard disk drives would work in Titan ///+//e emulation mode. At the time I wasn't sure and said I'd call back when I new for sure. After some time we received our long awaited Titan boards and tested it out. Worked like a champ!

Unfortunately I lost the mans telephone number. If you're out there - It does work! It was very interesting to save a file in /// E-Z Pieces and then run an Apple //e graphics program written to handle AppleWorks documents. The neat part was that the programs were all located on the Sider. With our new Sider drivers the **Apple /// stores files on the ProDOS partitions of the Sider, thus complete compatibility between normal Apple /// and the Titan ///+//e operation.**

## We're Set

By the time you read this column we will have finished the moving of our sales office. Our new sales office address and phone number is:

**ON THREE, Inc.**  
**11235 80th Avenue, N.E.**  
**Kirkland, Washington 98034**  
**(206) 823-0516**

As stated last month, our technical support address and phone number is:

**ON THREE, Inc.**  
**8920 Yolanda Avenue**  
**Northridge, California 91324**  
**(818) 701-1355**

All orders should be sent to our sales office or called in via our toll-free order line. The order line number remains unchanged at (800) 443-8877. Questions regarding product delivery should go to our sales office. Any subscription or technical inquiries should go to our technical support office.

## 512K Memory Upgrade Kits!

We are very sensitive to the 512K price increases brought on by the ram price increases of the last six months. In an effort to make the 512K affordable again we've figured a way to make the 512K much less expensive. Our 512K memory expansion effectively adds 256K of memory to your current 256K Apple ///. But up until now we've been supplying the 512K fully populated (filled) with memory chips.

Because of the memory chip price increases we've decided to offer two new 512K memory boards. The first is a zero K 512K. That is, a 512K memory board with no memory chips. The second option is a 256K 512K. This board comes with the upper 256K of memory that the 512K uses. If you're upgrading from a 256K Apple ///, you can simply take the memory chips off of your current 256K memory board and fill the empty positions on the 512K board. With these boards we will supply a list of ram chips vendors where you can purchase the memory needed to fill the 512K.

Please note that both of these 512K kits are complete and fully tested, just like the regular 512K. The zero K board will cost \$159.95 and the 256K board is \$299.95. If you decide to get the zero K board you can take the 256K of memory from your existing 256K memory board and then purchase the upper 256K of memory elsewhere to completely fill your 512K memory board. Owners of 128K Apple ///'s can't use any of the memory chips from their memory boards in the 512K.

Our 512K design splits the memory into two parts, one half being made of 8 256K ram chips, the other half made of 32 64K ram chips. Each supplies 256K of memory. The 256K memory board found in most Apple ///'s is made up of 32 64K ram chips. It's a very simple matter to take the memory from your 256K memory board and plug it into the 512K board. We even supply a small

**Continued On Page 8**

# Apple /// User Groups

If you want to meet other Apple /// owners and exchange ideas, tips and hints about the Apple ///, contact one of the user groups listed below. They're all willing and able to help new and old Apple /// users with the trials and tribulations of owning an Apple ///.

If you recently formed an Apple /// group or know of one that is not listed here, please contact ON THREE and we will include the updated information in this section.

## 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

L.A.-South Bay  
Apple /// User Group  
P.O. Box 432  
Redondo Beach, CA 90277  
(213) 316-7738

Apple /// Users of Northern  
CA  
P.O. Box 1528  
Mill Valley, CA 94942  
International Apple Core  
(Apple /// SIG)  
908 George Street  
Santa Clara, CA 95054  
(408) 727-7652

## Canada

Apples British Columbia  
Computer  
Society (Apple /// SIG)  
P.O. Box 80569  
Burnaby, B.C.  
Canada V5H 3X9  
(416) 839-7779

The Astronic Club  
1453 Highbush Trail  
Pickering, Ontario  
Canada L1V 1N6  
(416) 839-7779

## Colorado

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

## Connecticut

Apple /// Society of So  
Connecticut  
34 Burr School Road  
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 Apple /// Society  
385 Saddle Lake Drive  
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 Granda  
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 /// SIG Chairman  
Washington Apple Pi  
8227 Woodmont Ave. #201  
Bethesda, MD 20814  
(301) 654-8060

## Minnesota

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

## New Jersey

New 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 /// SIG  
P.O. Box 1666  
Fairborn, OH 45324-7666  
(513) 879-5895

## Oregon

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

## Texas

Apple Corps of Dallas  
Apple /// SIG  
P.O. Box 5537  
Richardson, TX 75080

River City Apple Corps  
Apple /// SIG  
Box 13349  
Austin, TX 78711  
(512) 454-9962

Houston Area Apple User  
Group (H.A.U.G.)  
Apple /// Division  
P.O. Box 610150  
Houston, TX 77063  
(713) 480-5690 or  
(713) 974-5153

## Virginia

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

## Virginia (Continued)

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

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

## Overseas

Apple /// Users  
Belgium/Netherlands  
c/o H. Van der Straeten  
Mechelsebaan 116  
Belgium  
(015) 516561

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

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

British Apple Systems User  
Group (BASUG) Apple /// SIG  
P.O. Box 174  
Watford Herts, England  
WD2 6NF  
0727 73390/72728

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

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

# The Beginning ///

by Richard and Lavona Rann

Memory Size And The Apple ///

When the Apple /// was being designed, a power user was lucky to have a 64K Apple II. That was the biggest and the best microcomputer on the market. At the beginning of the '80s, RAM was built on 16K memory chips which, at that time, were new and expensive. A fully equipped Apple II came with 48K. To get to 64K you had to have a memory expansion card or a language card that contained extra memory chips. These cards were expensive. Consequently, only real enthusiasts and "heavy users" could afford a 64K Apple II.

A little more than a year later the standard had raised and the machine that generally set the standard was the 64K Apple II+. The Apple II+ ran word processing programs that could hold a maximum of 16 to 20 pages in memory at one time, games of all sorts, and VisiCalc.

People with businesses could actually do spreadsheets on their Apple IIs. Of course that first VisiCalc was not very powerful; nor did it do more than the standard simple calculator functions of addition subtraction, multiplication, and division. It did not handle macros or complex formulas. What it did was keep rows and columns of numbers and do mathematical operations across selected fields. Even with its limitations, VisiCalc was very important. It proved, long before IBM, Compaq, and AT&T introduced their first microcomputers, that microcomputers could do useful work. It was a turning point.

This feeling of optimism about the growing business use of microcomputers permeated the microcomputer world while the Apple /// was being designed and ultimately introduced. In 1981 the Apple /// was the biggest and most powerful machine on the market. Functions and capabilities that would require filling all the slots of an Apple II+ with expensive add-on cards, were included in the basic Apple /// system. Apple intended it to be the next step in microcomputing. The step that would give Apple a fully function business machine. In a sense,

Apple was correct. The /// was a business machine, and it was delivered almost a full year ahead of IBM's first PC, but as we all know, that was not the entire story.

The Apple /// was announced in September of 1980 and began shipping in limited numbers within a couple months. Those first Apple ///s had a full 96K RAM. While the earliest ///s had almost double the memory of the largest Apple II, the functional space available to applications was not doubled. This was because SOS is a software based operating system, and unlike the operating system of the II+, SOS takes up space in RAM.

Unfortunately a number of hardware bugs were found in those early machines. When the Apple was reintroduced a year later, in November of 1981, the minimum memory configuration had been increased to 128K. Apple had revised the /// to correct the problems found in the early machines, and shipped early owners new motherboards which included 128K using 64K RAM chips.

The 128K Apple /// configuration appeared adequate for 1982 because there still was very little software that took advantage of the capabilities of the Apple ///. By the end of '82 Apple /// native mode software was on the market and it was becoming apparent that the 128K /// was not enough memory for a number of functions. Over the next few years most new Apple ///s were sold as 256K. It was the growing complexity of software and the size of business spreadsheets that forced /// owners into buying more memory (RAM) just as it had for the 16K, 32K, 48K, 64K, and 128K Apple IIs.

Each memory level was left behind as the functionality, memory requirements of the software, and type of documents created increased. That trend continues today even stronger than it has in past years. The Apple minimum size of RAM in the IIGS was recently double to 512K. The minimum size of the Macintosh will officially be 2 meg by next year, and there are reliable

predictions that by 1990 top line machines will have 12 meg.

In the Apple /// world the size of commercial software is relatively frozen, owing mainly to the fact that there is so little commercial development being done for the ///. The majority of commercial software development stopped after Apple announced in April 1984 that the Apple /// product line would be discontinued. A few products were completed over the summer, but after that, ON THREE and a few individuals were the only folks doing significant new commercial development for the Apple ///.

It would seem, at first glance, that there is little reason for /// owners to expand the memory of their ///s up to, or past, the 256K that was available when commercial development virtually stopped. That is not entirely true. There are several reasons why larger memories are useful. Most of these reasons deal with how the /// is being used. This is an important consideration because some functions still generate the need and/or desirability for greater amounts of RAM.

For people with 128K machines there are two main reasons that make larger memories necessary. Size and speed. The size issue is the easiest to address. Larger memory allows space for larger files and larger programs. This is an obvious statement, but it does have a couple implications that are important. 128K Apple ///s do not have sufficient space for the latest official Apple /// software. Programs like the last release of Applewriter /// with the integrated spelling checker and dictionaries will not load into 128K machines. A number of other programs will load, but the size of the program is such that it will not allow enough space in memory for files of reasonable size. This lowers the efficiency and functionality of the /// drastically.

The need for speed is a little harder to pinpoint as a memory issue. When memory is nearly full in the Apple ///, the time required to do an operation like a sort in a database or a recalculation in a spreadsheet increases. More and more computer cycles are used in the house-keeping tasks of moving data around to gain working space instead of completing the task at hand. When memory space is scarce, programs have increased problems of keeping track of the data spread out in various

parts of memory and some will slow to a crawl and even stop, often with the ubiquitous "stack overflow."

Another advantage of moving to 256K is the space it allows for system enhancements such as RAM disks, spoolers, and Desk Accessories programs like The Desktop Manager. Taken together, they add greatly to the useful function of the /// by expanding the scope of what the /// can do at any given time. The additions to efficiency of the Desktop Manager, alone, should be worth the cost to upgrade to 256K for most users.

### GETTING FROM 128K TO 256K

Fortunately for Apple /// owners, it is still possible to upgrade from 128K to 256K. Some local dealers will still do memory upgrades, but most folks find that they are better off dealing with ON THREE or Sun Remarketing for their Apple /// needs.

The initial upgrade packages did not anticipate home upgrades and had little in the way of instructions or help. The ON THREE upgrade includes a complete installation guide. From word on the street, the upgrade is considerably more difficult than the one from 256K to 512K mostly because the number of different 128K versions.

### MOVING FROM 256K TO 512K

For the past several years Apple /// owners have had a second alternative in expanding the memory on their Apple ///'s. Expanding memory to 512K has a number of the same advantages mentioned before and is necessary when handling very large files or programs. With a 512 upgrade very large spreadsheet files can be manipulated easily. Beyond that, it gives database users the ability to create and use large databases without having to split them or lose time with unnecessarily prolonged searches and sorts.

A 512 K /// will hold large word processing documents and still have space to run spelling checkers. Speeding up processing is a major consideration. With the 512K upgrade a large program can be read entirely into memory and placed on a RAM disk and still have adequate space for files. Not having to go to a floppy disk, or even a hard disk, for program sections speeds processing. Finally, a 512 K /// is a must for serious programmers.



With 512K there is more space in memory for code as well as the Pascal libraries which makes compiling much faster and easier.

While not made by Apple, the 512K board was designed by the same people that originally designed the ///. Wendell Sander headed the Apple team that developed the ///. When he left Apple, he formed his own computer engineering company. It was that company who did the design work of the 512K memory board. The advantage is that the upgrade is completely compatible with all Apple /// software and hardware.

What may be more important to many /// owners at this time, it was designed to be installed at home. Included are step by step instructions for installation, the reconfiguring the SOS to find the extra memory, and everything else that is needed to do the job. It takes about an hour to install from start to finish. The time for changing SOS depends on how many boot disks you use and have to change. If the /// is running under Catalyst or Selector the only changes are on the system management disks. While there are a few special cases that will not effect most people, the accompanying user's guide explains each special software case.

The last item that is included in the 512K memory package, is a special confidence disk that will test the installation for problems. Mostly it checks to see that all the modifications to the system allow SOS to find the newly added 256K.

Since the original designers of SOS believed that 256K was as large as the Apple /// would ever be, they wrote SOS so it only uses 256K of memory. That is why there are software changes to SOS. Hardware changes are done by taking a chips off the motherboard and placing a jumper cable that shifts the function to the new memory board. This is much the same procedure that Titan uses in its Titan /// plus IIe board. The chips that are replaced do the memory management and addressing functions which were originally done by the /// motherboard.

While there are several steps to upgrading to 512K, the entire process is relatively easy. Most people who have upgraded their ///s have had no trouble. Many of those people had no electronic experience and were able to install the upgrade easily of the first try. While the idea

of taking the mother board out of the ///, modifying it, and putting it back in is daunting; it sounds much harder than it really is.

## SHOULD I UPGRADE?

The decision to upgrade is, in the end, a personal one. It depends on such variable elements as whether your Apple /// is being used for business or pleasure; is used all the time, or is just a weekend diversion; is reaching its limit of power and space, or just coasting along. While we can not analyze just how your /// is being used, there is another factor that will intervene.

Apple has guaranteed that it will continue to have parts available for the Apple /// for five years after the /// was discontinued. If you do not remember, the /// was discontinued in April of 1984; four years ago. Parts are not guaranteed to be available to Sun and ON THREE after next year. After that, there is no telling how difficult it will become to get parts like an upgrade or replacement motherboard.

If there isn't a demand for these items, they may be inclined to left their inventories get smaller. These people are people still supporting the ///, but once again there is no telling how long these people will be able to keep it up. The upgrade option may no longer be available in the not to distant future.

Should I upgrade? For people with 128K machines the answer is definitely yes. There is a lot of advantage to doubling the memory size on your ///s, and time may be running out. For those with a 256K /// the answer is less clear. If you get stack overflow error messages, use your /// to write software, would like to use more desktop management programs, or if you have noticed a slowing in response, the answer is definitely yes, order it now.

For the others the decision is less clear and more personal. Moving up to 512K has its advantages, it adds quite a lot of flexibility to the ///, but it does cost money. Our advice revolves around you. If you plan on keeping your ///, consider upgrading carefully. It is an option that you should seriously consider while it is still available.

**Editors Note: You can also upgrade directly from a 128K Apple /// to a 512K machine. When ordering the 512K upgrade, just ask for the 128K upgrade instructions.**

actually make more sense from a linguistic viewpoint, it is quite foreign from a US computer standpoint.

### VENDOR SUPPORT

ON THREE provides free telephone support for the first 90 days following purchase; after 90 days, support is provided at a nominal charge. Technical support personnel are available Monday through Friday during normal business hours. On the two occasions when I called with questions, ON THREE's technicians were quick with answers and quite helpful, even though StemWriter is a relatively new product.

These positive experiences are consistent with previous dealings I have had concerning other ON THREE products and are indicative of ON THREE's commitment to both quality products and customer satisfaction.

### STEMWRITER /// - SUMMARY

**PERFORMANCE:** Excellent.

**DOCUMENTATION:** Could be better - especially needs command key templates and a more thorough index to the manual.

**BEST FEATURES:** Speed; AMAZING flexibility in print formatting.

**WORST FEATURES:** Incompatible with background utilities like Catalyst, Desktop Manager; painfully difficult configuration program.

**EASE-OF-USE:** Good.

**EASE-OF-LEARNING:** Good.

**MAKES GOOD USE OF SOS/HARDWARE:** Tough call. While it won't install on hard disks, and uses a non-standard memory management technique that renders background utilities unusable, StemWriter makes excellent use of the keyboard, display, and interrupt system. On the balance, I rate this category as good.

**VENDOR SUPPORT:** Excellent.

### StemWriter UPDATE

Since this article was written, StemWriter has experienced an important upgrade (current version is 1.2.0), and a companion spell-checker product, StemSpeller /// has become available. The upgraded StemWriter addresses the most of the serious reservations expressed in the original review; specifically:

- Δ StemWriter is now completely compatible with interpreter-switcher software (i.e., Selector ///, Catalyst); it can be installed on and run from a hard disk; it also now works with Desktop Manager.
- Δ The two bootable disks (/STEMWRITER, /STEMUTILITY) now come with the most current versions of the SOS device drivers.
- Δ A very fast, easy-to-use spelling checker is now available: StemSpeller ///.

The upgrade to version 1.2.0 does not affect the documentation nor the configuration program, so my comments pertaining to those aspects of StemWriter remain unchanged.

Owners of StemWriter version 1.1.0 will be glad to know that the 1.2.0 upgrade is FREE - a fact which solidly reinforces the EXCELLENT rating already awarded ON THREE for their support of this product. The overall rating of StemWriter was already EXCELLENT, even with version 1.1.0's noted deficiencies; EXCELLENT is EXCELLENT and you can't advance from there, so that category's rating remains unchanged.

Version 1.2.0, however, allows StemWriter to better utilize other software/hardware in the /// environment - and therefore the "MAKES GOOD USE OF SOS/HARDWARE" rating is changed to VERY GOOD.

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### Continued From Page 3

extractor tool that makes moving the chips around a breeze.

Both new configurations will also come with our memory test, expander and ramdisk software. We feel that this makes a 512K upgrade within the reach of everyone now. In the next issue we'll be giving a step by step

description of the new upgrade process.

### In This Issue...

The Rann's explore the ins and outs of memory size and the Apple /// in their Beginning /// column. A good primer if you're interested in upgrading to a larger

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# Review ON: StemWriter (Or - Return Of StemWriter)

by Steve Brineaux

The Better Late Than Never 2nd Part Of The Review

Editor's Note: The first part of this review appeared in the February issue of ON THREE. Due to some editorial problems the second part was delayed until now.

The bulk of this review was written before the latest 1.2.0 version of StemWriter was released. This new version corrects many of the problems noted in the review. After some of the lines of the review, an asterisk will appear. This indicates that the fault discussed has been fixed. Complete information about the 1.2.0 version can be found at the end of the article under the heading **StemWriter UPDATE**.

## PERFORMANCE

StemWriter is a stand-alone SOS.INTERP which loads entirely into RAM at system startup: once the program has started, the boot disk may be removed from the internal drive. StemWriter is quite fast, with crisp .CONSOLE response - no disconcerting lags between keypress and character display as in AppleWriter, and no annoying cursor run-on as with VisiCalc. The program is bug-free as far as I could determine.

There are several "gotchas", however, the most serious being that StemWriter cannot be installed on a hard disk and is completely incompatible with background utility programs like Catalyst, Selector ///, PowerKeys, and Desktop Manager. ON THREE reports that these compatibility problems will be fixed\*.

### Other Observations:

The TAB key only provides forward movement; while you can move backwards a character, a word, a line, and even a paragraph at a time, I also would like to be able to reverse TAB.

While StemWriter does allow up to eight documents in memory simultaneously, it does not indicate which of the

eight document slots are filled and which are vacant, nor does it tell you the SOS filename associated with that document - so you may forget where you put a document and have to hunt for it. To overcome this limitation, I recommend inserting a comment field or two at the top of a document, showing the document number and SOS file name, if any.

Text scrolling takes getting used to. To provide WYSIWYG (What You See Is What You Get), StemWriter displays text in super high-resolution graphics mode rather than in standard text mode (without actually having .GRAFIX in the SOS.DRIVER file, by the way). Accordingly, vertical scrolling is somewhat slower and more jagged than what you may be used to - though it is worlds faster than the torpid performance usually associated with graphics displays. Whatsmore, most /// programs permit use of special .CONSOLE features (CONTROL + "KEYPAD-5" through "KEYPAD-9"); StemWriter allows CONTROL-5 (toggle video) and CONTROL-6 (flush typeahead), but ignores all other .CONSOLE command-keys.

StemWriter's unique menu-driven structure is appropriate and does not become obtrusive as your experience with the program increases. Since StemWriter remembers previous choices made in a menu prompt, repetitive operations are easily and quickly done. Two relatively minor complaints: the numeric keypad is dedicated to issuing commands and cannot be used to enter numbers, not even, unfortunately, in command prompts.

I would like to see some intelligence added to the program so that, in command prompts the numeric keypad could be used to input numbers. Also, in a command menu prompt some bracketed sub-option fields may be underlined, indicating that a new value may be directly typed from the keyboard. Unfortunately, the block cursor totally obscures the underline character and you cannot readily see that the sub-option field requires direct text entry.

While the "quit program" command (CONTROL-B) does ask you to confirm your intent, it does not warn you that exiting the program before saving your document to disk will result in your losing all your deathless prose. I find this unacceptable.

StemWriter lacks a spelling checker\*. Although StemWriter documents are stored as standard SOS files (in a modified Pascal textfile format discussed in an appendix), they cannot be run through AppleSpeller without an inordinate amount of intervention. AppleSpeller flags many correctly-spelled words in a StemWriter document because [randomly] they have no intervening spaces between them. This problem can be circumvented by using the utilities program to create a "vanilla" file which can be proofed in the standard way.

ON THREE reports that a StemWriter-compatible spell checker may become available in the future. On a related note, StemWriter can read ASCII and Pascal text files directly; however, imported text is not converted to StemWriter format. This causes some irritating behavior in the editor, chiefly that documents cannot be scrolled by paragraph increments, nor can search/replace operations be 'bound' by paragraph, nor do the "point and see" filename scanning techniques work. Hopefully someone will write a program to convert ordinary text into StemWriter format and eliminate these problems.

The two bootable disks in the StemWriter package do not come with up-to-date device drivers in their SOS.DRIVER files\*.

```
/STEMWRITER (4 disk /// drives, standard charset,  
             SHOLES keyboard)  
.console (version 1.1.1)  
.profile (version 1.0.0, 5MB)  
4 printers, 2 parallel and 2 serial:  
.printer1, .printer2, .printer3, .printer4  
  
/STEMUTILITY  
.fmtd1-4  
.console (version 1.1.2)  
.profile (version 1.0.0, 5MB)  
.parprint (inactive)  
.printer
```

Updating the drivers is not especially difficult, but it shouldn't be necessary at all. Speaking of which, the disk /STEMWRITER has only three blocks free, so larger SOS.DRIVER files cannot be created without first deleting unused printer configurations from the PRINTERS/

subdirectory. A two-stage boot is not possible.

## DOCUMENTATION

StemWriter includes a tutorial disk, /MYTEXT; an intimidatingly thick (almost 350 pages) and a smaller bound manual (plastic spiral ring-bound, in the style of the local ladies' auxiliary cookbook); and two laminated 8" by 6" reference cards which map the program command keys to the physical keyboard layout. Despite this complete-sounding complement of reference and tutorial material, documentation is StemWriter's Achilles Heel.

My first complaint is a lack of supplementary information regarding ON THREE's role in supporting StemWriter. I find it hard to believe that I am supposed to mail the warranty registration card to StemSoft in Brisbane, Australia - and yet that is exactly the conclusion I'm led to by the lack of contradictory information in the package. Also annoying is the fact that there are no printed instructions included to steer you to a disk file called "SUPP.INFO" on /MYTEXT: this file contains important information about StemWriter's default configuration, how to modify existing printer configurations or add new printers, and several new and updated commands not discussed elsewhere.

The reference cards are a nice idea but useless from a practical standpoint. One card maps the main keyboard (standard /// layout on one side, /// plus layout on the other); the other card displays the layout of the numeric keypad. The main problem is JUST WHERE DO YOU PUT THESE CARDS so that you can read them without blocking the screen and/or the internal disk drive? The effort would have been much better spent on keyboard template cards, particularly for the numeric keypad layout. I hope some enterprising reader develops just such a template, because there is definitely a need.

The manual is divided into a lengthy tutorial and a smaller reference section. The information is generally quite thorough but is poorly indexed - you remembering seeing a couple of references to ProFile disks, for example, but actually finding them may turn out to be quite a search. Furthermore, there is a language barrier: the manual is written in Australian, not American, English. While referring to a DELETE operation as a WIPE may

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# ON THREE News & Views

## From The Desk of Bob Consorti

From one die-hard Apple /// owner to another, I welcome you to the Spring/Summer '88 edition of the ON THREE product catalog. For many of you this will be your first bit of information you've received on the many products that are available for the Apple ///. I encourage you to look over this guide. If you're a new or an old hand with the Apple ///, there's something in here for you.

Over the last six years we've dedicated ourselves to producing the best software and hardware for the Apple ///. This catalog shows the fruits of those labors, dozens of Apple /// specific products. From memory and disk expansion to productivity tools and games, ON THREE has led the way in the powerful products that you want.

In that spirit we're introducing a few new products in this catalog. For you Desktop Manager users there is Super Accessories Disk #3! Another one is the long awaited spelling checker for /// E-Z Pieces. If you have this wonderful integrated program you're probably painfully aware of the lack of a suitable spelling checker.

With our new StemSpeller /// your worries are over. Now you can quickly and easily check your /// E-Z Pieces word processing files for spelling mistakes. A great enhancement for those who want to, or currently do use /// E-Z Pieces for their word processing needs.

We're selling StemSpeller today because a year ago over one thousand people requested a /// E-Z Pieces spelling checker. As long as you continue purchasing what you've asked for, we will continue to create new products for the Apple ///.

Other products that we're working on include a high-speed replacement for Backup /// and an easier way to configure and optimize your drivers. Both of these items have been requested repeatedly from you, our valued Apple /// customers.

For new Apple /// owners, let me suggest our new /// Beginner Pack. Explained in detail on page 3, it has everything to get a new ///'r up and running. For everyone, please sit back and read through the next few pages. There's something for everyone.

To all of the people who've supported us with their continued purchases over the years, a whole-hearted thanks! We look forward to continue fulfilling all of your Apple /// needs.

Bob Consorti - President, ON THREE

## Special Sale Prices:

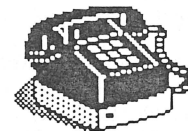
**Save 10% On All Hardware**  
**Save 25% On All Software**

Simply check the listed price then  
subtract 10% or 25%

Items preceded by an \* or an \*\* are already specials and are exempt from the special discount.

Sales of items with double asterisks are limited to stock on hand. Please call to assure availability.

Discounts do not apply towards shipping charges.



Phone in an  
**ORDER TODAY!**

Orderline: (800) 443-8877

Product Support/Questions: (818) 701-1355

## Apple ///-IIGS Users:

Many Apple /// owners have changed to the new Apple IIGS over the last year. If you have a GS, give us a call. ON THREE now has a variety of software and hardware products available for the Apple IIGS. Included are The Desktop Manager and the ON-BOARD, a GS 4 MegaByte memory expansion card. We'll be glad to send you our free Apple IIGS product catalog.

## 12 Monthly Issues of ON THREE Magazine for As Low As \$20!

If you're one of the many that have let your subscription lapse this past month (or a year ago), have we got some deals for you! Resubscribe today at the low rate of **only \$40** for a 12 issue subscription. That's our standard subscription price. Or if you like, order any product in this flyer and you can resubscribe for **only \$20**. That's 50% off the regular \$40 price.

But why should you resubscribe? Well, do you still have an Apple ///? If so you *need* ON THREE Magazine. It's the **ONLY** magazine that exists for the Apple ///. Please don't confuse us with other magazines that have abandoned the Apple ///. We're the last Apple /// magazine left and we **listen** to your needs:

From series for the beginner to articles for the most advanced Apple /// user, ON THREE Magazine helps you get the most out of your Apple ///. Resubscribe today and learn how to connect laser printers, hard disks, micro-floppies and more to your old Apple ///. Learn how to use ramdisks, spreadsheets, data bases, and word processing programs to their fullest. Timely reviews on Apple /// products (new and old) make ON THREE Magazine the only publication that can fill all of your Apple /// needs. With our Apple Slices column you can be kept abreast of all that's current in the Apple computer world. Whatever the reason, please be sure to subscribe (or resubscribe) today!

# Apple ///'s, Memory Expansion & Disk Drives

**NOTICE:** The price of the micro chips with which we build our memory boards has skyrocketed! Prices are increasing daily with no end in sight. The prices listed below for Apple ///'s and Apple /// memory cards are valid as of the date of this printing. Please call for current prices. If you have been considering getting a spare Apple /// or upgrading your Apple /// to 256K or 512K, our advice to you is, "do it now, before prices climb even higher".

## \*Apple /// with Monitor ///

Powerful reconditioned Apple /// computers. Limited 90 day warranty. Save hundreds of dollars on one of the worlds finest microcomputers. Please add \$35 for shipping, handling and insurance.

256K Apple /// with monitor only \$599  
512K Apple /// with monitor only \$999

## 512K Memory Upgrade

Expand your spreadsheets and data bases, use larger word processing documents and the new desk accessories! Enjoy a full 414K desktop in /// E-Z Pieces, 442K in Advanced VisaCalc and 456K in Business Basic! Had problems running large programs such as BPI, Selector ///, Catalyst or others? With a 512K your /// will have more than enough memory! Easy to install. No slot required! Kit includes: fully populated 512K memory board, installation guide, System Utilities 1.2 which permits larger driver files, 512K Memory Confidence Program that tests all memory and ensures the 512K is working properly, ultra fast RAMDISK driver with demonstration programs and 512K utility that updates your programs. 90 day warranty \$399+\$10

## 256K Memory Board Rebates

After purchasing and installing your 512K memory board, return your old 256K memory board to ON THREE within 14 days from date you receive your 512K upgrade and we'll pay you a \$35 cash rebate, or you can deduct \$45 off any piece of ON THREE software that you purchase at the time you return your board!

## 256K Memory Upgrade

If you need more memory but don't want to upgrade your Apple /// all the way to 512K, the 256K upgrade kit is for you. With 256K installed you'll be able to use programs like Selector, Draw ON, Desktop Manager and more! Includes installation instructions, 256K users guide, Apple /// Confidence Program, chip extractor, 256K confidence disk that tests memory and ensures that your 256K Apple /// is working properly, free technical support, 90 day warranty and a fully populated 256K memory board. All this for only \$169+\$10.

## Memory Boards 128K

If you have ever worried about what you would do if your Apple /// memory went bad, here is an inexpensive way to get insurance. Have a spare 128K memory standing by and if trouble comes all you have to do is pop in your spare and go right on working. \$25+\$10

## Memory Board Installation

All Thumbs? ON THREE will install your 256K or 512K memory board in your Apple /// for the new low price of just \$25 plus shipping charges. Please call (818) 701-1355 to schedule an appointment.

## Memory Board Insurance

Covers immediate replacement of your 512K memory board in case of failure. Cost per year when issued within 90 days of purchase: \$50 per year for the first board and \$40 per board for two or more boards: Any original purchaser of an ON THREE 512K memory board can also purchase memory board insurance for \$50 for a full years coverage.

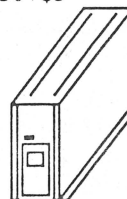
## Apple /// Disk Drives

### \*UniDisk ///.5 800K Drive

The UniDisk ///.5 is a regular Apple 800K 3.5 inch disk drive for your Apple ///. If you have a hard disk but hate making back-ups, the UniDisk is for you! Back up an entire ProFile with just seven micro-floppies! No hard disk? Then this is a great way to say goodbye to your floppies! With Selector or Catalyst you can store all of your programs on the UniDisk and switch between them in seconds. The new 3.5 disks are so small they can easily fit into your shirt pocket but they're a lot tougher than regular 5.25 inch floppies. Complete with 800K drive, interface card, cabling, driver disk and complete instructions. \$499+\$10

We also offer just the Apple /// driver and documentation for those who want to get the UniDisk elsewhere. \$50+\$3

### \*The All NEW Sider 20 Hard Disk Drive



One of the advantages of a hard disk is that you can store virtually all of your programs and data files on it, greatly reducing the time it takes to do things - improving your productivity. Loading and saving files can be 10-20 times faster with the Sider hard disk. All in all it's a low cost, great hard disk and one of the fastest on the market.

## All New Sider 20 Continued...

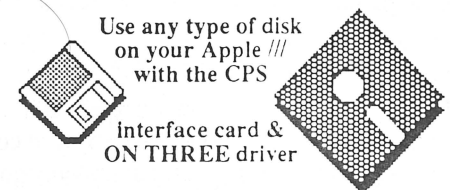
If you have a Titan ///+Ile board your choices have been very limited if you want a hard disk that worked in ///+Ile emulation mode. The Sider 20 expands your options by now working in the native Apple /// mode & the regular Apple II and the ///+Ile emulation modes.

You can store your files on the hard disk in the regular Apple /// mode, then switch to the emulation mode and access those same files with all of your Apple II programs.

The NEW Sider 20 is complete with interface card, Apple /// driver disk, documentation and cabling. The NEW Sider 20 even supports Apple II DOS, Pascal and Apple II CPM partitions through it's powerful installation utility. Our new Apple /// Sider 20 drivers automatically recognizes these partitions and allows you full access to the two SOS partitions in native Apple /// mode. The NEW Sider 20 is a truly great hard disk. \$949+\$35

Current Sider 10, 20 and 30 owners can upgrade to the new version for only \$99+\$5. Call for complete details.

### \*CPS 800-400-140K Disk Drives



Use any type of disk on your Apple /// with the CPS interface card & ON THREE driver

While many of you select the UniDisk for your expanded storage needs, many /// owners have told us they wanted a low cost alternative to the the 800K Apple UniDisk 3.5 drive, for main storage or for backups.

With our new Universal CPS Driver, you've got it! The CPS interface card allows you to attach an Apple 3.5 drive and a UniDisk, or a UniDisk and a CPS 800K drive, or a CPS 800K drive and a Mac 400K drive or any Apple II 5 1/4 inch drive.

Any combination will automatically be recognized by our new Universal CPS Driver. No need to re-configure your driver files, it's all automatic! Includes the driver disk and instructions for installing the CPS interface card and all disk drives. We even carry the CPS interface card, 800K, 400K and 140K floppy disk drives with some of the lowest prices around!

Universal CPS Driver: \$50+\$3  
Universal CPS Driver & Universal CPS Interface Card: \$149+\$5  
CPS 800K Drive: \$249  
CPS 400K Drive: \$145  
CPS 5 1/4 inch 140K Drive: \$139  
Add \$6 /h per drive ordered

# Training Guides, Manuals, Games & More

## \*New To The Apple ///?

If you've acquired an Apple /// computer recently, you're probably distressed over the seeming lack of information available to help the new user get started. There is plenty of help available. **ON THREE** has a beginner pack that contains everything you need to gain the basic skills necessary to operate the Apple /// and learn which programs will benefit you the most.

The /// Beginner Pack has guides and programs that will teach, amuse and entertain you as you learn how to use the Apple ///. Please read the full product descriptions of these products elsewhere in this catalog. If you purchased them separately they would cost \$216.60. We're offering the /// **Beginner Pack** for only \$99+\$7 for s/h. Save over \$100! Contains:

- 1) McGraw Hill Guide to the Apple ///
- 2) Lazarus file restoration utility
- 3) ThreeWorks
- 4) System Utilities Product Training
- 5) Will Someone Please Tell Me What An Apple /// Can Do?
- 6) Crossword Scrambler
- 7) Mr. Sandman
- 8) Apple /// Card Machine
- 9) Apple /// Fruit Machine

## McGraw Hill Guide to the Apple ///

Informative 276 page book explains the Apple /// in detail, everything from getting started with the System Utilities to programming. Complete instructions for the operation and care of your /// make this book a valuable aid for all ///rs and a necessity for every new Apple /// owner. The Guide is only \$29.95+\$3.

## ON THREE Magazine

The worlds only monthly magazine that's devoted solely to the Apple /// computer. **ON THREE** contains articles of lasting interest, answers to your technical questions, new programs, in depth product reviews, user groups and hot liner listings, editorials and up to the minute news of what's happening in the Apple /// world. You'll get substantial product discounts (available only to subscribers) that will more than pay the cost of your subscription!. If you have an Apple /// you need the **ON THREE Magazine**. **USA 12 issues \$40: For First Class Mail add \$12: APO, FPO, Canada and Mexico \$60: Europe, South America, Asia, Pacific Islands and Australia \$84.**

## ON THREE Back Issues

Available from Vol. 1 #1, January 1983. Some are copies. Mailed first class within U.S. Air mail postage extra. **Only \$5 each**

## \*System Utilities Product Training Pak, An Introduction. Save \$20

Instructions on using the System Utilities program to format, copy, rename disks, list, copy, rename, delete files and make subdirectories. A section on the System Configuration Program helps you to configure your Apple /// and application software programs to communicate with other peripherals such as disk ///s, the ProFile hard disk and printers. Gives an overview of the features of the System Utilities program and enough knowledge of the tasks involved to use your Apple /// with applications programs, data files and peripherals. Contains Sample Files disk and exercise booklet. **\$14.95+\$3**

## ThreeWorks. New! New! New!

Bibliography of everything written or created for the Apple /// computer with listings of all published magazine and newspaper articles, a glossary of /// related terms, listings of the Apple /// bulletin boards, books, clubs, user groups, publications, vendors software and drivers with current version numbers, error codes, public domain software, Apple /// tips and more! Requires ///E-Z Pieces. A must have for all new Apple /// owners. **\$39.95+\$3**

## Will Someone Please Tell Me What An Apple /// Can Do?

Original 95 page guide to Apple /// software from Apple Computer, Inc. Please be aware that some of the companies listed in this guide may no longer be in business. **Only \$3+\$2.**

## Service Reference Manual and Complete Schematics for the Apple ///. 459 pages. Save \$20

The only authorized edition, complete and unabridged. Contains all of the schematics ever released. Contains trouble-shooting guides for repair of the main logic board, memory card and disk drive. All the inside information you ever wanted about the Apple ///. Comes in a sturdy three ring binder. Originally \$99, now only **\$79+\$7.**

## Disks of the Month (DOM) from ON THREE Magazine

The most popular programs from the pages of **ON THREE** magazine on easy to use disks. No more typing in long program listings. Now you can easily use the innovative and popular programs included in each issue of **ON THREE** magazine.

## DOM Contents:

**DOM #1** - Disk Pak 1, Key-Things, Graphic-Demos and more!  
**DOM #2** - Disk Pak 3, DOS File List, Char-DownLoad, SpeedBoot (Un)Lock? and Graphic Demos!  
**DOM #3** - Keyboard Change Utility, WPL Shorts, WPL Help Screen Move Utility, Graphics Sketcher ///, Disk Formatting Utility  
**DOM #4** - Emulation Patch, Access /// Startup, Pascalculator, Radiate Graphics Demo, musical melodies, Draw ON /// pictures  
**DOM #5** - Access /// Startup, Ben's Super Slot Machine, PFS-WPL Merge, Decision Support SpreadSheet, Draw ON Graphic Demos  
**DOM #6** - Business Basic Program Lister, Noisemaker, Documentation Programs. Spirograph, Surface, Golfball, D.O. pictures & fonts.  
**DOM #7** - Imagehelper, Sorting and Printer Control  
**DOM #8** - Directory Sorter, Drive Cleaner and File Reader  
**DOM #9** - Graphics, Music and more  
**DOM #10** - Graphics Football Pool, Useful Pascal Prompt procedure  
**DOM #11** - Apple DMP, ImageWriter, Epson graphics printing utility. Rotate, print large or small graphics in your Pascal or Business Basic programs. Graphics and audio demos.  
**DOM #12** - Pick lottery numbers randomly, catalog by two way directory scrolling, find text files on disk, print files to screen or disk.

**Disks of the Month are priced at \$14.95 each + \$2 s/h. Two or more DOM's are only \$12.50 each + \$4 total s/h.**

## Games For The Apple ///

Try your luck at breaking the bank! Become a high roller! The **Card Machine** is a realistic simulation of authentic Las Vegas style blackjack. The **Card Machine** uses beautiful full color playing cards. You can control the action with a mouse, joystick, TrackBall or the keyboard. Requires a 256K Apple ///. **\$19.95+\$2**

**Crossword Scrambler** is an educational program that makes learning fun. Not a 'shoot 'em up' type arcade game, although you won't be disappointed by the displays and musical interludes. Hundreds of different crossword questions will provide hours of fun for the whole family. **\$9.95+\$2**

**Apple /// Fruit Machine** brings beautiful color graphics and exciting sound effects add to the fun of this slot machine type game. Experience the fun of a Las Vegas trip at a fraction of the cost. **\$19.95+\$2**

**Mr. Sandman** is a fast paced game modeled after the most famous arcade games of all time (—Man!). Can be used as a stand-alone program or as an accessory for The Desktop Manager within any other application. **\$19.95+\$2**

## \*Game Combo Special!

Buy all of the games listed above and save over \$29.00. All four for **only \$39.95+\$4.**

# Productivity, Utility & Programming Software

## \*\*AppleFile ///

Lets users store, arrange, review information and print reports with a variety of options for summaries. Merge and redesign files without retyping. Prevents filing errors. Checks each entry for conformity to your rules. Simplifies reporting, provides compatibility with RPS. Over 20-30,000 records per file! Self help screens, letter by letter editing, easy tutorial, and special file management features. Requires a hard disk. Originally \$195, now only \$49+\$7.

## \*/// E-Z Pieces (AppleWorks)

Fully integrated spreadsheet, word processor and data base manager. /// E-Z Pieces combines the power of the three most commonly used program with the ability to quickly and easily transfer data among them. This program was written by the author of the Apple II program AppleWorks - the best selling software package on any computer! AppleWorks & /// E-Z Pieces look and function exactly the same, even the data files can be swapped between Apple II and Apple ///. Utilizes the full memory available in your Apple ///. 180K on a 256K Apple ///, 414K+ on a 512K machine! This best seller was originally \$245. Now only \$135+\$3.50.

## \*Draw ON /// THE Graphics Tool for the Apple ///

Transform your Apple /// into a combination drafting table, easel and sketch pad! Graphics can be created with the Apple mouse, Trackball, joystick or keyboard. Adjustable grids, built-in self help screens, rubber banding of lines and easy to follow menus make Draw ON /// easy to learn, yet very powerful for more advanced users.

A spiral bound, Apple style manual complements this program. Create bar, pie or scatter charts. Add colors, fill areas with textured patterns and add text in a variety of fonts and sizes. Cut and paste facilities let you to pick up a piece of your drawing and move it, shrink, expand, rotate and invert it. Zoom in for detailed work. Add borders, textures, different typefaces!

You can even design your own fonts. Complete font templates and samples provided. Prints graphics to an Apple DMP, Pro-Writer or ImageWriter. All Epson printers (MX, RX, and FX) are supported. If you have the Pkaso or Pkaso/U interface card you can print to your Centronics, NEC, OkiData, IDS Prism and others.

Graphics Tablet version available for \$15 extra. Requires at least 256K of memory. Installs under Selector /// or Catalyst. State printer & interface type when ordering. Regularly \$179, now only \$129+\$5!

## \*\*BPI General Accounting

Double entry bookkeeping system. The general package includes accounts receivable, payable and payroll ledgers. Prints out checks and reports. Requires 256K and a hard disk drive. When running under Selector or Catalyst with the Desktop Manager it requires 512K. Was \$495, now only \$99+\$7 - save over \$400!

## \*\*BPI Add-On Modules

Accounts Payable: Was \$495, now \$99.  
Accounts Receivable: Was \$495, now \$99.  
Job Costing: Was \$495, now \$99.  
Payroll: Was \$495, now \$99.

Please add \$7 shipping for each module.

## Utility Programs

### \*Backup ///

Allows you to make a back-up of the files on your ProFile and restore those files to the hard disk. Backup /// may be used with all regular hard disks and floppy disk drives, including the 800K 3.5 inch drives. Your data is your most valuable asset. Don't be caught unprepared. Please backup your files regularly. \$49.95+\$3

### Lazarus /// File Restoration

If you make a mistake and erase that one file that you can't afford to lose, Lazarus /// is all the magic you'll need to bring it back from the dead! Lazarus can restore files on all Apple /// hard disks and floppy disk drives. Completely menu driven, works in seconds! Get Lazarus now, before you need it! \$49.95+\$2

### RAM Diagnostic Disk

The diagnostic disks will test the memory and general well-being of your Apple ///. If you've had problems with your Apple ///, get the diagnostic disk today. When ordering please specify 128K, 256K or 512K diagnostic disk. \$15+\$2

### Selector /// Program Switcher

The state-of-the art program switcher that eliminates the need to swap disks when changing applications. With Selector you can now put all of your programs on your hard disk (or large capacity floppy) and run them from there. Switch from application to application in seconds, not minutes!

Programs such as Apple Writer, VisiCalc, Draw ON /// and hundreds of others work perfectly with Selector. Startup your /// with Selector and you're done for the day. Requires a 256K or 512K Apple /// with large capacity disk drive. Only \$99+\$7.

## The UncopyProtect Driver

Allows you to make back-up floppies of VisiCalc, Advanced VisiCalc and AppleWriter ///. ON THREE does not condone duplicating copyrighted programs. But, as these programs are no longer supported its a big problem in the event of a disk crash. UncopyProtect Driver allows you to make backup copies of the above mentioned programs for legitimate disk archival purposes only. \$29.95+\$3

## Programming Languages

### \*Apple /// Pascal Version 1.1

Develop and execute UCSD Pascal programs quickly. Take advantage of the ///'s power. Use 64K for program data, the entire available memory for code and graphics. Full integration with SOS gives the benefit of both UCSD Pascal and support for larger mass storage. Incorporates full IEEE standard numerics including single, double and extended precision types. Easy to use. Was \$250, now only \$99+\$7. Save over \$190!

### \*Apple /// Pascal Update (Debugger Version 1.2)

Updates the standard Apple /// UCSD Pascal with a powerful debugger. Includes file selection and many other features. A must for serious Pascal program development. Does not contain all of the manuals as in version 1.1. This is an update! \$49.95+\$7

### \*Apple /// Business Basic

This is one of the most powerful basic languages available for any computer! Apple /// Business Basic lets you write complex business, educational or game programs for the Apple ///. Limited supply. Was \$125, now only \$99+\$5.

### \*Apple /// Cobol

Apple /// Cobol is a high intermediate level implementation of Cobol. Provides main-frame power on your Apple ///. A must for engineers. Was \$495, now only \$99+\$5.

### Apple /// Fortran Compiler

Apple /// Fortran 77 works under the Pascal language system (required). You can link your Pascal, Fortran and assembly programs together in this powerful implementation of Fortran. Only \$59+\$5.

## Programming Guides

SOS Reference Manuals is the complete guide to SOS programming. Only \$59+\$3.

Device Drivers Writer's Guide guides you in writing drivers. Only \$29.95+\$3.



# Desk Accessories (Available From All Programs)

## The Desktop Manager

The Desktop Manager (TDM) is a utility that allows you to use desk accessories like those on the Macintosh™. They are utility programs that you use within other programs. You can be using /// E-Z Pieces or any other Apple /// program and a simple keystroke will freeze your program and display the TDM menu. Simply highlight the accessory you want, press RETURN and in a moment it will be up and running. When you're finished, press escape and you'll be right back in your program.

With TDM you can throw away your paper, pen, calculator, appointment book and more! We've included a number of standard features to enhance your productivity. TDM is also expandable. You can design the system that best suits your own needs. TDM has a built in: Note Pad, Appointment Calendar, Calculator, Pickup & Paste, Built-in self help screens and more.

Add new accessories such as macros, disk utilities, a communications program, games and more at any time.

The Desktop Manager requires an external disk drive of any capacity and a 256K or 512K Apple ///. TDM uses about 32K of memory. A hard disk or large capacity floppy disk drive is highly recommended. Works with Selector, Catalyst and ALL other Apple /// programs. Only \$99.95+\$6.

## ASCII Chart

This Desktop Manager add-on lists the decimal, hexadecimal and corresponding character values of all ASCII keyboard characters. A second screen shows the decimal and hexadecimal equivalents of keypresses which include the control key. Keypress table can be invaluable when you need to know printer commands to enable different printer modes. Only \$9.95+\$3.

## The Communications Manager

The Communications Manager (TCM) is a powerful tool that allows your Apple /// to communicate or talk to other computers or services such as Dow Jones™, CompuServe™, The Source™ and others. Complete VT-52 terminal emulation makes this program really powerful.

You can record incoming text to a printer or disk file for later viewing and transmit standard ASCII and Pascal Textfiles automatically. TCM has every feature of the other Apple /// comm. programs plus error free transmission of files via the popular XModem & Binary II transfer protocols.

TCM also supports Turbo Downloading for ultra fast file XModem downloads. Turbo downloading gives 2400 baud performance on 1200 baud modems!

## TCM Continued...

Included with this package is a version of TCM that runs as a stand-alone program and a version that can be run as an accessory under The Desktop Manager. If you have The Desktop Manager you have the best of both worlds! You can be inside /// E-Z Pieces or VisaCalc and send a spreadsheet or data base file directly. Only \$49.95+\$3.

## Disk Manager

This TDM add-on allows you to list, copy, delete, rename, lock/unlock files and list the devices, copy, format, rename and verify disks. Virtually all the features of the System Utilities available in an instant. If you've ever typed in info. and then found that you didn't have a blank disk to save it on, the Disk Manager can be a lifesaver.

Are you sick of not being able to remember the names of certain files? Worry no more - It's Disk Manager to the rescue! You can even copy files to the printer! Instead of the few minutes that it takes to boot the System Utilities, Disk Manager is ready in a few seconds and it takes no additional memory away from your programs! \$44.95+\$3

## The Graphics Manager

The Apple // version is being acclaimed as the best graphics printing program EVER! The Apple /// version is even better! The Graphics Manager (TGM) allows you to take any Apple /// black/white or color and any Apple // black/white hi-res, color or double hi-res. color or Print Shop image and print it the way you want it!

Sophisticated image analysis lets you take your entire picture, or any portion of it, and expand it to fill an entire page or shrink it down to a small section. Rotate, invert or flip the image to suit your needs. TGM is the *ultimate graphics printing utility!*

Included with this package is a version of TGM that runs as a stand-alone program and a version that can be run as an accessory under The Desktop Manager. Learn what people in the Apple // world are all talking about! Get the original! Get The Graphics Manager /// today! \$39.95+\$3

## Macro Manager

One of the most popular add-on accessories for TDM. It's a keyboard macro program that can redefine any keystroke to be a series of keys. Thousands of keystrokes may be assigned to a single key.

You can set a certain key to contain the name of a city, state, zip code or any other commonly typed item. Phone numbers, salutations or *anything that you type* can be setup to as a macro and played back at a moments notice - via a single keypress!

## Macro Manager Continued...

Our innovative Macro Recording lets you type in the information as you usually do and will automatically assign you a key. You can use up to 50 different macro keys at once and switch between sets of macros (MacroMaps™) in just a few seconds.

The Macro Manager eliminates repetitive typing and improves your personal productivity by making the /// faster and easier to use than ever before. Like all the other TDM accessories Macro Manager uses no additional memory. Only \$44.95+\$3.

## Super Accessories Disk #1

Contains the following TDM accessories: Printer Setup lets you send complex controls to your printer via menus, TypeWriter, Labeler, New Desktop Setup allows better control over the Clipboard, Make Subdirectory, Menu Manager which provides submenus so you'll have an infinite number of accessories on your Apple ///.

Best of all, each accessory has built-in self help screens and the standard ON THREE power and ease of use. Only \$39.95+\$3.

## Super Accessories Disk #2

Contains the following TDM accessories: File View lets you view another file within a file: Change Font: Show Time (no need to go back to Systems Utilities to change the date or time) plus there's an elapsed timer in this module: Change File Type; File Print, Print Screen better than screen dump, you can opt to Print Screen, Form Feed Printer or Line Feed Printer: Reload and Exit: PKASO U commands and The Warning Module. Only \$24.95+\$3.

## Super Accessories Disk #3 New!

Contains the following TDM accessories: Accessory Manager lets you customize your TDM menus, rename accessories & more. Character rulers displays rulers on the screen to help you align text. Hex View/Hex Print lets you view or print any file in hexadecimal form. Info Help lets you enter any type of info into a TDM window for instant recall. SOS Errors is an Info Help accessory that lists all SOS errors. Block View/Edit is a powerful disk block editor. Included are both a stand-alone and TDM version. A great value at only \$29.95+\$3.

## Programmers Toolkit

Now you can write your own accessories for The Desktop Manager. The toolkit contains built-in routines that you can add to your accessories to easily, design and move folders, use a standard error, line input routine and more. Only \$19.95+\$2.

# Clocks, Modems, Memory Upgrade Kits +

## Apple /// Clock

We stockpiled the ON THREE O'Clocks before chip prices went crazy, so we're reducing the price \$10. Did you know that the Apple /// has provisions for a built-in clock and calendar? ON THREE O'Clock is easy to install. Does not require a slot. Compatible with all Apple /// programs. Simply save your files and the time will be saved along with it. Use the System Utilities to see the date the file was created or last modified. Includes battery holder, cable, clock chip and easy to follow instructions. Battery not included. Only \$39.95+\$3.

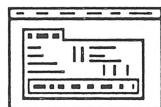
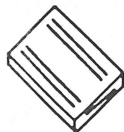
## Apple /// Modems

Modems are the perfect way to enter the wonderful world of communications. Combined with ON THREE's Communications Manager (or other comm. program) you can talk with other Apple /// users on CompuServe™, the Source™, Dow Jones™ and other information services.

We offer both a 1200 and a 2400 baud modem of superb quality. Fully Hayes compatible with auto answer/dial, these modems come in rugged cases and are an exceptional value.

1200 BAUD...\$159.95+\$10  
2400 BAUD...\$259.95+\$10

## \*Modem - Comm. Manager Combination



Order a 1200 or 2400 baud modem and you can get The Communications Manager (TCM) for 1/2 price. TCM is simply the best communications package available for the Apple ///. For a limited time you can get everything you need to get started in the wonderful world of telecommunications and get TCM for only \$25+3.

## \*\*CP/M Softcard ///

The CP/M Softcard from MicroSoft lets you use the thousands of business, science and education applications based on the widely used CP/M operating system and the Z80 processor.

This reconditioned Softcard /// includes the complete interface card, manuals and everything else you need to start using CP/M on your Apple ///. Also includes Microsoft Basic and an 8080 assembler, debugger, editor & utilities. Originally \$499! Today it's only \$99+\$7.

## Apple Mouse

With the Apple Mouse and Interface Card installed in your Apple /// you can use such programs like Draw On ///, the Graphics Manager and other Apple /// programs faster and easier than possible before. Fun to use and installation's a snap! Requires one of the slots inside your ///. You'll enjoy your Apple /// programs much more using the Apple Mouse. \$160+\$5



## TrackBall /// New!

A low cost alternative to the Apple Mouse. And it's compatible with ALL major Apple /// programs.



TrackBall /// is like an inverted mouse with two buttons, instead of the single one on the mouse. Instead of pushing and pulling the mouse around your desk the TrackBall unit remains stationary while you roll the first little ball back and forth. The 2nd button can adjust the sensitivity of the TrackBall.

TrackBall /// comes with a replacement .MOUSE driver that you add to Draw ON and other popular programs. Complete with trackball, interface card, driver disk and instructions.

TrackBall /// can also be used as cursor keys in all Apple /// programs, including Desktop Manager, Visicalc, /// E-Z Pieces & more! Specially priced at only \$89.95+\$6.

**Purchase Draw On /// at our regular low price and you can order a Mouse for just \$80 or the TrackBall for only \$44.98.**

**- Limited time, order yours today -**

## Parallel Interface Card

The Universal Parallel Interface Card allows you to connect any printer that uses a parallel interface to your Apple ///. Includes interface card, cable, driver and documentation. Works great with all Apple /// programs! Only \$99+\$7.

## Titan ///+//e

Brand new Titan ///+//e cards are now available. This is a two board set that allows you to use virtually all Apple //e programs on your Apple ///.

When you want to use Apple //e programs, just boot the Apple //e emulation startup disk and your Apple /// will magically be transformed into an Apple //e. To change back to your Apple /// programs, just put the Apple /// disk in and reboot!

The Titan boards will even work with the ProFile, new Sider drives, UniDisk and CPS drives in Apple //e emulation mode.

Some Apple //e programs require the 65C02 microprocessor that is different from the regular Apple /// 6502. The 65C02 is available to those who need it for only \$29.95+\$2.

The Titan ///+//e was originally \$499, now while supplies last you can get one for only \$399.00+\$10!

## 512K Upgrade Kits

With our new 512K Memory upgrade kit, you can upgrade your Apple /// to a full 512K the inexpensive way.

You can order a 512K kit with Zero K (no memory) or one with 256K. Supplied with the upgrade kit are complete installation instructions and information on ordering and installing memory chips.

If you have a 256K Apple /// you can use your existing memory to fill half of the 512K. If you order the 256K filled 512K kit, you then have a 512K Apple ///.

If you order the Zero K 512K board you can fill half of the 512K with the memory from your existing 256K memory board, but you will have to purchase 256K of memory elsewhere. This should cost around \$125.

Both the Zero K and 256K 512K upgrade kits come with everything you need to get up and running and a 90 day warranty.

The Zero K 512K is only \$159.95 and the 256K 512K upgrade kit is only \$299.95. Please enclose \$10 shipping and handling for each upgrade kit ordered.

# Miscellaneous Items For Your Apple ///

## Magazine Binders

Now you can put ON THREE in its place, for keeps! An attractive vinyl binder will keep your ON THREE Magazines clean, neat, in sequence and ready for quick reference at any time. Each binder holds twelve ON THREE Magazines. Why not order several and get your ON THREE Magazines in order! \$9.95+\$3

## Dust Covers

A frequent cause for computer crashes or failure is common dust, which affects the delicate components in your computer. Our sturdy vinyl dust cover is an absolute must for protecting your Apple /// from the ravages inflicted by dust, dirt and static. Remember when not in use, keep your Apple /// covered! Comes in two sizes.

Apple /// with monitor: \$11.95+\$3  
Apple /// with monitor & profile: 12.95+\$3

## "I Love My Apple ///" Tee-Shirts, by HANES

These popular Tee-Shirts for the Apple /// enthusiast are sure-fire conversation starters! They come in the following colors: silver, blue, yellow, white, cream and tan, with a multi-colored decal that proclaims, "I Love My Apple ///".

Made of 100% cotton, they are comfortable, washable and top of the line HANES quality. Sizes: small, medium and large.

Please be sure to give your size and list second and third color choice, because not all colors are available in all sizes. Certain to become a collectors item, they make a thoughtful gift for your favorite Apple ///er! Only \$11.95+\$3.

## Program Updates

ON THREE can update the programs listed below to the current version. Just mail us your original disks with note explaining which version you want. We'll update your disks and send them right back to you.

AppleWriter Version 4.0 \$15+\$2  
Business Basic Version 1.23 \$15+\$2  
(Free if Basic was originally purchased from ON THREE)

- Please include return postage -  
Draw ON /// Printer Update: Versions available for: Apple DMP, Epson, Pkaso, Pkaso/U and Graphics Tablet \$15+\$2  
Graphics Manager ///: Specify the color or black and white version. \$15+\$2  
PFS File, PFS Report and Word Juggler (Copyable): These disks can be backed up with the regular System Utilities program and can be used on Catalyst or Selector without requiring a key disk. \$15+\$2

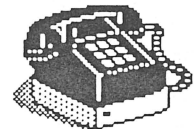
## Order Form

Order by calling TOLL FREE: (800) 443-8877

Customer Service: (206) 820-1874 Technical Support: (818) 701-1355

**ON THREE**  
Your Apple /// Experts

ATTN: Order Dept.  
11235 80th Avenue, N.E.  
Kirkland, Washington 98034 U.S.A.



Phone in an  
**ORDER TODAY!**

Ask About Our Quantity Discounts!

VISA, Master Card, American Express, money orders or checks accepted. Add \$3 for C.O.D. Add 3% surcharge to total on orders charged to American Express. CA residents must add 6% sales tax. Overseas customers can pay by credit card, international money order, a check drawn on a U.S. bank or bank transfer. Call first to ascertain foreign shipping costs and mode of transport. Returns must have prior approval and are subject to a restocking fee. We do not copy-protect any of our software products so there are NO returns allowed on software. Not responsible for typographical errors.

QUANTITY	PRODUCT DESCRIPTION	EACH	TOTAL	SHIPPING

Name _____	PRODUCT SUB TOTAL	_____
Company _____	SHIPPING SUBTOTAL	_____
Address _____	C.O.D. (\$3.00)	_____
City _____ State _____ Zip _____	6% CA SALES TAX	_____
Credit Card _____ Card No. _____	3% AM/EX SURCHARGE	_____
Exp. Date _____ Phone _____	GRAND TOTAL	<b>_____</b>

ON THREE - Dedicated To The Development Of Quality Products For The Apple /// Computer

# Exciting New Products For Your Apple ///

## StemSpeller ///. A Spelling Checker For /// E-Z Pieces

Compatible with standard ASCII files, Pascal Text, StemWriter and most importantly, /// E-Z Pieces word processing files!

StemSpeller /// is fast and very easy to use. Simply save your file in /// E-Z Pieces, run the StemSpeller program and check the spelling of your file.

StemSpeller will notify you of any misspellings and allow you to make changes on the spot! You can even add your unique words to the StemSpeller dictionary.

When you're finished spell checking your document, StemSpeller will automatically save your corrected file to disk. You can go right back to /// E-Z Pieces, load up the file and print it, or make further corrections.

StemSpeller /// comes with a 50,000+ word main dictionary and the ability to create auxiliary dictionaries of words you commonly use. 100% assembly language for speed. Comes as a standard interpreter that can be run by itself or loaded and run under Selector or Catalyst. In stock and available for immediate delivery. Requires a 256K or 512K Apple ///. Only \$69.95+\$5.

## Technical Support From Your Apple /// Experts

Technical support is FREE on any product that you've purchased from ON THREE within the last 90 days. After that time, or on any non ON THREE product there is a modest fee for technical support. \$5 for the first three minutes and \$1 per minute thereafter with a \$15 minimum.

Our experts know everything there is to know about the Apple /// and virtually all of its software and hardware. If you're having a problem with your Apple ///, give us a call. There's nothing worse than spending your precious time trying to figure something out, when one of the people on our staff can help you in a few minutes.

The support line is open Monday through Friday 9 AM to 5 PM Pacific time. Please have your product serial number (if applicable), purchase date, your credit card number and a list of the problems you're having ready *before* calling.

Technical Support (818) 701-1355

## StemWriter /// - Powerful Document Preparation

This new word processor from Australia lets you view two files simultaneously and combines all of the features you wanted in a word processing program!

Now you can design your own templates, make headlines, adjust column width, utilize on-screen over-strike & underlining, date stamp documents, count words, label and personalize form letters.

StemWriter has four levels of on-screen subscripts and superscripts, utilizes a desktop like /// E-Z Pieces and the four arrow keys to "see and point". It even uses the full memory available in your Apple ///.

Built-in macros, file management, utilities program and other special features makes StemWriter the premier word processor for the Apple ///.

Compatible with dozens of printers, StemWriter works on a 128K, 256K or 512K Apple /// and costs only \$99+\$7.

A year ago over 1,000 people asked us for a /// E-Z Pieces spelling checker. If you were one of them, please order it today. Doing so will help fund our continued Apple /// development efforts.

# A 1987 Bibliography Of ON THREE

by David Ottalini

A Look At Where We've Been

1987 was, in many ways, a benchmark year for ON THREE. It became the only monthly commercial magazine (in fact, the only commercial magazine period) devoted exclusively to the Apple /// computer and the only company that still continued to sponsor major programming efforts on behalf of the ///.

ON THREE also ported over its most successful product, The Desktop Manger to the IIGS, a move that will accelerate with other products in the future.

Despite suffering through reduced renewals and a change in editors (Lynne Denicola left and was replaced by Paula Sheppard) (and as we entered 1988, Sheppard left to be replaced by Olaf G. Wolff), ON THREE

continued to offer its readers a wide range of articles by a number of authors. And, for the most part, the articles published in the magazine were excellent. The continuing series of columns by Richard and Lavona Rann remain my favorites. And their series for new Business Basic programmers was excellent as well.

Al Bloom, Ed Gooding, Earl Brelje and many others, listed below, all made important contributions. I especially enjoyed those articles by some guy in Maryland named Ottalini.

1987's listing, like previous listings, is sorted based on subject. This bibliography is part of an update to my ThreeWorks disks that is now available.

SUBJECT	TITLE	AUTHOR	IS	MON	PGS
Basic and Pascal	From BASIC to Pascal	Bloom	3	Mar	21-23
Basic Program	Text File Manager	Soling	4	Apr	11-13
Basic Program	Recipe for a Menu	Barton	7	July	23-26
Basic Word Processor	Kidword ///	Ottalini	11	Nov	9-10
BB Game	Magic	Smith	2	Feb	14-15
BB Programs 01	Two Shorts - Fini!	Barland	1	Jan	11+
BB Programs 02	Three Shorts - Fini!	Puckett	2	Feb	18-19
BB Programs 03	Two Shorts - Fini!	Gauger	8	Aug	31
BB Programs 04	Two Short - Fini!	Ottalini	12	Dec	9-10
Beginner Basics 01	The Beginning ///	Rann/Rann	1	Jan	13-14
Beginner Basics 02	The Beginning ///	Rann/Rann	2	Feb	17-13
Beginner Basics 03	The Beginning ///	Rann/Rann	3	Mar	11-15
Beginner Basics 04	The Beginning ///	Rann/Rann	4	Apr	5-8+
Beginner Basics 05	The Beginning ///	Rann/Rann	5	May	5-10
Beginner Basics 06	The Beginning ///	Rann/Rann	6	June	5-10
Beginner Basics 07	The Beginning ///	Rann/Rann	7	July	7-11+
Beginner Basics 08	The Beginning ///	Rann/Rann	8	Aug	5-8
Beginner Basics 09	The Beginning ///	Rann/Rann	9	Sep	5-8+
Bibliography	An On Three Bibliography	Ottalini	1	Jan	4-6
Column CH01	Ask Doc Christenson	Christenson	12	Dec	27-28
Column C01	Block Write	Consorti	2	Feb	4+
Column D01	Apple.Sauce	Denicola	1	Jan	3+
Column D02	Apple.Sauce	Denicola	2	Feb	3+
Column D03	Apple.Sauce	Denicola	3	Mar	3
Column D04	Apple.Sauce	Denicola	4	Apr	3
Column R01	Ranntings	Rann/Rann	1	Jan	15
Column R02	Ranntings	Rann/Rann	2	Feb	31
Column R03	Ranntings	Rann/Rann	3	Mar	19-20
Column R04	Ranntings	Rann/Rann	4	Apr	23-24
Column R05	Ranntings	Rann/Rann	5	May	17-18
Column R06	Ranntings	Rann/Rann	6	June	17-18
Column R07	Ranntings	Rann/Rann	7	July	15-17

Column R08	Ranntings	Rann/Rann	8	Aug	17-19
Column R09	Ranntings	Rann/Rann	9	Sep	17-19
Column R10	Ranntings	Rann/Rann	10	Oct	17-19
Column R11	Ranntings	Rann/Rann	11	Nov	17-19+
Column R12	Ranntings	Rann/Rann	12	Dec	17-19
Column S01	Apple.Sauce	Sheppard	5	May	3-4
Column S02	Apple.Sauce	Sheppard	6	June	3
Column S03	Apple.Sauce	Sheppard	7	July	3
Column S04	Apple.Sauce	Sheppard	8	Aug	3
Column S04	Apple.Sauce	Sheppard	9	Sep	3+
Column S05	Apple.Sauce	Sheppard	10	Oct	3-4
Column S06	Apple.Sauce	Sheppard	11	Nov	3+
Column S07	Apple.Sauce	Sheppard	12	Dec	3
Copyright	Copyright Protection	Cortopassi	5	May	11-13
Data Bases 01	Data Base ///	Fritz	12	Dec	21-25
Desktop Manager	The Updated Desktop	Brelje	9	Sep	9
Desktop Toolkit	Toolkit	Brelje	11	Nov	11-15
Drivers	Driver Versions	Ottalini	11	Nov	21-22
DTM Module	Warning	Brelje	3	Mar	7-10
DTM Module	PKASO/U Command Module	Brelje	4	Apr	18-21
DTM Program	Reload and Exit	Turner	2	Feb	5-6
Dvorak	Dvorak Keyboard	Fitzmaurice	5	May	15-16
Epson Upgrade	Printer Upgrade	Brelje	4	Apr	15
EZP Tutorial 01	Three E-Z Pieces	Graham	10	Oct	5-8
EZP Tutorial 02	Three EZ Pieces	Graham	11	Nov	5-7+
EZP Tutorial 03	Three E-Z Pieces	Graham	12	Dec	5-8
Formulas	Spreadsheets, Formulas	Lomartire	9	Sep	21-24
Game Program	Cross	Smith	1	Jan	7-8
Glossary 01	Glossary of Terms	Thompson	7	July	13
Glossary 02	Glossary of Terms	Thompson	8	Aug	13-15
Glossary 03	Glossary of Terms	Thompson	9	Sep	25+
Letters 01	One, Two, /// Forum	Denicola	1	Jan	26
Letters 02	One, Two, /// Forum	Denicola	2	Feb	25-30
Letters 03	One, Two, /// Forum	Denicola	3	Mar	25-32
Letters 04	One, Two, /// Forum	Denicola	4	Apr	27-31
Letters 05	One, Two, /// Forum	Sheppard	5	May	29-30
Letters 06	One, Two, /// Forum	Sheppard	6	June	29-31
Letters 07	One, Two, /// Forum	Sheppard	7	July	27-29
Letters 08	One, Two, /// Forum	Sheppard	8	Aug	27-30
Letters 09	One, Two, /// Forum	Sheppard	9	Sep	27-31
Letters 10	One, Two, /// Forum	Sheppard	10	Oct	27-31
Letters 11	One, Two, /// Forum	Sheppard	11	Nov	27-29
Letters 12	One, Two, /// Forum	Sheppard	12	Dec	29-31
News S01	Apple.Slices	Sheppard	7	July	5
News S02	Apple.Slices	Sheppard	8	Aug	23
News S03	Apple.Slices	Sheppard	9	Sep	24
News S05	Apple.Slices	Sheppard	10	Oct	25
News S06	Apple.Slices	Sheppard	11	Nov	31
Print Utility	Epson Graphics	Consorti	6	June	25-28
Printer Utility	DMP-Imagewriter	Consorti	5	May	23-28
Programmers Q&A 01	Programmers' Paradise	Consorti	10	Oct	21-22
Review	The Unprotect Driver	Ottalini	1	Jan	9
Review	Copy ///	Gooding	4	Apr	25-26
Review	Think Tank	Fritz	6	June	11-14
Review	MatchPoint	McNeese	8	Aug	25-26
Review	Super Desktop	Brelje	8	Aug	9-12
Review	Super Disk No. 2	Martin	12	Dec	11-15
Review 01	TCM, XModem Unveiled	Gooding	9	Sep	11-13
Review 02	TCM, XMODEM Matchup	Gooding	10	Oct	9-14
Review DC01	Data Capture ///	Gooding	5	May	19-22
Review DC02	Data Capture ///	Gooding	6	June	21-24
Review DTM01	The Desktop Manager	Gooding	1	Jan	19-24
Review DTM02	The Desktop Manager	Gooding	2	Feb	20-24
Sort Program	An Improved Sort	Teel	1	Jan	10+
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Tutorial	Joystick ///	Gooding	8	Aug	21-22
Versions	Program Version Update	Ottalini	10	Oct	23-24

# Review ON: TDM Super Accessories Disk #3

by Dan Martin

*New Accessories For Your Apple ///*

The population of Desktop Manager modules continues to expand with ON THREE's introduction of Super Disk #3. Earl Brelje has become quite a prolific module programmer and we have him to thank again for the next in a hopefully long series of Super Disks. This is one place that the Apple IIGS market may help to keep the Apple /// version of The Desktop Manager alive.

Super Disk #3 adds several new functions that expand the utility of TDM. They are:

Block Editor	Accessory Manager
Info Help (several sizes)	Ruler
Hex View	Hex Print
File Utilities Sub-menu (ala' Disk Manager)	
SOS Errors (a special case of Info Help)	

## Block Editor

After years of using Dan Wade's Block Editor and more recently Disk Window /// from Daryl Anderson, I was intrigued to see a version available via TDM menu in any application. I was even ready for the inevitable compromise in the functionality and utility I had grown accustomed to with the two programs mentioned. What Earl delivered was a surprise. First, it is the largest feasible TDM module (just shy of 32K bytes). Second, it is the best damned block editor I have ever used on the ///.

Earl's approach to the block editor is a virtual "tip-toe" through the directory structure of the SOS file system. Other block editors have classically included an obligatory help file (of large size and poor intelligibility) on the intricacies of the directory and file block structures.

Earl's editor IS the help file! Block.Edit displays the information to the user differently depending on the type of block that it is, i.e., directory/subdirectory, index or hex/ascii data. If you don't like the default display mode, you may view it in your mode choice, even if the block you're viewing doesn't make any sense in that mode!

The beauty of this approach is the incredible speed and convenience it provides for finding the exact block you need to edit. I used to spend 10 minutes (hey, I'm slow!), SOS manual in hand, refreshing my memory on SOS file structure each time I'd go in and hack a disk block. Now it takes about 10 seconds.

It occurred to me that I really don't care to slog through the SOS file details every time I want to block edit! Now we don't have to anymore! A lightning fast search mode is provided that works with either Hex or String search targets. You can just type in the info. you are looking for and it will find it..fast!

This search mode is invaluable for hacking pathnames that were "hard-coded" into programs by developers who always thought, for example, that there would be a profile hard disk attached with a volume name of / PROFILE. An example of a hex search might be to find the manufacturer ID in a device driver or a special SOS I/O location reference.

This block editor is not going to make a hacker out of a secretary, but if you are comfortable with the task of block editing, I'm sure you will love this module.

I mentioned that Earl's block editor is just shy of 32K bytes, comparable to the largest interp files. Well, Earl also provides an interp version of his editor, in the tradition of ON THREE's Communications and Graphics Managers, to allow one to use the block editor PLUS all other TDM features as well.

## Accessory Manager

Accessory Manager saw its genesis on the Apple IIGS version of The Desktop Manager. Earl liked the utility so much, he dragged it back across the bumpy boundary between Prodos-16 and SOS. And I'm very glad he did. I have been beta testing Earl's Disk #3 modules for

awhile. As you will see, this module was a godsend in keeping my TDM menus up to date with the numerous versions and revisions as they unfurled.

Accessory Manager (AM) provides a full range of installation and maintenance control over your TDM menus as your needs evolve. No need to set up those menus at installation and keep them unchanged just because you don't want to drag out the manual and reorient oneself to the process.

menu, rename, copy, delete and install new accessories. Figure 2 shows how easy it is to load a new accessory into the TDM menu using the Accessory Manager. You just tell it what file to copy over and it installs it automatically!

I use my TDM main menu as my high-priority access for the modules that are supporting my needs for the work I'm doing at the time. Jockeying the occupants of the first 4 slots in the main menu add even better access to my "favorites du jour" since they can be directly accessed via

SOLID-APPLE 1 through 4 without even bothering with the main menu. Since the TDM menus wrap-around vertically, the menu selections at the very bottom are as accessible as those at the very top. Therefore, my lower priority items (from an access point of view) tend to get buried in the center of the column.

Submenus are also accessed from the AM installed in the main TDM menu, so there is no need to

```

Earl T. Brelje  OPTION COMMANDS  Ver 1.00
| A...File/Disk Util | * R - Read Main TDM Menu Option List
| B...Calendar       | * D - Delete Option(x) file from disk
| C...Disk Manager  | * N - New Option(x) name in TDM Menu
| D...Macro Manager | * C - Change Option(x) Disk File Name
| E...Note Pad      | * L - Load new TDM Accessory to Option(x)
| F...Make Subdir.  | * S - Enter Sub-Menu Option(x) Directory
| G...Comm. Manager | * H - Hard Copy of Current Menu
| H...Graphics Mgr. | * ESC - Exit with Main Menu Reload
| I...              |   ESC - Exit Accessory Manager
| J...Accessory Mgr. | Use the UP/DOWN arrows to move highlight.
| K...Calculator     |
| L...Show Time +   |
| M...Print Screen  |
| N...Printer Setup |
| O...AsciiCharacter |
| P...Track View    |
| Q...BackBurner    |
| R...              |
| S...Info Screens  |
| T...Super Disk#2A |
| U...Hacker Menu   |
  
```

Figure 1: Accessory Manager Main "Control Panel"

install a copy of AM in each submenu, a real space saver.

AM provides complete control over the layout and appearance of TDM menus and submenus via a unique, windowed "control panel". See Figure 1. The left vertical panel displays the current content of your TDM main or sub-menu. The top right window always contains the most relevant help screen to support your current action. The bottom window pops up composition areas for pathname entry and feedback on errors or options.

```

Line Input Editing Commands
| A...File/Disk Util | * <- - Delete Left      * -> - Delete Right
| B...Calendar       | * < - Jump Beginning    * > - Jump End
| C...Disk Manager  | * Y - Delete to EOL    * D - Delete Line
| D...Macro Manager | * Tab - Tab Backward   Tab - Tab Forward
| E...Note Pad      | * E - Edit/Insert Mode * ESC - Restores String
| F...Make Subdir.  | * C - Copy Characters  * P - Paste Characters
| G...Comm. Manager |
| H...Graphics Mgr. |
| I...              |
| J...Accessory Mgr. |
| K...Calculator     |
| L...Show Time +   |
| M...Print Screen  |
| N...Printer Setup |
| O...AsciiCharacter |
| P...Track View    |
| Q...BackBurner    |
| R...              |
| S...Info Screens  |
| T...Super Disk#2A |
| U...Hacker Menu   |

Copy file to Option(x)
| At the prompt, enter the pathname for the file you
| want to load. It will be copied to the unused
| highlighted Option.
| Source File [.D2/BLOCK.EDIT ]
| RETURN to accept, ESCAPE to exit
  
```

Figure 2: Loading an Option Into Menu Position I

AM allows you to move the accessories around on the



## Info Help

Earl has provided on Super Disk #3 a unique capability for customizing information of importance to each user and making it available with TDM-style convenience. It is called Info Help. Regular readers of ON THREE will recall from my December 1987 review of Super Disk #2 that I was a bit frustrated that all of the PKASO/U help card information was not available in that accessory disk's PKASO/U help module.

Earl realized that you can never please everyone all the time, especially in a group of folks as feisty as ///'ers! So he created a general help screen capability that will allow ///'ers to create, customize and exchange screen loads of useful information on virtually any topic, accessible in the touch of an SOLID-APPLE-Escape.

It's not Macintosh HyperCard, but as for convenient access to useful information on the Apple ///, it is an important addition to the TDM module family. Earl has provided for 3 different sizes of Info Help modules. There are 2, 5 and 10 screen versions, all of which store the information within the module itself rather than in data files. This means that the screens pop up quickly, limiting disk access to loading in the module only. The size tradeoff is really one of speed. Small screens pop up faster than large ones.

The really useful feature of Info Help is that modules that are created may be saved off to disk files and exchanged with other ///'ers over BBS's, Compuserve and disk exchange. One-touch help screens can now be created and shared, hopefully extending the knowledge of the mysterious workings of the /// to a new generation of computer users. Info Help offers the /// community a new infrastructure for the exchange of on-line information. It is up to the user community to take it from there.

## Rulers

Earl's Rulers module does not unfortunately make you King or Queen for a day. (Ed. Note: Get it...Rulers - King or Queen - It took me a while to get that one) It provides an incredibly useful tool for those folks that want to measure screen coordinates for form creation or screen layout in programming.

Selecting the Rulers module displays horizontal, vertical or both rulers which measure the X,Y coordinates of the Apple /// text screen in either normal or inverse video presentation.

This allows a programmer to compose a desired menu or screen in AppleWriter ///, edit it until it meets expectations and then measure off the screen coordinates to ensure a perfect match when drawn by Business Basic, Pascal or assembler.

The technique I use is to create a menu in Applewriter, measure off its screen coordinates with Rulers, type them beside the menu entry line in Control-R mode (so you don't change the screen coordinate by typing). Then I cut and paste the annotated menu into the Pascal text editor to be used in a series calls to a function which passes x,y and menu string as parameters and generates a line on the screen. No fuss menus located properly the first time.

## Hex View and Print

These two new modules allow a user to view or print a hex/ascii representation of any file. It is very useful to the hacker or to someone analyzing a program file for pathname references. I personally rarely dump whole files in hex, preferring to pinpoint an area of interest using a block editor (now Earl's block editor!) As a result, I have limited use for this added module. It is a useful tool for folks who prefer to work from dumps, or if you want to analyze a file on the plane to the West (or East) coast and your Apple /// portable isn't real handy to take along (he-he).

## File/Disk Utilities

Earl added a goodie for those who purchase both the Super Disks 2 and 3. It is a menu which aggregates all the file utilities on the two disks (i.e., File View, File Print,

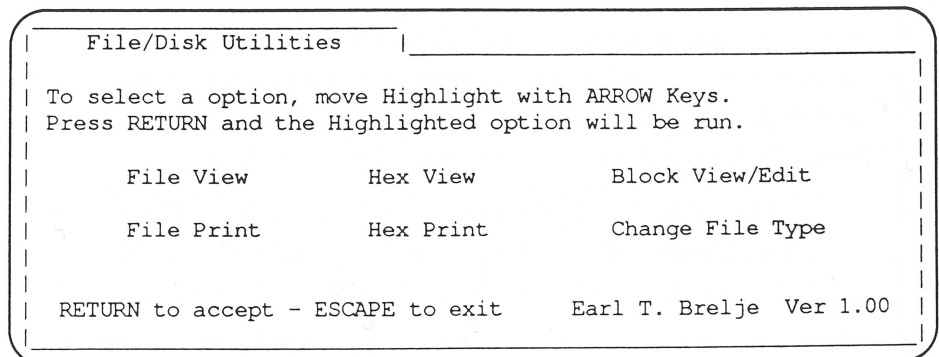


Figure 3: File/Disk Utility Subload Menu

Hex View/Print, Change File Type and Block Edit) into a subload menu in the same style as the Disk Manager menu. Figure 3 shows this menu. As you can see in Figure 1 or 2, I have this setup as my first main menu option so I can fire it up with SOLID-APPLE-1.

### SOS Errors

Earl's SOS Errors module is a good example of the type of instant on-line help that is available through the use of the Info Help module. This one is a standard Info Help accessory that has been filled with information about Apple /// SOS and bootstrap errors. It beats the stuffin' out of cleaning my desk to find my SOS manual!

### Summary

Super Disk #3 has added several important new modules to the arsenal of The Desktop Manager. The Block Editor is fast and intuitive in operation...the best ever on the ///. The Accessory Manager keeps my ///'s Desktop from getting as cluttered as my physical desk.

The Info Help screens offer a new, albeit simple means for exchanging useful pop-up information among the // / community. Rulers helps with the frustrating chore of menu creation for /// programmers and perhaps some

other uses that others can discover and share. Hex View and Print round out the battery of file utilities, organized by the File/Disk Utility subload menu. SOS Errors provides an excellent illustration of the power and convenience of pop-up information screens now at the disposal of the /// community via the Info Help modules.

Super Disk #3 is available from ON THREE for \$29.95, a bargain for the Block Editor alone. This a small price to pay to encourage the support of ON THREE and Earl Brelje in extending the capability of the single, best program ever written for the Apple ///!

I'd like to take this opportunity to bid a fond, gradual farewell to the /// community I've become a part of. In my six years of /// ownership, I first depended on, then graduated to helping, a unique group of people with a rare sense of independence. The Apple /// is a phenomenon in the history of microcomputer development, still expandable and performing well, long past the end of its official product status with Apple. My personal and professional needs have finally pushed me into the ranks of Macintosh II ownership. My new challenges as a user of the Mac II remind me of my first session in front of System Utilities SCP menu. My /// will serve as a reliable backup machine for as long as I, ON THREE and the /// community can keep it running!

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### Continued From Page 8

memory size. It is also a very good tie in for next issues article on the 512K memory upgrade kit.

David Ottalini brings us the 1987 year in review or bibliography of what we published last year. We have

two reviews this issue. The first is the long awaited second part of the review by Steve Brineaux on Stem-Writer which initially appeared in the February issue. In the second review, Dan Martin explores some accessories for The Desktop Manager in his review on the new Super Accessories Disk #3. ///

## AUTHORS WANTED!

We are accepting article submissions for review and possible publication from readers who are willing to share their Apple /// knowledge and experiences with others. If you would you like to contribute to the pages of ON THREE Magazine, here's your chance! We're looking for articles of general interest, short programs, tutorials, hints on getting things done easier & more efficiently, games and anecdotes. Anything goes!

Just send your article or program on diskette to ON THREE. If it's chosen for publication we will check it for accuracy and even correct those silly spelling errors. Before you know it, you will become a rich (at least in spirit) and famous author. Your work will be read by a worldwide, captivated & spellbound audience.

For a copy of our author guidelines, please send a self-addressed, stamped envelope to **ON THREE Magazine, 8920 Yolanda Avenue, Northridge, CA 91324**, or give us a call at (818) 701-1355.

# Letters To The Editor

by Bob Consorti

Questions and Answers From Your Apple /// Experts

## StemWriter Printing +

Dear Friends at ON THREE,

When using StemWriter I discovered that you must have a driver called .PRINTER. I have two printers, one serial and one parallel and neither is called .PRINTER.

The question now is, how do I use both printers without changing the driver names each time I want to change printers?

I notice on the "PRINT" menu you are asked what printer, 1-2-3-4, to use but I have found nothing in the StemWriter manual as how to use this option.

One more thing, how do you get back to the Selector /// menu when finished with StemWriter? Thanks for your help.

Sincerely yours,

John C. Laughlin  
Honolulu, Hawaii

Dear Mr. Laughlin,

With StemWriter the printer drivers must be named .PRINTER and/or .PRINTER1 - .PRINTER4. The reasons are a little silly and the next update the author does we are going to try to have him add the ability to manually select any printer type driver.

To select the printer to use just use the arrow keys to select the printer you want to use. If you have a .PRINTER1, printer #1 in StemWriter will be associated with it. If you have a .PRINTER, printer #1 in StemWriter will be associated with that device only if you don't have a .PRINTER1. If you have a .PRINTER1, printer #1 in StemWriter will be associated with it and the .PRINTER will be printer #2, #3 etc, depending on how many other .PRINTERx's you have.

Confusing isn't it! That's why we want the author to update StemWriter. As soon as this update is available we will tell everyone. I believe that the command to exit StemWriter is CONTROL-B. There is a file called SUPP.INFO on one of the StemWriter disks. It gives you up to the minute details of changes in the program that are

not in the manual.

## 'Doc' Needs Brain Surgery

Dear Bob,

In the April, 1988 issue of On Three, Dave Christenson 'Doc' gave some confusing, and slightly inaccurate answers to C. S. Egel of La Grange Park, IL.

C. S. asked about using some unspecified Apple ][ interface cards in the ///. He also asked specifically about using the Hayes Micromodem II in the ///, and then asked about using an autodial phone list and automatic logon sequences from within The Communications Manager.

First of all, SOME Apple ][ interface cards will indeed work in the ///, but usually in Emulation mode only. Some examples of these include the Videx 80 column & upper/lower case cards (Smarterm and Ultraterm). Using these cards will give you 80 columns in Emulation mode, but will be ignored by SOS when in Apple /// native mode.


Some cards, such as the original Super Serial Card and the Mockingboard sound generation card will work in both Emulation and /// modes, but you must have a driver in your SOS.DRIVER file to recognize them in order to use them in /// mode.

The Hayes Micromodem II card will not function in native /// mode as far as I know. It was THE modem to have in the ][ world a few years ago, and was the forerunner to the now famous Smartmodem 300/1200/2400. It fit inside the Apple ][ in one of its slots. To my knowledge, there was never a driver written to allow it to be utilized in native /// mode, so Dave's answer was not accurate here.

Finally, it IS possible to use autodialing and autologon with The Communications Manager by simply using the Macro Manager. One can build a macro map that contains dialing commands, phone numbers, logon ID's and passwords. Also, using the interpreter version of TCM, rather than the Desktop Manager module allows one to use other Desktop Manager functions such as the Disk Mgr., Notepad, Calendar, etc.

Here is a technique that I use when I know that I want

to use the Binary II function with TCM to transmit several files to a fellow ///er:

- 1) I pick a blank entry in my macro map and fill in all of the file pathnames that I will be sending, pressing the Return key after each pathname.
- 2) I exit the Macro Mgr., and start up the Communications Mgr.
- 3) I dial my friend, connect, chat with him/her about what is coming, then initiate the Binary II file transfer process. When I am prompted to enter the pathnames that I'm going to transmit, I press the  x key that I used to store them with, and pow!.....I'm ready to start transmitting in an instant.

I hope this additional information clears up any confusion caused by Dave's reply.

Sincerely,

Edward Gooding, Sr.  
Richmond, Virginia

Dear Ed,

Thanks for the clarifying answers. If anyone else notices a mistake in the magazine, please let us know. There's nothing worse than getting the wrong answers from the people who know *almost* everything about the Apple ///.

### Thesaurus ///?

Dear Bob,

Just a quick note to express my appreciation for your immediate response to my call for help with my problem with /// E-Z Pieces and my 512K. I was delighted to get help so quickly. Your solution worked like a charm. All is well - until the next crisis show up! Meanwhile, it is a comfort to know that you are there if and when something happens.

I wanted to show my thanks, so I called the other day to order your disk driver for the Central Point 3.5 disk and also your newest Desktop disk. At that time I asked that my thanks be conveyed to you for your help, but it seems that I should add this note so that my appreciation will be unmistakably clear.

By the way, since Al Bloom showed me how to call up Mail List Manager from my Selector menu I have been happy as a kitten. Since I use that program quite a bit it was a constant source of aggravation to have to leave Selector and go to Catalyst. Now there is no problem - and I have his great MLM utilities available

too!

Anyhow, another big thanks to you and all of your ON THREE team for the continuing help and assurance you give. It makes my Apple /// computing a constant pleasure as well as a worthwhile endeavor.

Afterthought: If the truth be known, now and then I find myself wishing that I had a Thesaurus for my Apple ///. But I think I heard you say that that was probably never to be. Couldn't the StemWriter people fill in this gap? Oh well, I suppose we cannot have everything.

Sincerely yours,

Francis K. Wagschal  
New York, New York

Dear Mr. Wagschal,

Thanks for your last note. It's always nice to hear that things are going right! The next time I'm in touch with Trevor Smith (Stem Soft), I'll ask about the thesaurus for the ///. Since he doesn't have one available for the Apple II, I doubt that he could do it - but I'll ask.

We have a line on a thesaurus on disk and if we can get a hold of it we might be able to make an accessory for The Desktop Manager where you could just enter a word and it will give you some similar ones. It's going to be the end of the year before I get to that though, the GoBack program is next.

### Mouse/TDM Conflict & Draw ON /// Printing Problems

Dear Bob,

Well, I hate to write again about this, but my Mouse doesn't seem to work any more. Also, I was working with Pascal and tried to invoke a macro from the Macro Manager and nothing happened. When I tried to call up the Macro Manager from the TDM main menu, it gave this error message:

```
| Warning! | _____ |
| You are using an incompatible |
| version of the Desktop Manager |
| driver. Please see the users  |
| guide for installation        |
| instructions. Press Any Key.  |
```

So I re-read the installation procedure again, installing the Desktop.Driver from the Macro Manager disk. After that, the mouse stopped working, at least from most applications. It works fine with Draw ON ///. So I re-installed the Desktop.Driver file from the original Desktop Manager disk and the mouse works, but the Macro Manager doesn't. I just re-re-installed the Desktop.Driver file from the Macro Manager and now the macros work, but the mouse doesn't. It looks like a problem in the Macro Manager Desktop.Driver file.

My other problem concerns Draw ON /// (DO3). At first I thought DO3 didn't support my Epson (based on the user's manual), but in the letter from Lynne Denicola, dated 10 Feb 1987, she says that it will work with a UPIC and an Epson (and my order dated 3 Sep 87 states that I have a UPIC and an EPSON).

I've enclosed an output from the Graphics Manager and DO3. As you can see the Graphics Manager prints fine to my Epson, but DO3 prints junk. I thought maybe I had a wrong driver, and installed the UPIC driver (version 1.31) from the DO3 disk to replace my UPIC driver, but that didn't help. It appears that DO3 thinks I have another type of printer or is trying to tell a PKASO card something.

I assume you'll want my original disks back, but I'll wait until I hear from you first.

Sincerely,

Robert C. Sudduth  
Helmstedt, S.D.

Dear Mr. Sudduth,


The error message that you got from the Macro Manager accessory is a common one. When you upgrade The Desktop Manager (TDM) to the macro version you must replace the original .DESKTOPMANAGER driver with the updated one on the Macro Manager disk.

When you run the Macro Manager it makes sure that you are using the correct version of the driver. If you aren't it displays that error message. I see that you then correctly updated the driver and the Macro Manager worked successfully. I'm sorry if there was any confusion but when using the Macro Manager the optional mouse movement in TDM is no longer functional.

The Macro Manager uses some things that we were using with the mouse that enabled it to act as cursor keys. Thus, using the Macro Manager precludes using the mouse cursor movement capabilities. We've changed some of our ads for TDM and will make it more clear in

the near future that when using the Macro Manager you can't also get the optional mouse movement. I'm sorry about the confusion.

On the Draw ON problem...we goofed. It looks like we sent you the regular Draw ON ///, the one configured for a PKASO card. Just send the Draw ON disks in and we'll update them for free. Please send a note with the disks requesting a free update to the Epson version per this note.

Please note that when using Draw ON /// you can choose which printer driver Draw ON prints to. This is selected on the options menu (press 0 on the keypad). Here press  P and a message asking for the printer driver name will appear. Simply type in the printer driver you want to use, in your case the driver for the UPIC card, and press RETURN. Next go to the **Save Prefix & Parm.** item and press RETURN again. This will cause Draw ON to save the printer driver name to use. Thus, the next time you use Draw ON you won't have to enter the driver name again.

### Hardware Stuff

Gentleman:

I am looking for a couple of things you might have...

- 1) Pin-outs for an Apple /// drive so it can be connected to a GS.
- 2) An old Mountain Hardware BSR X-10 interface that I could rig up to one of my Apple ///'s to operate the lights & stuff.
- 3) A couple of 4332 RAMs that don't require a mortgage.

If you can quote any of this please let me know.

Sincerely,

Rich Potter  
Tucson, Arizona

Dear Mr. Potter,

The pin outs for the disk ///'s can be found in the Apple /// service reference manuals. It's not an easy task to connect an Apple /// drive to a II, but I know some people have managed to do it.

The BSR X-10 can be found at swap meets and clearance houses for very low prices. You should contact

**Continued On Page 28**

## Continued From Page 27

Ed Gooding (a hot-liner) as he has a controlling program for the BSR.

4332 (32K) ram chips can be purchased from a variety of electronics vendors. I'd check in the back of some of the computer magazine and call a few of the companies that are selling ram chips. If you can't get any that way we can sell you an Apple /// 128K memory board with 16 4332 ram chips on it (along with 32 4116 ram chips). I believe our current price is about \$25.

### MOVING?

If you are in the process of moving, please give us a *minimum* of one months notice. Because the magazine must be printed and mailed prior to the date on the cover and because it takes us a short while to update our records, tell us before you are moving. Doing so will assure that your copy of ON THREE won't be lost in the mail or get to you late.

## DeClassifieds

**FOR SALE:** Apple /// 128K, monitor, two 360K drives, UPIC, cable, AppleWriter ///, PFS, VisiCalc, other software, all manuals. Original owner, hardly used, excellent condition, must sell - need new golf clubs. \$500 or best offer. Call Chuck Wolf at (201) 580-0639.

**FOR SALE:** Apple /// with 12" monitor, ProFile 5 megabyte hard disk, and lots of software. Only \$500. (213) 947-7225 evenings.

**FOR SALE:** Apple /// 256K, monitor, external drive, software included, \$400. Excellent condition. (404) 642-0900.

### DeClassifieds Work!

Been searching for hard to find hardware or software? Need to sell some excess equipment? Try an inexpensive DeClassified ad in ON THREE Magazine. Our readers tell us that they really get results! Place your ad by phone or mail. All copy must reach us 45 days prior to publication date, e.g. July 15 for the September issue.

Rates \$1 per word \$25 minimum.

Subscriber discount 50 cents per word, \$12.50 minimum.

Mail your copy with payment to:

ON THREE DeClassifieds  
8920 Yolanda Avenue  
Northridge, CA 91324  
Or Phone (818) 701-1355

## Make Backup Copies Of AppleWriter, VisiCalc and Advanced VisiCalc

with the ON THREE *Uncopyprotect Driver*. ON THREE Hasn't changed its policy regarding duplicating copyrighted programs, but since many Apple /// software products are no longer supported, owners of AppleWriter ///, VisiCalc and Advanced VisiCalc are facing the problem of what to do when their program disks "Crash."

After much consideration we decided to make a product to solve this problem. The *Uncopyprotect Driver* will allow you to make backup copies of these three programs. For the first time you can put your master disk in a safe place and boot from the duplicate.

The *Uncopyprotect Driver* is economically priced at only \$29.95 plus \$3 shipping and handling. The *Uncopyprotect Driver* comes complete with full documentation and will work with Selector /// and Catalyst. The *Uncopyprotect Driver* is sold for legitimate Archival purposes only. ON THREE does not and will not and will not condone program copying for any other purpose.

### Next Time In ON THREE:

A Look At The New 512K Upgrade Kit

Review of the *new* ThreeWorks!

Attaching A Printer To Your Apple ///

110 <-> 220 Apple /// Conversions

And our regular mix of letters and other information to help you get the most out of your Apple ///.

# SMART APPLE /// USERS



## USE SELECTOR ///

Because SELECTOR /// is a state-of-the-art program switcher that makes instantly available, without rebooting, a wide range of applications programs that are stored on your hard disk or high capacity floppy, such as UniDisk. Programs such as the ones listed below and more! When you start up your system just boot Selector /// and that's it for the day! No more frustration looking through stacks of floppies or searching through sub-directories!

Access ///  
Access 3270  
Advanced Visacalc  
Apple II Emulation  
AppleFile ///  
Apple Speller ///  
Apple /// Pascal  
AppleWriter ///  
Backup ///  
BPI  
Business Basic

Business Graphics  
Cobol  
Draw On ///  
Communications Manager  
Desktop Manager  
EasyTerm  
Graphics Manager  
Graph'n'Calc  
Haba Merge  
Keystroke Data Base\*  
Keystroke Report Generator\*

Lazarus ///  
Macro Manager  
Multiplan  
Nexus  
PFS: File\*  
PFS: Report\*  
Quick File ///  
Script ///  
Senior Analyst ///  
/// E-Z Pieces  
Visacalc ///

Selector /// allows the above copy-protected programs followed by asterisks to be placed on your hard disk, but requires that the 'key' or boot disk for those programs be placed in the built-in drive before starting that particular program. If one of your programs does not appear on this list, it will, more than likely, work under Selector ///. The Selector /// utility will not work with the copy-protected Word Juggler program. Selector /// is not copy-protected. Selector /// requires an Apple /// computer with at least 256k of memory. **Now only \$99 plus \$7 s/h**

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