EXPANDABLE COMPUTER NEWS

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ECN An Independent Publication for users of the Adam Computer

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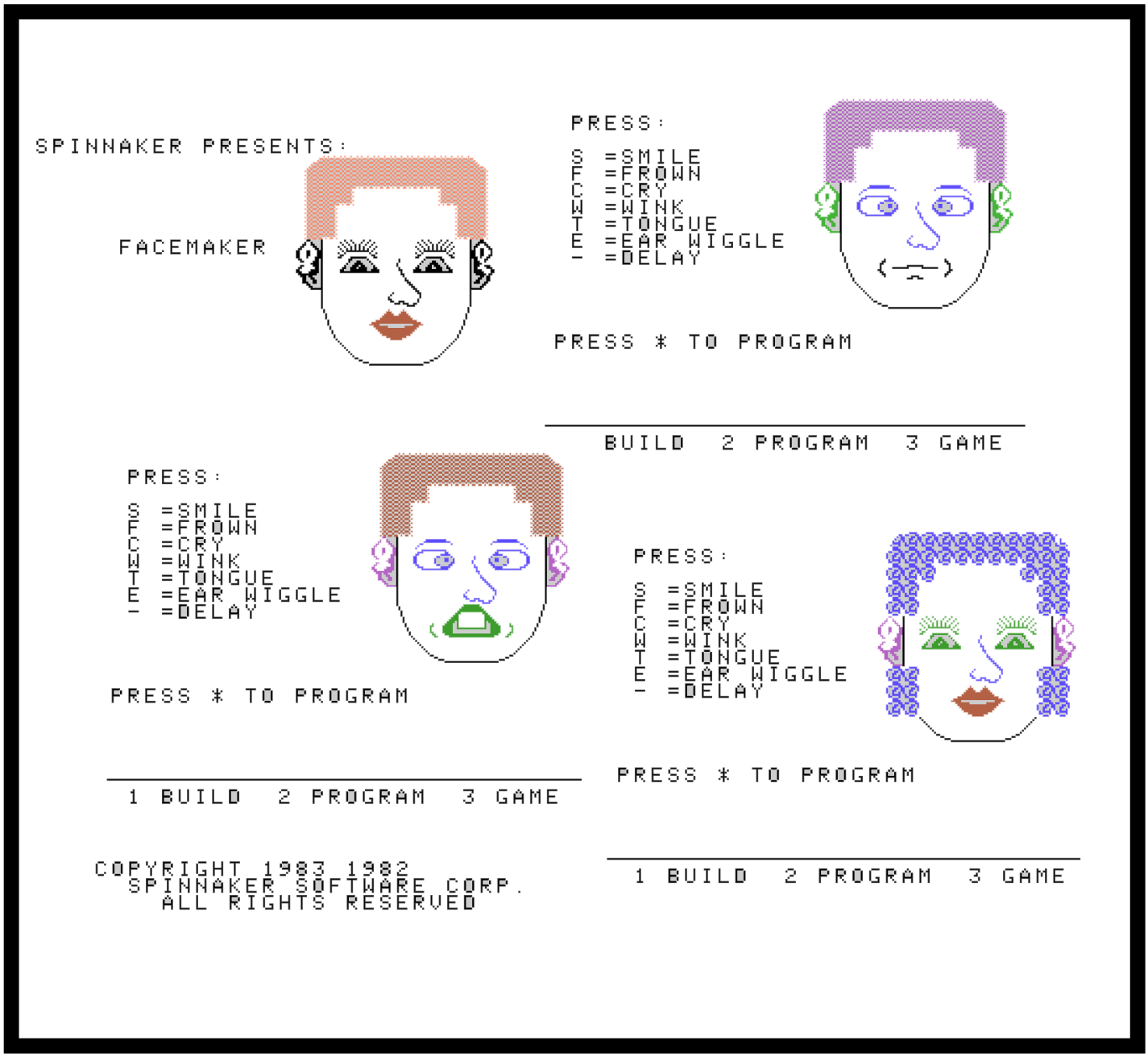

ISSUE 10

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ITEM	Foreign Price	U.S. & Canadian Price
Blank Data Pack (Loranger)	$8.00 US	$5.52 US
PACKCOPY software copier	$45.50 US	$41.50 US
CONVERT CP/M Disk Transfer Program	$40.95 US	$36.95 US
Program Library I, II, III (price each)	$13.30 US	$9.95 US

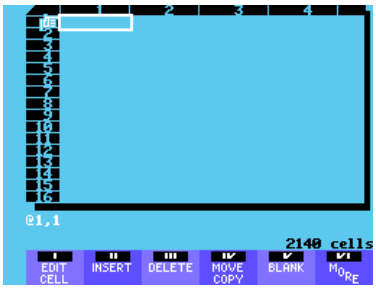
ALL SOFTWARE NOW AVAILABLE ON DISK OR DDP

Ramblings From The Ridge
by D. Sage

Every issue seems to find us involved in some sort of change. Perhaps the biggest change to occur this month is the fact that we now have established regular daytime office hours. Sage Enterprises is now open for business Monday, Tuesday, Thursday and Friday from 9 a.m. until noon and from 2 p.m. until 4 p.m. If you need to get in touch with me these are the times that I am now available. The office will now be closed on Wednesdays and weekends.

Another change is the fact that this newsletter is now being written with WordPerfect on our Zenith 100. WordPerfect greatly simplifies the process of producing a publication in columns; it also greatly simplifies the overall layout process.

As I indicated last time, we will try to catch up on reviews in this issue. We appreciate the many products that have been sent to us for review. In the future we will make every effort to stay current. As I have indicated before, it is impossible in an initial review, to test all of the features of a particular program. You can imagine the number of hours that would be required to fully put a program like ADAMCalc through its paces. Our reviews and ratings of products are based on our initial perceptions and that is why it is important that others who use these products provide us with feedback, especially when you find that the product does not perform to your standards. Many of our initial reviews of SmartFiler were quite positive, because many of the bugs in the early versions could not be identified when using small files. These problems became apparent only through continued use.



Your interests are quite varied and we will continue to try to present a variety of materials in ECN. Many of you indicated that you liked the emphasis on CP/M in our last issue. We will continue to try to do this subject justice, but we also must recognize that many of our readers do not have CP/M for their ADAMs. For them we will continue to provide Basic programs, technical information and reviews.

The universal printer interface from Eve Electronics is alive and well (see my review in this issue). In addition Eve has available a power supply and CP/M software for the ADAM. Eve also plans to produce a speech synthesizer/clock calendar, an 80 column adapter, and a disk controller unit. The latter will allow you to connect your ADAM to hard disks and other standard disk drives. For more information send for their catalog (Eve Electronic Systems, 2 Vernon St., Suite 404, Framingham, MA 01701). Their products will also be available through a number of the mail order dealers who carry ADAM products.

Elliam Associates, 24000 Bessemer Street, Woodland Hills, CA 91367 (ph. 818/348-4278) has announced Screen Chop for the ADAM (CP/M). This program "takes data coming to the screen in long lines and chops them so they display as individual lines - eliminating the need for horizontal scrolling." Sounds like a good idea. Elliam also carries other CP/M software in ADAM CP/M format.

Coleco has finally begun shipping Jeopardy, Family Feud, and 2010, the text adventure. No word yet on Best of Electronic Arts. We have had reports that some people have had trouble getting these games to work. Sounds like the image transfer to data pack may have been a little weaker than normal resulting in poor recording quality.

Generally, the production of cartridges for the Colecovision/ADAM is drying up. Most companies are getting out of the production of cartridge software entirely and are selling off inventory at reduced prices. Some companies are leaving the computer game market entirely. Now is the time to get those games you want; almost every game is now selling at reduced prices and many at clearance prices (under $10).

We have been advised by some of our readers that another company is allegedly starting up "two new ADAM" publications. I want to say that neither ECN nor myself is in any way involved with this company or with any other company that produces publications for the ADAM. I have not authorized anyone to use my name in conjunction with any other publication.

One of our subscribers, Buck Rogers, has advised me that he and some of his associates have been busy developing a number of hardware items for the ADAM. Because of the difficulties involved in developing new products they have been forced to limit orders to a minimum of six units of any one type. They cannot honor orders for less at this time. Orders

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will take from 6 to 8 weeks to fill. Those of you who belong to user's groups may want to contact Mr. Rogers (795 Garfield, Lander, WY 82520, ph. 307/332-9250, recorder on line for messages) for more information. If you want a response be sure to include a self-addressed, stamped return envelope. Mr. Rogers advises us that they currently have a clock-calendar card available and will soon have an RS232/Centronics interface, 128K RAM Disk module, 256K RAM Disk module. They are also working on a "Double Hi-Res" card, an RGB monitor hook-up, and are considering developing an emulator for either the Apple or the IBM.

I would like to remind all of you that developing new products does take time. For those of you who have stayed with the ADAM, you are now seeing the many new products that you asked for begin appearing on the market. My sources tell me there is more to come. Software and hardware development is a slow and painful process. Products must be carefully tested and debugged to insure that when you get them, they will work as expected. The ADAM will have been on the market for two years as of this coming October-November and we arc beginning to see many useful items appear from third-party developers.

Through the assistance of one of our subscribers, ECN has been able to make a special purchase of digital data drives. If you only have one drive and would like to obtain a second one or would just like to have a spare, now is the time to buy. We are able to make these available to subscribers at $55 each or two for $100 plus shipping (see our ad elsewhere for more details). Delivery times will probably be from four to six weeks on these items and we will be able to offer only a 30 day warranty instead of the usual 90 days, because of this special discount price.

In addition to reviews of new products, we have another fine article on patching CP/M. This issue also includes a number of articles submitted by you, our subscribers, and more Basic programs as well as our usual columns. I hope you will enjoy it.

We are in the process of accelerating our publication schedule again. As you know our previous efforts have not been very successful. Nevertheless, my goal is to have the Jan-Feb issue out before Christmas. If you have an article or review you plan to submit, remember that we will be going to press earlier and earlier each issue.

I want to give special thanks to our regular contributors, who have done so much to make ECN what it is. Thank you -- Joe, Jeff and John and everyone else who has helped in the past.

Finally, our back issue supply is nearly exhausted. Of the early issues, we now only have issues 1 and 2 available. We still have a few copies of issue 7 available and we ended up having to reprint issue 8, so it is now available. NONE of the other back issues are available. The price for back issues is $3.00 each.

What About The Competition?
by D. Sage

There is a lot of hot air flowing in the home computer market and little of it seems to be coming from any real equipment. Everyone says they are shipping, but we are having difficulty finding out where these phantom machines are going. Atari says that they are beginning to ship the 520ST in quantity, but our local distributor still hasn't seen a single machine, except for demonstration models. At least the ST is now in production, although the operating system is still being supplied on disk instead of ROM. We get different stories concerning software support for the ST. Large companies are generally taking a wait and see attitude, while the smaller companies are eager to get busy with development. Many of the initial orders for the ST have come from small developers who were unwilling to pay the original $5000 price for pre-release systems.

Spectravideo (Bondwell) has been running new product announcements in all the major computer magazines. Behind the scenes, however, they have put a hold on their announced September release date. Company representatives say they want to wait until after the COMDEX in Chicago before making a final decision on the introduction of the Express MSX computer in the U.S. This leaves the U.S. MSX market to Yamaha, who has been selling their machines as part of a music system. The Express was one of the few MSX machines to have a built in disk drive and included CP/M support as well.

General Electric finally made an announcement for their HOMEMINDER, definitely not a product to get excited about. The HomeMinder is another one of those programmable home control systems that turns your lights on and off. The main difference between this one and the others is that it uses your TV screen as the display device for the various options and

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settings. The price of the system with some control modules is about $500. I'm sure all of you will want to rush out and buy these up as quickly as you can.

All of the computer publications seem to be really pushing the Commodore/Amiga. I guess they hope the machine will generate a lot of ad revenue. Commodore has really been going out of its way to be nice to all the publications, insuring that they all get a chance to work with a review machine. I still say that the price on this product is too high to make it in the real home market. On top of that an outside developer has come up with color for the Macintosh. Because of past practices. Commodore also continues to receive resistance from dealers. Many of them are leery of carrying Commodore products again.

As for the Commodore 128s, according to a major distributor, they have yet to receive a shipment. They indicated that it would be another week to ten days before they received their first shipment of 128s and late in September before they received any of the 1571 disk drives. As I have indicated before, the 128 sounds like a good product, but Commodore is notorious for field testing their computers on buyers. If you get one early, you should expect to have some problems. Make sure you read the warranty carefully before buying and at first sign of any problems exchange it before the warranty runs out. Commodore says they are doing more testing, but who knows what that means. If you are planning on getting one of their new disk drives, you may want to wait for the 1572 dual disk drive.

Sinclair has been having their share of problems. Recently it was announced that Sinclair would be bought by Pergamon Press. We expect that this move will lead to the death of the QL, at least as far as the U.S. market is concerned.

The months ahead are sure to be interesting. We are working hard to keep in touch with new products and developments throughout the industry. If you hear of any developments that may be of interest to others, let us know.

ADAM Update
by Buck Rogers

There have been a number of production line changes in the ADAM. For example, the original ADAM printer was incredibly noisy, as well as super slow. In addition the plastic device which held the paper to the rubber platen was poorly shaped and would occasionally tear single sheets when they were inserted. The paper was not tightly held, allowing the sheet to skew from side to side.

The latest production printer has an improved paper holding device, which is better shaped; a vastly improved printer head, resulting in a great deal less noise. The printer is still noisy, but not deafening as before.

We have also noted several changes in the Digital Data Pack Drives. The metallic holding clips have seen changes three times and the ejection mechanism has been changed three times as well. The earlier models had a centrally-located large grommet on the back of the pack with the two cables for the nine pin and eight pin connectors. These cables were difficult to dress properly if one had installed the modem and the 64K memory upgrade. Later models had the cables dressed to the right and held with a plastic wire tie.

On a new tack, a clock-calendar card is available now. A large memory upgrade, an RS232C interface, a double hi-resolution card, and an 80 column card are all in the offing. Sometime this fall or early winter an RGB conversion will be ready.

Those who use a television set for their ADAM do not know what they are missing, until they connect the ADAM to a Teknika MJ22 monitor. There is no bleed of colors, no smear, just beautiful color. The MJ22 is obsolescence proof, since it will accept both Apple and/or IBM (positive or negative pulse), composite, separated, or RGB. It is the only monitor with all these features. Contact me for information if you decide to buy one. I give all ADAM owners a special discount on the MJ22.

It is a fact that when a person gets an ADAM working correctly, there is absolutely nothing available which can compare. The ADAM presently is selling for $299.97. Just checking the price on a comparable quality printer will show you that you are getting a complete setup for less than the cost of the printer. I just bought two more for spares and whatever. It is without a doubt the best bargain available today.

A word of warning, though it is late coming, the plugs and sockets provided for the Digital Data Drives are not coded or goof-proof and therefore can be inserted one pin wrong to the left or to the right. If this happens, you can write off that drive and possibly other parts of your computer, including a disk drive.

One more addition has been made to the latest ADAMs; some of the ferrite filters for the console are now built-in and can be seen through the slots in the bottom of the compartment containing the sockets for the expansion modules. These work both ways, keeping RF generated in the computer from interfering with nearby equipment and I am sure they also keep other equipment from interfering with the ADAM. This is evident because the new ones do not

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have anywhere near the tendency to "lock-up" that the previous ones had.

That is about all I have for now, except: Coleco has stopped answering the ADAM "Help Hotline", 1-800-842-1225. This line, during business hours, gives nothing but a busy signal and a recording after those hours. Five of us have tried over 850 calls at various times of the day, always with a busy signal, since June 1. They also do not answer letters for help, even ignoring certified and registered letters, including those suggesting legal action! As stated before the computer is a bargain, but it would appear that the old adage of "Caveat Emptor" (Let the buyer beware) would apply.

If I may be of any service to any readers, my address is as follows: Buck A. Rogers, 795 Garfield, Lander, WY 82520, phone 307/332-9250, recorder on line.

EDITOR'S NOTE: I have been advised that the hotline has not been disconnected, but is simply overloaded. Apparently, most of the time there are fewer than 5 or 6 operators answering calls. Unless you are lucky you will have a difficult time getting through, especially since these numbers are also being used to take orders for ADAM products. Nevertheless, I have been contacted by people who have managed to get through and were referred to us for help by the Coleco hotline staff.

CP/M & ADAM: Patches
by John Moore

If you are running more than one drive on your ADAM under CP/M, you will eventually forget to type in the correct drive designator and will receive an error message for your trouble. There is a simple patch available which can make your life easier. With this patch installed, whenever you specify a .COM file which does not exist on the logged-in drive, the CCP will look at the boot drive (A:) before returning an error message. If the filename DOES exist on the boot drive, it will be loaded and run. This action is transparent to the user and takes little extra time.

The advantage of this patch to you is that you could leave a disk with all your system utilities in drive A: and then log in another drive for all operations, allowing you to call your utilities with the same ease you use the built-in CP/M functions such as DIR.

It is my understanding that the original idea for this patch came from the fertile mind of Irv Hoff, creator of the MDM740 modem series, among others. To install the patch you will need the special version of SYSGEN.COM outlined in issue 9 of ECN. I will use the normal convention where your input is lowercase, machine output is capitalized and [RET] means the RETURN key.

```
A0> sysgen [RET]
SYSTEM GENERATOR
ENTER SOURCE DRIVE
(OR RETURN TO SKIP)? a [RET]
ENTER DESTINATION DRIVE
(OR RETURN TO REBOOT)? [RET]
A0> ddt [RET]
DDT VERS 2.2
-a2ddb [RET]
2DDB  jz cbf2 [RET]
2DDE  . [RET]
-a2ef2 [RET]
2EF2   lxi h, cbf0 [RET]
2EF5   ora m [RET]
2EF6   jnz cb6b [RET]
2EF9   inr m [RET]
2EFA  lxi d, cbd6 [RET]
2EFD jmp cacd [RET]
2F00  . [RET]
-g0 [RET]
a0> sysgen [RET]
SYSTEM GENERATOR
ENTER SOURCE DRIVE
(OR RETURN TO SKIP)? [RET]
ENTER DESTINATION DRIVE
(OR RETURN TO REBOOT)? a [RET]
```

ADAM should respond with a "SYSTEM WRITTEN SUCCESSFULLY" message. Reboot your system, change logged in drives, and call for a .COM file that does not exist on the current drive, but DOES exist on the boot drive. Your ADAM should immediately load and run it for you.

A few points of interest are in order. When SYSGEN.COM creates an image of the CCP in memory it begins at 2700 hex. The data at that location exactly corresponds to the first word of the CCP at C400 hex. Any changes you make to the

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image must take place at the relatively correct address, but all absolute addresses must be exact. As an example, look at the first instruction we entered, a jump on zero instruction (JZ) to address CBF2. This is the actual address of the subroutine we will put into the CCP. Since we are first going to put the subroutine into the image of the CCP, we have to figure out where the relative address is. Since the image of the CCP starts at 2700 and the actual CCP is at C400, we can figure an offset. Since the subroutine will be at CBF2 we can subtract C400. Thus our subroutine will be 7F2 bytes into the CCP. Taking the start of the image and adding 7F2, we get 2EF2, the address at which our subroutine will start in the CCP image.

Since DIGITAL RESEARCH insists that the CCP of all the CP/M systems be identical, you can use other system patches on your ADAM as long as you know how many bytes the code occurs from the first word of the CCP.

Lightning and Data Files
by John Moore

Most of us have learned a healthy respect for lightning. It represents enormous power and the voltages that can be induced by a static discharge of this magnitude can permanently damage your ADAM.

Many of us have added suppressors and filters to our power lines and sit back with the confidence that we have done all we can. Yet, a number of us are taking a chance that we may never have considered!

The data on our tapes and disks is magnetically encoded.

This would be relatively immune to any static discharge that didn't actually damage the media surface, but we should never overlook the fact that the current caused by a lightning discharge through a conductor will create a MAGNETIC field sufficient to destroy the information encoded on the disk or tape.

To avoid this, be sure that you keep several feet between your precious store of data and almost any metal that could provide a discharge path for lightning.

This means power lines, TV or cable lead-ins, and even metal shelving that can conduct a charge and possibly wipe out your media. I don't suggest that you become paranoid about this, but a number of audio archivists have reported damage from this phenomenon. Fortunately, this problem is not that difficult to prevent.

Telecommunications
by Joe Blenkle

Question: How much would you be willing to pay for a telecommunications program that features a phone directory, dialing, special function keys, up/downloading capability with XModem protocol and other features too numerous to mention?

No matter what your answer might be, there is now one that is free for the taking and has all the above mentioned features. The program is a CP/M based offshoot of Modem7 called Madam7 and it's available right now on CompuServe's PCS-22 Creative Computing ADAM CP/M forum (Sect. 8).

There are two other files that should be obtained with this program. One is a documentation file and the other is called M7LIB.LIB which is a library file containing programs to modify the phone directory. You will also need some version of NULU to extract the programs from the library.

Although I haven't had as much opportunity to work with MADAM7 as I would have liked before writing this column, from what I've seen it is very user friendly with help and function menus that are easy to call up.

The only drawback is that MADAM7 is another 80-column program that has to be run on ADAM's 30 column CP/M screen. Although with another public domain program such as Elliam Assoc., CHOP.COM which wraps the characters down to the next line every 29 characters, MADAM7's use becomes tolerable.

The documentation file is six pages long and I'd recommend printing it out so you can have it in front of you when you use MADAM7. It's fairly easy to understand and apparently was written by ADAMite John Moore of Atlanta, Georgia whose name follows the text. I'll assume that he also converted the program and would like to send a hearty thanks to him for his work.

MADAM7 is definitely a superior program to Coleco's own ADAMLink I & II as there is very little that you can't do with it. Since it supports XMODEM protocol, the user now has access to a wealth of public domain CP/M programs which require this protocol for transmission. And as stated before, MADAM7 supports dialing from ADAM's modem, something previous MODEM7 and MEX conversions have not done.

Besides being able to down/upload, MADAM7 also has a capture feature for text files as well as definable function keys (although you need a program called M7FNK.COM which was absent from CIS at this writing).

I would definitely recommend obtaining MADAM7 and I think you'll find that once you get used to its

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many commands, you'll probably put ADAMLink on the shelf permanently.

For those of you that don't subscribe to CIS or don't have one of the primitive CP/M communications programs that have appeared there before so you can download it, here is how to get it. If you send a check or money order for $5.00 to me at the address listed below, I will send you MADAM7.COM and M7LIB.COM on disk (available only on disk). As space permits, I will also put a variety of other public domain CP/M programs on the disk.

You must have CP/M to run these programs. The CP/M system will not be written to the disk, only the programs. I will however leave space for you to use SYSGEN to write the system to the disk yourself. The $5 goes to cover my cost for mailing and duplicating. Send your requests to: Joe Blenkle, P.O. Box 41746, Sacramento, CA 95841.

Product Review: Eve SP-1 Interface
by D. Sage
Product: Universal Interface
Manufacturer: Eve Electronics Systems, 2 Vernon St., Suite 404, Framingham, MA 01701, Ph. 617/653- 3003
Requirements: ADAM, Disk Drive
Media: Software on Disk/Hardware
Warranty: 90 day Price: $139.00 plus shipping. Available from Eve and other suppliers
Rating: 9

As I indicated last issue, I was having problems getting the Eve SP-1 interface working with some of our printers. I felt that the true test of this product would be its ability to work with a number of "Centronics" type printers. Unfortunately the "Centronics" standard is not as standard as it should be. Some of our printers required TTL levels on the strobe line in excess of those provided by the SP-1.

This was really a fault of the printers since the values required exceeded those provided in the standard. Nevertheless, Hank Szretter of Eve worked to resolve these problems and has incorporated the changes in the current models of SP-1's and has offered to upgrade the early models. This kind of service is important and makes this an extremely desirable product.

For those of you who are not familiar with universal interfaces, you should know that most such devices provide support for a serial interface such as the RS-232C standard and a parallel interface like the "Centronics." Both of these are provided on the SP-1. While most of you will use a parallel printer using the "Centronics" interface, some of you may be unfortunate enough to have a serial printer. The serial interface can be used to hook up external modems and a wide array of external devices such as speech synthesizers, digital to analog converters, and other products that use this standard.

The SP-1 comes with support for Basic and CP/M and includes a program that reads SmartWriter files in Basic and prints them. Considering the ADAM's design and operating system, there is not much else you could ask for. We tested this product in both Basic and CP/M using a Gorilla Banana dot-matrix printer, an Olivetti PR2300 jet ink printer, an MPI-99 dot-matrix printer and a Silver-Reed EXP550 daisy-wheel printer.

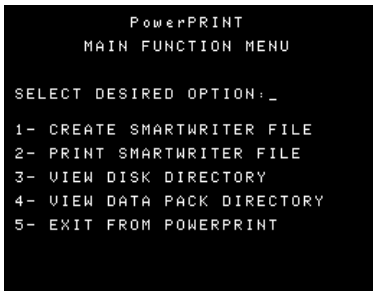
The current version of the SP-1 worked with all of these. Our Olivetti jet-ink has to be the prize. It is extremely fast and only whispers as it blazes across the paper. Now what I need is a graphics screen dump program and a color printer.

For all of you who have complained about the ADAM's noisy and slow printer, here is the solution. Eve has supported us, now let's support them. This is an excellent product that opens up the ADAM's power and usefulness. I highly recommend it.

Product Review: PowerPrint
by Mitch Powell
Product: SmartWriter File Utility
Manufacturer: Strategic Software
Requirements: ADAM
Media: DDP
Warranty: 90 day Price: $24.95 plus $2.50 SH from MW Ruth Co.
Rating: 9

I received PowerPrint after a four week wait, however unlike other mail-order suppliers, M. W. Ruth printed a notice with the approximate delivery date in their advertisement.

The software does everything stated In the catalog, however, the procedures to set up your files can cause some confusion if you fail to understand that PowerPrint operates via its own menu and is used to enhance your SmartWriter files.



The instruction manual is well written and easy to follow. First you load SmartBASIC and then the PowerPrint ddp. The copyright notice stays on your screen while the main program loads. The "MAIN FUNCTION MENU" will appear and then the fun begins.

The main options are: create a file, print a file, view disk or data pack directory, and exit back to

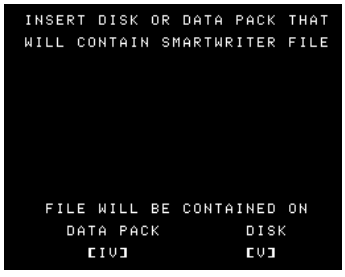
Basic. To use PowerPrint's features you have to use the create a file option, exit PowerPrint, remove the data pack and then enter SmartWriter. SmartWriter is then used to "GET" this new file from your disk or ddp and once loaded you use SmartWriter as before but you can now insert the "Embedded Commands" to be used by PowerPrint. These commands allow you to center, right justify, set line spacing and width (margins), footnotes, or headers, set page number, skip pages and change your daisy wheel. When you have completed entering your text, save it, reload Basic and PowerPrint. Then all you do is select the menu option of print a SmartWriter file and answer the setup questions. The program will then turn the printer on and begin printing your file.

I feel this software fills all the gaps we ADAM owners have had to live with SmartWriter and as a printing enhancement program makes it an even better tool. I subtracted one point from the rating because page 55 of your ADAM set-up manual and page 5 of the accessory kit manual both WARN the user that "Before changing the Daisy Wheel, the power plug must be disconnected." Strategic Software has a disclaimer that they will not be responsible for any damage caused to your equipment by the use of the change Daisy Wheel command.

Product Review: PowerPrint (10-2)
by Jay H. Wald
Rating: 7

Strategic Software's PowerPrint program is billed as a complete printing enhancement for the ADAM. Let's say that it adds some printing capabilities to the ADAM that SmartWriter lacks at the expense of some printing flexibility and speed.

Once a text file is set up for PowerPrint, you use SmartWriter to write the text file-- none of SmartWriter's word processing features are lost. If you decide to forego PowerPrint's printing capabilities and use the SmartWriter's printing capabilities, that is also OK; it hasn't cost you any flexibility. The rub is that when you use PowerPrint's printing capabilities, you lose the ability to print only parts of the text file or stop the printing in mid-stream. I hope that you're not in a hurry. To print, you must first reload Basic and re-run the 14K PowerPrint program which is a bit time consuming. Then PowerPrint takes over and the printing is painfully slow (yes, much slower than the snail's pace of SmartWriter).



Typing is not bi-directional and there is a pause after each line as the program recalculates how to print the next line. For example this review took 290 seconds to print with SmartWriter and 780 seconds with PowerPRINT! (Editors Note: this review has been edited and shortened. The times reported were based on the original length of the review). Not too swift, but then SmartWriter can't right-justify and PowerPrint is less expensive than any other word-processing enhancement alternative.

One last note: the manual says that you can't modify any previously typed files to be useable by PowerPrint. The good news is that isn't true. By loading a PowerPrint file on top of a SmartWriter file in SmartWriter mode, the merged text becomes PowerPRINT compatible.

Product Review: PowerPrint (10-3)
by D. Sage
Price: Review copy supplied by manufacturer

I generally would have to say that I concure with the comments about this program in the two proceeding reviews. PowerPrint solves most of the shortcomings found in SmartWriter. The things it does are the very things many of you indicated that you would like to see in a print formatting utility. Our tests indicate that the features included in the program do work correctly.

The program has features that may be used at time of printing and features that may be used through embedded commands that are entered when the text is entered into the file in SmartWriter. The commands are straight forward and easy to use. The only real shortcomings that the program has are its speed when printing your document and the built in delays that occur between sheets. Rather than having the program wait 2 minutes between pages, I would rather have the program stop and then start by a keyboard command. The printing can be

temporarily halted at any time by using a "Control-S." Otherwise this is a useful product that many of you may want to add to your program library. Recommended.

This product is not available directly from the manufacturer, but must be ordered from one of the mail order companies that carry ADAM products.

Product Review: Motherlode
by D. Sage
Product: Text Adventure
Manufacturer: Bob Zimmerman, 22607 SE 322, Kent, WA 98042
Requirements: ADAM
Price: $5.00 on disk or user supplied data pack and $3.00 from the Zimmermans. This is a FREEWARE product
Rating: 6-7

I have never been a big fan of text adventure games, because they are time consuming. I like them, but I just don't have the time to invest in solving them. For those of you who have the time and a high frustration level these games are great. If you have never played one of these games then Motherlode is a good place to start.

This is a two part game. First you have to collect supplies and find a way into the Motherlode mine. Second you have to find the Motherlode gold and return safely to the surface of the mine. Once you have entered the mine, there is a delay while the second part of the game loads. For this reason I would recommend the disk version as it is considerably faster than the ddp one.

I don't want to give the game away, but what you do in the first part of the game is fairly critical to your success in the second part. The game uses a fairly simple two word parser and the list of commands available is relatively limited. Included with the instructions is a list of keywords. The map for the first part of the game is relatively small but the game play is good and the situations seem to change dependent on your previous actions. The entrance to the mine is not difficult to find, but succeeding once you have entered the mine is more difficult. If you get in trouble you can type "help" and you will be given a clue.

I would recommend this game to those of you who enjoy text adventures, especially for those of you who have never played the more elaborate games such as Enchanter that are available on other computers and for the ADAM in CP/M. This product is FREEWARE. It is available for a minimal charge and if you like it you are encouraged to make a further contribution to the author. Let's hope Bob keeps up the good work. I am certainly looking forward to seeing what he will produce next.

Product Review: Las Vegas ADAM Club Archives #1
by D. Sage
Product: Software collection
Manufacturer: Las Vegas ADAM Club, P.O. Box 81146, Las Vegas, NV 89103
Media: Disk or DDP
Requirements: ADAM
Price: $20.00 from LV ADAM Club. Review copy supplied by LVAC
Rating: 6-7

This is a good solid collection of programs from one of the many ADAM user's groups. The effort this group has put into this product should be applauded and emulated by other groups. Efforts such as this will make the ADAM useful to everyone for a long time.

This package of programs is menu driven. Instructions are accessible from the menu without having to load SmartWriter and print them out. The collection includes the following programs: I. Q. Test; Catalog P/O, a program to print catalogues of disks and DDPs; Letter Match, a guessing game; Snake Eyes, a dice game using joysticks; Card Trick, the

computer guesses your card; Color Pokes, a program that lets you choose text, background and border programs then provides you with the necessary pokes; Morse Code, learn morse code; Match'em, a concentration type game; Triv. Maker, allows you to make up your own questions to use in Triv Game; Triv Game, a trivia type game with 50 questions on TV trivia; and Questionaire, which provides you an opportunity to give feedback to the LV Adam Club and get a discount on their next product.

The programs make good use of color and limited use of graphics. The games are easy to play with no complex instructions. The I.Q. test and the Trivia game are extremely well done. In the TV trivia game you are subjected to a timer, so that your score is

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determined by the speed of your answers. Although most of these programs are short, they are well done. The collection is suited for family play and entertainment. Recommended.

Product Review: Graverobber
by Jeff Silva
Product: Game
Manufacturer: International Computing, P.O. Box 176, Patterson, NC 28661
Media: Disk or DDP
Requirements: ADAM, SmartLogo, Joystick
Warranty: One year
Price: $24.95
Rating: 5

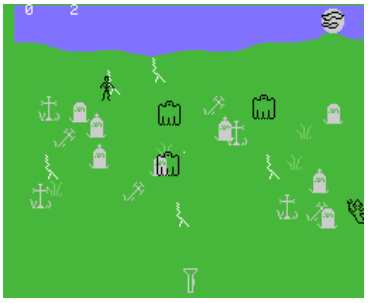
In this SmartLogo game from Tony Petrecca and International Computing, you are a flashlight that must avoid lightning while shooting horizontally moving ghosts and demons in a graveyard. If you are successful in dispatching 30 ghosts, your flashlight moves to the second screen, where you must shoot various treasures while avoiding the deadly touch of advancing groups of ghosts, demons, etc.

This game, according to the advertisement, is supposed to have "four arcade quality screens with super sound." I found that this game has two screens with OK sound. You must first load SmartLogo, then type, LOAD "GHOST#1. Don't try to go back to the Demos or tutorials in SmartLogo after play because it messes up some of the shapes and movements are also affected. It is a very simple, pretty slow, and pretty hard slide and shoot game. By itself it is not worth the $24.95 price tag. The accuracy of your flashlight beams and the lightning which assails you are not too accurate. You can kill demons with near misses and likewise, lightning goes right through you, but near misses kill you. Further, when you get to the second screen, there is a "TOO MANY DEMONS" message and a cursor that appears at the bottom of the screen, though it doesn't seem to affect game play.

All in all, if this game was on a disk or data pack with ten or so different SmartLogo games, it might have been worth the price. By itself, you are paying $24.95 for a game that is only slightly better than a simple Basic game like tennis. The graphics are pretty but the gameplay is slow and inaccurate. I don't think this is the programmer's fault, it is just the way SmartLogo works. The only positive thing I can say about this game is that it shows you the capabilities of SmartLogo. Graverobber for the price is a moneyrobber. It gets a "5" for the educational value in learning how to put together a simple SmartLogo type game. The game program is listable.

Product Review: Graverobber (10-2)
by D. Sage
Price: Review copy supplied by manufacturer
Rating: 1

This game just isn't of commercial quality in its current form. The game play is so poor, because of SmartLogo's speed and lack of responsiveness. While the concept may be good and the programmer's effort may be laudable, I agree with the previous review that this should have been one of several games in a package and not a package by itself.



What we all need are some good development tools for the ADAM. That would certainly solve some of these problems. Written in machine language this would probably have been an enjoyable game. As it is I cannot recommend it.

Product Review: Tomb
by D. Sage
Product: Adventure Game
Manufacturer: International Computing, P.O. Box 176, Patterson, NC 28661
Media: Disk or DDP
Requirements: ADAM
Warranty: 1 year
Price: $24.95. Review copy supplied by manufacturer
Rating: 5-6

TOMB is another adventure game from International Computing. This one was written by Howard Cowles. The game takes place in a house with a relatively limited map. In spite of the small map size, I found this game to be somewhat difficult to solve.

It includes an intervening witch who can turn you into stone and end the game.

I rated this game down because of its limited

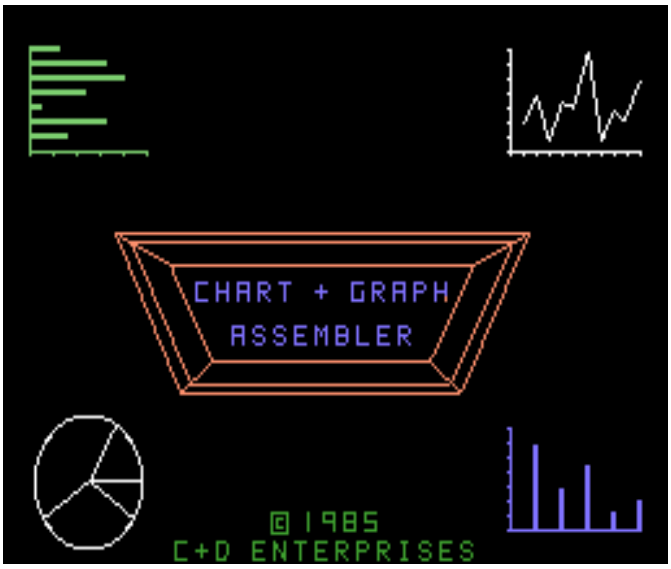
vocabulary, the fact that you are not provided with a list of keywords and the absence of a help function.

Because of the limited vocabulary, I found the game to be somewhat frustrating although it was entertaining. Besides avoiding the witch, there is no goal given in the instructions. You will have to figure that out on your own.

Overall, I would recommend this game to adventurers and particularly to beginning adventurers.

Product Review: Chart & Graph Assembler
by D. Sage
Product: Graphics Aid
Manufacturer: Extended Software Co., 11987 Cedarcreek Drive, Cincinnati, OH 45240
Media: Disk or DDP
Requirements: ADAM
Warranty: 120 days
Price: $24.95
Rating: 4-5

This program allows you to create pie charts, bar, line or step graphs. The instructions are clear and the program is easy to use. Its primary limitation is that you can only print bar charts. While the on screen representations are very good, the other charts and graphs cannot be printed. Now that dot matrix



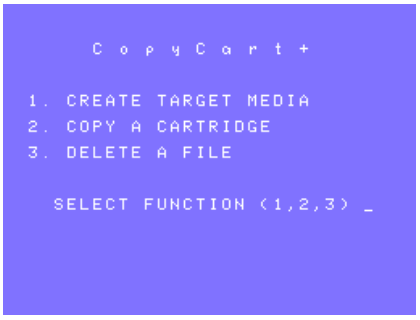
printers can be used with the ADAM, I would hope that the authors of the program would make the modifications necessary to allow printing of the other types of charts and graphs.

For the price this is a fairly limited program. I feel that the authors could have taken more pains with the program and added more enhancements. One example is the fact that you cannot label the range or the units of measure. You ought to be able to indicated whether the units of measure are bushels, dollars, or whatever. In addition there is no provision for providing a title for the chart or graph. Bar charts are printed from left to right and cannot be printed vertically. This is not a difficult feature to add. In addition you can draw somewhat limited line charts on this type of printer. With some effort you can even draw rough pie charts. Without some of these additional features or enhancements, it is difficult for me to recommend this program.

Product Review: Copycart 1.0
by Joe Blenkle
Product: Cartridge Copier
Manufacturer: MMSG, P.O. Box 1112, Broomfield, CO 80020
Media: Disk or DDP
Requirements: ADAM
Warranty: 90 day
Price: $15.00
Rating: 8

Here it is, the first commercially available cartridge copy program for the ADAM. Copycart 1.0 does exactly that. It copies ADAM compatible game cartridges to either disk or ddp. The program is written in machine language and is extremely fast.

Pressing return from the title screen gets you into the program which presents you with three options: 1. CREATE TARGET MEDIA - this formats your disk or DDP so that it will auto-boot the games; 2. COPY A CARTRIDGE - this will copy your game cartridges to your data pack or disk (the only limiting factor as to how many games will fit on a given ddp or disk is the total size of the copied games); 3 - DELETE A FILE - this is used to delete unwanted games from your media.



After you have copied your games to either a DDP or disk, you can then use that disk or ddp like any other self-booting ADAM program. Simply insert the media in the drive and pull reset. You will then be presented with a menu with numbers and game titles. To run a chosen game you need simply to input the number and press return.

Copycart will not copy all ADAM cartridges. Some cartridges contain routines to check and see if the program is in ROM or RAM. A cartridge of course is ROM and Copycart loads the game into RAM. Of the many game cartridges I own, the only ones I have found that won't copy are Tapper, Pitfall, River Raid,

Keystone Kapers, The Heist, and Destructor. Although I don't own it, I also understand that Spy Hunter will not copy.

I rate Copycart a solid eight and it is a much needed utility. To me it is much more desirable to put half a dozen or so games on a disk and merely have to pull the reset switch to change games than to constantly be turning ADAM on and off.

Product Review: CP/M Workshop
by Francis Sifers
Product: Learning Aid
Manufacturer: Text Sciences Corporation
Media: 2 disks
Requirements: ADAM, disk drive
Warranty: 30 days
Price: $79.95
Rating: 4

This is a two disk workshop purchased from Westico thru the ADAM Depot. Being new to CP/M this sounded like a good thing -- an interactive study guide to give me hands-on-training, to start me on my way to understanding CP/M.

The workshop comes in a full sized three-ring binder. Inside you find 17 pages of instructions and in a pouch in the binder a package containing two 5 1/4 inch floppy disks, which contain the workshop itself. The written instructions state that one disk is the master and should be stored in a safe place. The second disk is the working disk and is the only one you should use. This is incorrect! The complete program is larger than can be stored on one ADAM disk. When I tried to use the program according to the instructions, it would not work due to missing portions of the program stored on what I thought was the master disk. After several false starts and the use of DIR and STAT commands, I determined that both disks must be utilized to make the program work.

Before you actually start into the teaching program you must first go through a SETUP program to set the display parameters to work with the adam's 32 column display. This is not as easy as it sounds. For someone trying to understand CP/M you are asked some heavy questions -- hex codes for clear screen and cursor positioning, etc. Also, even though there appears in the directory a SMARTKEYOFF program, mine didn't seem to work automatically. If I did not manually turn off the Smart Key functions, the bottom screen display would be messed up. I did finally get to the teach program and then I discovered the difficulty of viewing an 80 column program on the ADAM 32 column display. CP/M without an 80 column display will never catch on big, especially when you have to hold one finger on the control button and the other on the arrow keys and watch the words blur as they scroll back and forth across the screen. You can feel your eyes begin to cross.

Once you are in the teach program, things go rather smoothly. You are taken to topics which include: Prompts, Outline of Commands, Entering Commands, Control Codes, Naming of Disk Files, Ambiguous File Names, All About Stat, and All About Pip, etc. In all there are 17 topics, which include a practice test at the end of each topic. Everything worked fine with the exception of a bug in one of the topics, which when you reached a certain point in the program and tried to continue caused the computer to try to warm boot from Data Drive 1. This would then disable the program making it necessary to boot CP/M again and go on to the next topic.

Conclusion: This is an overly expensive program which gives limited results with poor documentation and at least one bug. My advice buy a good book. If you are having trouble with Coleco documentation, try *CP/M USERS GUIDE*, third edition, by Thom Hogan for all 8 bit CP/M computers and published by Osborne/McGraw-Hill. Log on to a local CP/M BBS and experiment.

Product Review: ADAM DDP Format & Duplication Manual
by Guy Bona
Product: Instruction Manual
Manufacturer: Charles F. Summers III, LOF Communications, P.O. Box 587, York, PA 17485
Price: $5.95
Rating: 10

Now you can turn a 60 minute cassette tape into a data pack. This book shows how to convert a blank tape into a data pack. You need an existing data pack, a 5/32 drill bit, a drill, and two tape decks or one tape deck with dual cassette drives with manual level controls.

The author states that tape decks with automatic level recording will not work. I borrowed a tape deck to see if this works as he says it does. It took about

one hour using both sides of the tape for the copy. The author recommends using brand name tapes like Sony, TDK, etc. The peak level indicators should be at +3db or above. I know that this is not recommended for recording, but it did work. I put the new tape in my ADAM and it showed the directory in SmartWriter and in Basic. It also retrieved a file and stored a file. You can also use this method to backup your tape library.

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One word of advice from myself and the author, follow the directions exactly as he has written in the manual. It could save you a lot of trouble and grief if you only have on tape and don't have another to use to make more tapes. Overall I give this a 10 and recommend to all ADAM owners who want to save some money on buying data packs. BEFORE TRYING THIS READ THE NEXT REVIEW.

Product Review: ADAM DDP Format & Duplication Manual (10- 2)
by D. Sage

As the proceeding review pointed out, the instructions in this manual are easy to follow. Part of the procedure does involve disassembling a digital data pack in order to modify it so that it will fit in a cassette drive.

I realize that some of you have been using this or similar methods to make blank data packs, however you may be asking for trouble in order to save a little money.

This process will not produce data packs of the same quality as those produced by Loran. It will produce data packs that may work for now, but which may produce I/O errors in the future. If you use these data packs for storing important information, then you are asking for trouble. I strongly recommend that you use only high quality digital data packs for storing important programs and files.

If you want to make your own data packs to use for backing up programs or files or for use as scratch packs for temporarily storing information, then that is probably not going to cause you any major grief. We have made data packs using high quality tape and a commercial duplicating system and even these will occasionally fail. I learned a long time ago never to trust important programs or files to the data packs we have made ourselves.

I put this practice in the same category as using both sides of a single sided disk. The reason a disk is sold as single sided is because the unused side produced errors during testing. In addition, when a disk is turned over the original side is rotated in the opposite direction from normal and any garbage that has been collected by the disk sleeve will be redeposited on the disk. This generally leads to failure of the disk.

This did not really turn out to be a review of the product, but more a warning that this is not an error free procedure. Digital Data Packs use high quality tape and a high quality tape transport system which is not found in all commercial audio tapes. The error rate of home made tapes will be extremely high compared to Loran or similar high quality digital data packs. If you are determined to produce your own data packs, then spend the money on this manual. Otherwise, I simply cannot recommend this procedure or product.

Product Review: Online: A Guide To America's Leading Information Services
by Milton Pasley
Product: Book
Author: Steve Lambert
Publisher: Microsoft Press
Price: $19.95 at Walden Books

This book is a good overview of telecommunications, with on-line data bases, well worth the price tag. The author covers databases, what they are, how they work, what they offer and what they charge. He even covers how to use them and numbers for contacting them in your area. The databases that are covered include: MCI Mail, Official Airline Guides, CompuServe, Newsnet, Western Union, Dialog, Dow Jones News/Retrieval Service. In a chapter called "other online" services he briefly covers the Source, BRS (Bibliographical Retrieval Service), I.P. Sharp, Lexis/ Nexis, and Delphi.

The access numbers are covered in Appendix A. Appendix B covers common communications problems which could have been more extensive for us modem novices (see Family Computing, June 1985, pg. 18).

The extras of this book are only hinted at on the front cover, where it offers $350 value, with over 20 hours of free connect time. But that is only part of it. Inside of a plain white envelope inside the back cover are eight postcards, with these cards you can get more than free connect time. Microsoft Press offers a free list of their books, CompuServe a free subscription to their Executive Information Service (a more complete service) and $15 worth of introductory usage. MCI offers a free mailbox and $10 worth of mail; Dow Jones offers $5 off their $29.95 membership kit; Western Union offers a $25 usage credit when you subscribe.

News Net will give you $24 of free use when you subscribe. On the Official Airline Guide's order form you are offered a free password and first month's usage. There are some limitations on some of these offers and some expire 12/85.

If you are interested in online databases, the book has something to offer even if only information. If you want to try one of the services, it should be cheaper with this book.

There is a chapter on Practice Calls, where you are walked through Tymnet or Telenet. There are also chapters on Starting Out, Setting Up, and Accessing online services. Overall, it's a well written, easy to follow book.

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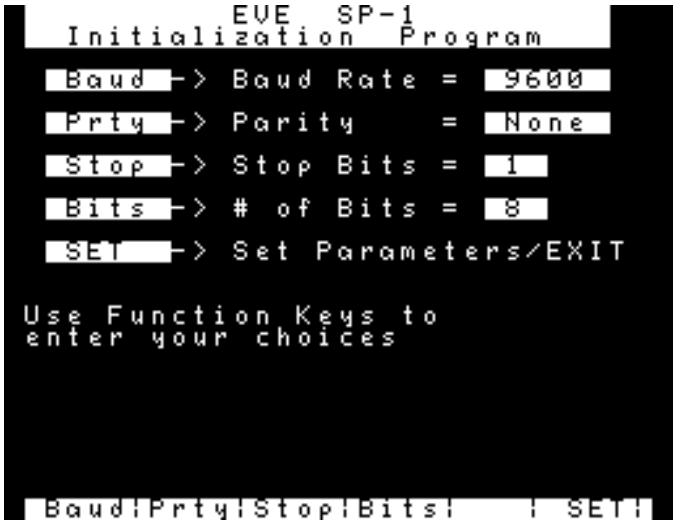
Product Review: Eve Sp-1 Configured Software
by Joe Blenkle
Product: Printer Software
Manufacturer: Eve Electronic Systems, 2 Vernon St., Suite 404, Framingham, MA 01701, ph. 617/653- 3003
Media: Disk
Requirements: ADAM, disk drive, SP-1 printer interface
Price: $25.00
Rating: 6 1/2

Now that you have your EVE SP-1 Interface and have your ADAM hooked up to a new printer, are you disappointed that you can't make use of your printer's special functions, such as elongated or condensed printing?

Well, EVE Electronic Systems has the answer for you. For $25 they will specially configure the SP-1 software so that it supports all your printer's functions. The EVE SP-1 and my Epson printer can now print elongated, condensed, italic, emphasized, elite and double strike.

The various modes are turned on and off by simply inserting a carat (^) and a letter either before



or after the text. For example, to print a sentence in condensed print on my Epson, I would type in: ^M This is printed in condensed mode^N...it's as simple as that. The 'M' turns on the condensed mode and the 'N' turns it off.

I rated this software a 6 1/2 for two reasons. Considering the price of the hardware, $139, the software should be configured at no charge. One hundred thirty-nine dollars plus the cost of a new printer is a lot of investment for some of us, only to find we have to shell out another $25 to take full advantage of the printer.

The second reason was that the configured software inserted annoying spaces throughout the text.* (Editor's Note: After this article was received, Joe sent in the update that appears at the end. The update is supposed to resolve the space problem).

Overall, the software isn't a bad package. It does allow more flexibility in the use of your printer, but unless you are in desperate need of using all of your printer's features, you might think about staying with the software that comes with the SP-1.

*Hank Sretter of EVE Electronic Systems informs me that to remove the extra spaces from your text while using the EVE software, you must be sure that the number you input when prompted for the number of characters per line is exactly the same as the number of spaces in your original document. If your SmartWriter document has margin settings of 10 and 70, you would set this number for 60 -- the number of spaces between the margins.

Product Review: Hacker's Guide To ADAM
by Joe Blenkle
Product: Technical Manual
Manufacturer: Peter & Ben Hinkle, 117 Northview Rd., Ithaca, NY 14850
Media: Disk or DDP and 61 page manual
Price: $12.95 manual only; $17.95 (w/ddp or disk) from M.W. Ruth
Rating: 5

I had heard a lot of good things about Hacker's Guide to the ADAM, but I've got to say I was severely disappointed when I received the book and diskette from M. W. Ruth Co., who is distributing the package for the authors, Peter and Ben Hinkle.

The disk was supposed to contain all the programs from the book. Several were missing and had to be typed in. Of those present on the disk, over half would not run "as is" and had to be corrected from the book. I found upon examination that entire sections of the programs were missing on the diskette. I mentioned this on Family Computing's ADAM section on CompuServe and half a dozen other purchasers of this product had met with similar problems.

First, let me say that this may not have been the fault of the authors, but may have been due to poor quality control on the part of whoever reproduced the diskettes from the original. Once fixed, the programs seemed to work quite well.

The manual itself contains 18 or so programs that demonstrate some of the capabilities of the ADAM, as well as several useful utility programs. The ADAM operating system. Basic, sprites, etc. are all explored in a relatively easy to understand manner. Some of the useful programs included are a disassembler, ROMviewer, soundtest, sprite editor, tape backup and editor, and a program to copy five cartridges to a

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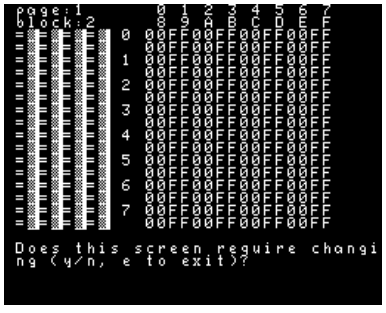
rograms aren't pretty, being devoid of frills, menus, screen colors and the like, but they do work for the most part.

I have yet to get the FONT EDITOR program to work correctly and I may have to resort to typing the entire program in again from scratch from the listing in the book. If it wasn't for all the annoying errors and omissions on the disk, I might rate Hacker's Guide higher than a 5, but as it is that's all it gets. While the book and programs are interesting, more care should have been taken in its production. I won't say don't buy the Hacker's Guide, but before you do make sure the company you purchase it from is reliable and will take your purchase back if you find omissions on the disk as I did. If you want an easy to understand technical guide to the ADAM, then I'd recommend Hacker's Guide to you. Let's hope the Hinkles decide to provide us with even more of the inner-workings of ADAM in the future.

Product Review: Hacker's Guide To ADAM (10-2)
by Valorie Zimmerman
Rating: 10 for programmers

This manual by a father-son team is great! It contains a lot of technical information which they got by "peeking and poking" around, plus some Coleco data sheets.

It begins with a hex to decimal converter program and explanation, and proceeds through the Z80 chip, to assembly language Z80 instruction set, op codes and a disassembler. There are RAM viewers, a memory map (hex), a ROM viewer, memory bank switch and operating system explanations with EOS jump table. There is an interesting chapter on SmartBasic; a long chapter about the Video Display Processor the various graphics modes, a sprite editor and demo, and a font editor and sample; and the sound chip OS routines and programs.



There is a full discussion of ADAMNet, plus all the parts: game controllers, keyboard, printer, tape drive, expansion ports, power supply and pinouts. Also included are a Basic backup routine and a cartridge copy program. For an extra $5 they will send you a DDP with the programs from the manual. That will save you about 29K worth of typing!

I wish they had included information on the disk drive, memory expander and modem, but maybe they'll write a sequel. Here's one practical hint we've already put in use: (p. 16) "...you are likely to discover the deadly Coleco data-bump bug that adds a space in front of data lines when they are saved...It sounds harmless, but after a few sessions of revisions, followed by saving the new version you will find that data is pushed off the end of the line and lost, causing an out of data error the next time you run the program. To avoid this you must go through the whole program and edit out the extra spaces with control right arrow every now and then."

Product Review: Hacker's Guide To ADAM (10-3)
by Craig Emmitt
Rating: 7

The Hacker's Guide to ADAM is an updated version of Information for ADAM Explorers, which brings me to my first complaint. It was my understanding that the people who bought the original manual would receive free updates on what Mr. Hinkle found as he decoded the ADAM, but I have found this NOT to be true. This manual contains some of the programs from the original and some new ones.

My second and last complaint is that the copy utilities run the tape drive through machine language subordinates and cannot be used with anything else except one data drive, which means that in some cases many swaps of the tape are required.

At $12.95 I would consider this product a bargain.

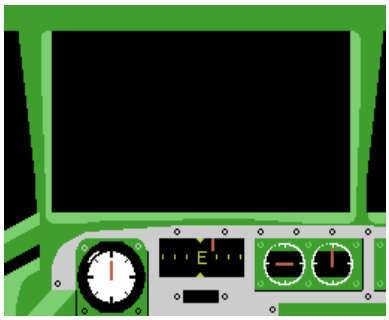
EDITOR'S NOTE: This review has been edited to eliminate material already covered by the proceeding reviews.

Product Review: Dambusters
by Jeff Silva
Product: Game - Flight Simulator
Manufacturer: Coleco
Requirements: ADAM/ColecoVision, joystick
Media: Cartridge
Warranty: 90 days
Price: $22.95 at Toys R Us
Rating: 10

This new game from Coleco and Sydney Development Corp. is both a flight and a historical war simulation based on an actual Allied bombing run over Germany during world War II. In this game you must fly a modified Lancaster Mark III bomber in a bombing raid over the industrialized Ruhr Valley. Your mission is to make it past enemy barrage

balloons, flack and fighters to one of the three dams, the Eder, Moehne or Sorpe, and then release your single very special bomb. This bomb is designed to skip over the water and then drop past torpedo nets, to sink against the dam wall, causing it to explode and bring their industries to a standstill.

You have control over the plane's cockpit, two aerial gunner positions, two engine sections with boosters, landing gear, etc. and a navigational map. If you make it to one of the dams, which isn't easy, a complex series of maneuvers are required to blow up the dam. Only then can you advance to a higher level.



This game is a must for any ADAMite who has longed for a flight simulator of any kind. This game combines the best of computer flight simulators and computer war-gaming into a fascinating blend. As the first "serious" adult simulation for ADAM it is wonderful. I am surprised they have squeezed as much as they have into this cartridge. It is truly superior programming all the way!

You will crash a lot. I haven't successfully launched a bomb yet, but that won't stop me from trying again and again. This game has more depth and more frustration than several other games combined. But, it is certainly worth the struggle. Graphics are great and game play is superior to most other Colecovision and ADAM games.

The historical background of this game is also fascinating. A very educational and fun game cartridge. There is nothing else like it available for ADAM owners Highly Recommended!!

Product Review: One On One
by Jeff Platt
Product: Game
Manufacturer: MicroFun
Media: Cartridge
Requirements: ColecoVision/ADAM, joystick
Price: $9.99 at Camelot Music
Rating: 7 - two player; 5 - one player

One On One is a one or two player duel between Larry Bird and Julius Erving which includes 3 point shots, free-throws, fouls (offensive, hacking and reaching-in), turnovers (traveling and 24 seconds), fatigue indicators, timeouts and backboards that break. The viewpoint given is from in front of the basket. There are four different skill settings, a choice of timed (2, 4, 6, 8 minute quarters) or a set score (1-99), and an option on whether possession of the ball is kept on a score.

The controls are used as follows: left button-shoot, rebound and block shots; right button-turn around (face or back to basket) and to reach in for a steal; left button and stick-jump in the direction stick is pushed.

The game itself features good play-action, poor graphics, and a weak computer opponent. Play action is good because of the ability to jump in any direction and being able to protect the ball. The only flaw in play-action is that there is no control on whether a free-throw is made or not. It seems to be a 50% chance every time. Also both Bird and Erving play the same.

Graphics are of a poor quality. The background graphics are nothing but lines on a black screen. Bird and Erving are drawn in the same blocky fashion,

with one color apiece. If these defects were caused by a lack of memory then there is a lot of junk in the cartridge that should be eliminated to get at least one color on each player. An example is the fatigue indicator which is meaningless, since the players never show any effects of being tired.

If you do not mind handicapping, the computer can be fun to play. The computer's problem is that it tries to block all moving shots. This makes it easy to get inside position for the rebound. If the programmer had the computer block out on these shots (instead of trying to block them) then the computer would be a worthy opponent.

The instructions seem to have been written for an ADAM disk version. There are some discrepancies on what the penalties are for fouling. Also included is a brief biography of the players. The back of the box contains an accurate picture of game graphics. At this price I would recommend this game.

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User Group News

We have attempted to reorganize our user group list into a more meaningful order. Essentially the groups are now organized by state with the states in alphabetical order.

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

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Tucson, AZ 85730
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Phoenix, AZ 85021

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So. California ADAM Users
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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
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Rockford, IL 61111
ph. 815/877-7786

Greater Cincinatti 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)

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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
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ph. 206/886-1167
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Winnipeg Adam Users Group

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

Bulletin Board

- FOR SALE: Slightly used DDP software (includes all instructions). ADAMCalc, SmartLOGO...$28.00 each; Letters & Forms, ExperType, SmartFiler and Flash Card...$15.00 each; Best of Broderbund, Zaxxon, Donkey Kong, Donkey Kong Jr....$10.00 each; FlashFacts: Flash Backs....$7.00; Disk Drive (needs minor repair)....$120.00; Modem (great shape) with software...$60.00. Contact: Jonathan Fligner, 2110 W. 36th St., Lorain, OH 44053, ph. 216/282-8467.
- WANTED: Coleco Game Cartridges Chuck Norris and MotorCross by Xonox; Galaxian by Atari; and PowerLords by Probe 2000. Contact: James Notini, 8125 W. Catherine, Chicago, IL 60656, ph. 312/775-9662.
- WANTED: Richard & Mary Colleps, Box 226, USAFSA, APO New York 09458, would like to correspond with other ADAM owners. The Colleps are stationed in Germany and don't have much contact with other ADAM owners.
- WANTED: SEWER SAM by Interphase (new or used). Contact: Owen McNulty, 2205 Peach Tree Street, Florence, SC 29501.
- FOR SALE: Locally produced 64K expanders for the ADAM are now available in Canada for approx.

$100 in Canadian funds. For more information send a self-addressed stamped return envelope to: SPECTRUM ELECTRONICS, 14 Knightswood Crescent, Brantford, Ontario, CANADA N3R 7E6.

- FOR SALE: I have an extra copy of 32 Basic Programs by Dilithium (Book & DDP). Contact: Greg Van Valkenburg, 701 Pond View Dr., Audubon, PA 19403.
- WANTED: Roger Felts, 1609 N. Main St., Edwardsville, IL 62025, ph. 618/656-2669, wants to hear from other ADAM owners in the St. Louis area.
- SWAP SHOP OUTSIDER'S USER'S GROUP - Individuals interested in swapping NON-COPYRIGHTED programs may do so by accomplishing the following; 1. Request a FREE copy of the group program library. 2. Review the list of programs available and select those programs you want to receive. 3. Send the programs that you wish to swap and the group will copy the programs that you requested on the DDP and return the DDP back to you. ONLY DDP will be accepted or mailed by the group. Individuals interested in swapping should test the programs that they plan on sending and write a well documented file via a "README" file. Only non-copyrighted programs will be accepted for swap. Please be advised that these programs don't have to be written by the individual swapping, they can be any non-copyrighted program. CONTACT: Donald L. Villiard, P.O. Box 771, Starkville, MS 39759.
- HELP: I need to obtain (purchase) a revision 25 of SmartFiler. Contact me here at ECN by mail or phone. Thanks, Darrell Sage.

Glitches, Bugs, Errata, Etc.

- **ERROR-ERROR** - I made a big mistake - in our last issue. On page 25, in the Bulletin Board column, I incorrectly listed the phone number for the BBS in OHIO. The number for the Steel City BBS should have been 216/244-9081.
- **HELP:** Murray Flotre, M.D., Box 336, Indian Head, Saskatchewan, Canada S0G 2K0, is having the following problem with SmartFiler and would like assistance in solving the problem: After having created a form and stored some data in it (ie: names & addresses), I have attempted to have the data printed out using the "Create Format" mode which is supposed to be part of SmartFiler. When I press the print SmartKey (VI) an end of page symbol appears at the end of my format and then the screen changes back to the index of the information stored. The information never gets printed in the format I have created (no printing occurs at all); the information will print in the original way that it was set down in the file, when this is requested. I think that I am following the instructions as given in the SmartFiler manual, and can't figure out what I am doing wrong.
- **FROM David Jacksch** - Here's how to get rid of extra spaces in data statements. Put the cursor at the beginning of the line containing the DATA statement, and move it to the word "DATA". Delete "DATA" by pressing the space bar. Then position the cursor five spaces before the first data entry. Retype the word "DATA". It will end up one space before the first data entry. Move the cursor past the end of the line and press "RETURN." When you LIST, the DATA statement will be as good as new. One space will be added when the program is SAVEd. You can try this procedure with "REM" statements, too. ADAM adds one space to each DATA and REM statement everytime you SAVE a program. So if you don't want these extra spaces filling precious memory, use the above procedure. Now a word about the invaders. There are strange characters which appear sometimes when you hit "RETURN" after typing a line of BASIC. ADAM will probably have an error message for you. The strange character got there if: an appliance (fridge, etc.) turned on or off; lightning struck nearby (don't use ADAM during a thunderstorm); you pressed two or more keys at once, or you hit a SmartKey or other function key. To get rid of the invader, just put the cursor at the beginning of the line you typed; run it just past the end of the line and press "RETURN." Or, if its a real short line, or you just love to type, you could re-do the whole line.
- **Perry L'Herault** advises us that there is a bug in his battleship program. The following additions will fix the problem:

```
4000 IF m=9 GOTO 4010
4005 IF (n=1 AND (m-2)<1  AND SCRN((((m+1)*4
)-1),((n*4)-1))=15) THEN GOTO 12050
4010 IF n=9 GOTO 4020
4015 IF (m=k AND (n-2)<1 AND SCRN(((m*4)
-1),(((n+1)*4)-1))=15) THEN GOTO 12050
4020 IF n=1 GOTO 4030
4025 IF (m=k AND (n+2)>9 AND SCRN(((m*4)-1),
(((n-1)*4)-1))=15) THEN GOTO 12050
4030 IF m=9 GOTO 4040
4035 IF (n=1 AND (m-2)<1 AND
SCRN((((m+1)*4)-1),((n*4)-1))=15) THEN GOTO
12050
4040 IF m=1 GOTO 4050
4045 IF (n=1 AND (m+2)>9 AND
SCRN((((m-1)*4)-1),((n*4)-1))=15) THEN GOTO
12050
4050 IF n=1 THEN GOTO 4060
4055 IF (m=k AND (n+2)>9 AND SCRN(((m*4)-1),
(((n-1)*4)-1))=15) THEN GOTO 12050
4060 IF n=9 THEN GOTO 4070
4065 IF (m=k AND (n-2)<1 AND SCRN(((m*4)-1),
```

(((n+1)*4)-1))=15) THEN GOTO 12050
4070 IF m=1 THEN GOTO 4080
4075 IF (n=1 AND (m+2)>9 AND SCRN((((m-1)*4)-1),((n*4)-1))=15) THEN GOTO 12050
4080 GOTO 12040
12035 GOTO 4000
These additions should correct the bugs.

- **From Francis Sifers:** a reminder that the Parker Brothers game Super Cobra will NOT work on the stand alone ADAM.
- In regard to the infamous "GARDEN OF ADAM," - I have been in correspondence with the Postal Service Chief Inspector for several months. However, all they seem to be doing is writing letters to Taylor Barcroft at his old P.O. Box. I doubt if that will do any good. Anyone heard anything else on this subject?
- Spectravideo and Parker Brothers are dumping their game cartridges at less than $10.
- Coleco does NOT recommend the use of a demagntizer on ADAM's Data Drive heads. Cleaning with head cleaner is recommended when the heads become dirty. Problems with reliability can sometimes be traced to electrical problems or interference from a monitor or TV. The latter can sometimes be solved by placing aluminum foil under the TV or by moving the ADAM in relation to the TV.

- Wayne Robbins sent us the following peeks, pokes and tips:

To change the text screen color-POKE 17059, (0-15) then TEXT.

To HPLOT any of the 16 allowable colors-POKE 16777, (0-15) and then HPLOT.

To change the color of the background in the HGR or HGR2 modes-POKE 25431, (0-15) to change the text part of the graphics screen's color and POKE 25471, (0-15) to change the color of the graphics area. Then execute the HGR or HGR2 command.

To POKE above 53630-POKE 16149 and 16150 to 255. This will allow you to POKE from 0-65535.

Printing a CHR$(24) will clear the text screen from the current cursor position on down. The memory locations for PDL(0,1,2,3) are as follows: 27100, 27102, 27101, 27103. You can set them as you like, however, when you give a PDL command, they are set at the read number from the joystick.

POKE 17009,0 tells the VDP (Video Display Processor) that there will be info going to it.

PRINTing CHR$(14) gives you backwards printing on the printer. This is a possible clue to bidirectional printing capabilities found in the OS (Operating System).

Giving the CALL 64560 will automatically dump you from Basic to Electronic Typewriter Mode.

Programs, Programs, Programs

Finally a program on printing tabs on the ADAM was submitted by John J. Hempfling, Jr. of Carmel, Indiana. This program demonstrates one way of getting around the tab bug with the ADAM printer.

```
10   REM This tab exercise is FN 'tabexercis'
20   POKE 17059, 10
21   REM 10=screen color(yellow)
22   REM 17059=full screen
30  POKE 17115, 26: REM Yellow screen and black text.
31   REM 26=text color (black=1)*16 + screen color (yellow = 10)
52   REM 17115=text screen area
59   REM after any poke then 'text' to activate
40   TEXT
90    REM This is an exercise in tab use for the printer
100  PR#1
110  PRINT TAB(1); "1";
111  REM 1 or 0 = same result. 0 works but 1 is the first location.
112  REM 1 is the default # when 0 is used
115  PRINT TAB(5) ; "5" ;
120  PRINT TAB(10); "10";
125  PRINT TAB(15); "15";
150  PRINT TAB(20); "20";
155  PRINT TAB(25); "25";
140  PRINT TAB(50); "50";
141  REM spc 1 thru 31 are used in sequence. The counting is in sequence.
142  REM 31 is filled therefore next count must start. The next count starts at first unused column, that is 32, therefore
143  REM next location is + 4.
145  PRINT TAB(4); "35";
150  PRINT TAB(9); "40";
155  PRINT TAB (14); "45";
160  PRINT TAB (19); "50";
165  PRINT TAB(24); "55";
170  PRINT TAB (29); "60";
171  REM   column 29 & 30 are used, therefore next print continues as addition.
175  PRINT TAB(34); "65";
178  REM Start count at 63 even when 63 is used. 63 is next section start.
179  REM This is the next print and it begins after the 31 multiple ie 62. The count is from the column 63. ie 63+8=column 70
180  PRINT TAB(8), "70";
185  PRINT TAB(13); "75";
189  REM This is column 79 & 80. The full page is 1 thru 80 columns.
190  PRINT TAB(17); "80"
200  PR #0
```

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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.

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CLOSE OUT! Colecovision cartridge specials $4.95 each...following titles available from Coleco: Venture; from Imagic: Moonsweeper, Nova Blast, Dragon Fire; from Xonox: Chuck Norris Superkicks. 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
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An Invitation To Join... AUG
Adam Users' Group

The ADAM computer has been exciting students, parents, hobbyists and all members of the family for only a short time, but the response to AUG (Adam Users' Group) has been much more than gratifying. Now that Coleco has stopped production of this fine computer, it is more important that ADAM users communicate with other ADAM users. With this in mind we offer you the following:

- HELPFUL HINTS ON USING SMARTWRITER, SMARTBASIC AND OTHER SOFTWARE FOR ADAM
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The above is represented in out bi-monthly mewsletter, AUGment, which is received by all members. Learn more about how you can get additional benefits from the POWER of ADAM and find out about what other AUGies are developing for the ADAM. JOIN THE MORE THAN 5000 MEMBERS NOW!!! Just send in your check in the amount of $12.00, payable to AUG, along with your name, address and telephone number to AUG, P.O. Box P-2, Lynbrook, NY 11563.
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ADAM and smartBASIC T.M. Coleco, Inc.

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COLECO ADAM OUTLET

Data Pack (Pre/Formatted Adam) $3.95
Data Pack (Pre/Formatted) w/o label 10/$37.50
Disks (blank for ADAM) 10/$19.95 30/$49.50
Ribbon Cart. (ADAM Printer) $5.50
Ribbon Cart. (ADAM Printer) 1/$5.50 3/$15.00
Daisy Wheel-Elite, Script etc. $5.50
Covers (3) Key,CPU,Printer $18.95
Labels T/F-F/F (Address) 1000/$5.00
Labels T/F-F/F (Data Pack) 100/$5.00
Paper T/F-F/F White Clean Edge 20lb. 150/$8.95
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** Combo SPECIAL - TRACTOR FEED & PRINTER STAND $98.95 **

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DIABLO - Great mind challenge - All graphic $24.95
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ADAM'S COMPANION - Book (updated) $9.95
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INTRODUCING CONVERT

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Unreal Software presents another breakthrough in software for: the ADAM Family Computer System

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