

EXPANDABLE COMPUTER NEWS

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ECN

An Independent Publication for users of the Adam Computer
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LORANGER MAY DISCONTINUE ADAM DDP PRODUCTION

ISSUE 11

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Ramblings From The Ridge by D. Sage

Two years ago Coleco began shipping the first ADAMs. Who would have believed back then that two years later the ADAM would be selling for \$300 and be a discontinued product. Since that time the ADAM has begun to mature although slowly. Much of this growth and maturation was stifled by Coleco's lack of cooperation with third party companies. It was largely this attitude toward the various support groups such as ECN and AUG that ultimately led to the withdrawal of Coleco from the home computer market. Had Coleco approached external support more positively, there would have been a great deal more software and hardware add-ons early in Adam's life. Companies that have attempted to monopolize the software and peripheral market for their products by making such interfaces difficult or by not cooperating with outside companies have typically failed to establish themselves in the home computer market. Coleco only had to look at Texas Instruments experience to know that this was not the way to prosper.

The Apple II, Vic-20 and Commodore 64 prospered because those companies made technical information readily available to anyone. All other present and potential producers of computers for the home market should closely analyze the experience of their predecessors before making decisions on the marketing of their products. If you aren't willing to learn from history, then you probably shouldn't be in this business.

Clarification: In our last issue Joe Blenkle made some comments in his review of The Hacker's Guide that may have been incorrectly interpreted. He cautioned that purchasers should "make sure the company you purchase from is reliable and will take your purchase back if you find omissions" This was a general comment and was NOT intended in any way to imply that the M.W. Ruth company is unreliable. To the contrary, we have NEVER received a complaint about M.W. Ruth and from our own dealings know them to be a responsible supplier of ADAM products. M.W. Ruth guarantees the products they sell and will supply replacements for products that are found to be defective.

And now for some good news. Sage Enterprises and ECN will soon be moving. This move will NOT result in any address or telephone changes. All correspondence should continue to be addressed to our current listing. We are currently in the process of building a larger facility to house our operations. Our

current operation is overcrowded and getting worse daily. Many of our computers are boxed up or otherwise inaccessible. The new facility will be organized so that our many printers can be shared by all computers without constantly connecting and disconnecting cables. In addition this facility will allow for some future growth and will include a much needed centralized environmental control system that will be healthier for all of our computers. Hopefully, this move will not impact on our current production schedule. With any luck and good weather we could be finished before the next issue goes to print.

Disk drives for the ADAM are becoming relatively scarce. I would recommend that anyone who doesn't have a disk drive consider getting one. I would also urge you to get CP/M 2.2 for your ADAM. The CP/M operating system will give you access to a great deal of software and greatly extend the life and usefulness of your ADAM. Some CP/M software requires two disk drives and most requires at least one disk drive.

On a related note, we were recently advised by a representative of Loranger that the company that supplies the high-quality blank tape for their digital data packs was discontinuing its operation. If Loranger is unable to find another tape manufacturer that is willing to produce the type of tape required for the digital data packs, Loranger may be forced to discontinue production of their DDPs. (Loranger Manufacturing Corporation, P.O. Box 948, Warren, PA 16365).

In another development, Family Computing magazine had dropped references to the ADAM from its cover although the November issue continues to carry ADAM programs and information. We suspect that this move presages a move to drop coverage of the ADAM entirely and have written to them expressing our concern. If you are concerned about this development write to Claudia Cohl, Editor-in-Chief, Family Computing, 730 Broadway, New York, NY 10003. I am sure that ADAM owners constitute a fairly large proportion of their subscribers and can have an impact if they are in fact considering dropping coverage of the ADAM. Remember, this is the only glossy magazine that regularly covers the ADAM and carries ADAM advertising.

Now is a good time to do some Christmas shopping if you are looking for Colecovision game cartridges and products. Our local KayBee store has been carrying ADAM/Colecovision cartridges for \$9.99 and has the Atari Expansion Module #1 for \$20, Super Action Controllers for \$23, Driving Module for \$25, and the Colecovision unit for \$49.

A number of the educational cartridges from Fisher Price and Spinnaker are making their appearance at these discounted prices. These include Spinnaker's

Jukebox, Make-a-Face (FaceMaker), Fraction Fever and Fisher Price's Dance Fantasy, Logic Levels, Memory Manor and Linking Logic. Also available are a number of cartridge games from Spectravideo, Epyx, Interphase Technologies and Xonox. Many of these products have yet to be reviewed in ECN, so if we don't get to them and you have the product, send in a review. Our local KayBee was also selling Family Feud for \$19.95. Circus World is now selling the ADAM, but nothing else, not even game carts.

Those of you who had dealings with Adam Users of America and The Garden of ADAM Newsletter will be interested to know that little is being done to recover your money. To rectify this situation you need to write to both of the following addresses: Eric G. Larson, Regional Chief Postal Inspector, San Bruno, CA 94098-0200 and John C. Lamb, Legal Service Unit, California Department of Consumer Affairs, 1020 "N" Street, Room 585, Sacramento, CA 95814.

The postal authority in this case has made the following statement: "Receiving a few complaints alleging failure to pay for or furnish a product or service may reflect poor business practices rather than intentional fraud." Anyone having any information concerning Taylor Barcroft's operation that would indicate or support a finding of fraud should write to Mr. Larson. Anyone who lost any money to Mr. Barcroft and ADA should write with the details. Include copies of any correspondence. If the combined total dollar amount of all complaints is sufficient they will probably take some action. Even though you will probably get more action from the California Dept. of Consumer Affairs, you should write both of these agencies.

The 1985 ADAM Resource Directory is now available (see ad in this issue). This is an excellent source of information on ADAM products and resources. Ray Hanania has announced the availability of STELLAR 5 an astronomy oriented program that will allow you to track Halley's Comet. See his ad in this issue. We hope to have a review copy soon so that we may include a review in the next issue of ECN. ADAMite Wear (c/o TKRP, P.O. Box 23114, Lansing, MI 48909, ph. 517/394-0893) has available a number of t-shirts with "I LOVE MY ADAM", "I'M AN ADAMite" and "ADAM FOREVER" imprints.

Hi-Tek Marketing & Research Ltd., 244 Penbrooke Close S.E., Calgary, Alberta, Canada T2A 3P1, ph. 403/272-3927, has announced the availability of a limited supply of ADAM products. They currently have memory expanders, modems, disk drives, CP/M 2.2, and other products available for sale. Their prices are in line with prices of other retailers. Write or call for more information. They are also currently developing

an RS-232 interface and are contemplating the development of an emulator for the ADAM and are seeking feedback on the type of emulator that ADAM owners would be interested in (i.e. Apple, IBM PC, or Commodore 64).

The Puget Sound Adam Network, 22607 SE 322nd, Kent, WA 98042, is publishing a "computer cook book" that will include a recipe filing program and is seeking contributions of recipes. The file types are: breakfast, beverages, breads, desserts, other goodies, meats, seafood & poultry, main dishes, veggies, sauces & dips, soups & stews, recipes from scratch. Full credit will be given to the submitter of each recipe. Please include your name, town & state, and user group if any. If any of you are interested in purchasing the finished cookbook, it will be available well before Christmas and will sell for \$9.95 plus shipping. This cookbook is that groups way of raising money to reach potential members. They are also interested in swapping newsletters with other ADAM groups.

A large number of companies are now selling data drives at discount prices. Because of the wide availability of data drives we are discontinuing selling these or any other hardware.

In response to a number of requests we have decided to make available CP/M public domain software in the ADAM format. Now you will be able to get the original CP/M Adventure game and many other programs, including a variety of programming languages. Transferring and testing this software takes time, so our list will grow as we can get this done. For those of you who only have ADAM printers we will even be willing to provide printed copy of the documentation where it is more than a couple of pages. Some of the languages have extensive documentation and you may not want to spend days printing this out, so we will offer it preprinted for a modest charge to cover our copying costs and time. Remember this is public domain software and we cannot guarantee that it is bug free, but most of it has been around long enough that it works.

Where different versions exist, we will generally include all versions as well as the source files if any. There are thousands of public domain programs available on hundreds of double-sided disks and most of it is organized by when it was received rather than by language, subject or anything else. We have already spent many hours trying to bring together these products in some sort of logical organization and have only made a dent in what is available. By taking this time, we feel we can make the public domain library available to you in a much more useful form.

Some of the disks contained programs that

required expensive interpreters, and we have generally eliminated those. Languages will be packaged with the programs that we currently have that operate under that language. In some cases a language may be accompanied only by minimal documentation and we will try to include references to sources on those languages. Most of this software is written for an 80 column screen, although much of it can be used with a program that resets the screen to 32 columns. You will simply have to experiment to determine what works best for you and a particular program. We will try to include John Moore's screen reduction program on these disks where there is room or you may want to use another such program that is available from other sources. Some of this software will only run from Drive A so you will have to copy the programs to a disk that contains the CP/M operating system. Also remember to keep the original disk as a backup only and make a working disk for day-to-day use. We hope you will enjoy the programs that we have chosen for our initial offering.

This issue of ECN contains much of the usual information as well as continued extended coverage of CP/M. In addition we have started providing more technical information on the Adam's operating system. Remember your contributions are welcome. Some of you have written and expressed disagreement with some of the reviews that have appeared in ECN, yet you have not contributed reviews yourself. The best way to express your feelings regarding products is to write a review so that your comments and concerns can be shared with others.

Finally, I want to thank those of you who have contributed the many fine articles to this issue. We appreciate your assistance and look forward to your future contributions. Through all of our efforts we can keep the ADAM going for a long time.

What About The Competition?

by D. Sage

At a time when one would expect things to be picking up in the home computer market (Christmas is coming), nothing dramatic seems to be happening. Sure Atari is shipping the 520ST and the 130XE, but the ST still does not have the operating system in ROM.



Some software is appearing although not much. Commodore is shipping the Amiga and the 128, although both remain scarce in the midwest. The new 1571 disk drive is supposed to be available and the 1572 dual drive should be making its appearance

shortly.

The 64 is being discounted heavily along with software and peripherals. The Executive 64 (the portable) is available for \$388 alone or \$488 packaged with a printer and some software from C.O.M.B. Liquidators. Call 1-800-328-0609 for more information.

The Amstrad CPC 6128 is to begin shipping shortly and will be available initially primarily through mail order companies. Nintendo is supposed to be shipping their game system to the East Coast, although we don't have confirmation on that yet (If anyone knows where I can get one, please let me know).

Apple has cut some prices in an effort to increase sagging sales. Look for more price cuts if things don't turn around soon.

The Intellivision is supposed to be reintroduced into the U.S. market by the company that bought the rights from Mattel.

There are rumors that Sony will be entering the home market with an MSX system that includes a CD-ROM player. Look for more news on this after the January CES at Las Vegas. Other than that it doesn't look like there is much else going on in the home market. I hope to have more news on this next issue.



Telecommunications

by Joe Blenkle

In the last issue of Expandable Computer News I briefly described MADAM7, the CP/M telecommunications program for the ADAM. My offer for the program was met with overwhelming response, so I would like to again examine the program, this time in more depth.

First, to use MADAM7, you must, of course, have CP/M. With MADAM7 are two other programs that are used for customizing the program. We'll take a look at these first.



The first of these programs is M7LIB.COM. It is the more confusing of the two. Briefly, M7LIB will allow you to add and delete entries from MADAM7's phone library. Up to 36 numbers can be stored and dialed simply by inputting a letter A-Z or number 0-9. The correct way to load M7LIB is to enter M7LIB

MADAM7.COM. This tells the program to find MADAM7.COM and then look for its phone directory. Once the program has loaded you will be presented with a list of the phone numbers in the directory and the question, "DOES LIBRARY LOOK RIGHT?" Whether it does or not, you must answer YES to this question or you will exit the program. After answering YES, you will again get the phone library screen only this time you will be presented with the choices of CTL-C - abort, [C]hange, [D]elete, [P]rint lib, [R]ead, [W]rite. To change, for example, entry A, you would type in CA. The 'C' is for change and the 'A' tells the program what entry to change. You can then type in the description and phone number. You must, however, input a total of 32 spaces (even if they are blank) before the program accepts the new number. I spent quite a while hung up on this routine before I figured it out.

Deleting numbers works in the same fashion and after you are satisfied that all your numbers are correct, hit 'W' and your phone library will be written to disk.

The second program I want to elaborate on is M7FNK.COM. This program will give you 10 definable function keys that can be used while online in the terminal mode. To load this program, simply type in M7FNK and RETURN. It will then ask you for the program name. Type in MADAM7.COM and you will get a display of the function keys. While the function character is also definable, it is currently set to a '^'. This program is very straight-forward and asks you for the key you want to define and then your choice of what that key is. You may choose to input a password, user number, or some sort of greeting. For example, my '^1' key is my CIS user number. When I make contact with CIS, I simply have to press ^1 and my number is sent. I might also add that in this case the '^' does not stand for the ADAM's control key, rather it is the actual '^' symbol. Inputting an 'S' will save your function key menu and it will be ready to use next time you boot up MADAM7.

After you have loaded MADAM7 you will be present-ed with the title screen and a prompt that looks like this:

A»COMMAND:

This is the command line. To dial a number you enter CAL [number], or simply CAL to bring up the phone directory. All commands are followed by a return.

Rather than going through the whole set of commands available to you, I would suggest just typing an 'M' for Menu. Also, you should print out the MADAM7.DOC and have it for a handy reference. I

will, however, mention some of the more important commands. They are: Ctl-N (hangup), Ctl-E (return to command mode from terminal mode), T (return to terminal mode from command mode), S [filename] (sends a file via XMODEM protocol) and R [filename] (receives a file via XMODEM protocol).

Due to the response last issue, I will once again offer a disk with all the MADAM7 files and other CP/M programs on it. The CP/M system will NOT be written to the disk, so you must own CP/M to use these programs. I have also gone through my files and created two other disks of CP/M programs. These disks are available at \$5.00 each. The MADAM7 disk is #1 and the others are #2 and #3. If you've already received MADAM7, then request disk #2 and/or #3. Send your requests to Joe Blenkle, P.O. Box 41746, Sacramento, CA 95841.

ADAM System Calls

by D. Sage

Over the last year I have spent a substantial amount of time disassembling the ADAM operating system. Actually the ADAM has two operating systems that have been designated EOS and OS7.

The OS7 system is essentially the Colecovision cartridge system and this is used to handle most of the sound and graphics that are produced on the ADAM. The EOS is the ADAM'S primary operating system that handles I/O and other system functions.

This column will be used to present the various system calls that are available to the user in SmartBasic. This column will not be a tutorial on assembly or machine language programming. I will simply present the information with a brief explanation of its function and how it is used. What you do with it is up to you. To use the calls you will have to understand the Z80 and its machine language. In most cases you will have to write machine language routines in order to provide the called routines with the information that they require. In previous issues I have already given some information on writing such routines for using some of the calls to the video display processor and the sound chip.

As I said earlier, I have spent a lot of time disassembling the ADAM's operating system. After I had completed that task, Coleco provided us with a copy of their technical manual for the ADAM. Unfortunately the technical manual is not very well organized and contains what I consider to be some major gaps. The manual clearly is not designed for the novice.

Even though I have the manual, I feel that much of what I learned in disassembling the OS was more than worthwhile. Unfortunately, the technical manual

includes almost nothing on SmartBasic and its memory map. For that information you should consult the previous issues of ECN for many peeks and pokes and the Hacker's Guide to ADAM which is a great deal more organized (the Hacker's Guide is available for \$12.95 from Peter & Ben Hinkle, 117 Northview Road, Ithaca, NY 14850 or MW Ruth Co.). Another source of technical information is The ADAM Technical Journal (one year subscription-6 issues is \$15.00 from Serendipity Productions, P.O. Box 7592, Milwaukee, WI 53207).

In this column numbers will generally be presented in hex format and will be so designated by a following '\$' sign, for example: 4032\$. All numbers without the dollar sign will be in regular decimal format. Each of the CALL statements will include a description of the registers used for input in the call and a description of the output registers, if any. We will publish a few CALLS each issue until we have covered the entire list of CALLS available.

First of all you should know that the operating system CALLS do not directly address any routines, but are directed to a jump table that contains another CALL instruction and the actual location of the routine. For example the CALL FC30\$ (64560) actually CALLS a routine at F832\$ (63538). This was done so that the CALL statement would remain the same for a particular routine even if the routine were changed and placed in a new location. So revisions to the operating system could be made without affecting any existing programs provided they used only CALLS to the jump table. Programs which failed to follow this practice would not run. This is probably the reason some cartridge games will not run correctly on the stand-alone ADAM (Defender is one example).

CALL FC30\$ (64560) - This routine executes a system reset and causes the operating system to check the various devices for a disk or data pack. The order of the check is device #4, #5, #8 and #24. Device #4 is disk drive #1; #5 is disk drive #2; #8 is data drive #1 and #24 is data drive #2. If one of the drives contain media, then block #0 is read to locate boot instructions if none is present or an error is encountered then the system loads the Electronic Typewriter from ROM. If a boot record is present the system loads it to C800\$ (51800) and branches to it where the boot routine takes control. In addition this routine performs a number of housekeeping functions such as clearing video RAM, turning off the sound and setting up the Device Control Blocks (DCB's).

CALL FC33\$ (64563) - Display the character whose value is stored in register A. This one is easy to check out. All you have to do is place a value in the A register (LDA x) and CALL the routine. The

character will be displayed at the current cursor position and the cursor will be moved one place to the right. This routine will not execute the control characters, but will instead print them on the screen if there is a corresponding graphic character in video RAM.

CALL FC36\$ (64566) - Initialize the video display screen. HL register contains the video RAM screen address. This information appears to be stored in memory at FD64\$ (64868). Additional information needed by this call and the associated registers are as follows: B register = line length -1 (normally 31); C register = screen lines -1 (23); D register = cursor position (column); E register = cursor position (row).

CALL FC39\$ (64569) - Send a character to the screen and display it or execute the appropriate action if the code represents a control character. The code for the character is stored in the A register. Most of the control characters are described in the SmartBasic manual.

CALL FC3C\$ (64572) - This is a delay that is executed after a hard reset. It is approximately 40 micro-seconds in duration. Only the A register is killed (cleared).

CALL FC3F\$ (64575) - Checks the DCB command/status byte to determine status of printer. Reissues print command to a busy printer if no error is returned. The A register return the error code, if any. This routine is used with the start-up call.

CALL FC42\$ (64578) - Calls the same routine listed above (FC3F\$).

That completes the calls for this issue. Next issue we'll have more.

28 Column CP/M Dump by Daniel A. Uitti

One of the useful utility programs included with CP/M is DUMP.COM. For hackers, this utility displays the contents of a CP/M formatted file to the console in hexadecimal.

This program loses its usefulness on the ADAM because it requires an 80 column screen. I suggest that you create a new version that will display only eight bytes per line as is illustrated in this article.



The DUMP program checks to see if the current address is a multiple of 16 in order to determine whether to display a new line. If the program is modified to look for the address equal to a multiple of

8, then the screen will be 28 columns. I used the DDT debugger to examine and modify DUMP.COM. I found that the value was checked at address 12D hex of the program.

The following shows how the program was modified by DDT, then saved in a new file named D.COM. A partial run of the new program is also shown.

```
A>DDT DUMP.COM [ret]      [ret] enter RETURN key
DDT VERS 2.2
NEXT PC
0500 0100
-L12D [ret]              DDT list function
012D ANI 0F
012F JNZ 0144
-A12D [ret]              DDT assemble function
012D ANI 07 [ret]        enter new code
-[control C]             exit DDT program
A>SAVE 4 D.COM [ret]     save new program
```

Sample run of D.COM:

```
A> D D.COM [ret]
0000 21 00 00 39 22 15 02 31
0008 57 02 CD C1 01 FE FF C2
0010 1B 01 11 F3 01 CD 9C 01
```

CP/M Potpourri by John Moore

From time to time, I find myself with a collection of random ADAM CP/M scraps which may be useful to a lot of people, but which by themselves do not contain sufficient substance to build a full column. If this seems disconnected, now you know the reason!

The bane of any computerist is faulty documentation! In the spirit of cooperation, I would like to share some of the ADAM problems I have uncovered and ask that the rest of you do the same. On page D29 of the Coleco ADAM CP/M guide, the



Escape sequences given for cursor-on and cursor-off are reversed! The offsets to be added to the cursor positioning statement are decimal. Notice that you have to send ADAM the "Y" value before the "X".

On pages D24 and D27, the manual gives values for the "arrow" keys. These values may be reasigned by the user using the "CONFIGURE" program supplied with the CP/M package. Inexplicably, the values given in the reference are not the values assigned by the CP/M program shipped by Coleco. If you are having problems using the "arrow" keys in your programs, run CONFIGURE to see what values the keys are returning.

The control sequences on pages D30 and D31 may contain errors. I was unable to turn off the cursor key trap using the code (13H) cited. There is no sequence given for turning the trap on. I suspect that a misprint has occurred and the ON code is 12H, since all of the other SmartKey codes lie between 16H and 1AH, but I haven't had time to work with it.

CP/M experimenters who have been trying patches with the method outlined in ECN Issue #10 will be happy to learn of an undocumented feature of DDT which will do the offset math for you without forcing you to buy a hex calculator. When DDT is running and displaying the "-" prompt, you can type in the letter "H" followed by two hex numbers separated by a comma. DDT will return two new numbers: the sum of your pair and the difference between them. To figure the offset in the article in Issue #10, you would run DDT and type in:

```
-hcbf2,c400[ret]
```

and ADAM would reply:

```
8FF2 07F2
```

You want the difference - 07F2. Now to find the subroutine location in the image, type:

```
-h2700,07f2
```

ADAM replies 2EF2 1FOE. This time, you want the sum 2EF2.

Articles in ECN have mentioned Elliam Associates screenchop program. I have seen it running and it is excellent! If you would like a quick-and-dirty substitute, run DDT and type in the following:

```
-a100
100 lxi h,ea68 [ret]
103 mvi a,le [ret]
105 mov m,a [ret]
```

```
106 jmp 0000 [ret]
109 . [ret]
-g0 [ret]
A0>save 1 scnchp.com [ret]
```

Now type in SCNCHP and your screen will be limited to 30 characters in width. Should your TV have a large overscan, re-do the program and reduce the number in line 103. this is the number of characters per line in hex. The width will remain at the new value until you reboot the system.

CP/M Autostart by John Moore

One of life's little mysteries is why Digital Research would include an autostart facility in CP/M 2.2, but not tell anyone about it. Nevertheless, it is there and relatively easy to use, so let's find out how-to-do-it. The ability to arrange a disk so that the program on it is "self-booting" can be quite useful, particularly when you want to let someone use your ADAM to run a special program or play a game, but you aren't confident that he or she understands the full implications of a command like "ERA *.*".

In order to install this facility, you will need the modified version of SYSGEN.COM that I outlined several issues back (Issue 9). This or a similar program will be necessary for you to write your modified system back to the system tracks on the disk.

In the following dialog with ADAM, the computer will be in upper case, and your responses in lower case letters. You will need to be prepared to enter the name of the program to be run at startup, and have it translated to hex code. There is a conversion chart in the back of the Coleco CP/M manual. For an example, we will arrange for a directory to be displayed when the system is booted. The command for a directory is DIR. In hex this is 44,49,52. You should follow this example, but use the name of the program you want to Autostart.

```
A>sysgen
SYSTEM GENERATOR
ENTER SOURCE DRIVE
(OR RETURN TO SKIP) a [ret]
ENTER DESTINATION DRIVE
(OR RETURN TO REBOOT) [ret]
```

```
A>save 75 CPM.COM
```

```
A>ddt cpm.com
```

```
DDT VER. 2.0
NEXT PC
```

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```
4C00 0100
```

At this point you have created a copy of the CP/M system in memory starting at 2700 (hex), saved it to disk and then read it back into memory under DDT.

Now, type the command D2700[ret]. You will get a memory dump of the start of the CP/M system itself.

Note the first two instructions. They are the jump vectors CP/M uses. Do not change them! Immediately after these bits of code is a 7F, reflecting the fact that you have 128 bytes of code for your AutoStart names. Next in the dump is a 00, followed by a line of 20's (ASCII spaces) and the Copyright notice. This is where the AutoStart command string goes. You will insert the hex codes using the DDT "S" command.

```
-s2707 [ret]
2707 00 04 (The number of bits in your string)
2708 20 44 [ret]
2709 20 49 [ret]
270A 20 52 [ret]
270B 20 [ret]
270C 20 00 [ret]
270D . [ret]
-g0
```

Now at the A prompt, type SYSGEN[ret]. When it asks for a source drive, just hit RETURN (your modified system is already in memory at this point).

Now, when asked for a destination drive, type A [ret] and your modified system will be written to disk.

To see if it works, pull the RESET switch on ADAM. Note, that each time the system reboots with a Control-C, the AutoStart program restarts.

The only way out is to remove the disk, or turn off the computer!

Do-It-Yourself Printer Stand by John Moore

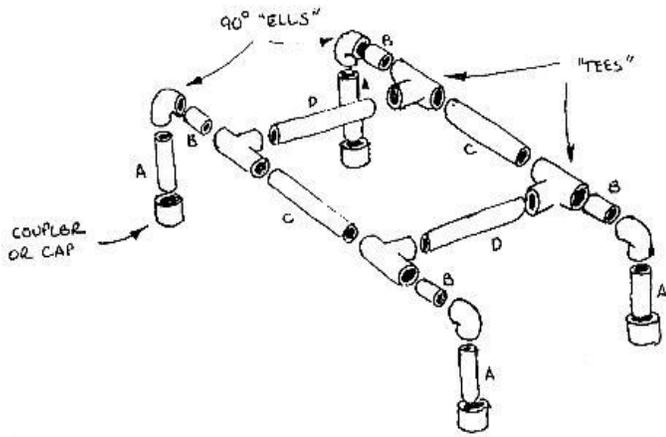
One of the quirks of the Coleco design for the ADAM printer is the difficulty one encounters when trying to use fan-fold paper. Sure, there are any number of commercially-made printer stands, but these usually cost \$30 or more.

There is a simple way to build a durable stand that shouldn't cost you more than \$4.00!

The secret to this stand is PVC pipe and fittings that you'll find in the plumbing supply section of your local home improvement store.

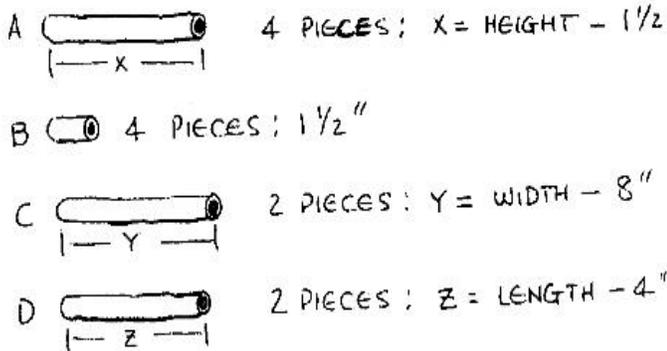
I used 1/2 inch pipe for my stand. You will need a ten foot section of pipe, four - 90 degree ells, four tees, and either four pipe caps or four junctions (PVC to NPT - the clerk should know what you mean).

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Actually the caps or connectors aren't completely necessary, but if you use them, you don't have to worry about making any of your cuts exactly flat.

PVC pipe will cut easily with any saw, or even a very sharp knife. Start by cutting off four 1-1/2 inch pieces. Put these aside. The next lengths will be determined by the size you want for your stand. You need to cut four pieces so that they are 1-1/2 inches SHORTER than you want the top of the stand. Next cut two pieces that are 8 inches NARROWER than you want your stand to be. Finally, cut two pieces that are 4 inches SHORTER than you want the length of your stand.



Now you are ready to assemble your printer stand. Notice that you can use the same idea to make a stand for ADAM itself to fit over the disk drive, etc. Take each piece of pipe and with a knife or a file clean the plastic burrs off the cut edge of the pipe. These edges should be smooth. You can buy some PVC cement if you want to assemble the stand permanently, but the pipe will fit together fairly tightly without it!

Now, referring to the diagram, put the stand together. Take time to make the legs the same length and twist the frame so that it sits flat on your tabletop. You can leave the stand in its natural color, or spray paint it any color you'd like. The best part is that if you mess up, new parts are fairly cheap!

Product Review: Aspen Ribbons

by J.S. Ramsay

Product: ADAM printer replacement ribbon

Manufacturer: Aspen Ribbons, Inc., 555 Aspen Ridge Dr., Lafayette, CO 80026, ph. 1-800-525-0646

Price: See "Pricing Policy" below

Aspen Ribbons has available long-life replacement ribbons for ADAM and practically any printer you can think of. The ribbons are inked nylon and can be obtained in a variety of colors. They also have three different versions of the Diablo Hytype II ribbon.

The special ADAM ribbons are not as crisp as the Diablo film ribbon but are quite acceptable, particularly when compared with the quality of most computer printer ribbons.



They are a bargain for heavy users, due to their long life and, should you want that one special piece of correspondence to look extra sharp, are easy enough to replace with a Diablo film

ribbon for short term use. Be sure to tighten the tension knob on the cartridge gently with pliers or a loose ribbon may cause the print to appear slightly faded in places.

Pricing policy: Aspen seems set up for high volume corporate purchasers, with their discounts starting at an order for 24 cartridges. However, they do offer a recycling option where you can return the Aspen cartridge and the ribbon will be replaced. For the special ADAM ribbon, the regular price for 1-23 cartridges is \$7.00 and \$3.50 for each cartridge recycled. The Diablo cartridges are \$6.00 and \$3.00 respectively for the multi-strike film ribbon. The cheapest option is reloading your own cartridges, which brings the price down to \$1.25 each for a multi-strike film pancake for the Diablo which must be ordered in a minimum quantity of 50 and \$2.50 each for the ADAM long-life ribbon in a minimum order of 12 inserts. That's starting to get into the useful range of orders for a user's group. I would caution that these latter inserts may only fit an Aspen cartridge which is shaped differently from the standard ADAM cartridge. These ribbons are also available in blue, green, red, brown and purple for an additional \$2.00 per ribbon. Again, a minimum order of 12 is required for the color option.

Confusing? Probably, but I would recommend that you request a copy of Aspen's catalog, give their toll free number a call to straighten out any remaining questions, and order a few of their long-life ribbons unless you are getting a real deal from your local supplier.

Product Review: Eve PS-1 Power Supply

by Joe Blenkle

Product: ADAM power supply

Manufacturer: Eve Electronic Systems,

2 Vernon St., Suite 404

Framingham, MA 01701

617/653-3003

Requirements: ADAM

Warranty: 90 day

Price: \$69.95

Rating: 8

The Eve PS-1 power supply is the second power supply I have purchased for my ADAM and is by far the better of the two.

My previous power supply, produced by ADAM TECH, had several drawbacks that are absent from the Eve power supply.

First of all, the ADAM TECH power supply apparently tried to feed power through the disk drive if it was turned off resulting in insufficient power to make the data drives run.

The resolution to this was to turn on the disk drive power whether or not it was being used.

The second drawback, or at least inconvenience, was that the power supply plugged directly into the side of the ADAM with no connecting cable.

The interface seemed to be slightly off-line with ADAM'S power connector as well and was difficult to plug in.

The Eve power supply solves these problems and is very easy to hook up.

The power supply box is a little over three inches high, five inches wide and seven inches deep.

A four-foot long cord that hooks into the side of ADAM lets you place the power supply box at any convenient location.

The on/off power switch is on the front of the box in an easy to reach place, a vast improvement over ADAM's own rear-mounted switch.

Needless to say, the silence created by not having ADAM's printer reset every time the computer is turned on is great, although it does take some time getting used to after several years of constantly hearing this sound.

The first time you reset your computer you'll probably find yourself staring at it wondering if something is wrong...no noise!

The Eve power supply rates an eight on a scale of ten.

The only feature that is not included that I would have liked to have seen is an interface and switch on the box that would allow you to plug in ADAM's own printer and toggle it on/off as needed.

Still, the ease of plugging in the device partially makes up for this omission.

Product Review: Eve SS-CC Speech Synthesizer

by Joe Blenkle

Product: Speech synthesizer/clock card

Manufacturer: Eve Electronic Systems

Requirements: ADAM, Disk Drive, Basic (CP/M option included)

Media: Hardware and disk

Warranty: 90 day

Price: \$109.95

Rating: 10

I had very high expectations for the Eve speech synthesizer/clock card and needless to say, I was not disappointed when it arrived in the mail.

It was quite a shock to hear my ADAM talk to me. After plugging the unit into the side expansion port and booting the diskette, I was greeted with a friendly "Hello," and then was warned that I should read the instruction booklet before proceeding.

Since this is the first speech synthesizer I have ever had, I can't really compare it to others, but thus far I can find no fault with it. The unit is housed in an off-white box, exactly the same size as Eve's SP-1 interface. Since I also have that device, I purchased one of their multi-unit adapters which allows you to plug the units in at the same time. My interface now sits directly on top of the synthesizer, which is a welcome relief considering my already cluttered computer table.

The SS-CC is also a clock card and once you set the time and date, you need not worry about it again. Apparently the unit has some kind of power reserve which keeps the information in the chip until you power up your ADAM again. I can detect no loss of time in the unit since I first set it.

There are several programs included with the SS-CC. One is a CP/M program which allows you to set the time/date and is stored on your CP/M diskette as CLOCK.COM. While using CP/M, if you want to know the time, just load the program and press either 'T' for time or 'D' for date and ADAM will tell you.

The SS-CC Basic programs include the HELLO greeting that you hear when you boot the disk, a program called "shell" and the clocksetting program. The "shell" program is just that, a shell so you can create your own programs. All you need do is add the words as data statements. In the instruction manual there is a dictionary of several hundred words and their "allophone" equivalents. You need simply find the word you want, look up the decimal addresses of the allophones in the table provided and put them in data statements. A typical line would look like this: 100 DATA "ADAM ",26,33,21,26,16,3,99. This would display the word ADAM on the screen while ADAM says the word as well. The vocabulary potential is unlimited as you need only find the correct sounds

and durations to make your own words. My own BASIC diskette now boots with the greeting "Hello Joe, How are you?"

The quality of ADAM's voice really surprised me as it is very clear, although having a definite "computerish" accent to it.

Eve is also developing a 4,000 word library which will load into ADAM's memory expander and be ready for use at any time.

Despite a \$20 rise in price recently, I'd still put this item on your list of things to get. I know it's going to keep me busy for quite some time. While I only received the preliminary documentation, it is quite good, and you should have ADAM saying whatever you want in no time at all!

Product Review: The Dukes of Hazzard

by Jeff Silva

Product: Game

Manufacturer: Coleco

Requirements: ColecoVision/ADAM, Driving Module

Media: Cartridge

Warranty: 90 day

Price: \$14.95 Toys R Us

Rating: 7

In this driving game from Coleco, you drive the General Lee through Hazzard County. You have to catch Jeremiah Stinge up ahead, while watching for Boss Hogg, hills in the road that really let you fly, bridges that are out, oil slicks, and even a town. You can even make bootlegger turns (180 degree



turnarounds) as needed. If Boss Hogg catches you or if you wreck the game ends. A Dixie-style tune plays at the start of the game.

Coleco has made another very good driving game for Expansion Module #2. The graphics and sound are very nice, and this game, in its simplicity,

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captures perfectly the one-dimensional themes of the original TV show. It is difficult at first because shifting is much like shifting a manual transmission, so it takes a while to get the hang of it. The rear view mirror on the screen is a great addition. All in all, this game is a good addition to Coleco's Turbo. A fun, though simple-minded chase through Hazzard County. Recommended.

Product Review: Aquattack

by James Notini

Product: Game

Manufacturer: Interphase Technologies, 6391 E. Westminister Hwy., Richmond, B.C., Canada V7C 4V4

Requirements: ColecoVision/ADAM, joystick

Media: Cartridge

Warranty: 90 day

Price: \$17.95 plus \$2 shipping from Interphase

Rating: 10

Aquattack is a multi-screen action game that combines great playability and originality. Aquattack offers four different game screens with all of them being action packed. During the game the player, as Captain Blitztek, must invade territory controlled by the Axtoatle Combine.

As the player travels down the screen he is bombarded by helicopters from the air and by tanks from the roads on the side of the canals and later takes on the role of a hang glider as his quest to destroy the Axtoatle Empire goes on. If the gamer makes it through all of the screens he is awarded with a terrific graphic show of exploding Axtoatle helicopters and then is presented with a brief intermission screen before moving on to the next higher skill level.

The graphics in the game are quite amazing, by far they are Interphase's best, with the hang glider scene taking the cake. I would say that this is a must-have game if you like arcade shoot-em-ups and even if you don't it is a great addition to your software library.

Product Review: Aquattack (11-2)

by Joe Blenkle

Rating: 5

Aquattack is an example of a good game concept gone bad.

After reading a review in Electronic Games magazine saying how great the game was, I





purchased Aquattack via mail-order from Interphase.

Needless to say, I was disappointed. "The graphics are nothing short of spectacular..." said the review in EG. All I can

say is that the reviewer must have been playing some other game as Aquattack's graphics appeared to be straight out of the Atari 2600 generation.

Aquattack could be a fun game...but it's difficult to play and the instructions don't help matters any. As it is now, I'd recommend saving your money.

Product Review: Fastfiler

by Donald Arnone

Product: Filing System

Manufacturer: Strategic Software

This program at first appears to be better than average, but unfortunately after you are into it, it crashes. The reason it crashes is that for some reason it does not know how much memory is actually available although it says it does.

I laid out my file for 70 spaces across and 9 rows and the program said that I have room for 73 records. Well everything went fine up through my 18th record. Then when I try to save record 19, the screen says "error condition" and that is the end and a big disappointment.

I wrote to Strategic Software and David M. Smith (Director of Technical Support Services) said, "As far as we know, there are no major bugs in FastFiler that could cause the problems that you describe in your letter."

Product Review: The Free Software Catalog & Directory

by Valorie Zimmerman

Product: Book

Author: Robert A. Froehlich

Publisher: Crown Publishers

Price: \$9.95, 475 pages

Rating: 10

This is a "Sears" catalog of CP/M public domain software. There are listings for the CPMUG Library, SIG/M, a keyword source file, author and file name directory. Also included are BBS and computer club/user group directories.

All of the thousands of programs available from SIG/M and CPMUG are described (except those added since 1984). After you decide what you want, give your local CP/M BBS (RCPM) a call. You usually can request a file from the SYSOP (system operator)

if you can't find the one you want. This may also work on the CompuServe CP/M forum (PCS-47).

This book is a bargain for ADAM CP/M owners, a 10.

Product Review: Spy Hunter

by Jeff Silva

Product: Game

Manufacturer: Coleco

Requirements: ColecoVision/ADAM, joystick

Media: Cartridge

Warranty: 90 day

Price: \$23.95 Toys R Us

Rating: 7

In this game (which is probably one of the very last ColecoVision carts to be released by Coleco or anyone else) you are in control of the famous Spy Hunter vehicle based on the arcade game of the same name by Bally/Midway.

Your specially equipped car starts out with unlimited machine gun fire, and depending on where



you are, other deadly weapons such as smoke, oil, and missiles can be added every time you slow down to let the "Weapons Van" pull ahead of you, extending its ramp and allowing you to enter. There are a number of enemy cars driven by the likes of Switch Blade, the Enforcer, Road Lord and in the water, when your Spy Hunter vehicle becomes a speed boat, Barrel Dumper, and Doctor Torpedo. The Mad Bomber, in his helicopter, is the toughest to beat because only a Spy Hunter missile can stop him.

Graphics and sound are very nice in this game, with the Peter Gunn theme playing constantly. This game starts out pretty easy and does get harder and more interesting the longer you survive. I would have liked a little more variety and surprises in the road terrain, which becomes very predictable after a while. But this game is faithful to the arcade game and is

the most fun driving type game for ColecoVision and you don't even use the driving module! I liked using my Super-Action controllers better than the keypad, because each of the four triggers represent a different weapon to use. All in all, a reasonably fun-action-filled game.

Product Review: Tapper
by Jeff Silva

Product: Arcade Game

Manufacturer: Coleco

Media: Cartridge

Requirements: ColecoVision/ADAM, joystick

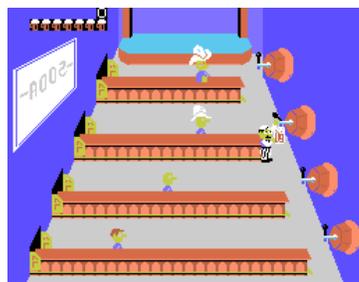
Warranty: 90 day

Price: \$23.95 Toys R Us

Rating: 9

In this home version of TAPPER, the Bally/Midway arcade game, you are Sam, the Soda Jerk, who has to serve Sam's old fashioned root beer to many thirsty customers by sliding them down the bar as fast as you can!

The customers get very impatient, pounding their fists on the bar, and if you don't serve them right away they will slide Sam down the bar and out the



door. Some are satisfied with just one drink and disappear. Others, however, leave their empty mugs after drinking them and pound for more.

Some customers leave tips which, if Sam has the time to go grab em, provides money for enter-taining the customers with a show on the stage. Sam also has to watch out for empty mugs building up and sliding to the end of the bars. If any drop, Sam makes a horrible face and loses one life.

There are also Root Beer Hunter screens where Sneaky Pete shakes up all the cans of root beer except one which are shuffled with the others.

Sam then gets to choose and open one can. He gets bonus points if he picks the one that wasn't shaken.

If he guesses wrong, he gets a face full of root beer. On later screens your bar turns into a Rocket Root Beer bar where you serve hilarious looking Martians!

This game graphically and musically is top notch and has the most humor and cartoon graphics I've seen yet. It is challenging and fun and the action gets fast and frantic very quickly, especially on the higher skill levels. This is a very fun family type of game which is hilarious to play and watch. Recommended.

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Product Review: Tapper (11-2)

by Joe Blenkle

Product: Arcade Game

Manufacturer: Coleco

Media: Cartridge

Requirements: ColecoVision/ADAM, joystick

Warranty: 90 day

Price: \$22.95 Adam Depot

Rating: 10

It's been quite awhile since I've played a game as enjoyable as TAPPER. Excellent graphics, music and play-action highlight this new release from Coleco.

With five total screens including the far-out space bar, Tapper is a real winner. The longer you play, the faster the action gets, giving you many hours of enjoyment.

Product Review: Tapper (11-3)

by D. Sage

Product: Arcade Game

Manufacturer: Coleco

Media: Cartridge

Requirements: ColecoVision/ADAM, joystick

Warranty: 90 day

Price: \$9.95 at KayBee

I know, three reviews? Well as the editor, I feel this game deserves special comment. I have always been impressed by Coleco's cartridge conversions of arcade games. This one goes beyond the normal conversion by changing the theme from that of a bar where beer is served to a soda fountain where root beer is served, thus giving the program a more family orientation.



The instructions are printed in the form of a menu adding another touch that is not always found in today's products. Recommended.

Product Review: Uncle Ernie's Toolkit

by Francis Siffers

Product: Utility package

Manufacturer: Uncle Ernie's Software, 279 Eastholm Ave., Akron, OH 44312

Media: Disk or DDP

Requirements: ADAM

Warranty: 90 day

Price: \$23 disk, \$25 ddp plus \$2 s&h

Rating: 10+

Do not be put off by the somewhat odd sounding name for this backup program. This is a very comprehensive and professional package.

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missing from other games. This game is more than a simple translation of Monopoly, it is entertaining and educational.

Product Review: Mr. Do's Castle

by Jeff Silva

Product: Game

Manufacturer: Parker Brothers

Media: Cartridge

Requirements: ColecoVision/ADAM, joystick

Warranty: 90 day

Price: \$14.95 at Toys R Us

Rating: 6

Your objective in this arcade sequel to Mr. Do is to keep the little clown safe and moving to the next scene in the castle by eliminating pesky unicorns. To do this, hammer or drop blocks on them. If you knock out three key blocks and make it to the tope of the screen to open the door, all of the unicorns will temporarily turn into bonus letters you can chase and catch for points. Like the original Mr. Do, if you spell "EXTRA" with the letters you get a bonus Mr. Do.



This game looks and plays a lot like the original arcade sequel on which it is based. Graphics and music are nice, with the exception of the unicorns. They look very strange indeed and blink so much they

are hard to see. Play on this game is quite a bit harder than the original Mr. Do, and it isn't really as much fun or original either, kind of like a cross between Mr. Do and Space Panic.

Both Space Panic and the original Mr. Do on Colecovision cartridges are more humorous, and fun to play than Mr. Do's Castle. This is the first Parker Brothers game for Colecovision that I've been disappointed in. Overall, just an average game for ADAM and Colecovision owners.

Product Review: Roc 'N Rope

by A. Leclerc

Product: Game

Manufacturer: Coleco

Media: Cartridge

Requirements: ColecoVision/ADAM, joystick

Warranty: 90 day

Price: \$39.95 Canadian

Rating: 10

For one or two players with four levels of difficulty. You, explorer-adventurer, have to climb up cliffs, falls and ledges to the Golden Bird, collecting magic eggs

and feathers along the way, if the numerous aggressive cavemen and dinosaurs don't push you down before you move. All this is done under a time constraint.

Take note: you are not playing Donkey Kong. The best way to collect points is not to hurry but to collect the collectible and, invested with the power of the magic eggs, to do unto others what they try to do unto you...all this through three different scenes and unpredictable moves from the enemy. But so what! You have ropes to help you climb, your flashlight to dazzle the beasts, and hanging vines to get away.



Since I bought this my kids have completely abandoned all other games. Although there are only three scenes and they thus come back rapidly, the situation varies constantly because the movements of the cavemen and dinos are themselves a constant surprise as the game progresses and becomes, believe me, very nasty indeed. The "beasts" climb up, come down, rock your rope to make you fall and so on. Hold tight to your flashlight because in many cases it's your only way out.

The music is just perfect and the various sounds accompanying - your often horrible fate - bring just the right touch to it all. As for the graphics, they are near outstanding, good shapes and movement, nice colors. I enjoy the sound and movement of the rope as it slices through the air and ties itself to a ledge for you to climb.

All in all, the game requires some pretty good reflexes, a close watch on numerous enemies, and a good strategy. It looks nice, sounds nice and will give you hours of fun. If playing Indiana Jones tempts you, don't hesitate. For those of you lazy point collectors who look for the easy way, try sticking to phase 3, grabbing all the points you can along the way, then killing the flying rock bird with your flashlight as often as you can until your time has passed...it's worth losing one of your lives.

High Scores

by Joe Blenkle

Anyone wishing to add their name to the high score list should send the game, score, and level to Joe Blenkle, P.O. Box 41746, Sacramento, CA 95841 or leave an EMAIL message on Compuserve at 70247,2466. Due to space limitations, all games may not be listed in every issue of ECN. For a complete list send a SASE to the above address. (EDITOR'S

NOTE: In the future only scores for the newer games will be listed and games for which a new high score has been achieved. Therefore, you can assume that these high scores are still in effect if you don't see a higher one listed in a later issue.

<u>GAME</u>	<u>PLAYER</u>	<u>LEVEL</u>	<u>SCORE</u>
A.E.	John Power	1	167,900
Antartic Adventure	Jeff Platt	-	176,750
Aquattack	Jeff Platt	-	92,910
B.C.'s Quest	Jeff Platt	1	82,330
Blackjack/Poker	Skip Clark	-	\$11,000/\$0
Blockade Runner	Joe Blenkle	-	30,345
Buck Rogers, Super	Jeff Platt	4	10,167,642
Bump & Jump	Jeff Platt	4	259,636
Cabbage Patch	Jeff Platt	-	127,950
Carnival	Joe Blenkle	1	46,430
Centipede	Jeff Platt	1	383,512
Choplifter	David Dooley	1	63
Chuck Norris	Jeff Platt	-	196,200
Congo Bongo	Raymond So	1	9,960
Cosmic Avenger	Skip Clark	1	30,310
Defender	Jeff Platt	-	1,005,200
Destructor	Jeff Platt	1	316,620
Diablo	Joe Blenkle	-	462
Donkey Kong	Dale Rohde	1	3,419,500
Donkey Kong, Super	Jeff Platt	1	1,201,800
DK Jr., Super	Jeff Platt	4	481,300
Dragonfire	Jeff Platt	-	29,700
Dragon's Lair	Alan Neeley	4	87,700
Dukes of Hazzard	Jeff Platt	4	83,570
Family Feud	The Blenkles	-	\$10,563
Fathom	Jeff Platt	1	31,626
Flipper Slipper	Joe Blenkle	1	26,550
Fraction Fever	Jeff Platt	-	206
Frantic Freddy	Jeff Platt	4	21,140
Frogger	Ann Peterson	Slow	14,000
Frogger 3 Deep	Jeff Platt	1	47,351
Front Line	Robert Cavanaugh	1	110,500
Galaxian	Jeff Platt	1	28,300
Gateway to Asphai	William Summerville	-	1,304,535
Gorf	Joe Blenkle	1	9,630
Grog's Revenge	Jeff Platt	2	7,910
Gust Buster	Jeff Platt	4	122,090
Gyruus	Jeff Platt	-	394,900
Heist	Joe Blenkle	-	96,782
Illusions	Joe Blenkle	1	46,590
James Bond 007	Joe Blenkle	1	57,550
Jumpman Jr.	Jeff Platt	3	1,055,175
Keystone Kapers	Joe Blenkle	-	13,500
Ladybug	Joe Blenkle	1	214,450
Linking Logic	Jeff Platt	3	192
Looping	Joe Blenkle	1	26,910
Miner 2049er	Jeff Platt	-	451,885
Montezuma's Rev.	Jeff Platt	-	1,045,900
Moonsweeper	Jeff Platt	-	107,350
Motocross	Jeff Platt	2	5:46
Mountain King	Joe Blenkle	3	125,360
Mousetrap	Joe Blenkle	1	184,280
Mr. Do	Joe Blenkle	1	407,400
Mr. Do's Castle	Jeff Platt	-	535,400
Nova Blast	Joe Blenkle	1	97,400
Oil's Well	Don Lager	-	169,250
Pitfall	Jeff Platt	-	113,458
Pitfall II	Joe Blenkle	-	195,665

<u>GAME</u>	<u>PLAYER</u>	<u>LEVEL</u>	<u>SCORE</u>
Popeye	Jeff Platt	1	166,540
Q*Bert	Jeff Platt	3	1,096,030
Q*Bert's Qubes	Joe Blenkle	1	126,700
Quest For Quintana	Tom Earnest	-	144,800
River Raid	Jeff Platt	1	54,050
Roc 'N Rope	Jeff Platt	1	203,120
Rolloverture	Jeff Platt	1	100,000
Sector Alpha	Joe Blenkle	-	1,900
Sewer Sam	Scott Swenson	-	15,799
Slither	Jeff Platt	1	184,390
Smurf Rescue	Joe Blenkle	2	84,300
Spy Hunter	Gary Wien	1	211,470
Squish 'Em	Jeff Platt	-	53,620
Star Trek	Alan Samuels	-	287,925
Star Wars	Jeff Platt	3	10,281,421
Subroc	Joe Blenkle	1	340,400
Super Cross Force	Jeff Platt	1	281,300
Tapper	Joe Blenkle	1	182,375
Tarzan	Jeff Platt	4	1,524,650
Time Pilot	Robert Cavanaugh	1	201,420
Turbo	Joe Blenkle	1	42,906
Tutankam	Jeff Platt	1	170,456
Up & Down	David Dooley	1	3,011,890
Venture	Joe Blenkle	1	168,100
War Games	Joe Blenkle	6	332,120,000
War Room	Joe Blenkle	-	11,230
Wing War	Jeff Platt	-	150,200
Zaxxon	Scott Swenson	4	169,600
Zaxxon, Super	Jeff Platt	6	326,600

User Group News

The list of user's groups continues to grow. If there isn't a user's group in your area to join -- start one.

NATIONAL GROUPS

#1 Adam User's Group

Attn: Jay Forman

P.O. Box 3761

Cherry Hill, NJ

08034

ADAM User's Group

P.O. Box P

Lynbrook, NY 11563

LOCAL GROUPS

Victor L. Watford

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Russellville, AL 35653

Richard Bains

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Anchorage, AK 99507

Danny Levitt

4525 S. White Pine

Tucson, AZ

85730

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8580 Buggy Whip Rd.
Alta Loma, CA 91701
ph. 714/989-1394

Frank Reich
13381-19 Magnolia Ave.
Corona, CA 91719

Central Calif. Adam User's Group
James Turner, Jr.
20110 Ave. 19
Madera, CA 93637
ph. 299/ 661-8290

Inland Empire Users Group
Mike & Paula Smith
6644 Seine Ave.
Highland, CA 92346
ph. 714/862-5807

Hawaii AUG
Harlan Fletcher
2335C Apollo Ave.
Honolulu, HI 96818
ph. 808/422-4019

Donald R. Lager
5415 N. 2nd St.
Rockford, IL 61111
ph. 815/877-7786

Greater Cincinnati Adam Users Group
c/o Keith Bowman
P.O. Box 434
Alexandria, KY 41001

ADAM Network
P.O. Box 85
East Detroit, MI 48021

Bill & Nancy Rahn
12426-15th St. S.
Afton, MN 55001
ph. 612/436-6577

Alan L. Taylor
612 7th Ave. NE
Stewartville, MN 55976
ph. 507/533-8415 after 6 pm

Downtown Minneapolis AUG
Thomas C. Gilmore
1424 West 33rd St.
Minneapolis, MN 55408

Outsider's Users Group
Donald Viltiard
P.O. Box 771
Starkville, MS 39759

Omaha ADAM Users Club
Norman Castro
809 West 33rd Ave.
Bellevue, NE 68005
ph. 402/291-4405

Al Roginski
4327 Thorndale Pl.
Las Vegas, NV 89103

Metro Adam User's Group
Russell Williams
414 W. 149th St.
New York, NY 10031
ph. 212/208-0645
(9am-5pm M-F)

Genesee Valley Adam Users
Donald K. Zimmermah
5132 Jordon Road
Silver Springs, NY 14550

Tri-Angle Adam Users
Gary E. Hill
L-5 Oak Grove
Chapel Hill, NC 27514
ph 919/968-0299

Lake Erie Adam Users
Jonathan Fligner
2110 W. 36th Street
Lorain, OH 44503
ph. 216/282-8467
between 4:30pm & 8pm EST

The (717) Adam Users
Steve Chamberlain
120 E. 4th ST.
Bloomsburg, PA 17815

Adam Users of El Paso
Dick Lewin
6308 Falling Star
El Paso, TX
79912

Houston AAUG
c/o Thomas Rutan
1805 14th Ave. N
Texas City, TX 77590

ADAM Washington D.C. Users Group
Jim Tyson
1811 St. Roman Dr.
Vienna, VA 22180

Puget Sound Adam Network
Valorie Zimmerman
22607 SE 322nd
Kent, WA 98042 ph. 206/886-1167
or Barbara Duncan ph. 206/938-5276 evenings

Dave Sandahl
USNH, Box 2844
FPO Seattle, WA 98778

CANADA

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Alma, Quebec G8B 6B1

Mike Laurier
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Mr. G. Hibbert
P.O. Box 10
Mistatim, Saskatchewan S0E 1B0

First Canadian Adam User's Group
P.O. Box 547 Victoria Station
Westmount, Quebec H3Z 2Y6

Winnipeg Adam Users Group
David Fordyce
729 Government Ave.
Winnipeg, Manitoba R2K 1X5

Metro-Toronto Adam Group
P.O. Box 123
260 Adelaide St. East
Toronto, Ontario M5A 1N0

Bulletin Board

■ **WANTED:** If anyone in the New York area knows where I can get the new NINTENDO game system and would consider picking one up for me, contact me: D. Sage, Rt. 2, Box 211, Russellville, MO 65074, ph. 314/782-3448. I am also looking for Aquattack, Spy Hunter & Dukes of Hazzard for ADAM/Colecovision.

■ **NOTICE:** The ADAM-X-Change, 12863 Washburn, Wolcott, NY 14590 is now operating a 24 hr ADAM BBS, the COBRA BBS, 315/594-9372.

■ **WANTED:** To buy-any and all software, hardware, etc. for ADAM. Steve Berger, P.O. Box 4323, Midd, RI 02840, Ph. 401/846-8622 evenings.

■ **WANTED:** Basic or Logo programs for reading & grammar skills for teenagers with behavior problems working at 6th grade or lower level. John G.S. Albee, 1125 East 15th St., Davenport, IA 52803.

■ **WANTED:** To hear from ADAM owners in my area. David Weldy, 859 National Ave., Toledo, OH 43609.

■ **WANTED:** ADAM/Colecovision games on DDP, Disk, or Cart-new or used. Send list to Amil Dillinger, 2226 Patterson, Joplin, MO 64801.

■ **FOR SALE:** Burger Time (\$12) & Search for Ruby Chalice DDP (\$10): Guy S. Bona III, 1824 Wesley Ave., Berwyn, IL 60402.

■ **WANTED:** One on One, WarRoom, PowerLords, Aquattack, Parker Bros., & Activision games. Will buy or trade. Want to hear from other ADAM owners. Royce Mac Rae, RR# 6, Truro, N.S., Canada B2N 5B4.

■ **WANTED:** Kit to hook monitor to expansion module. Lee Smith, 105 Donna Dr., Terre Hill, PA 17581.

■ **FOR SALE:** (all working) ADAM (\$200); Disk Drive (\$150); 64K ex (\$60); CP/M & Screen Chop (\$25); Smart Letters (\$10); SmartFiler (\$10); Modem & sftwr (\$50); Super Controllers, Baseball, Football, Mousetrap, Mr. Do, Frenzy, RocnRope, DK Jr., Popeye (all for \$75) contact Raymond E. McAlpin, 1005 So. Hamlin, Park Ridge, IL 60068, ph. 312/823-5301.

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Adam Right Directory Data Packs
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These are ADAM data packs. Most contain Buck Roger's Super Game, but can be INITed and used as blank right directory data packs. Great for backing up other Super Games. Send check/money order to Sage Enterprises, Rt. 2, Box 211, Russellville, MO 65074.

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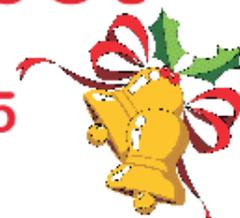
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CLOSE OUT! Colecovision cartridge specials \$4.95 each...following titles available from Coleco: Venture; from Imagic: Moonsweeper, Nova Blast. We purchased the remaining inventory of these two games from Imagic: Tournament Tennis \$19.95 and Wing War \$14.95...when they're gone, they're gone forever! Now available: Infocom games for Adam (CP/M 2.2 required) Zork I, II, III, etc. \$\$\$ CALL... **NOW AVAILABLE:** Speech Synthesizer/Clock calender...\$109.95.

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CONVERT is a utility program that allows you to transfer information from other CP/M single-sided double-density disk formats to the ADAM CP/M disk format. **CONVERT** allows you to read and write to disks that are in the following formats: Zenith 100 CP/M 85 SSDD; TRS-80 Model IV CP/M+ SSDD; and IBM CP/M-86 SSDD.

Your ADAM can only run programs that are CP/M 2.2 compatible. These programs are commonly called generic CP/M 2.2 programs. ADAM cannot generally run programs that were written for other versions of CP/M or that have been specifically configured for another computer. Most dealers and suppliers of CP/M programs have the capability of supplying CP/M 2.2 software on a variety of disk formats. Unfortunately, few companies can supply such software in the ADAM format. Most companies can supply CP/M 2.2 software in the formats that **CONVERT** can read. When buying such software make sure that you get a generic CP/M 2.2 version copied to one of the formats listed above. DO NOT buy CP/M+, CP/M 85 or CP/M 86 software. You will probably need to tell the dealer that your computer is a Z80, 8 bit system, to help avoid any confusion.

CONVERT requires at least one disk drive and one data drive. The best arrangement is to have two disk drives, although this is not necessary.

In addition to copying programs from the three formats to the ADAM format, you can also transfer data files. How does **CONVERT** work? **CONVERT** reads the necessary tracks of one disk and manipulates the information in order to put it into the format ADAM needs. **CONVERT** copies an entire disk. If you do not need all of the information copied, you can use CP/M to delete that information.

CONVERT may be obtained directly from Sage Enterprises for \$34.95 plus \$2.00 for shipping/handling (Missouri customers should include sales tax). To order send a check/money order to Sage Enterprises, Rt. 2, Box 211, Russellville, MO 65074. Sorry no COD's or charge cards. If you have additional questions please feel free to call us Monday, Tuesday, Thursday or Friday from 9:00 am to 4:00 pm CT at 314/782-3448.

CP/M PUBLIC DOMAIN FOR THE ADAM

Now many of the CP/M Public Domain programs and languages are being made available for the ADAM on ADAM disk or digital data pack. Included in this library is a wide selection of software including languages, games, utilities, text editors and formatters, and more. Each month additional software will be converted and made available to ADAM owners at a minimum cost. Because many ADAM owners do not have access to a high speed printer, we will provide the accompanying documentation in printed form when such documentation is extensive for an additional charge. While we have tested much of this software we cannot guarantee that it is all bug free; however, most of this software has been around for some time and has gone through a number of revisions to eliminate any bugs that have appeared.

All prices are given in U.S. funds. Canadian orders should be in U.S. funds or equivalent. Orders for other foreign countries add \$2 for disk and \$3 for ddp per item to cover overseas shipping. Missouri residents must include sales tax.

Order No.	Contents	Disk	DDP
cpm1	ADVENTURE (version A02) - this is the original public domain game (1 disk or ddp, disk recommended) 126K, documentation limited, instructions in text adventure game.	\$5	\$7
cpm2	TINIDISK - this is a version of Tiny Basic. Includes documentation file, 6 pages long (include \$1 for printed copy) Source file (ASM) is included. Includes STARTREK, a tinidisk version of the original trek game. (1 disk or ddp) 84K.	\$5	\$7
cpm3	PILOT & ZPILOT - two implementations of the PILOT language, includes source files and demo programs, but NO documentation. (1 disk or ddp) 93K.	\$5	\$7
cpm4	POW2 - Text formatter for use with the CP/M ED (editor), includes source and extensive documentation files - 20 pages (Include \$3 for printed copy of documents) (1 disk or ddp) 76K.	\$5	\$7
cpm5	EBASIC package - this is a subset of the CBASIC compiled Basic language. It includes several versions of the compiler and runtime Interpreter as well as the source files. It includes a HELP disk that contains documentation on CP/M, EBASIC and CBASIC in approximately 70 printed pages of material. Although some of the documentation is redundant it is extremely useful (include \$10 for a printed copy of documents) Includes a version of Othello game (5 disks or 5 ddps).	\$25	\$35
cpm6	EBASIC games (REQUIRES cpm5 above) Poker, Gunner, Civil War, Golf, Football, Blackjack, Lunar1 - text games. (1 disk or ddp) 63K.	\$5	\$7
cpm7	EBASIC games (REQUIRES cpm5 above) Startrek (2 versions), Master, SNOOPY & TWEETY picture files ready to print (1 disk or ddp) 136K.	\$5	\$7
cpm8	EBASIC games (REQUIRES cpm5 above) 2 Startreks, craps, LEM, Bagels2, Poet, TicTacToe, Hangman, Cannons, Chomp, Amaze, Ace, Fit, Fib, Core, Hello, Loan, Euclid, Stars, Keno, Strike9, Lanes, Animal, Bioprint, Story, Combine, Lander, Chase, Wumpus, Bagels, Plot2, Coretest, Love--text games (2 disks or 2 ddps) 205K.	\$10	\$14
cpm9	EBASIC games (REQUIRES cpm5 above) Blackjack, Kingdom, 23match, Swarms, Rocket, Bagels, Trap, Bullseye, Wumpas, Chief, Convert, NFL, Dice, Russian, Checkers—text games (1 disk or ddp) 73K.	\$5	\$7

Some of this software will work with a screen chop program, some will not. You will have to experiment. To order these products send *i* check or money order to Sage Enterprises, Rt. 2, Box 211, Russellville, MO 65074. All prices include shipping for U.S. and Canadian orders.



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UNREAL SOFTWARE COMPANY PRESENTS



PACKCOPY Version 1.1

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PACKCOPY allows you to make backup copies of your ADAM software. Make backup copies of Basic (includes autoboot), SmartFiler, AdamCalc, SuperGames (EVEN the short SuperGames), and almost all other software on disk or digital data pack. May be used with one or two data drives/disk drives.



To order send check or money order for \$41.50 payable to Sage Enterprises, Rt. 2, Box 211, Russellville, MO 65074. Sorry no charges or COD orders.

NOTE: PACKCOPY is intended for archival use ONLY. Any other use may be in violation of copyright laws.

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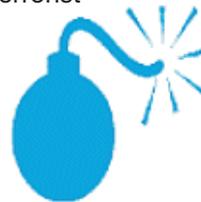
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READ THE REVIEW FROM COMPUTER ENTERTAINER JUNE 1985

ADAM FANTASY GAMER (** 1/2*** 1/2) from Martin Consulting of Canada includes three programs: two text adventures with graphics and an 'Adventure Creator,' which is the real star of the show. The programs are written in SmartBASIC, but the parser (the portion of the program that analyzes the player's keyboard input) is in machine language. This allows faster analysis or commands and use of more words in the game vocabulary than adventure games written entirely in BASIC.

The Adventures

Ideally, you should play and solve both games before moving on to the Adventure Creator, since working with the Creator reveals many secrets of the two adventures. The first game is "Bomb Squad," an intermediate-level adventure in which you must find and deactivate three bombs planted by terrorists in the embassy of Lunaria. The second is a fantasy adventure, "The Visitor," in which you befriend an alien being and help him find his mother ship. Both adventures include illustrations with some animation. These are not mere decoration, since important clues are revealed graphically. Both games are well written and compare favorably with the few

other adventures available for Adam.

Adventure Creator

The best reason for owning this program is the Adventure Creator, which is well supported with a detailed instruction manual. Creating an adventure from scratch is an involved and difficult task that is made easier with Adventure Creator. The program assumes that you understand BASIC programming, and you will have to put that knowledge to work. The manual guides you through the process of mapping your game, provides a listing of the Creator program, explains the operation and application of the parser, and teaches you the use of sprites to create animated graphics. (For some Adam owners, the section on sprites alone makes the program a worthwhile purchase.) When you have completed your first adventure with the help of the Creator, you will have learned more about programming than you knew before you started. You'll have fun, of course, but the knowledge gained is a lasting benefit of the program. (Solo use; Keyboard; Digital data pack.) Recommended (SRP \$34.95)

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