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Phone #: (708) 961-3529

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MONTHLY NEWSLETTER - PUBLIC DOMAIN LIBRARY
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Issue #71 / 72 - December/ January 1991
Editors: Lyle Marschand & James Notini
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Continuing our study of the Gospel of John chapter 6...

After this Jesus went to the other side of the Sea of Galilee, which is the Sea of Tiberias. ² And a multitude followed him, because they saw the signs which he did on those who were diseased. ³ Jesus went up into the hills, and here sat down with his disciples. ⁴ Now the Passover, the feast of the Jews, was at hand. ⁵ Lifting up his eyes, then, and seeing that a multitude was coming to him, Jesus said to Philip, "How are we to buy bread, so that these people may eat?"⁶ This he said to test him, for he himself knew what he would do. ⁷ Philip answered him, "Two hundred denarii would not buy enough bread for each of them to get a little." ⁸ One of his disciples, Andrew, Simon Peter's brother, said to him, ⁹ "There is a lad here who has five barley loaves and two fish; but what are they among so many?"¹⁰ Jesus said, "Make the people sit down."

Now there was much grass in the place; so the men sat down, in number about five thousand. ¹¹ Jesus then took the loaves, and when he had given thanks, he distributed them to those who were seated; so also the fish, as much as they wanted. ¹² And when they had eaten their fill, he told his disciples, "Gather up the fragments left over, that nothing may be lost."¹³ So they gathered them up and filled twelve baskets with fragments from the five barley loaves, left by those who had eaten. ¹⁴ When the people saw the sign which he had done, they said, "This is indeed the prophet who is to come into the world!"

¹⁵ Perceiving then that they were about to come and take him by force to make him king, Jesus withdrew again to the hills by himself. ¹⁶ When evening came, his disciples went down to the sea, ¹⁷ got into a boat, and started across the sea to Capernaum. It was now dark, and Jesus had not yet come to them. ¹⁸ The sea rose because a strong wind was blowing. ¹⁹ When they had rowed about three or four miles, they saw Jesus walking on the sea and drawing near to the boat. They were frightened, ²⁰ but he said to them, "It is I; do not be afraid."²¹ Then they were glad to take him in the boat, and immediately the boat was at the land to which they were going.

²⁵ When they found him on the other side of the sea, they said to him, "Rabbi, when did you come here?" ²⁶ Jesus answered them, "Truly, truly, I say to you, you seek me, not because you saw signs, but because you ate your fill of the loaves. ²⁷ Do not labor for the food which perishes, but for the food which endures to eternal life, which the Son of man will give to you; for on him has God the Father set his seal."²⁸ Then they said to him, "What must we do, to be doing the works of God?" ²⁹ Jesus answered them, "This is the work of God, that you believe in him whom he has sent."³⁰ So they said to him, "Then what sign do you do, that we may see, and believe you? What work do you perform?" ³¹ Our father ate the manna in the wilderness; as it is written, 'He gave them bread from heaven to eat.'" ³² Jesus then said to them, "Truly, truly I say to you it was not Moses who gave you the bread from heaven; my Father gives you for eternity the true bread from heaven. ³³ For the bread of God is that which

comes down from heaven, and gives life to the world."³⁴ They said to him, "Lord, give us this bread always."

³⁵ Jesus said to them, "I am the bread of life; he who comes to me shall not hunger, and he who believes in me shall never thirst."

The story of Jesus feeding the five thousand is perhaps the best known of our "Sunday school" stories. It is intriguing for children and adults because we find this miracle so astounding yet so practical. I suppose Jesus could have instantly made a full course meal appear in front of each of the 5000 people there, but he chose a unique way of taking something that was available (a few fish and loaves of bread) and multiplying it a thousand times as the baskets were passed from person to person, even leaving more leftovers than what they started with! This must have been just an amazing miracle to see and experience for the people, especially considering they were all very hungry!

The real question is why did Jesus perform this miracle? An obvious answer is that he had compassion for the people who had come to see and hear him and who had no food. I believe this is true, however I think there was another reason. All of Jesus' miracles were done with a second purpose, to teach the Jews of that day and everyone who reads the Bible a specific aspect of God's kingdom. All of Jesus' miracles had two dimensions - the physical results of the miracle itself (producing food where there was none and feeding hungry people) and a spiritual dimension that God wanted to show us.

Food is a basic necessity of all life, which is obvious to all of us. Jesus used the miracle of the feeding of the 5000 to teach us that knowing God is also a basic necessity of all life. There is a corresponding "SPIRITUAL FOOD" that we must have to exist in addition to the normal physical food we eat everyday. Man is a dual being, consisting of a physical nature and a spiritual nature. The physical we can see and touch, the spiritual we just feel and "know". Physical food keeps our body from dying, spiritual food is required to keep our spirits from dying.

Jesus said in verse 27... "Do not labor for the food which perishes, but for the food which endures for eternal life, which the Son of man will give to you; for on him God the Father has set his seal."

and in verse 33... "For the bread of God is that which comes down from heaven, and gives life to the world."

and in verse 35... "I am the bread of life; he who comes to me shall not hunger, and he who believes in me shall never thirst."

These statements teach us that there is an even more important "bread" than physical food that we all need to keep our spirits alive for eternity.

(continued on page 2...)

DECEMBER / JANUARY - ISSUE #71 / 72 INDEX

NOVEMBER INDEX / N.I.A.D. PROCEDURES.....	1
FROM THE EDITOR'S DESKS.....	2
N.I.A.D. NEWS & UPDATES.....	3
FOR YOUR INFORMATION.....	4
NEW ADAM REPAIR SERVICE by Barry Wilson (Supplied by the ADAM News Network).....	5
'MODIFYING THE COLECO INTERNAL MODEM INTO A SERIAL CARD by Syd Carter.....	6
THE TRUTH IS TOLD by Tony Patterson (Supplied by the ADAM News Network).....	8
DATA DRIVE SPEED ADJUSTMENT SOFTWARE by Phil Kosowsky / BLURRY EYED? by Bob Slopesma.....	9
I DID IT by Ron Symonds.....	10
THE MIDI-MITE! MIDI - ADAM'S MUSIC REVOLUTION! by Ron Collins.....	11
ADAM BULLETIN BOARD by Jim Notini.....	13
WHAT IS ADAM-FORTH? by Keith Marnier.....	15
CP/M & TDOS WORKSHOP: PUBLIC DOMAIN & REVIEWS by Doug Rosenvinge.....	16
PUBLIC DOMAIN WORKSHOP.....	17
PRODUCT REVIEWS:	
LEARNING TO DRAW WITH ADAM / EL ESPANOL - Reviewed by Jim Notini.....	18
MATH MENTOR - Reviewed by Jim Notini / TAX HELPER 1990 - Reviewed by Lyle Marschand.....	19
SWIFT LABEL PRONTSHP by Pat Herrington.....	20
PRODUCT LIST.....	22



N.I.A.D. PROCEDURES



⇒ N.I.A.D. is published monthly except for the months of December/January and July/August, which are combined issues by the Northern Illiana ADAM User's Group. Individual issues may be purchased for the current month or a backissue for \$3.00 (always check Product List for current pricing). The Dec./Jan. issue of N.I.A.D. is the 71/72 issue published by N.I.A.D., there are 70 preceding issues. When ordering backissues, please specify the number of the issue, month and year.

⇒ The standard membership rate for 10 issues is **\$22.00 USA Third Class** and **\$29.00 Canadian, USA First Class** and it's **possessions**. Contact us for membership rates outside of these areas.

⇒ N.I.A.D. welcomes contributions of original reviews, programs, articles, questions, suggestions and comments. Please include a SASE (Self-Addressed-Stamped-Envelope) if you want a written reply. Also, any contribution sent in on DDP or DISK will be eligible to receive a public domain program or volume in return at no charge!

⇒ Your N.I.A.D. member ID number is on the first line of your mailing label (affixed to the newsletter). The first four digits are the month and year of the final issue in your current membership. Please check this number each month to make sure that issues are not missed.

⇒ N.I.A.D. will not be held liable for any issues missed due to an address change which we are not informed of. Please get this information to us as soon as possible so as not to cause any type of difficulties. Also, include your member ID number.

⇒ N.I.A.D. accepts advertising for ADAM related products and services. Cost is \$50 for a half page ad and \$75 for a full page ad for one month. Contact us for multi-issue discounts. Well over a thousand ADAM owners receive our newsletter each month and many more get to see it second hand. You may send in your ad in either SmartWRITER, SpeedyWRITE, PowerPAINT, PrintWORKS, other ADAM formats, IBM ASCII or IBM PUBLISH IT! DTP format files or even supply us with a high quality print out for reproduction in the newsletter. N.I.A.D. reserves the right to not advertise certain products.

⇒ If 1290 or 0191 are the first four digits in your member number, it is time to renew your membership to insure that you do not miss an issue.

⇒ N.I.A.D. welcomes software developers to submit their programs for us to evaluate for possible commercial sale. Send in your products for us to test and to review in the newsletter. N.I.A.D. offers a 50/50 split of the sale price on all items that we handle distribution of for all developers. You will find that this is one of the best offers around in the ADAM community. We will also publish a review on the product as soon as possible.

⇒ Our Chicago Local Chapter Meetings are a great way to learn more about our beloved ADAM systems. You have the opportunity to meet fellow ADAM owners, ask us questions, see live demonstrations of hardware and software and also purchase products. We meet in our store, CompuKINGDOM, the second Thursday of each month at 7:30 PM. If you need directions getting here, just give us a call.

The meetings which will be held throughout the year will fall on the following dates (remember that there are no meetings scheduled for the months of June, July and August):

February 14, 1991
March 14, 1991
April 11, 1991
May 9, 1991
June 13, 1991

We have exercised due care in the preparation of this newsletter (that doesn't mean we're perfect!). No warranty, expressed or implied with regard to the information contained herein is given, either by interpretation, use or misuse. The opinions expressed herein do not reflect those of the editor or staff unless noted.



(continued from front page...)

Our physical bodies will perish one day, but our spirits will exist for eternity, however, we need to "feed" our spirits with the truth of Jesus' teachings to have this eternal life with God in heaven. Our spirits will exist for eternity, but if we don't understand and accept Jesus' teaching of salvation through his sacrifice on the cross for our sins, our spirits will spend eternity in Hell.

These are very uncertain times and we tend to reflect more on the ultimate meaning of life as a result.

I would encourage all of you to search for this spiritual understanding by reading the Bible and asking God to help you understand Jesus' teachings.

If you open your heart to spiritual "food", God will respond and help you. I have only one caution and that is to **base your reading on the Bible**. There are many false teachings out today that attempt to paint themselves as spiritual or god based. Beware of any books, tapes or teachings that do not use the Bible as the basis for their teachings because you can't afford a mistake in this area!

God bless you all.

Hope you all had very Happy Holidays and the best to you in 1991. Hopefully, by the time you receive this newsletter the Gulf War will be coming to a close. I think we are all praying for a quick resolution to this war for the benefit of all involved. So far our casualties have been light, but the loss of any human life is a tragedy. War is a horrible thing, but there are points when countries must be stopped. I am glad I am not the one who has to make such decisions.

The ADAM World is looking brighter all the time. We have great news about new hardware coming out in the near future including a new ADAM disk drive! Yes, so many of you have been unable to expand your systems to include a disk drive, but thanks to Mark Gordon of Micro Innovations this limitation will be lifted in the very near future. Call for more specific information in early February.

The ADAM Image Maker has gone into production and promises to be the most innovative hardware / software expansion for the ADAM yet developed. Software needs to be developed to make use of the full potential of this fine product - watch for more information on the Image Maker in future issues.

ADAMCON 03 is in full planning at this point, we will have full details in the next issue.

So, 1991 promises to be another exciting year for ADAM products which I'm sure you all will be happy to hear. Our little orphaned system has certainly shown its staying power and flexibility through the years and all indications are that this trend will continue.

I would like to recognize the contribution that Ed Jenkins of E&T Software has made to the ADAM computer and ADAMites all over the country over the years. He has been one of the longest and best contributors to the ADAM... THANKS ED!

Ed will still be supporting all of us ADAM dealers and User Groups but will be discontinuing his newsletter and any retail mailorder sales due to the requirements of his new job.

As I sit here and write this editorial for the December / January 1991 N.I.A.D. Newsletter, I am listening to the events of the Gulf War (Operation Desert Storm) unfold. When I first heard of the bombing that was taking place in Iraq and Kuwait, butterflies briskly filled my stomach. For some five or six months, the events that were taking place in the Middle East seemed so far away, but within minutes the conflict has jumped up and given me, and I am sure many others in the world, a wake-up slap in the face. It is hard to motivate myself to even write this editorial due to the fact that it seems so trivial compared to the happenings in the Middle East, but as one sports figure said, "Life must go on." Being only 22 years old, I would be eligible to be drafted in the case that the draft is re-installed. Would I go and serve my country? YES, I WOULD. As I sit here, I feel pretty useless, but I can pray for the safe and quick return of all United States / Nations troops in the immediate future and express my feelings, which are totally for the actions which have been taken. I only wish these, for a better word, STUPID protesters would be put in their place, but this is a free country and they have the right to do as they wish even if it will only stand to hurt the efforts in the Middle East. Also, I would like to extend my wishes to Mrs. Ricki Gerlach for the safe return of her husband, Ricki. Ricki Gerlach has been a major supporter of the ADAM over the years through the many articles he has written and have been published as well as the numerous commercial and public domain software packages that he has released over the years.

On the ADAM front, no pun at all intended, the fight for the continued support of this fine system continues and as it continues, it grows stronger and stronger and stronger. Is this surprising? No, not at all. Many of us have known for some six or seven years now what a tremendous and flexible computer the ADAM is, many others are just now finding this out and these are the people that are quickly coming to the fore-front of support and product development. New hardware and software developers seem to be popping up each day and many of the older and not so old developers continue to devote countless hours into research and development. For instance, Jason Brown Software's hypercard-type program will soon be released; Oasive Pensive Abacutors has gone into mass production of the ADAM Image Maker hardware with the software lagging slightly behind; Micro Innovations continues to improve their line of Powermate Hard Drive systems as well as continue development of stand-alone 5 1/4" 360K and 3 1/2" 720K Floppy Disk Drives as well as a stand-alone 20 Megabyte Hard Drive without all the additions of the Powermate; Steve Pitman Software is nearing the completion of their much awaited entertainment game, RoboThief, as well hopefully continuing work on a graphics printer program specific for 24-pin dot matrix printers; Walters Software continues work on their updated SmartDSK Cart which promises to be the best compilation of utilities ever released for the ADAM; and on, and on, and on. Notice I didn't even mention the continued planning of ADAMCON 03 which will be held August 1-4 in South Bend, Indiana (full details next month)!

There just is no end to the amount of support that the ADAM has generated over the years, but don't let this fact lull you into a false sense of security. In order to make the ADAM successful for the long haul, sacrifices must be made. I feel that I have sacrificed a lot and now that many others have sacrificed even more so than myself, probably to the point of getting ulcers, for the sole purpose of the ADAM community. Now is the time to show even further appreciation for all the developers and user's groups efforts to insure that a year or two from now, the ADAM will still be enjoying the high amount of support it has received in the past and is currently receiving.



NIAD NEWS & UPDATES

⇒ **ADAMCON 03** planning, headed by Dean Roades of 463 ADAM, is proceeding ahead at full steam now. The third ADAM owners convention is scheduled for August 1st through August 4th in South Bend, Indiana. There have been a tremendous response by the ADAM retailers, user's groups and developers as well as the ADAM community in general to date, so it looks like ADAMCON 03 will be the most supported convention of the three. We will have complete scheduling and an application form in the next issue.

⇒ **OASIVE PENSIVE ABACUTORS**, operated by Gary Bowser, is on the verge of completing software drivers and utilities for the long awaited ADAM IMAGE MAKER. The software is being developed by the brother team of Neil and Dale Wick, two of the more prominent, if not unknown by the general ADAM community in the states, programmers for our system. The A.I.M. is the kissing cousin of the T.I.M. (the same video upgrade that has been developed for the TI-99/4A computer by Gary) and promises to bring about a video revolution for the ADAM by using the much improved TI9958 video chip to replace the TI9928 supplied in the ADAM. Screen resolutions of 640x480 and 1024x768 with as many as 19,200 colors will be accessible. The A.I.M. is planned to be sold for around \$179. A VGA Monitor will be required for a display, current VGA Monitors sell for around \$300 to \$400. This setup will give you the equivalent of a high-end IBM VGA setup and all VGA monitors we will carry for A.I.M. will be completely compatible with IBM VGA cards in the case you upgrade to an IBM system or already own one. More news will follow as we receive it.

⇒ **MICRO INNOVATIONS**, operated by Mark Gordon, is still in the process of setting up their new PowerMate Hard Drive configurations. By the time you read this, the new design should be available (N.I.A.D. is now carrying the PowerMate as well as all accessories). The much anticipated release of the stand-alone 5 1/4" 360K and 3 1/2" 720K floppy disk drives has been delayed for a couple weeks due to a design flaw. We hope to have word on the release of the disk drives next month. M.I. also is starting work on developing a stand-alone 20 MB Hard Drive that cannot be expanded like the PowerMate for \$299.95. This 5 1/4" Hard Drive will connect to the ADAM through an interface card similar to the PowerMate's and function exactly as the PowerMate does, but without the option to add additional floppy disk drives or a second hard disk drive. More details to follow. After completion of these items, M.I. will begin work on the ADAM / IBM bridge card which allows ADAM to use hard and floppy disk drives which are contained in your IBM system (if you own one). Following that, work will start on development of 5 1/4" and 3 1/2" high density floppy disk drives for the ADAM! Wow, M.I. will certainly be busy for the entire 1991 calendar year developing new hardware for the ADAM.

⇒ **JASON BROWN SOFTWARE** is close to completion of their yet un-named hypercard software package. Many improvements are being made on top of what was discussed last month and we should see the final release within a couple of weeks. Watch in the next issue for further news and an in-depth article on all it's programming features.

⇒ **E & T SOFTWARE**, operated by Ed Jenkins, will soon cease to operate as a mail-order vendor as well as stop publication of their fine ADAM'S ALIVE newsletter due to the heavy strain and traveling that Ed's job places on him. E & T Software will still be involved in the ADAM community, but will only sell to ADAM vendors like ourself. All hardware and software developed or distributed by E & T Software will continue to be available for purchase through ADAM vendors. Ed Jenkins has, and will continue to be one of the major reasons why the ADAM is still a

viable computer system today. We thank Ed for all he has done for the ADAM over the years and hope that now he will have more time to devote to research and development of further ADAM hardware and software projects. See E & T's new address in the ADAM BULLETIN BOARD. If you have an outstanding membership to E & T Software's ADAM'S ALIVE Newsletter, you should soon be receiving a letter from Ed Jenkins concerning this matter with details on how you can go about receiving credit for the amount of your remaining membership.

⇒ **BONAFIDE SYSTEMS**, operated by Chris Braymen, has completed work on the update to the Mini-Recorder software package which is included with the MIDI-MITE Interface. To receive the update, contact Bonafide Systems at their new address listed in the ADAM BULLETIN BOARD. Additionally, ten new volumes of public domain software have been released exclusively for use with the MIDI-MITE. Check the PUBLIC DOMAIN WORKSHOP for details on each of these volumes.

⇒ **ROADRUNNER PUBLICATIONS**, operated by Mel Ostler, has released the third in their LEARNING TO series of manuals for the ADAM, called LEARNING TO DRAW WITH ADAM. See the review in this issue. The next manual, LEARNING TO PLAY GAMES WITH ADAM, which deals with sprites, should be released shortly.

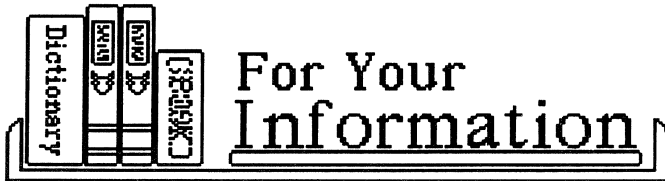
⇒ **TDOS V4.58**, by Tony Morehen, has been received and is now available in the Public Domain. We will have a complete review upcoming by Doug Rosenvinge. Much work has gone into making V4.58 as user friendly as possible and many thanks should go out to Rob Friedman for his work in testing and development of a thorough instructional program upon boot-up.

⇒ **ADAM'S HOUSE** is hard at work on a number of books dealing with repair work that has been accomplished on over 200 ADAM Systems and Disk Drives, a book of reviews of ADAM hardware and software and a book on learning SmartBASIC. A soon as we receive further news on these publications, we will let you know.

⇒ **TAX HELPER 1990**, by Gary Hoosier Software, should be available by the time you read this. We received a beta demo copy and are astounded to say the least. TAX HELPER 1990 will aid tremendously in income tax preparation and alternative ways to figure taxes each year. Priced at \$19.95, purchasers will be eligible to receive yearly updates to newer versions for a nominal fee. Best of all, your tax information is saved for reuse and update each year. We have a review in this issue of the beta copy and should have the completed version in stock for purchase by the time you read this on disk or data pack.

⇒ **THE BEST OF B.C.**, a new Public Domain addition from a couple months ago is now available on data pack, not only disk. Note, however, that the disk and data pack versions are not compatible and that the data pack version must be placed on a Right Directory Data Pack (aka: the supergame data packs like Super Buck Rodgers).

⇒ **CHRISTMAS RENEWAL SPECIALS** are still in effect until January 31st, 1991. If you have not renewed your membership, or have just become a N.I.A.D. member through E & T Software's ADAM'S ALIVE newsletter, now is the time to renew since you will be eligible to choose one of ten free ADAM products with at least a \$20.00 product order. For the complete listing, refer to the November issue on page 5, column 1 or call for further details. Due to a tremendous amount of information released this month, no specials are being offered besides the RENEWAL, but next month we will make up for this matter.



SpeedyWRITE V2.0 RE-ALERT

by Terry Kayser

In Issue #64, 1990, you had a SpeedyWRITE alert from Dean Roades of 463 ADAM. Dean explains how, when he uses CONTROL +] to check the length of a document, his printer locks up. Well, I tried it and my printer and it doesn't lock up.

I did everything exactly like he said. I got one of my files with a lot of printer control codes in it. I then selected which printer (dot matrix) to use from the printer menu. I then took my printer off-line by pressing the on-line switch. I then pressed CONTROL +] and up came the number of pages and lines in my document. I then thought, maybe Dean doesn't have a print buffer in his printer. I have a Microbuffer (256K) plus an 8K buffer in my printer. I figured the only way to get around the buffers was to shut everything off, so that's what I did. I completely shut off the printer and my 256K Microbuffer. I then tried the CONTROL +], I figured it would lock-up for sure, but it didn't. The number of pages and lines came up again. Dean doesn't say what type of printer he is using. I have a Panasonic KX-P1124.

I have had SpeedyWRITE lock up on me sometimes when I use CONTROL +], but not because of not having paper in the printer. Here is the reason SpeedyWRITE has locked up on me.

Sometimes when you save a document, it get's "GOOFED UP". By that I mean, if you scroll through your document, you'll see a lot of "WEIRD SYMBOLS" that you didn't put there. These symbols make SW lock up.

When SpeedyWRITE locks up, bring your document back up and scroll through it. Sooner or later you'll run into these symbols. It will look like you lost half of your document, but fear not, keep scrolling. You'll hit the END OF PAGE marker, but if you press the HOME and DOWN ARROW again, the screen will start scrolling again and the rest of your document will come into view. In order to get the whole document back, you have to delete all the "WEIRD SYMBOLS" and empty spaces. After doing all this you will find 3 or 4 lines of text still missing. Those you'll have to type back in. After that's done, press CONTROL + N.

After you cleared the delete buffer, go to the top of your document and press CONTROL + D, then go to almost the bottom, about 3 or 4 spaces back from the END OF PAGE marker. Then slowly creep up on the END OF PAGE marker, don't go past it. If you watch the number of bytes, you'll see that if you go past it, 3 or 4 more bytes will be subtracted, but the next END OF PAGE marker will be in the exact same spot as the one you went past. So that's why you have to creep up on the END OF PAGE marker. Once you get to the END OF PAGE marker, press CONTROL + D. Now that you have everything in the delete buffer, press CONTROL + C or CLEAR and when it asks if your sure, press "Y". Now bring everything back by pressing MOVE/COPY. You now have your document back without the "WEIRD SYMBOLS" and empty spaces and you can use the CONTROL +] feature to find out how long your document is.

One last note, if you try to print your document with all those "WEIRD SYMBOLS" in it, your printer will go crazy, and I do mean CRAZY!

So next time CONTROL +] doesn't work, look through your document for those "WEIRD SYMBOLS". You'll know what I mean by weird as soon as you see them.

SUPED-UP SignSHOP

by Allen Smith

Recently I received "SignShop" by Strategic Software. As noted in one of N.I.A.D.'s back issues, this package is excellent. By experimentation I've made an interesting discovery involving SignShop, a memory expander and Walter's SmartDSK III package.

As we all know, the constant reliance on loading and saving data via the Data Drives and even the Disk Drives can not only be a little time consuming but cause premature aging of these units with excessive use. List and print out the programs entitled "SS.OBJ" and "piceditor" respectively.

Program one: Line 1310 calls for use of a disk drive. Not having one I changed this line to read "RAM DISK". Line 1380 needs to be changed to read < dr\$=","d7" >. D7 is used by Walter's package for the ram disk. Save this change.

Program two: Lines 1320 and 1750 should be changed to read < dr\$=","d7" >. Save this change.

Load Walter's SmartDSK package then SmartBASIC V1.0, I'm using volume 1.0. Copy the new versions of the entire SignShop package to the RamDisk. If you are using only one Data Drive, the changes should be to 'd2' instead of 'd7'.

Also I've converted the SS.OBJ program to a machine language binary file using Walter's cruncher program which makes the SignShop program run even faster.

NOTE: If this conversion is made, also change the last line in the SignShop title program, the file called "signshop" to read < PRINT CHR\$(4); "brun SS.OBJ" >. Add a timing loop to prevent the title program from running too fast.

ADAM RIBBON FEEDING PROBLEM

by Ron Kelly

A hint on the ribbon cartridge's feeding problems: my printer still had problems with ribbon advancement even with the spring weakened. To remedy it, I partially filed off the protruding rib on the bottom side of the cartridge (on the left side) to allow the cartridge to seat further down on the drive post. PRESTO! That worked very well! The drive post just wasn't reaching up into the drive gear in the cartridge itself to get a good "bite", and consequently would slip. If this were to continue, it could damage the drive post as it is only plastic. Hope that helps.

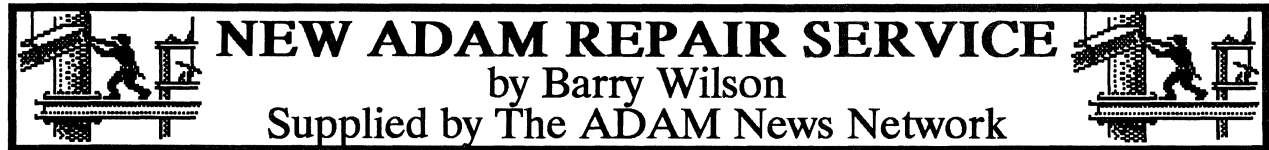
ZORAN III HINTS

by ADAMzap Software / Eric Danz

Attention all programmers involved with the CIA and FBI computer virus search!!! Once logged onto the Pentagon's Central Computer Network, there are several things that ZORAN III has changed to use it easier.

First, when the BBS is on-line and it asks you for your NAME, enter the word "undo" in lower case to bypass the intro screens. Second, the numbers appearing at the bottom of the screen from 1 to 4 tell you something. ZORAN III only interrupts when 2 or 4 is showing. Third, the SYSOP CONTROL password has been changed by ZORAN III. To find out what it is, check the on-line section where the latest guesses are displayed by management. Finally, when you are in the SYSOP CONTROL menu section, press the "!" and see what happens.

Good luck programmers. More updates will follow to help you prevent ZORAN III from launching a nuclear attack.



I didn't believe it the first time I read it and maybe you will not either.

However, when my disk drive forgot how to write (it could still read), I decided to take a chance and send it to be repaired by Dan Elliott and his new ADAM repair service.

I was VERY HAPPILY surprised! The drive was repaired promptly (although Dan said it COULD take 4 to 6 weeks, my disk drive was repaired in one week). Dan works full time at a paying job during the week and only has a few hours over the weekend to work on computer repairs.

He has been repairing ONLY orphaned computers, does own an ADAM and wants to get more into repairing ADAM Computers, so he has cut his prices as low as possible to break into the ADAM Computer Repair field. Here we go...

SERVICE CHARGES FOR COLECO ADAM Effective June 1, 1990

Prices do NOT include return shipping and handling charges. Shipping charges will vary depending upon weight, distance and method. I will ship via the cheapest method unless you specify otherwise. The minimum shipping and handling charge is \$2.00.

There may also be a surcharge for repairing modified equipment. The minimum surcharge is \$5.00.

[Barry: I sent him \$10.00 to cover shipping and handling because I was not sure what the cost would be. I got a check for \$7.00 back with my disk drive. Shipping and Handling on my disk drive was \$3.00.]

Definition of modified equipment: Any circuitry changes on the inside of the equipment case that involved the addition of components, wires, integrated circuits, or hardware. Customers who send in computer equipment that has had modifications done to it, which change the manufacturer's original design, must pay the additional \$5.00 surcharge for repairs.

1. The following items will be repaired for \$5.00 [Barry: YOU READ IT RIGHT, \$5.00] each PLUS parts and shipping:

**64K MEMORY EXPANDER
PARALLEL PRINTER INTERFACE
ADAM PRINTER POWER SUPPLY**

2. The following items will be repaired for \$10.00 each PLUS parts and shipping:

**ADAMLINK MODEM
ADAM KEYBOARD
ADAM DIGITAL DATA DRIVE**

3. The following items will be repaired for \$15.00 each PLUS parts and shipping:

**ADAM LOGIC BOARD
ADAM GAME BOARD**

4. The following items will be repaired for \$25.00 each PLUS parts and shipping:

**ADAM MEMORY CONSOLE (w/o drives)
ADAM DISK DRIVE**

[Barry: Mine was a disk drive repair and I paid including shipping, handling, parts, etc. - \$28.00]

For repairing add-on modules, printers, monitors, or other computerized equipment not listed above — write for a price quote for the items you want repaired.

I also service: ATARI, COMMODORE, SINCLAIR/TIMEX, TI, and TRS-80 computers.

For modifying or upgrading any computer or add-on module — write for a precise quote.

Customers can expect a 4 to 6 week turnaround on most repair jobs. Upgrades and problem cases may take longer.

You will be notified of any delays or excessive repair costs.

[Barry: As I said, my disk drive took ONE week plus 3 or 4 days shipping. If you backup or don't use the item needing repair often, this is a perfect service. Otherwise, I would write him to see how busy he is as the time, if he can give you a better turnaround time, etc.]

Instructions for sending in computer equipment:

1. For repairs, please use a separate sheet of paper to describe in detail the problem you are encountering and whether or not the problem is intermittent. List any software or hardware that are associated with the problem. Also, list any modifications that have been done to your equipment.

2. For upgrades, please enclose or specify the magazine article or other source of information for doing each upgrade.

3. You may include a check or money order as a deposit for repair costs. You will be notified if a balance is due. Over amounts will be refunded. [Barry: I was refunded \$7.00 for an over payment.]

4. Carefully pack and ship your equipment to the address below via UPS or Parcel Post. UPS is usually cheaper (and safer.. Ed.), especially with heavy items.

**DAN ELLIOTT
RT. 1, BOX 117
CABOOL, MO. 65689**

PHONE: (417) 469-4571

Evenings: Sunday thru Thursday till 10pm
Saturdays by chance till 11pm
All times are CST (Central Standard Time)



Modifying the Coleco Internal Modem INTO A Serial Card

by Syd Carter



I always wondered what a serial card was all about, sure the signal lines were understood awhile back, but the mystery of getting everything to work was still unanswered. A bit of experimentation provided those answers and now I am a proud owner of a serial card which cost me next to nothing to build. I should clarify that I had to cannibalize an original 300 baud modem (Which I didn't use anymore anyway) then there was a chip which I had to purchase. This chip is called the Max232. It's function is to convert the normal computer TTL level signals to standard RS232 levels. This changes the computers +5 & 0 volts into +10 (normally +12v) and -10 (normally -12). These levels are allowable to RS232 standards.

WHY DO I WANT A SERIAL CARD?

Here is the reason for wanting a serial card. This card is used to interface the computer to a host of standard RS232 type devices. Typical example would be an external modem, however there is a multitude of devices available. My personal preference for designing the serial card was to interface to another computer with serial capabilities, however an RS232 terminal can be interfaced to thereby obtain an 80 column display on the ADAM.

WHAT IS THE PURPOSE?

This article is being released so that others have access to the design details to build their own serial card. A card which is capable of speeds from 9600 baud up to 56K baud. Sure enough, these speeds are to spec, the limitation of the modem is 300 baud as it is configured, however after connecting it as indicated, you bypass the 300 baud limitation and can progress upwards.

START AT THE BEGINNING

A few states are in order, first off, the serial card will operate at 300 and 1200 baud by just adding the MAX232 chip and cables. No other circuit modification is required. This is due to an internal multiply register. To achieve the 9600 baud upper limit would require some jumpers and crystal interchanging. It is for this reason that the circuit diagram enclosed with this article is so detailed. It shows the clocking circuitry responsible for the speed output. 9600 baud is the upper limit if your going to communicate asynchronously. You will encounter this type most often. When you operate in synchronous mode, the upper 56K baud rate is achievable.

EXPERT APPROACH TO CONSTRUCTION

Withholding the technical details, observe the circuit diagram labeled "Adalink Modem converted to Serial Card". The lower half of the diagram is where the modification parts are located. Essentially, you must cut 2 traces on your modem card which go to pins 3 and 5 of the U7 chip. This should be the 74HC943 300 baud modem chip. You then connect the MAX232 chip to the INS8251 (U6) chip. After that there is a Db25 connector. If you want to save the modem, then install switches where you cut the traces.

PARTS REQUIRED

1 MAX232 chip, 1 16 pin socket, 4 22uf 16v Electrolytic capacitors, 1 DB25 male type connector, 2 1/2 feet of 4 conductor cable 22 AWG, 1 breadboard to solder everything on plus some connecting wire.

CONSTRUCTION CONSIDERATIONS

Be sure to ground yourself while handling the modem board. A sure way to destroy the modem is by static electricity. The modem circuit board can be removed from it's case by peeling off the Coleco sticker on case top. Then pry apart. The largest chip on the board is the INS8251 chip which should be labeled U6. The MAX232 capacitors are flexible and can be lower than 22uf if so desired. The trade off is in output impedance thereby limiting cable length and increasing the chance of device errors.

DESIGN DETAILS

The configuration shown will provide a 300/1200 baud serial card in the DTE format. This will interface to modems and other DCE type devices. It will not interface to a terminal since a terminal is a DTE type device also. Changing between DTE and DCE is rather simple, just switch the TXD and RXD lines and connect the MAX232 DTR output to pin 6 on the DB25 connector (DSR). Faster baud rates will involve changing the crystal. Observe the reasoning here. The incoming frequency is 3.579545/188 MHz. The divider from Xtal to TXC in order is /2, /47, /2 for a total ratio divide of 188. therefore, the incoming baud rate (clock frequency) is $3.579545/188 = 19040.13$ baud. The chip however, is software configured to a multiply of 64, therefore $19040.13/64 = 297.5$ baud. yes, your modem is actually running slow. Now consider that another internal multiply selection is X16. So dividing $19040.13/16$ yields 1190 baud. As you see, we are starting to exceed the allowable limits. The last internal multiply is X1. Now consider replacing the crystal with one that divides down to 9600 baud in the X1 multiply. This would yield 9600 baud, yet no other useable baud rates. This is a limitation. You can fiddle around some and obtain 9600/2400. Your main concern is with the chip requirements. The specs state that the incoming clock signal on pin 20 must be greater or equal to 4.5 times the transmit / receive clock. If using synchronous mode, observe 30 times factor. Therefore, if you operate at 9600 baud in the X1 mode, the incoming clock signal must be $9600 * 4.5 = 43200$ Hz. This is not achievable though since the minimum clock signal allowed is 740740 Hz while the maximum incoming clock signal is 2.380952 MHz. My personal preference is to replace the crystal with a 1.8432 MHz value. The first flip flop will have to (Note iagram shows a divide / 47) be placed after the inverter. The end result is to achieve 9600 baud in the X1 mode. By bypassing the two flip/flops and configuring to X16 mode gives you 2400 baud. If your really gung ho, then try wiring the programmable divider to a port address with an 8-bit latch thereby giving you full 9600/4800/2400/1200/300 baud rates. My suggestion here is to gain the spec sheet on the MC14569 Divide by N chip for further details.

SOFTWARE IMPLEMENTATION

A hardware design is only as good as the software behind it. Fortunately, the USART chip is understood by a variety of programmers already. The problem arises since these programmers restricted their software to operate at 300 baud only (X64 mode). This is identified as a multiplier of 3 programmed in the initialization overlay. X16 is number 2 and X1 is number 1. I personally will have software available for the configuration of yet undetermined nature and you may wish to consult me for details when my final configuration is completed. In the meantime, I am operating the base circuit at 300/1200 baud and have ADAMlink II operating. This software operates at 300 baud only since it uses the 60 Hz interrupt vector to read data from the USART. 1200

baud is operational, but you miss some characters. I will most likely be pursuing the programmable baud rate via a port address and an 8-bit latch connected to the MC14569 chip with an 1.8432 MHz crystal. This configuration will be utilized via a terminal program to allow high speed transfers between two computers. 80 column terminal software will be a secondary priority, however the software implementation is rather rudimentary.

IN CLOSING

I make no warrants to the information discussed in this article. I have built and tested my own version as described with exception to the programmable baud rate mod. To my knowledge, this information is accurate to the circuit construction that I prepared. Special thanks to Joe Magnier for his initial assistance with understanding the modem circuitry.

FOR FURTHER ASSISTANCE

You can call me by voice between the hours of 8:30pm - 10:30pm at (416) 769-6446. I will provide circuit mods to those who desire it.

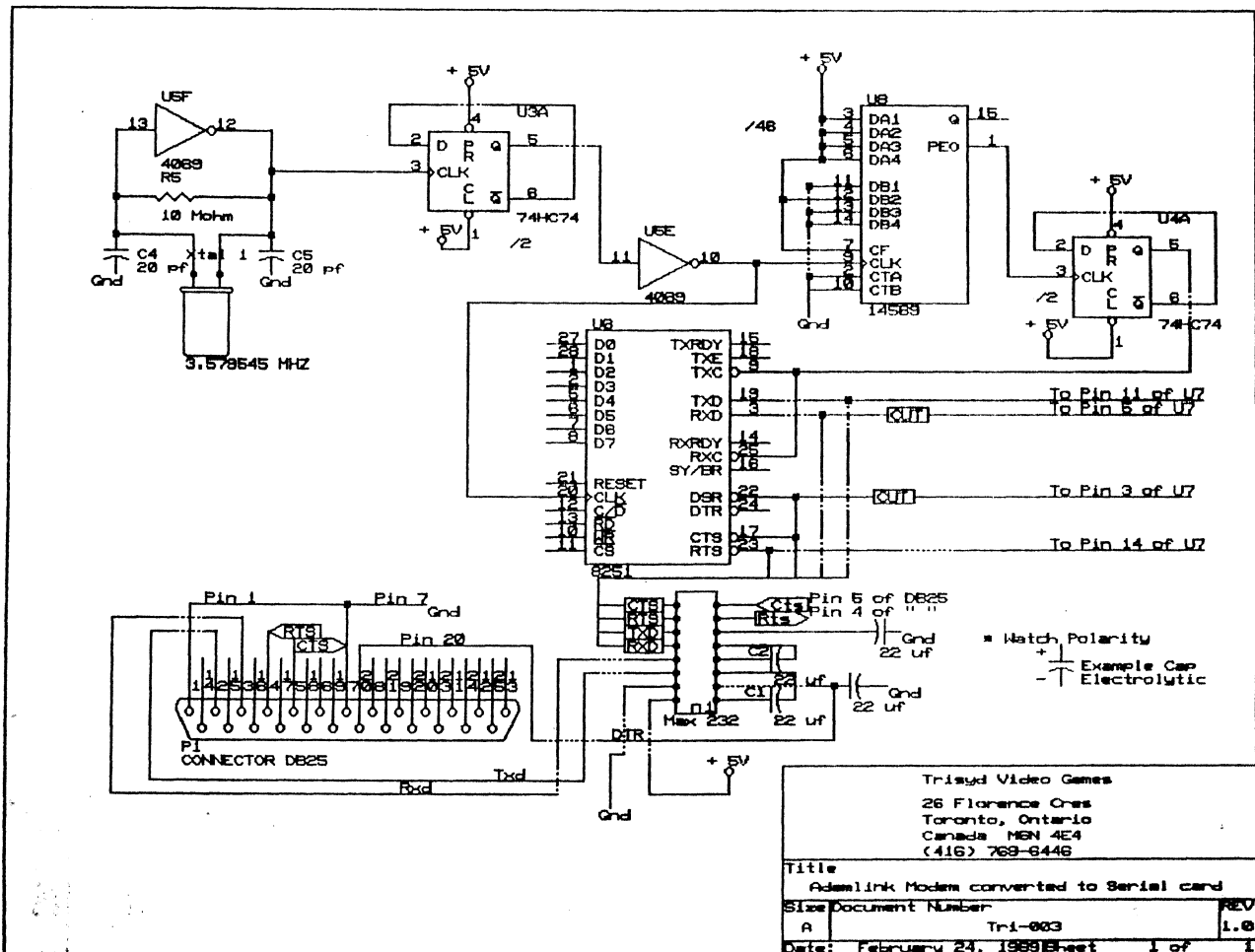
REVISION: May 2, 1990.... After hearing that this file and associated schematic diagram was not made readily available, I have posted this to CompuServe for distribution. Since this article was written, a few

updates have occurred. First, you will notice the diagram shows the one chip having a divide of 47. It should show 48. I corrected the original above article especially in the calculation of baud rate. Second, I have tried the programmable baud rate mod and still encountered an unsuccessful operation above 1200 baud. I've also written 80 column software which allows control to pass to a serial terminal with or without a keyboard. These files will be made available as a means of obtaining remission for the work involved to create this project. For a \$5.00 fee, I will send you a configured 80 column patch along with source code plus a configured MEX communications software package. Please note that the configuration is for use with original CP/M or at least that which contains the original video drivers. I have no idea if TDOS is compatible.

This project should only cost you around \$15.00 to build, but if you wish, then send your working modem (some non working ones may still work) to me along with a check in the amount of \$35 payable to:

Trisyd Video Games
26 Florence Cres.
Toronto, ONT., CAN. M6N-4E4

I will construct it and send you the currently configured software. The associated diagram (showing required modifications) is located below. Now, put that unused modem to use!





THE TRUTH IS TOLD

Intro: Barry Wilson, A.N.N. Editor
Rebuttal: Tony Patterson



WHAT TO DO? by Barry Wilson

WHAT TO DO ??? In a prior A.N.N. disk I reprinted the readme file from Sol Swift's Personal Calendar Utility. This was partially to give information on the calendar program, partially because Sol Swift talked of future programs and products he planned. It also included some comments on recent events involving himself and his company(s).

Now having included this on an A.N.N. disk, I am placed in a situation where I must consider what to do now that Tony Patterson has taken exception to Sol Swift's comments and offer his rebuttal.

THE TRUTH IS TOLD by Tony Patterson

To All ADAMites,

Ever since Mr. Swift walked away from TSF and left me here alone to face the creditors of the company I have gone out of my way to keep myself from saying anything derogatory about him. I knew that I could fill a book about him and what he has done to me and the ADAM community in general. But to tell the story necessitates my admission of how stupid and gullible I can be. But after his public attack on me I feel I have no choice but to enlighten the ADAM community at least about the lies that he has listed in the readme file on his latest offering.

He states that he walked away from DEI. In fact he disappeared and RAN away to start another company called ACE, remember Charlie Evans and Bill Propst. Ever heard from them before, or since? They do not exist, or if they do, they do not program on the ADAM computer. In fact he has operated 7 ADAM businesses, to be fair, all but two were under the name of Swift. He states that in April he started TSF in North Carolina making it seem that he again had a business when in reality all he had done was accepted (and spent) the money for the PD orders that he had asked for in his comeback letter. These orders were processed by me some six months later in Mississippi.

He states that I talked him into moving to Mississippi to take me into TSF as a partner, this is somewhat true. After listening to him wail that one of his employees had stolen all of the company cash (\$12,000 - his figure) leaving him penniless and he had no money to restart his company. I began to feel sorry for him. I later put two and two together, \$12,000 is a pultry sum compared to just the pre - paid orders for GoDOS that he had admitted to have received. He refused to press charges against this purported employee even though he knew all the facts and claimed to have the evidence. I should also have caught on when he did not have a record of just who was owed GoDOS. If he had ever planned on supplying GoDOS to the buyers when he left DEI, he should have had a list. Anyway, he wanted me to borrow the money to finance the rebirth of the company, this ended up being about \$4,500.00. He said that he had other people wanting to loan him money (no financial institutions just regular people), but he just did not know them like he knew me. I agreed to this, but only if we worked together from down here. I would renounce the debt that he owed me when he disappeared (he owed me \$1,000 when he left), run the business, process orders, draw newsletter graphics, work on newsletter articles, do all the folding and mailing of the newsletters and do all the graphics

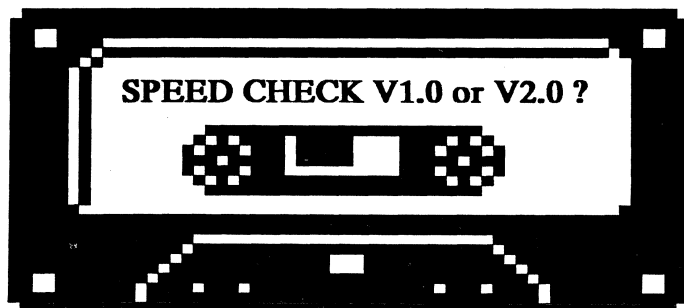
for upcoming TSF products, besides working a full time job (at least initially). This was so that he could devote all his time to programming and editing the newsletter.

Yes, as he states, I had control of the company money, but it WAS borrowed money and I was responsible for it. But being the fool that I was, every time he held his hand out for whatever reason I would write him out a check. I have cancelled checks made out for him and charge card slips made out for his benefit here that amount to 70% of the borrowed money and 50% of the money that the company took in. Most of the rest was spent on supplies, permits and printing. The \$20,000 worth of supplies that he states he brought here was about \$300 worth of printed paper (unbound software manuals and back issues of N&B). The equipment, that is still here amounts to a stapler and a punch and bind machine. Retail value of these items when new is about \$500, but actual value is closer to \$200. Yes, if this paper were bound together and paired with software and sold at retail it might be a chunk of money (but not \$20,000) and all of it could easily be replaced for less than \$300.

He says that in nine months virtually nothing was accomplished. That is not true at all! For while I worked a full time job during the day and worked on TSF projects at night and my wife worked TWO jobs, Mr. Swift undertook an exercise program that walked most of his overweight problem off, got quite a nice tan and spent most of his time romancing my sister and running up a tremendous phone bill (several hundred a month for many months), yes on my home phone. He could do this because he was alone all day long to do as he pleased plus he was living here rent free and eating off my hospitality.

If I seem a bit miffed, I am. He promised me that he would have GoDOS finished in 30 days from the time he moved in, but then we are all used to hearing that one aren't we. After three months of broken promises and strained family relationships (try letting a non-relative or even a relative live with you for a while) Mr. Swift was asked to move out. This was fine with him of course, he just moved in with my sister and sponged off her for a while. The worst part of it all is that for months I thought Mr. Swift to be a close personal friend. I went much farther to help him out than I ever should have. But now I have come to realize that he carefully manipulated me using his knowledge of psychology to engender trust and loyalty that was never deserved. He has done much the same with all of you. How else could he still get people to support him even when he repeatedly makes promises for software, takes money for that software and does not produce it. Has anyone received a completed copy of GoDOS V2.0? How about the G.A.M.E. Vol III?, Pictorial Graphic Library?, SmartTALK?, PowerPAINT Executive Edition?, GoDOS Technical Reference Manual?, The Swift Bookkeeping System?, not to mention GoWRITER, GoCALC and the other "Go" programs? These and others he has put up for sale and has received money for without shipment to the customer.

He is a talented programmer, a talented conversationalist, a talented writer, and a talented persuader, but he has shown me that being talented and being honest can be two different things. I understand that many will continue to support him for many reasons including the fact that he is such a capable programmer. What everyone needs to keep in mind is that he is NOT the only programmer for the ADAM. If he comes out with a good, useful program AND it has been reviewed by many reputable reviewers AND it is in it's final completed form including a manual AND someone besides him has it in stock available for delivery then I may even buy it. But until ANY product offered for sale by him meets ALL of the above qualifications, LET THE BUYER BEWARE!



DATA DRIVE SPEED ADJUSTMENT SOFTWARE

by Phil Kosowsky

Ever make a backup copy on one ADAM and for some reason it works on one of your ADAMs, but not on the other? Well, maybe one ADAM has a dirty head or just maybe one data drive speed is a little off? Thanks to data drive speed testing software which leaked out of Coleco and was placed into the Public Domain, this is not a problem!

Coleco made for it's own use two data drive speed adjustment software packages. The first data drive speed checker is self-booting and the screen will show a line indicating what percentage off that the read / write speed is running at. The hand controller is used to stop or start the program at any time. When the software is running, it will prompt you to adjust your drive speed. This can be done by turning the data drive adjustment screw. Turn the speed adjustment screw slowly allowing the software time to run in order to show the new speed. Keep repeating this process until the software shows the speed that you desire. You will note that the speed will vary some with the temperature of the drive.

The speed adjustment screw can be found either on the top or bottom of the data drives. On the USA and early JVC drives, the speed adjustment screw is located on the bottom of the drives. Turn the drive over and look at the center of the bottom. Sometimes you have to move the lead wire for the drive head over a little to see the adjustment screw. On the latest JVC drives, the adjustment screw is on the top lefthand side. This was a really great improvement because now the speed can be adjusted without removing and holding the drive upside down. One quick way to tell if the data drive is the new JVC style is by looking at the motor mounting screws in the front of the drive. On a new JVC, these screws will be lined up vertically.

Coleco revised the speed adjustment software (Speed Check V2.0) because of the change in the way they formatted blank data packs. In doing so, some additional options are added such as: light blue screen, measuring the percentage off on search speed, and percentage number read out. The software itself works the same as the first speed adjustment program (Speed Check V1.0). However, be for-warned, that the data pack that these are copied to **HAVE TO HAVE THE RIGHT FORMAT FOR THAT REVISION!!!** There are two different formats that Coleco used with their blank data packs. The first blank Coleco data packs had a clear see through label, the speed adjustment tape V1.0 can only be used with these. The second blank Coleco data packs have a light gray label that Speed Check V2.0 can only be used with. This is very important because if the wrong data pack format is used, then the software will give you false readings. The software will seem to be working, but false readings will be given. I know this drove me crazy for a long time since I had V2.0 on an old formatted data pack.

If you get this software and it is not on a Coleco brand data pack or not the right Coleco data pack **DO NOT** take a chance. This can be corrected by just copying it to the correct type of Coleco data pack.

BLURRY EYED?

by Bob Slopsema

Let's see, you've had your ADAM for a few years, you've purchased a memory expander to access all those neat new programs written lately. Now you're even thinking about buying a dot matrix printer to make all those neat graphics and / or speed up your printing capabilities. **BUT**, you still have that fuzzy screen on the old television that is hard to read - to say the least! Now you're thinking maybe you don't need that dot matrix printer to print all those neat graphics after all.

What if I told you that all your dreams are possible after all? No, you didn't win the lottery. If you haven't purchased that color monitor just yet, here's the answer to your problem! There is a "fix" for your color TV to make it work as well as a monitor. The best part is that it is a very inexpensive project to tackle! The supplies needed can be purchased at your local Radio Shack store. This is what you'll need:

1 - signal booster #15-1118 - \$12.95

1 - 4' coaxial cable #15-1529 - \$2.79

1 - 1 1/2' RCA to RCA cable #42-2365 - \$1.79

The object is to make 2 cable with an RCA computer plug on one end and a coaxial TV plug on the other. The RCA cable is a similar design to the coaxial TV cable, which helps simplify the process.

First, cut both of the cable in half. Next solder the center wire of one RCA cable and the center wire of one coaxial cable together and then solder the outer casing wires together. Make two cable this way. Now tape up the connections making sure to tape up the center wires first so that they do not touch the outer casing wires as you tape the cable together. Your two cables will now each have a coaxial plug on one end and a computer RCA plug on the other.

Now that you're done making the cables, start disconnecting all the goodies from your ADAM so you can get at the plug in the back. Plug one RCA end into this same port, then plug the coaxial end into the input port of the signal booster. Plug the second coaxial end into the output of the signal booster and the RCA end into the game adapter on the TV.

ALTERNATE CONNECTION - if your TV has coaxial cable input -use only the "adapter" cable to the signal booster and use a regular coaxial cable from the booster to the TV coaxial input. The coaxial input to the TV makes for a slightly better picture on the TV.

Now put your ADAM all back together again - hopefully in the same manner in which you took it apart, and plug the booster into a wall plug.

Now it's time to power up and test it out. Be ready for a pleasant surprise! What we've done is boost the computer signal to the TV so as to overcome most, if not all the line interference between the ADAM and the TV.

If you need help or don't quite understand the process, let me know and I'll help you any way possible. Please include a SASE (Self-Addressed, stamped envelop) for a reply.

Bob Slopsema
1815 Camille SE
Kentwood, MI 49546



I DID IT

by Ron Symonds



Well, I did it. I did it again. Rather than heeding the sage's advice of "if it's too good to be true, it probably is", I followed my basic financial philosophy of: Buy High... Sell Low -- keep the economy sound. After all, it has never failed me to date, although it has cost a lot.

Even Though I consider myself a novice, I am intrigued by computers. I wanted badly to pass on some of my fascination to my wife, Marilyn. Well, Marilyn is not intrigued with computers. In fact, she considers herself (with some degree of pride, I might add) computer illiterate... which she's not. She fights me all the time to get on our ADAM and strokes the keyboard with all the finesse and style of a concert pianist. As far as she is concerned, the ADAM is a sophisticated typewriter that makes her look like she can type a thousand words a minute, error free. I guess I should have accepted her satisfaction with ADAM and let it go at that, but I didn't. And old never-pass-up-a-bargain-if-you-think-you-see-one me only learns the hard way. So, when I saw a Vendex (now owned by the North American Phillips Corporation, a subsidiary of the Phillips Corporation, an entity, I'm told that makes IBM look like a corner grocery) Headstart Explorer Computer during a 1989 Christmas closeout sale for only \$195, and it came with gimmicky icons that I just knew would catch Marilyn's eye, I just had to buy it. After all, with 512K of memory and an expansion slot to add another 256K, a built-in 3 1/2" 720K disk drive, a slot on the side to plug in their super hard disk drive, a port for a mouse to point at all those neat icons, another port for an external 5 1/4" floppy, a port for a dot matrix printer, a port for a monitor, a switch that could be flipped to mono or color, a built-in word processor, filing program, telephone directory, calculator and the ability to switch between DOS and the Explorer's ROM "Bulletin Board", software for MS-DOS, GW Basic, Logo and a toll free number for help, well... how could Marilyn help but be intrigued? The floor model had been bashed around by kids and was missing some basic stuff, but they just happened to have a brand new one, still in the box, in the back. The last one, "believe me", said the salesman. And since Marilyn loves a bargain as much as myself, I did it.

Of course I had to pick up a monitor (they had an amber mono on sale) because a great computer like the Explorer couldn't be expected (and wouldn't) operate on a TV like the ADAM. An, of course, I needed a dot matrix printer because a printer didn't come with it, like the ADAM; and I just happened to have a friend who had one for sale. So I did it and I did it... and then I went home and told Marilyn about her early Christmas present. I really did.

She wasn't impressed

In fact, she wanted to know why I had bought another computer when I had already liberated several ADAMs from dusty closets around town and had an XT clone to boot. I explained to her again that I thought the ADAM was a great buy for the money; cheaper than an electric typewriter; cheap enough to put an extra in the guest bedroom in the house we plan to retire in soon, and impress all our friends by giving them access to their own personal computer while they visit, not to mention the image of prosperity we could project; cheap enough to be able to give one to our school age relatives to use for their own term papers. What price, happiness?

Of course she agreed. But she still wanted to know what I bought the Explorer. "Wait", I said, "you'll see and you'll love it".

I read all the directions and set it up, then called Marilyn in to see her new computer and how consistently it operated and how all those neat icons looked on the Bulletin Board. I think it was the consistency of the

machine that impressed her most. It consistently printed out a document with absolute disregard for the length of the paper. The spell checker was consistently slow, and consistently hung up. With the word processor, it consistently stayed on the back of the train, pushing a consistently increasing number of cars ahead of it and requiring that one stop now and again to delete the lettered boxcars lest they become longer than the text (this, of course, doesn't speak too proudly of my typing prowess). The font on the screen was fancy, but sometimes almost illegible. And the machine consistently locked up.

I took it back to the store. The salesman had been honest. There were no exchanges and no others in the back. He didn't know where I should go for help.

Ah, the toll free number: I called. After dialing the number consistently for a half hour a friendly recording came on the line telling me what button I should push to get various services. Then I was put on hold to listen to a southern California music station, which was finally interrupted by a friendly voice asking if it could help me. After a short discourse, during which I felt I had to defend my IQ more than once, I was given some directions. I hung up and tried. The consistency was still inherent in the computer.

Over the next several weeks, I called several times to get advice. Each time I invested anywhere from 15 to 45 minutes repeatedly dialing the number before I got through. I also wrote to the office on the west coast and the headquarters on the east coast explaining my problem. I have yet to receive a reply. During my inquiries, I checked on how to get the hard drive, the mouse, the external disk drive and memory expander. I was told they weren't ready for release just yet because they had found some bugs in them. And "no" they didn't sell to individuals. I was given some numbers to call. When I called, I found that many of the numbers were to places that were no longer in business or, if in business, no longer handled Headstart products. Obviously, the folks with whom I had spoken were not availed of current data. But I did manage to find out a few things. I found that the 40 MEG Hard Drive was \$600, the external floppy was \$300, and the memory expander was \$130. Outrageously high. The mouse was only \$29. But "no", they didn't sell to individuals and had no idea where I could purchase the add-ons.

Finally, in February, I spoke to a toll free number gent who told me to point to a certain icon and press the mouse button. I told him I didn't have a mouse and could he offer any suggestions. He said to use the arrow keys. I did it

The number that came up indicated to him that the wrong BIOS had been installed, and he told me how to send the computer back. /did it

After only 10 days, I received a call from Headstart's shipping department verifying Marilyn's name and address. The man said they were shipping the computer back to me that day. I was impressed. How could Marilyn not be?

A week went by and after another half hour dialing the phone, the toll free number answered. More music, more defense of my IQ, spoke to three people over the course of an hour, and finally established that "no", they had no record of ever receiving my computer. I did it. I lost my cool

I was finally put in touch with the voice of a sweet, young thing that promised to check it all out and call me the next day. The next day she called as promised (CONTINUED ON PAGE 12 COLUMN 2)



THE MIDI-MITE!

MIDI - ADAM's Music Revolution!

by Ron Collins



There have been three types of software popular with ADAM owners since it's first appearance on the market: GAME SOFTWARE, GRAPHICS SOFTWARE and MUSIC SOFTWARE. In between all the hobby and leisure-type software covered by these three program types, there is also a wide range of business and professional titles to choose from. The combination of these various offerings along with ever more sophisticated hardware add-ons, has turned Coleco's little orphaned "toy" into a full fledged computer. The ADAM Computer, as many of us have already found out, has the ability to give even "BIG BLUE" a run for it's money!

Probably the most supported of the three leisure-type fields has been GAME software. We ADAMites, as we are popularly called, just LOVE to play games! We've been a bit more fortunate than some computer owners in that our machine has the ability to use games which rival the Nintendo machines in selection and graphics quality. With roughly 160 ColecoVision games for us to choose from along with scores of ADAM specific game software from Coleco and third party developers, we now have plenty of GAME software to keep us going.

The second most popular software has been GRAPHICS design programming. It's always been great to look at the graphics capabilities and support that other computers have been given and to imagine using such software on our own machine. Because of our "orphaned" status, we've always had to wait for our own host of talented programmers to "catch us up", so to speak. We knew what "should" be possible for our ADAM. The game screens, themselves, taught us that OUR machine had a comparable capability to draw and paint. It took years to get to the point where we now are with programs like PowerPaint, SmartPaint, GraphixPainter, etc. to choose from. We can now pick and choose from amongst literally HUNDREDS of public domain disks chock full of clip-art, sprite art and pre-drawn artwork in any of the formats mentioned above.

The third most popular software has been the hardest to find if you can imagine it! MUSIC programming is really rather scarce for our fine computer. We can enjoy SmartTunes or we can play with FutureVision's excellent VideoTunes Music Software. There is also SmartLOGO's music capability.... still to be fully used at this point in time. VideoTunes has always been, by far, the easiest program for ME to use. All I had to do was to look at a piece of sheet music and use my joystick to move the little note around on the screen. When I had it looking like the sheet music note and on the same line, etc., I would just press the fire button on my joystick and the note would be stamped in place. It took HOURS at a time, but the results always seemed worth the effort. There was, of course, a limit to how many notes you could place into the file, but I rarely had the patience and the concentration needed to fill the memory buffer.

Music programs of all types have always had one limiting factor for us. The ADAM uses the older style sound chip used earlier in the TI computers. While this chip produces some truly excellent game sounds and background music, it still has certain limitations. The sound chip supplies us with three voices (one note per voice) and a noise channel. By mixing the correct notes, you could get a nice smooth chord to play through your TV speaker. It was not exactly what I wanted.... but it was "close".

I guess what I wanted was something I had read about for the C=64 in a catalog a few years back. What I wanted was a program that would let me put in the notes and then play them back.... not as a stilted collage of computer tones, but rather as fairly REAL sounding musical

instruments that I had selected! The C-64 with advertisements about what note would be played by a violin or harp, etc. ran over and over in my mind. It was at that time that I ordered VideoTunes for my ADAM. It was a super program, but it just wasn't the program I had been looking for all this time. What a blessing.... and a disappointment!

At ADAMCON 01, held in the fall of 1989, a well known ADAM owner and programmer named Chris Braymen demonstrated his own new prototype add-on for the ADAM. We had seen and heard about many new hardware and software items while at this tremendous gathering of continent-wide ADAM owners. What Chris had to show us was something few of us had ever heard of.... but even fewer of us could believe when our EARS heard it in action!

Chris had not only designed and built a new interface for the ADAM, he had even written the software to use it! The new unit was called a MIDI port. The name "MIDI" is an acronym for (M)usical (I)nterface (D)igital (I)nterface. What the MIDI does is to allow musicians to connect a synthesizer or electronic keyboard up to a computer. The computer's software allows you to select what musical instrument will play using which voice. It is only limited by the equipment it is connected to. The better your equipment.... the better your results.

Now, what about THIS MIDI? As I said, it was a prototype we were listening to. Connected to the side port of Chris' ADAM we saw a ribbon cable plugged into a flat PC board with wires sticking out of it. Connected to THAT was a keyboard and a unit called a synthesizer. All of this was then somehow connected up to a stereo unit for amplified sound! It was unknown what the future would hold for Chris and this new device. All we knew as we sat at dinner and listened was that WE ALL wanted one! Chris' software allowed him to play those old favorite VideoTunes songs; not with the three voice limit but with up to SIXTEEN voices.... each reproducing a different musical instrument! It was like having a live band in our dining area. The MIDI could also play songs played in on the electronic keyboard and stored to disk or data pack. Songs in a MIDI format created on other computers could also be played. It was fantastic to listen to.... but how could I get one? This was, after all, just a prototype to help Chris in his job as a professional musician. It was doubtful at this point whether or not a commercial release of the MIDI would ever come about. Well, many of us went as far as we could to get Chris to market his new unit. We bragged it up, talked it up.... in short, we did all that we could to convince Chris that he was NOT the only one who wanted Chris Braymen to perfect this MIDI!



It's been a year since that time and Chris has been BUSY! He has designed and had built a printed circuit board version of his prototype. He has polished up his software, put it all into a package with the needed cables, sample music files and three documentation manuals. The unit is now called the MIDI-MITE and is being distributed by BONAFIDE SYSTEMS, 48882 Royal Oaks Dr., Oakhurst, CA 93644. After seeing similar MIDI interfaces for the IBM line selling at close to \$300, I was amazed to find this one going for only \$75. I guess Chris just wanted to let all of us enjoy it as much as he does! It's nice to know that our early enthusiasm for the MIDI must have impressed Chris with the desire to make the unit possible within the limited budget of most of the ADAM world!

The MIDI-MITE is now housed in a compact black enclosure with a silver sticker on top that holds it's name, manufacturer and cable connection instructions. To use the MIDI-MITE, you just turn off your ADAM and disconnect any power source. Next, plug the supplied 60 pin ribbon cable into the side expansion port of your CPU. Take your MIDI synthesizer or electronic MIDI compatible keyboard and connect the two DIN type plugs into the other side of the MIDI-MITE. If you have both the keyboard AND a synthesizer, you can connect BOTH of them up at the same time for even more capabilities! Now, plug in the ADAM and turn it on. Turn on the keyboard, put the program data pack or disk into the drive and pull the reset. The software is all in ADAM EOS format. It is also SmartKEY driven and simple to use. Press the STORE/GET key, select the drive to search (it even works on any of the known hard drive systems for ADAM) and point to the file in the directory you want to play. Press the PLAY key (SK-V) and you will be treated to the most beautiful music you've ever heard played on an ADAM!

A piece of hardware is only as good as the support it has, as we all know too well. To this end, Chris is hard at work on a new sequencer as well as updates to his current programs. For those who can't play a keyboard, or don't have VideoTunes to get songs for the MIDI-MITE to play, take heart! If you have a modem, you can call hundreds of BBS's around the country that support MIDI and even VideoTunes songs. Many commercial networks such as CompuServe and GENIE even have a full MIDI forum section on-line! Just find the songs you want to hear and download them!

As for the MIDI format files, this level of software uses the older MIDI type 0 format files. Many MIDI files are listed in the newer type 1 or simply MFF format. Chris even wrote us a routine to convert the type 1 files over to the type 0 files so that we can use them as well! If you aren't interested in doing the conversions, etc. yourself to get the songs into an ADAM EOS format, don't worry about a lack of songs to choose from. There are already five volumes of VideoTunes songs (160K disks) in my ADAM public domain library and we have ten volumes of MIDI songs to use and enjoy! All of these volumes are being placed onto bulletin boards for easy access by user's groups, etc. for convenient access!

I was fortunate in being allowed to demo the MIDI-MITE at this year's ADAMCON 02 in Toronto. Alan Neeley even managed to capture our demo on video and is making the demo available on his full convention coverage video tape soon. I only wish I had been better equipped to properly demonstrate the MIDI-MITE. John Villilo, who assisted me, along with our sons and I did our best to convey our enthusiasm. I hope it made up for our lack of musical ability (grin). This video of the convention will let you see and hear the MIDI-MITE for yourself. Alan also publishes one of the finest ADAM newsletters in the business: THE ADAM INFORMANT. I am currently working on an audio cassette of songs played on my ADAM via the MIDI-MITE and my Casio MT-540 keyboard. I'll make this available to anyone who wants a copy of it as soon as I finish recording. I'd say that the third most popular software type, MUSIC SOFTWARE, has at long last received the support it's needed. If you like music, you're going to LOVE the MIDI-MITE!

For further information on how to receive the MIDI compatible and VideoTunes compatible song file volumes which Ron has available, please write to him at the address listed below and include a SASE (self-addressed stamped envelope) for a reply:



Akron ADAM User's Group
c/o Ron Collins
529 Grandview Ave.
Barberton, OH 44203
(216) 753-6971

and told me she had found Marilyn's computer, mislabeled. It hadn't been fixed. "No", she didn't know how I could get any accessories. "No", they didn't sell them direct to customers. "No", the new BIOS wouldn't be in for at least a month. It was backordered. I did it. I waited.

In late April, five months after buying the computer, the Explorer was delivered by UPS. In the meantime, I had managed to buy a Headstart mouse (not the one for the Explorer) from a kindly old fellow at another store who took pity on me. He had one that had come in by mistake. It cost \$59 plus tax. But the computer worked

Of course it still pushed little train cars ahead of the cursor. Apparently it's supposed to operate that way. The spell checker is still slow. Apparently it's supposed to operate that way. The font that appears on the screen is still difficult to read. Apparently it's supposed to operate that way, too.

But it worked

Meanwhile, Marilyn had been enjoying ADAM and getting her letters out in record time. She remained uninterested in the interesting PC. And rightfully she might. We've had no significant trouble with ADAM. She's convinced that ADAM can't be a computer because it's so easy to operate. They're tough machines

I recall an article I read several years ago when a trash collector (but, ah, I date myself... today I suppose he's called a "sanitary disposal engineer") found an ADAM in the trash he was picking up. He took it home, cleaned the coffee grounds out of the ports, wiped the toast crumbs from the keyboard, set it up, plugged it in, and wrote a letter. Tough

In my QUEST FOR THE PERFECT ADAM, I have liberated several from garages and closets, garnished with dirt and grime. Some have been resurrected from those who appear to have a hobby of feeding Ex-Lac to their cats. Others have been smeared sticky with jelly. They all cleaned up. They all worked. Tough

Yeah, they're slow compared to the multi-buck megabyte monsters. But they work.

Yeah, they have their idiosyncracies peculiar to them alone. But they work.

Yeah, the printer is noisy and crawls along, but you don't have to fool with a bunch of dip switches. You know, those little switches for the wall lights in Tinkerbell's house.

But it works

Yeah, support is a hassle by some standards, but ADAMs have light years more support than I found available for the Explorer; where the company won't sell me accessories, can't tell me where to buy them, and won't even answer their mail. During the timeframe I was exploring the Explorer problem, I made at least thirty phone calls to Headstart, their referral numbers, and numbers I located myself, in an effort to find adequate support. What I found was about as much help to me as a plate of butter beans. But... I can call NIAD and get an answer from Jim Notini regarding any problem I have with the ADAM. No hassle. No punching buttons. No listening to the local radio station. No recordings. And, most importantly, no defending my IQ.

So, guess what I'm using tonight to write this. You betcha... our ADAM.

Stick with the jelly. Stick with ADAM.

I DID IT



ADAM BULLETIN BOARD

by Jim Notini



SOFTWARE DEVELOPERS

A & S SOFTWARE
AARON HAMLETT
710 W. LONGSPUR BLVD. #2073
AUSTIN, TX 78753

ACOLYTE SOFTWARE
DOUG ROSENVINGE
30 ARBORWAY DR.
SCITUATE, MA 02066

ADAM CONNECTION
STEVE MAJOR
P.O. BOX 562
CHAMPLAIN, NY 12919

ADAM'S HOUSE
TERRY FOWLER
ROUTE 2, BOX 2756
PEARLAND, TX 77581-9503

ADAMagic SOFTWARE
STEVE OLSON
1634 NORTH THOMPSON DR.
BAYSHORE, NY 11706-1330

ADAMzap SOFTWARE
ERIC DANZ
17 CAPSTAN RD.
WEST MILFORD, NJ 07480-4816

AKRON AUG SOFTWARE
RON COLLINS
529 GRANDVIEW AVE.
BARBERTON, OH, 44203

AJM SOFTWARE
TONY MOREHEN
11 ELLIOT AVE.
OTTAWA, ONT., CANADA K1S-0M2

APE SOFTWARE
ANDREW EWANCHYNA
4756 LALANDE
PIERREFONDS, QUE., CANADA H8Y-1V2

BRYAN'S SOFTWARE
BRYAN PAYTON
428 KNIGHT ST.
ELBERTON, GA 30635

DIGITAL ADVENTURES
TONY PATTERSON
P.O. BOX 732
OCEAN SPRINGS, MS 39564

E & T SOFTWARE
ED JENKINS
9588 FOREST LANE #514
DALLAS, TX 75243

EYEZOD GRAPHICS
PAT HERRINGTON
1003 OAK LANE
APOPKA, FL 32703

FAST ED'S SOFTWARE
CARL FESSLER
5000 FAIRVIEW DR.
CRESTWOOD, KY 40014

FEDERATION SOFTWARE
JOE WATERS
13009 GRAY HILLS RD.
N.E. ALBUQUERQUE, NM 87111

FUTUREVISION
STEVE SIMPSON
P.O. BOX 34
NORTH BILLERICA, MA 01862

GMC SOFTWARE
GUY COUSINEAU
1059 HINDLEY ST.
OTTAWA, ONT., CANADA K2B-5L9

GERLACH FAMILY SOFTWARE
RICKI GERLACH
1402-A WERNER PARK
FT. CAMPBELL, KY 42223

GJMG ENTERPRISES
GLENN GABARIK
5558 HOLLYWOOD
MAPLE HEIGHTS, OH 44137

GRAFTEX SOFTWARE
JOE QUINN
6665 TIMBERS DR.
MOBILE, AL 36695

HAL WEBER SOFTWARE
HAL WEBER
2360 SW 22nd AVE. S-405
DELRAY BEACH, FL 33445

HANANIA ENTERPRISES, LTD.
P.O. BOX 356
TINLEY PARK, IL. 60477

HEXACE SOFTWARE
BRUCE WALTERS
RD#4, BOX 81
FRANKLIN, PA 16323

HARRISON PRODUCTIVITY
CARL HARRISON
1424 - 24th ST.
KENOSHA, WI 53140

IMAGE MICROCORP
P.O. BOX 3761
CHERRY HILL, NJ 08004

JASON BROWN SOFTWARE
JASON BROWN
312 ADELAID ST. W. #805
TORONTO, ONT., CANADA M5V-1R2

KEHOE SOFTWARE
DENNY KEHOE
144 STRATTON CRES. S.W.
CALGARY, ALB., CANADA T3H-1V7

LNS WARE
BOB LENNES
14637 ATLANTIC AVE.
DOLTON, IL 60419

L.O.F. COMMUNICATIONS
CHARLES SUMMERS
P.O. BOX 587
YORK, PA 17405

M & M SOFTWARE
MICHAEL MILLER
1124 S. 7th
SHELTON, WA 98584

M.C.P. SOFTWARE
P.O. BOX 68503
VIRGINIA BEACH, VA 23455

McGRATH SOFTWARE
MICHAEL McGRATH
6404 N. WASHINGTON BLVD.
ARLINGTON, VA 22205

MR. T SOFTWARE
BOB TARNOWSKI
6521 E. CAMINO SANTO
SCOTTSDALE, AZ 85254

MMSG
JIM MARSHALL
P.O. BOX 1112
BROOMFIELD, CO 80020-8112

MURDOCK GAMES
BOB MURDOCK
2645 WILBANKS CIRCLE
DALLAS, GA 30132

PARALLEL SYSTEMS INC. / A-WARE
P.O. BOX 772 or 116 MYTRE AVE.
TURNERSVILLE, NJ 08012

PHOENIX 2000
SOLOMAN SWIFT
P.O. BOX 1292
KINGS MOUNTAIN, NC 28086

PITMAN SOFTWARE
STEVE PITMAN
3705 CHURCH ST.
CINCINNATI, OH 45244

PRACTICAL PROGRAMS
DON SOBCZAK
4318 MONROE AVE.
KALAMAZOO, MI 49002-2063

REEDY SOFTWARE
JACK REEDY
P.O. BOX 129
LOWELL, MI 49331

RM SOFTWARE
RON MITCHELL
210 GLOUCESTER ST., APT. 1107
OTTAWA, ONT., CANADA K2P-2K4

ROGINSKY GAMES
AL ROGINSKY
4327 THORNDALE PLACE
LAS VEGAS, NV 89103

ROYAL AMBASSADOR SOFTWARE
DAN PEASE
8138 HONEYSUCKLE LAKE DR.
NORTH CHARLESTON, SC 29420

SCRUFFY BEARD SOFTWARE
TERRY CAIRNS
50 JOHN GARLAND BLVD., UNIT #108
REXDALE, ONT., CANADA M9V-1N4

STRATEGIC SOFTWARE INC.
424 E. JOHN ST.
LINDENHURST, NY 11757

SEAMAN SOFTWARE
DAVID SEAMAN
129 E. 8th ST.
WINONA, MN 55987

TC SOFTWARE
TOM CLARY
9015 ESTHER DR.
LOVELAND, OH 45140

TCR SOFTWARE
TOM KELLEY
3-B CHESTNUT GROVE
EARLYESVILLE, VA 22936

TELEGAMES USA
TERRY GRANTHAM
BOX 901
LANCASTER, TX 75146

UNREAL SOFTWARE
DARREL SAGE
ROUTE 2, BOX 211
RUSSELLVILLE, MO 65074

WALTERS SOFTWARE CO.
JIM WALTERS
RD. #4, BOX 289-A
TITUSVILLE, PA 16354

WHITE CO.
DAVID WHITE
2694 TWIGG CIRCLE
MORRIETTA, GA 30067

WIZARD'S LAIR
JIM NOTINI
8125 W. CATHERINE
CHICAGO, IL 60656

There are and were many other software developers for the ADAM that we don't have addresses for. If anyone knows the address of any of the listed companies below or you operate one, please drop us a line: A & A Software, Admiralty Microsystems, Altirion Software, Asgard Industries, Avimar Inc., BlankWare, BW-Frio Software, Carolina Games, Chris Hickman Software, Corleon Software, Dahlke Software, DC Software, Englesoft Consulting, Exyended Software Co., Hoepfer Software, Iban, Jaybee Inc., Jordan Co., JP Software, LR Realty Co., L'Herault Co. / Orbitware, Martin Consulting, Micro 2, N.A.C.C., Nickelodeon, Origin, Questech C.E.S., Scott Software Co., Silvagni Co., Skala Enterprises, Spaced-Out Software, Supercharged Programs, Tapeware Technology, Ticonderoga Computer Systems, TLB M Software, TWCo., Uncle Ernie's Software, Vanguard Ltd., Victory Software, W.L. Price Software Co., Weirdware, and Wittenbach Software.

HARDWARE DEVELOPERS

ADAM'S HOUSE
TERRY FOWLER
RT. 2, BOX 2756
PEARLAND, TX 77581

ADAMLINK OF UTAH
ALAN NEELY
2337 SOUTH 600 EAST
SALT LAKE CITY, UT 84106

BONAFIDE SYSTEMS
CHRIS BRAYMEN
45820 S. OAKVIEW DR.
OAKHURST, CA 93644

DATA BACKUP
J. WESS RHUDY
BOX 335
IONA, ID 83427

E & T SOFTWARE
ED JENKINS
9588 FOREST LN. #514
DALLAS, TX 75243

EVE ELECTRONICS
2 VERNON ST., SUITE 404
FRAMINGHAM, MA 01701

MICRO INNOVATIONS
MARK GORDON
12503 KING'S LAKE DR.
RESTON, VA 22091

OASIVE PENSIVE ABACUTORS
GARY BOWSER
432 JARVIS ST. #502
TORONTO, ONT., CANADA M4Y-2H3

THOMAS ELECTRONICS
THOMAS MACKIE
151 DEVONSHIRE CRESCENT
SASKATOON, SASK., CANADA S7L-5V6

TRISYD VIDEO LABS
SYD CARTER
26 FLORENCE CRESCENT
TORONTO, ONT. CANADA M6N-4E4

PUBLICATIONS

HINKLE PUBLICATIONS
PETER & BEN HINKLE
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ITHACA, NY 14850

ROADRUNNER PUBLICATIONS
MEL OSTLER
3217 MESILLA HILLS DR.
LAS CRUCES, NM 88005

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(814) 723-8600

ADAM REPAIR SERVICE

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KOSOWSKY'S ADAM REPAIR
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6067 JERUSALEM DR.
CICERO, NY 13039

OSCAR'S COMPUTERS
HOWARD PINES
224-F EGLIN PARKWAY
FORT WALTON BEACH, FL 32548

ELLIOTT REPAIR
DAN ELLIOTT
RT. 1 BOX 117
CABOOL, MO 65689

INSTRUCTION REPRINTS

OMAHA ADAM USERS CLUB
NORMAN CASTRO
809 WEST 33rd AVE.
BELLEVUE, NE 68005

NEXT - ADAM BBS'



WHAT IS ADAM-FORTH?

by Keith Marner
Editor of the U.K.A.S. Journal



Advantages of FORTH

Here are some interesting books on the subject which make very handy references:

- **Starting FORTH**, by Leo Brodie
- **Mastering FORTH**, by Anita Anderson
- **Thinking FORTH**, by Leo Brodie

Studying at least one of the first two is indispensable for getting started in FORTH. Also, each of the three references includes a summary and discussion of "generic" FORTH advantages, regardless of the hardware used.

Now what will an ADAM user notice about using FORTH?

IT'S FAST!

Relative to BASIC and LOGO, most ADAM users will be startled by the speed of the FORTH execution. Similar to Turbo Pascal on the ADAM, FORTH provides COMPILED code.

IT'S DIRECT!

In the on-line (interpretive) mode, FORTH provides immediate feedback to the user. Without worrying about conventions of line numbers, the strangeness of yet another text editor, or even much about language syntax, a new user can start DOING the example and exercises from one of the suggested books.

Later, as you become more familiar with the features and syntax, the possibilities of constructing your own, "user-friendly" programs will become apparent. You have the ability to define your own synonyms for ANY word -- to make it as short (for less keystrokes) or as long (for ease of remembering what it does) that you want.

IT'S SIMPLE TO TEST!

You do not have to write a complete program, as you do in BASIC and even PASCAL, to begin testing what you have written. In fact, some systems and program designers will use FORTH for "sketching out" their design and trying it, EVEN if they plan to eventually implement the design in some other language!

IT'S COMPACT

Memory usage for code and data is minimal. In fact, the FORTH code that you get is about the smallest for programming that you will find anywhere in terms of memory size. That leaves LOTS of space for your program.

IT'S POWERFUL

The "multiplying effect" that you obtain getting the use of a lot of compiled code by just writing a bit of source text is quite outstanding. Sometimes you have to develop a level or two of new FORTH words before you can make practical use of this power in a new application (computing problem). There are no artificial restrictions on how few or how many levels you develop.

IT'S MORE PERSONAL!

The ADAM, particularly with ADAMCALC and ADDRESS BOOK, set a new high level (in 1985) of how a personal computer could be. Now FORTH on the ADAM carries that into the program development (or software development) arena. For a computer hobbyist or home computer buff, that can be a lot of valuable fun.

If your learning and thinking style is more linear (left-brain) you may possibly feel more at home with BASIC, ASSEMBLER or PASCAL. However, if you prefer more of the parallel (right-brain) learning and thinking style, FORTH may be more of your thing. To some it up, some people say FORTH is similar to SmartLOGO, it's like getting SmartLOGO with SPEED!

The important point is that whatever your style and or the characteristics of the computing problem at hand, you can have a choice of software with which to get it done, in a personally satisfying way. Even if you're an experienced hacker who now prefers only to work in assembler (or machine) code, FORTH provides an interesting alternative tool for development and testing.

Here is another short program file (called a "screen") in FORTH. Type it in and see what happens:

```

9 list
scr# 9 SAMPLE.BLK
 0 1/2 Example of double-sized (32-bit) variables 1jun86tgc
 1 1/2 Interactively create a 32-bit variable d1/4 for the ok tolerance
 2 : tolerate ( n -- )
 3 1/2 store the input number for the allowable tolerance
 4 s" d 1/4 2! ;
 5 : check ( d1 d2 -- )
 6 1/2 check to see if the 32-bit number d2 is "close enough" to d1
 7 d- dabs d1/4 2@ ( find absolute difference )
 8 d" if ." not" (compare to tolerance d1/4 )
 9 else >" about the same"
10 then :

```

...
ok

And here is what it looks like when you compile and run it:

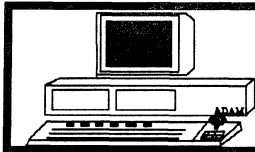
```

2 variable d 1/4 ok
9 load ok
2 tolerate ok
300,000 299,998 check about the same ok
300,000 299,997 check not ok
3 tolerate ok
300,000,299,997 check about the same ok
bye

```

(Yes, experienced programmers, FORTH, unlike almost all other computer languages around today DOES accept commas in INPUT numbers!).

In the next article, we'll point out some of the design features of FORTH and how they work, including a step-by-step discussion of a sample program.



CP/M 2.2 / TDOS WORKSHOP

Public Domain and Reviews

by Doug Rosenvinge



WordStar Professional

Release 4

for CP/M 2.2 or TDOS

In last month's article, ordering information for WordStar 4 for CP/M was omitted from the article. If you are interested in ordering this top end word-processor for CP/M, you can call WordStar International at their "800" number: 1-800-227-5609. The cost is \$89.00 plus \$6.25 shipping / handling and tax if required. **Note:** This version of WordStar makes heavy use of the disk drive. I would not suggest using this program unless you have at least the following added to your standard ADAM computer: 1 Disk Drive (any size) or a 256K or larger Memory Expander to setup a ramdisk. Two disk drives or a disk drive and ram disk work nicely. Using WordStar with data packs would quickly wear out your digital data drives. I also recommend that you use TDOS as your operating system. This will give you a 40 column screen as opposed to the 31 column standard ADAM CP/M 2.2 screen.

Since last month's review, I have had a lot more time to use this new version of WordStar and I have to admit, I'm pretty impressed. I do like the built in block math and calculator capabilities. For those who may choose to use WordStar and the built in spell checker, "The Word Plus", with standard Coleco disk drives, you will not be able to use the included dictionary. What you can do is use "DICTSORT.COM" to make a new dictionary. The only problem with this approach is that the "look-up" feature of the spell checker will not function. The original dictionary is indexed for quick searching by the look-up program. Dictionaries made with DICTSORT are not. I have tried using the "path" command in TDOS to circumvent The Word Plus's requirement to have the dictionary with the program files on the same drive without success. As a last resort I am trying to patch spell.com to accept the dictionary on another drive. If I succeed I'll let you know.

TDOS 4.56

Yes, TDOS has another revision! TDOS is now a GREAT CP/M replacement system! I admit it, I no longer boot the standard version of CP/M. All my important disks have now been sysgened with TDOS. With this new version I have noticed that I don't have to reinstall the video commands. The regular ADAM video commands seem to work fine for the most part. I have also learned to like a number of the utility programs included on the TDOS disk. I enjoy having a "search path" similar to MS-DOS so I can log-on to one drive and work there and if I call for a program on another drive that is in the search path, TDOS finds it for me. Having date / time stamped files is also a great blessing. Lastly, I like the "profile.sub" feature. If you don't have a copy of TDOS, you are missing something great for your ADAM!

A nice feature of both TDOS and Coleco CP/M 2.2 is the SmartKEY return strings. With TDOS at installation or CP/M's CONFIG.COM you can customize the 6 SmartKEYs and their labels. I have different setups for different programs. On my utility disks I have the SmartKEYs set up for the typical CP/M commands: DIR, ERA, TYPE, COPY, REN, SAVE, USER (CP/M). For WordStar I use the following: Help (^J), Block START (^KB), Block END (^KK), Block COPY (^KC), Block MOVE (^KV), and Block ERASE (^KY). For Video Display Editor I use: Help (^H), Insert on/off (^V), Insert line (^N), Top FILE (^QR), End FILE (^QC) and Del Line (^Y). As you can see, I have different needs for each program. Since I use WordStar primarily for word-processing, the

"block" commands become very important to me. Because I use VDE for editing submit files and program source files, the commands concerned with manipulating individual lines come to the forefront. These setups of SmartKEYs work the best for me for now and are only offered to demonstrate that you can customize SmartKEYs for yourself. What ever arrangement works best for you is the best arrangement!

TDOS Utilities Review

□ **Profile.sub:** This is not strictly a utility program that is supplied for you. This is a file you write yourself that behaves like an "AUTOEXEC.BAT" file in MS-DOS. To make a "profile.sub" file do the following:

1. Load an editor like WordStar, Video Display Editor or ED (the simple editor that came with your Coleco CP/M 2.2).
2. Open an ASCII (WordStar and VDE "N" option) file called "PROFILE.SUB".
3. Type the commands you want accomplished each time your computer is booted from the TDOS disk. Then save the file. The following is an example of my "profile.sub" that starts my ADAM when I boot up.

```
date11
initdr12 d:
copy d.com = d:
d
```

This little program: 1) starts DATE11.COM so I can set the date and time (I don't have a clock yet). 2) Initializes the directory on my ram drive to accept time and date information. 3) copies D.COM to my ram disk D: (I renamed the TDOS directory program "D" to cut down on typing; and 4) runs D.COM displaying my default A0: drive's directory, along with the time and date each file was last updated and accessed.

You could setup a file to do almost anything you want and the nice part is that TDOS will always look for a "profile.sub" on the disk or data pack when it is cold-booted.

□ **DATE11.COM:** This program is useful if you don't have a clock, but you will need to have a memory expander for the program to store time and date for TDOS. This is a very easy program to use.

□ **INITDR12.COM:** This program creates a directory that can store the time and date stamps that TDOS uses. Files can exist on a disk before INITDR12.COM is used.

□ **DRIVSIZE.COM:** This program is used to patch the size of the drive into TDOS. You should not have to use this program under normal conditions, but it's nice to know it's there.

□ **CU.COM:** CU.COM is a program to move files from one user number to another on the same disk. You can specify one file or a group of files using wild cards. Files can be located on any drive or user number. CU.COM will prompt you before each change to make sure that you really want to move the file.

□ **CD.COM:** The CD program is used to assign names to user areas and change between user areas using logical names. If you do not have a hard drive, this utility is of limited use.

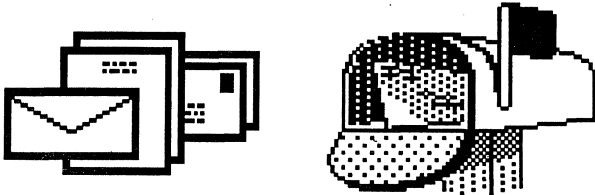
□ **UNCRUCH.COM:** This is not a TDOS utility, but is on the disk so you can extract the "crunched" files. The syntax is < UNCRUCH filename.ext > <RETURN>.

□ **FF.COM:** This program finds a requested file on any / all disk drives and any user area allowed by the system. Just enter: A0>FF NAME*.*. The command: A>FF *.* /S <ret> will display all files including system files. Those files which have attributes set will be flagged and attributes described.

□ **IOBYTE.COM:** IOBYTE.COM is used to make a temporary changes to the I/O byte. If you want to make a permanent change, you must re-install TDOS.

□ **TDIR.COM:** Is the time directory program for TDOS 4.5 and later. It displays the date and time that a file was created or last modified as well as the time and date that the file was last accessed. Time and date stamping must be enabled using the INITDIR command for each disk or ram drive before TDIR will display any dates or times for that directory.

□ **BD04.COM:** Is a fast utility for checking disks for bad blocks or files. It is very easy to use, just type "BD04 <RETURN>" and it will ask for the drive you want checked.



And now a word from the author...

This is now the fourth article that I have written for the NIAD newsletter. I would like some feedback as to what interests you would like to see reflected in this column.

- Would you like more written on how to use CP/M?
- Do you want to see reviews of commercial CP/M software?
- Should we list all of the volumes currently available with general descriptions of the contents?
- Would you like descriptions of how to use particular programs, if so, which ones?

Just drop me a card or note with your comments or suggestions to:

Doug Rosenvinge
N.I.A.D. CP/M Librarian
30 Arborway Dr.
Scituate, MA 02066

If you would like a personal reply don't forget to include a self-addressed and stamped envelope.

LAST MINUTE TDOS UPDATE

Just after receiving this article from Doug Rosenvinge, we received a copy of the latest version of TDOS, THE replacement operating system for CP/M 2.2 users. This new version, V4.58, was supplied by Rob Friedman, CompuServe ADAM CP/M Sysop, to Richard Salvati of R&R Software, who graciously supplied it to us. This looks to be the most user friendly version yet, with instructions displayed upon boot. We will have a review from Doug in the next N.I.A.D. Newsletter.



MOAUG PHRASE PAK

This is a collection of over 300 phrases which were put together by George Drank of the Metro Orlando ADAM Users Group. The Phrase Pak is for use with Reedy Software's PHRASE CRAZE program and was compiled with Reddy Software's PHRASE PAK CONSTRUCTION SET. Contains SmartWRITER documentation.

MIDI DRIVERS & DEMOS

This is a collection of Midi utilities which was developed and are for use with the MIDI-MITE by Bonafide Systems and contains: SBMDIDRVR - A SmartBASIC V1.0 Midi driver, PlayNotes - Plays all the Midi notes in a run, Harmonize - Harmonizes along with what you play, MidiMon - A graphics demo which follows your notes and velocity, MidiMsg.WP - A complete list of all Midi messages. Contains SmartWRITER documentation.

MIDI SONG FILES

These volumes listed below are collections of Midi format 0 files which are for use with the Mini-Recorder that is packaged with the MIDI-MITE Interface. The volumes were compiled by Chris Braymen, the father of the MIDI-MITE Interface. No documentation is supplied on the volumes, just follow the instructions outlined in the Mini-Recorder manual to use. The volumes which are now available include under the MIDI SONGS MNDV category are:

- MNDV # 1: JOPLIN I - Jcascade, JEIte (ver. 1), JEzwWinr, JGladiol, JSolace, JCrysnth, JEugenie, JFavorit, JRagDanc.
- MNDV #2: JOPLIN II - JAlabam, JPalmlef, JPineapl, JSunFlwr, JSycamor, JMapleaf (ver. 1), JPeachrn, JSmthnDn, JSwipEsy.
- MNDV #3: JOPLIN III - JEntrtnr (ver. 2), EliteSynco (ver. 2), Solace, Swipesy, JWillow (ver. 2), MapleLeaf (ver. 2), Strenuous.
- MNDV #4: COLLIN'S CLASSICAL - Bach D Mi, Polanase, Sonata8-1 (Mozart), Sonata8-2, Sonata8-3, Sonata15-1 (Mozart), Sonata 15-2, Sonata 15-3, Passepied, WillTell.
- MNDV #5: CLASSIC I - Haydn Andante, Chorale, Fuga 1, Gavotte, MozMenuet, Preludio, Allegro, Cantata, SonataC, FugueCma, Legrenzi, Pachbel, Sinfonie, Partia.
- MNDV #6: CLASSICS II - Vivaldi, Doubled, Beeth5th, Handelop, SonataG, Concerto, Moonlight, Pre6, Canta29, Bouree.
- MNDV #7: NEW AGE I - Baroque, Lullaby, Romance, Weekend, Railroad, Clock, News, Sadness, Barok, Moments, Drive, Rain, Talk, Country, FolkSong, Reckless, Waiting, Crystal.
- MNDV #8: POP/ROCK I - AllOfUs, ElecRocl, SpysEye, Funky, BadMan, Highways, Squares, Reggae, BigCity, Parade, Zardoz, RollRock, Dance, Pickled2, Classy.
- MNDV #9: CHRISTMAS - Joy, Angels, Deck, GodRestYe, Holy, Medley, Silent, We3Kings, Adeste, Child, Drummer, GoodKing, Jingle, Noel, Tree, WeWish.



LEARNING TO DRAW WITH ADAM

By ROADRUNNER PUBLICAT.
Reviewed by Jim Notini

Learning to Draw with ADAM, the third in the "Learning To" series, is the first of two volumes which will deal with graphics in general. It teaches one how to address the video screen via the Z-80 microprocessor in all of the four standard modes of the ADAM VDP (TI-9928), which Coleco purchased from the Texas Instruments Company.

Learning to Draw does not discuss sprites and sprite control in detail, in-as-much as that subject is better treated in Roadrunner Publications next release, "Learning to Play Games with ADAM". Neither is the subject of "bit-mapping", (which is most effectively done in Graphics Mode III), treated in any way. It is not discussed herein because it likewise belongs more appropriately in the realm of the design of game screens.

The subject of the VDP video display is difficult to discuss in any meaningful detail without the reader having some cursory knowledge at least of Machine Language Mnemonics and the basic manner in which a computer is arranged with its microprocessor, memories, ports, etc. That level of knowledge need not be great, in fact a working knowledge of the first three of the books released by Roadrunner Publications, "From Basics to Basic"; "Learning to Read with ADAM" and "Learning to Write with ADAM", would be quite adequate. Less than this level of reader preparedness does not make the task of understanding this work impossible, but if the level of understanding is less than that recommended, the reader will find that some extra reading and study will more than likely be required to comprehend what is discussed herein.

Certainly the reading of the author's previous works are not the only way in which a reader may have prepared himself for the following discussions. Indeed many have learned a great deal of information the hard way just by experimenting with, talking about, seeing done, or reading about computers.

The discussion is certainly ADAM computer and Z-80 Microprocessor oriented, but in general, VDPs can operate with a large variety of host microprocessors. Although the discussions are ADAM / Z-80 oriented, the information is of great value for anyone interested in any VDP presently, that is or soon to be on the market. Not only are the various modes and capabilities of the VDP herein discussed, but the author has included several actual exercises by which the reader will be able to use the VDP and its accessories to his own advantage. Included in these exercises are some in which the reader will be able to design his own screen figures, both in ASCII and in mixed ASCII and / or pure graphic representations.

The reader should finish this book, 161 pages in all, not only with a good understanding of how the device works, but with considerable practice in its actual use as well through the use of the included exercises and the demonstration programs which come on disk or data pack. Another tremendous publication from Mel Ostler.

HIGHLY RECOMMENDED: A+

EL ESPANOL

By HAL WEBER SOFTWARE
Reviewed by Jim Notini

El Espanol is a new language tutorial program developed by Hal Weber Software. The tutorial is designed to help those who are interested in learning the second (or should I say first) language of the United States of America, Spanish. It will also be a tremendous aid for children who are taking Spanish classes in high school. What separates El Espanol from other Spanish tutorials previously available for the ADAM is that instead of simple text screen displays, the user is treated to a game atmosphere where they have to correctly answer translations of words in order to build a a luxury hotel in Miami, Florida before the opponent or computer does the same. The first to build their hotel will take over both hotels and win the game.

Once loaded, the user will have the six options: 1) Change Vocabulary Lists - use the premade vocabulary file which contains Spanish words with English translations and visa verse for Numbers, Days and Months, Colors and Adjectives, Adverbs, Nouns, Verbs and Important Expressions. The second list is a skeleton file which is used to create your own custom list. 2) Review Vocabulary Lists - allows for the viewing or printing or a printer of all words used in each vocabulary list. 3) Start the Contest - starts the tutorial game. 4) Exit to DataCheck - loads the utility program used to create new vocabulary lists. 5) Exit for a Commercial - runs an advertisement for some of Hal Weber's other software packages. 6) Sign off for a Siesta - exits the program.

Upon choosing to play the game, the screen will clear and the contestants will be asked to enter their name. If two people are playing, then both joysticks will be used, or else one person may play alone by not entering a name for the second contestant. The computer will start the game off by asking what a certain word or phrase in Spanish means in English or visa verse. The first person to press their firebutton before the timer reaches the end of the screen (10 seconds) gets the chance to translate. If the question is correctly translated, part of the luxury hotel will be built. This procedure continues on until one of the hotels is completely built. If a word is incorrectly translated, then the last part of the hotel that was built is removed. As long as part of the hotel is built, you may continue to answer wrong, but once there aren't any pieces of the hotel constructed, you can only answer wrong three times, the game is lost.

El Espanol is a terrific language tutorial program. It is loaded with excellent sound effects, musical scores and animations through the use of sprites! El Espanol, as a whole isn't the most exciting program to hit the market, but it does exactly what one would expect of a language tutorial program. It aids the user in remembering translations from Spanish to English and visa verse. Like I said before, there have been other Spanish tutorial programs available previously, but this is easily the best one to come along with its interesting animations, musical scores and the laid back type of approach that it seems to exude. High school students should truly benefit from this product since Spanish is a language which is offered and for most is much easier to learn over the other language that is commonly taught at the high school level, French. Either way, Hal Weber Software has supplied the ADAM community with two very worthwhile language tutorials now, Francais Por Les Chic (French) and El Espanol.

RECOMMENDED: A-

TAX HELPER 1990

By GARY HOOSIER SOFTWARE
Reviewed by Lyle Marschand

This is the latest and the best of the ADAM Federal Tax preparation programs developed by Gary Hoosier.

The functions provided by TAX HELPER 1990 are:

1. Printing of a "Tax Organizer" document that is used to gather the information required for entry on the Tax Helper screens later.
2. Entry of appropriate tax data and saving of this data on disk/ data pack.
3. Loading of previously saved tax files, even the 1989 file if you used this program last year.
3. Calculation of the following forms:
 - A) 1040
 - B) Schedules A, B, D, D-1, SE, U
 - C) Form 4137.
 Most other forms are supported, but no calculations are done.
4. Printing of the forms / calculation results to the ADAM printer, a parallel printer, the screen or a SmartWRITER file.
5. Support of an override entry for certain fields which allows you to bypass the data entry screens for any specific field changes.

TAX 1990 comes with a very extensive and well written documentation file to guide you through the entry of all your data and the various functions of the program.

A very nice feature is the "ORGANIZER" which provides a printout of all the data entry fields which allows you to get all your data organized which makes the input process much faster and easier.

Once you have entered all your data and saved it to a disk / data pack, you would load and run the calculation program and then the form print program, which gives you the results of all the calculations and the data you need to transfer to the actual tax forms you will send to the IRS.

The program is very nicely done and user friendly. Main advantages are the ability to save your data for later use, the options to print the results to the screen, printer or disk / data pack and the excellent documentation that is provided for the user. Gary Hoosier also provides his address for user support if required.

As with all such programs, the author can not guarantee the results, that is up to you to verify. However, TAX HELPER 1990 will save you time in doing your taxes and allow you to see the results sooner (if that is what you want)!

HIGHLY RECOMMENDED: A



MATH MENTOR

By HAL WEBER SOFTWARE
Reviewed by Jim Notini

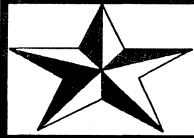
Math Mentor is an educational software program that was developed as a means for children to master arithmetic in a number of ingenious ways. Children are walked through the basic of arithmetic functions through pre-game coaching examples, practice drills, and the availability to printout arithmetic tables for further study outside of the program. Lessons are provided in which the child(ren) have to answer arithmetic equations in order to successfully move along in the game and build such things as hotels, cities, armies or hunt for elephants. Also, two lessons are provided in which the child(ren) are walked through instructionals as to why the arithmetic system is so important to learn and master as well as explaining ways in which one can master arithmetic without a need for strenuous study on the subject.

Upon boot, a main menu is displayed which gives the user eight different options to choose from with the first two not offering any drilling, but more or less a prelude to the drills. SWAMI'S GREAT INVENTION is a mythological story on how and why the arithmetic system was developed by a swami. BEATING THE SYSTEM details a number of ways in which the arithmetic system can be mastered more easily by children. The last two options are COMMERCIAL and EXIT.

THE BANKER deals solely with the multiplication tables and can be played by one person only. Within the game, one can choose to drill first, in which math tables are presented on the screen or printer for study. The game calls for the child to enter answers to the multiplication problems displayed on the screen to complete work on an eleven-story building. Equations are presented in order. By that I mean equations start with math table 2 with the multiplier increasing from 2, 3, 4, etc. The math tables and equations are not randomly picked. THE ARMS RACE pits two players head-to-head with three skill level options in a race to answer random equations before the opponent in order to build up ones own arsenal before the opponent can. The screen is divided in half with each correct answer adding to one's current arsenal. If a wrong answer is given a plane flies over and may or may not drop a bomb on the arsenal that has been compiled. If a bomb strikes, part of the arsenal is lost. The player who fills their arsenal first wins. THE HOTEL is a one player drill in which equations are presented on the screen and must be answered correctly in order to build a hotel. Answer incorrectly and part of the hotel will be disassembled or you may lose the game. THE GREAT ELEPHANT ROUND-UP is a head-to-head drill which offers two skill levels. The goal of the game is to answer random equations correctly. By answering correctly, you will not only win points, but also be able to capture some elephants and place them in your pen. The player who fills their pen up first wins the contest. Answering incorrectly will cause the lose of elephants..

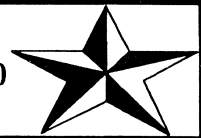
Overall, the drills which are presented in a gaming atmosphere are very well done. Music abounds throughout with heavy use of sprites and shapes in all the contests, from building hotels floor by floor to compiling arsenals. The setup of the screens and shapes used to represent the characters on-screen are simple, but the graphics presented should be more than enough to hold the child's attention, especially since the drilling of arithmetic equations is the main focus in these tutorials. The major drawback to Math Mentor is the fact that sufficient instructions are not provided. There are simple text displays which explain the basics, but sometimes a bit of experimenting is required. Overall, Math Mentor is a solid arithmetic drilling program which should be well accepted by parents who have children ranging from roughly 6 to 12 years of age, especially since there is a tremendous lack of educational programs available for the ADAM.

RECOMMENDED: B+



STICK'EM UP

A Review of SWIFT'S LABEL PRINTSHOP by PHOENIX 2000
by Pat Herrington / Editor of the MOAUG Newsletter



I can't find just the right word to describe the latest offering from Phoenix 2000. I guess I'll have to settle for DY-NO-MITE!

First, the bad news: You MUST have at least a 64K card to use Swift Label Printshop (SLP). If you have a larger memory expander, so much the better. You can use the standard ADAM printer for printing "text-only" labels. But the real fun is designing graphic labels... and, of course, you can print them only if you have a dot matrix printer.

You DON'T need a disk drive, but SLP supports up to three disk drives. You don't need any other software, either. You will no doubt want to collect several volumes of CLIPPER-type clip-art, though; and if you own PowerPAINT, you will find it is a valuable companion package for SLP.

TEXT LABELS

First, a quick description of text-only functions: There are MANY options for text-only labels. There are three standard label sizes and, in addition, there is an option by which you can define your OWN size. Text entry is quick and simple. The only improvement I'd like to see would be a way to edit each letter individually WITHOUT retyping the line. You can even use embedded commands within the lines of text, so that you can vary type styles with your dot matrix printer (such commands will be ignored by your daisy wheel printer.) Imbedded commands use a backslash, NOT a carat, with this program.

You can print text-only labels on either a dot matrix OR an ADAM printer, and you can select from among nine different darkness settings, which determine the number of passes made by the print head (yes, even with the standard ADAM daisy wheel!). If you are using a dot matrix printer (dmp), you also have all sorts of options for printer codes. The fancier your printer, the more options are available. For instance, there are choices for line justification, but those options will work only if your printer already has such capability. Check the owner's manual that came with your printer, and be sure to read the SLP docs very carefully.

**GIVE YOUR ADDRESS
LABELS THE
CROWNING TOUCH!!!
WITH THE POWERFUL
SWIFT'S LABEL PRINTSHOP**



THE DOC FILES

The documentation for SLP is quite good, but it's not "dynamite". I would prefer to have seen a hardcopy manual similar to the ones that came with early DEI packages. The documentation for SLP is all contained on the media. There is an advantage to that, of course, because it is always close at hand. But the docs must be read from the word processor, which obviously means that they can't incorporate graphic examples to illustrate the instructions; nor is there a way to preview the extra fonts and clips without loading them.

There are five separate doc files. They print out fine on the ADAM printer, but if you print them on a dmp, check out the third doc file

BEFORE you print it. It contains a couple of Control symbols (carats). When my printer reached the Control V symbol, it started printing expanded condensed print. (I didn't even know my printer could DO that!). My suggestion is to SEARCH for the carats and delete them before printing the file.

DO the docs, though. This is not one of those programs that is entirely self-explanatory, and you will definitely want the docs for reference.

NOW FOR THE REAL FUN !!!!

Graphics label design is nothing new to ADAMites. Several people already specialize in designing labels. Richard Lefko, Ron Collins and Tony Patterson, in particular, turn out wonderful labels using PowerPAINT. There is also a very popular label program by Walters Software, called "The Label Works". Both of those programs can use clip-art to enhance labels, and both work beautifully. But there has never been anything like SLP!



N I A D
PO BOX 1312
LISLE, IL 60532

SLP contains modules for three different sizes of graphic labels, sixteen different choices of borders (or you can leave the border blank) and an incredible selection of font styles. It also includes 7 clips.

The clips include a Smiley face, a bell, Mickey Mouse, a Roman soldier, a heart, a Jack-olantern, an an apparently sentient bag of popcorn (?) that looks as though it walked out of one of those cartoons they play at the drive-in during intermission. You are not, of course, restricted to those choices. You can load your own favorite clip-art. There is certainly no lack of clip-art in the world of ADAM!

After you have chosen your clip, you can place it anywhere in the framework displayed on your screen. You can use more than one clip, and you can even flip the clips left-to-right (not upside down, though.) When you are designing a medium or large label, you can use clips in conjunction with borders. Small labels are another matter.

The height of the small label is just barely the height of a piece of clip-art. Clips are a bit too large to fit within the confines of the border. There are exceptions, though. If the clip is centered, and the art does not come all the way to the edges of the clip, you may be able to add a border AFTER placing the clip.

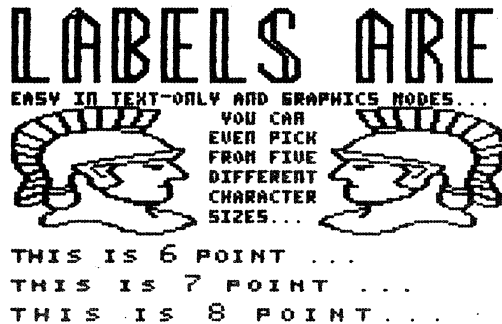
Or, you can choose to overwrite either part of the border or part of the clip. If you aren't satisfied with that, you can even Save the label and put the finishing touches on it using PowerPAINT. Finally, you can avoid the whole issue by choosing either a border by itself OR a clip by itself... or by selecting a larger label.

Placing a border around any size label is delightfully simple. In fact, it's INSTANT. Merely enter a number from 1 to 16, and the corresponding style of border draws itself. Entering the number 17 erases any existing border.

LETTERING

So far, so good. But the best is yet to come! By far the most versatile feature of SLP is its "text-editing" module. You've never seen anything like it (at least not on an ADAM!)

When you choose the "text edit" module, you will find five different font sets in memory. All five are different sizes: 1 is 4x8 pixels (half the width of the usual fonts.) Size 2 is 8x8 pixels, which is the same as normal fonts. Size 3 is 8x16, or twice as tall as normal; size 4 is 16x16, or the same size as normal sprites; and size 5 is a whopping 16 pixels wide by 32 pixels tall! You select the fonts by pressing CONTROL+P.



If you don't see exactly what you want, you can load other sets into memory. The system disk contains eleven additional sets, for a grand total of sixteen choices. The various sizes and shapes are sure to include just what you're looking for.

To load a new font set, look for filenames ending in .sz1 (for size 1) through .sz5. If you forget, though, look at the last line on the "file card" as you scroll through the files. It will display the file type. If the file is any type other than what the current module can access, the line will read "UNKNOWN". When you select a font set, it will replace the original set OF THE SAME SIZE. You will always have five different sizes in memory at any given time.

You CAN'T load regular font sets from outside sources. SLP fonts are saved in a totally different format. I think it's reasonable to expect that additional sets will be available at a future date. There are PLENTY to choose from here, but, like the lady said, "You can't be too rich, or too thin... and you can't have too many fonts!" (Well, that's what she SHOULD have said.)

And that's STILL not the best part. The best part is... are you ready for this?... USER-DEFINED VARIABLE SPACING! In other words, you can choose to place your letters closer together or further apart, either horizontally or vertically. Until now, you were pretty much stuck with 8-pixel increments. That meant that you often had too much space, or too little, between letters, words, and whole lines. It's wonderful to be able to control the gaps.

My suggestion: always choose the smallest increment for vertical spacing. If you set the space at 4 pixels, you can space the letters close together, but you can also space them further apart by hitting the arrow key twice. It's just more flexible that way, and it saves time.

I figured out some other neat tricks, too. For example, the larger font sets don't contain a full range of punctuation. You can make periods or colons by using the "O" from the smaller sizes. And you can combine larger and smaller sizes of numbers to create interesting affects, especially for dollar amounts.

But wait! There's MORE! After you've designed your label, you can store it and retrieve it later in PowerPAINT. SLP doesn't have any actual drawing capabilities, but if you want to add special touches of your own, you can use sprites, brushes, polygons, or any of the other PowerPAINT features. Just as long as you stay within the border, you can load it back into SLP with all the added extras intact. The point to remember here is that, when you SAVE your picture from PowerPAINT, be sure to save it as a "Binary 10K File" and give it a title that ends in the same file extension as it had originally. Otherwise, SLP won't be able to find it. Each label size ends in a unique extension. If that sounds complicated, don't worry; it's not. Just look at the original filename and copy the final letters when you rename the file.

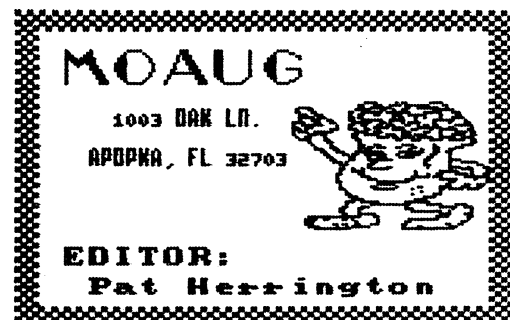
When it's time to print the label, you have the same options as for text labels, including 9 different choices for darkness, and the option of printing out any number of labels from 1 to 255. There are options for using a color printer, too.

In addition, you can choose to print the label inversely (a "negative" image.) Be careful here. Don't choose the "inverse" printing unless you are printing medium size labels! With both large and small sizes, the inverse image prints BEYOND THE BORDER of the label. My guess is that it would be hard on your print head! Medium sizes, on the other hand, print just fine.

I guess I got carried away, didn't I? But this is the most exciting program I've seen since... well, since PowerPAINT. I won't lie to you. This is NOT the fastest program you ever saw in your life. It won't even fit on a single diskette; you have to load first the bootup disk, and then the system disk. (I haven't seen the datapack version.) And scrolling through directories is time-consuming... even though it's a great idea to have filetype information displayed for each entry. And you'd darn well better read the docs. But even so, I think this is going to turn out to be one of your all-time favorites! It's ALREADY one of mine.



One more last thought, and then I'll let you go. When you think about how you will use this program, don't confine your thinking to address labels. Think bookplates, disk labels, nametags, seals, gift tags, stickers, memos....!



N.I.A.D. PRODUCT LIST

EFFECTIVE 01/25/90 & PRODUCTS / PRICING SUBJECT TO CHANGE WITHOUT NOTICE

ADAM HARDWARE

- **COMPLETE ADAM COMPUTER SYSTEM** **\$239.95**
Complete reconditioned ADAM System with Printer, includes all components / software. 90 day warranty. Includes Shipping/Handling!!
- **EXPANSION MODULE #3 ADAM SYSTEM** **\$209.95**
ADAM and Colecovision Game System attaches together to make a complete ADAM System. 90 day warranty. Includes Shipping/Handling!!
- **ADAM DIGITAL DATA DRIVE** **\$59.95**
Replacement or second digital data drive for the ADAM Computer. Great to own to speed up the backup process and also as a convenience to eliminate the need for swapping data packs constantly.
- **ADAM DISK DRIVE POWER SUPPLY** **\$19.95**
New, more reliable power supply transformer for ADAM Disk Drive.
- **ADAM PRINTER POWER SUPPLY**..... **\$59.95**
Standalone power supply which can be used in place of the ADAM Printer (saves wear and tear) to power the ADAM. Great to own if you have a dot matrix printer so that the ADAM Printer can be unhooked.
- **POWER SUPPLY COVER with LIGHT** **\$14.95**
Protect your ADAM Printer Power Supply from dust, dirt and accidents with this cover and power on / off light. Instructions for hookup included.
- **ADAM KEYBOARD**..... **\$24.95**
New keyboard for the ADAM, great to have as a spare or for replacement of defective keyboard. Comes with a 2 foot coiled cable.
- **TAN HAND CONTROLLER**..... **\$5.95**
New Coleco Hand Controller with 12-button numeric keypad.
- **ADAMNET CABLE** **\$2.95**
Flat, 7 foot cable for use with either the Keyboard or Disk Drive.
- **ADAM MONITOR CABLE** **\$9.95**
Allows attachment of a Composite Monitor to the ADAM Memory Console providing both audio and video. Monitor must have separate RCA Audio and RCA Video input jacks. NOTE: Note available for the ADAM Expansion Module #3 Unit that attaches to the Colecovision.
- **160K 5 1/4" DISK DRIVE EPROM** **\$17.95**
Greatly reduces disk formatting time along with fixing some bugs in the original disk drive eprom for Single-Sided drives. User must install.
- **320K 5 1/4" DISK DRIVE EPROM** **\$17.95**
For use with older Double-Sided drive conversions by Eve Electronics. Reduces read / write time of most operations. User must install.
- **MEGACOPY TAPE MAKER TYPE III (Disk or DDP)** **CALL**
Hardware device with software which allows for the creation of ADAM compatible data packs using the ADAM itself and two Digital Data Drives. Capable of producing over 12 different formats, 320K ALSO.
- **DYNAMITE SOUND DIGITIZER (Disk or DDP)** **\$79.95**
Cartridge with software which allows for the digitizing of any sound feed in through a standard RCA Audio Cable. Creates a digitized file which can be accessed in your own programs. Complete set of edit features. Can be supplied with SmartCLOCK Chip attached inside.
- **SmartCLOCK CHIP (Disk or DDP)** **\$44.95**
Plugs into U8 socket on ADAM Logic Board in Memory Console. Tracks hundreds of seconds, seconds, minutes, hours, days, day of the week, month, year, 12 / 24 hour modes, leap year correction.
- **D.S.D. with SmartCLOCK CHIP (Disk or DDP)**..... **\$109.95**
Dynamite Sound Digitizer with the SmartCLOCK Chip already installed into the D.S.D. cartridge. If ordering the D.S.D. separately, you can't add the SmartCLOCK Chip by yourself. The D.S.D. would need to be returned to TRISYD VIDEO LABS for upgrade. 2 week shipping delay when ordering this product.
- **MIDI-MITE INTERFACE (DDP ONLY)** **\$74.95**
Allows your ADAM to communicate with MIDI compatible synthesizers. It has one MIDI-IN, one MIDI THRU and two MIDI OUT jacks. Included are two MIDI cables for connection to your synthesizers and a ribbon cable for connection to the ADAM side port. Advanced software included.

ADAM HARDWARE, cont.

- **ADAMOUSE II (Internal)** **\$74.95**
Mouse controller which attaches internally to the joystick port. Requires minor modifications to be made. Works with numerous ADAM programs. Programs planned to make full use of this and the following mouse.
- **ADAMOUSE II (External)** **\$82.95**
Same Mouse as listed above, but plugs directly into the joystick port.

MEMORY EXPANDERS

- **64K MEMORY EXPANDER** **\$34.95**
Provides an additional 64K of memory to certain programs. Many of the newest software packages require at least a 64K M.E. or can access it. Card easily installs into Slot #3 in Memory Console.
- **256K MEGARAM MEMORY EXPANDER** **\$109.95**
Expandable memory board which will hold up to 1 MEGabyte of memory (1,024K)! Comes with 256K of memory installed and 3 open rows of sockets for upgrade with the 256K SIPs. Requires a Parallel Printer Interface or Addressor Card listed below to operate fully.
- **256K SIP** **\$49.95**
256K Memory Modules used to expand the MegaRAM Memory Expander. Add 3 256K SIPs to obtain a full 1 MEG (1,024K) of memory!
- **ADDRESSOR CARD** **\$19.95**
Installs in Slot #2 and required for use of MegaRAM Memory Expander if you don't have or purchase a Parallel Printer Interface.

PRINTERS & INTERFACES

- **PANASONIC KX-P1180i DOT MATRIX PRINTER** **\$169.95**
(with ADAM Printer Interface & Cable (Disk or DDP)) **\$209.95**
9 pin dot matrix printer with 2K buffer and parallel connector. Draft speed 192 CPS, Near Letter Quality speed 38 CPS. Many built-in print styles: compressed, elite, pica and size adjustable. Bottom / Rear paper feed. One ribbon enclosed. Two year limited warranty.
- **PANASONIC KX-P1191i DOT MATRIX PRINTER** **\$249.95**
(with ADAM Printer Interface & Cable (Disk or DDP)) **\$289.95**
Identical to KX-P1180i with faster draft speed 240 CPS and Near Letter Quality speed 48 CPS. Also includes a Front paper feed. One ribbon enclosed. Two year limited warranty.
- **PANASONIC KX-P1124i DOT MATRIX PRINTER** **\$299.95**
(with ADAM Printer Interface & Cable (Disk or DDP)) **\$339.95**
Identical to KX-P1191 but 24-pin with 6K buffer. Draft speed 192 CPS and Near Letter Quality 63 CPS. One ribbon. Two year limited warranty.
- **E&T PARALLEL PRINTER INTERFACE (Disk or DDP)** **\$39.95**
Interface card with software that plugs into Slot #2 in the Memory Console and provides the ability to print text / graphics on any standard dot matrix printer. Requires Parallel Printer Cable.
- **MULTI-PURPOSE INTERFACE BOARD 2 (Disk or DDP)** ... **\$74.95**
Provides two RS-232 Serial Ports and 1 Parallel Port along with Addressor Connection for 256K or larger Memory Expanders. Includes patch software for dot matrix printer and specially configured telecommunications software for non-standard serial ports along with the most current version of TDOS. Serial & Parallel cables sold separately.
- **PARALLEL PRINTER CABLE**..... **\$14.95**
Cable attaches between Parallel Interface and Dot Matrix Printer for either the MIB2 (6 foot) or E&T Parallel Interface (3 foot).
- **SHIELDED PARALLEL PRINTER CABLE** **\$19.95**
6 foot shielded cable provides for extra shielding from interference.
- **RS-232 SERIAL CABLE**..... **\$14.95**
6 foot cable attaches between M.I.B.2 and Serial hardware device.

HARD & FLOPPY DRIVES

● POWERMATE HARD DRIVE SYSTEMS & ACCESSORIES:

Standalone add-on subsystems that provide one or two 10, 20, or 40 MB Hard Disk Drives, one or two 360K or 720K Floppy Disk Drives, two RS-232 Serial Ports, a Parallel Printer Port, a Memory Expander Board Addressor Port and a Disk Cable for the Coleco ADAM Computer (also will soon provide a power supply for the entire ADAM System). Includes the most current version of the TDOS Operating System along with File Manager V3.0 and close to 1 MB of utilities and miscellaneous other programs pre-installed by manufacturer. SmartMATE CART by Walters Software Co. is highly recommended for EOS and CP/M users.

BASE UNITS:

- POWERMATE 10 (10 MB HARD DRIVE)\$399.00
- POWERMATE 20 (20 MB HARD DRIVE)\$499.00
- POWERMATE 40 (40 MB HARD DRIVE)\$599.00

OPTIONS:

- 5 1/4" 360K FLOPPY DISK DRIVE.....\$100.00
- 3 1/2" 720K FLOPPY DISK DRIVE.....\$100.00
- SECOND HARD DISK DRIVE: 10 MB.....\$150.00
- SECOND HARD DISK DRIVE: 20 MB.....\$225.00
- SECOND HARD DISK DRIVE: 40 MB.....\$300.00
- PERIPHERAL CABLE: SERIAL (6 feet).....\$14.95
- PERIPHERAL CABLE: PARALLEL (6 feet).....\$14.95

MONITORS & MODEMS

● MAGNAVOX 1CM135 13" COLOR RGB MONITOR\$299.95

13" Color RGB / Composite compatible monitor, green text display option, sharpness control, vertical & horizontal centering controls, comb filter, built-in stand, IBM compatible, capable of 80 column display with 25 lines and 640 horizontal pixel resolution. Requires Monitor Cable.

● GOLSTAR 2105G 12" GREEN COMPOSITE MONITOR ...\$109.95

12" Green composite / monochrome monitor that offers resolutions up to 640 x 200, up to 80 columns with 25 lines. Requires Monitor Cable.

● GOLDSTAR 2105A 12" AMBER COMPOSITE MONITOR \$109.95

12" Amber composite / monochrome monitor that offers resolutions up to 640 x 200, up to 80 columns with 25 lines. Requires Monitor Cable.

● GOLDSTAR GSM-1200 BAUD MODEM..... \$99.95

100% Hayes compatible, asynchronous, auto answer, auto dial, call progress monitoring with speaker. Requires Serial Interface and cable.

● GOLDSTAR GSM-2400 BAUD MODEM..... \$139.95

100% Hayes compatible, asynchronous, synchronous, full or half duplex, auto answer, auto dial. Requires Serial Interface and cable.

N.I.A.D. SERVICES

● UPGRADE 5 1/4" 160K SINGLE-SIDED DISK DRIVE TO:

- 5 1/4" 320K DOUBLE-SIDED DISK DRIVE UPGRADE.....\$109.95
- 3 1/2" 720K QUAD-SIDED DISK DRIVE UPGRADE\$129.95

Send in your Coleco Single-Sided Disk Drive to be upgraded. Don't send power supply. Repair charge for defective drives. Send payment to NIAD, drive to: E & T Software - 9588 Forest Ln. #514 - Dallas, TX 75243.

● DATA PACK CONVERSION to DISK FORMAT..... \$4.00

Send in your title card from your Coleco data pack to be converted to disk. Titles which can be converted are: Buck Rodgers, Donkey Kong, Donkey Kong Jr., Dragon's Lair, Zaxxon, Recipe Filer, 2010: The Text Adventure, Richard Scarry's Best (320K or 720K disk), The Best of B.C.

● SmartFILER UPGRADE to VERSION 27D..... \$4.00

Send in your SmartFILER Disk or DDP to be upgraded to Version 27D.

● INFOCOM CONVERSION to ADAM CP/M FORMAT\$4.00

Send in your INFOCOM titles to be converted to an ADAM CP/M format. We can convert: Zork I, II & III, Planetfall, Deadline, Starcross, HitchHiker's Guide to the Galaxy, Leather Goddess' of Phobos, Stationfall, Plundered Hearts, Seastalker and Ballyhoo.

EXPANSION MODULES

- EXPANSION MODULE #1 ATARI 2600 ADAPTER.....\$44.95
- EXPANSION MODULE #2 DRIVING CONTROLLER\$44.95
- ROLLER CONTROLLER\$44.95
- SUPER ACTION CONTROLLERS.....\$59.95

MANUALS & BOOKS

- ACCESSING VRAM.....\$12.95
- BASIC BASIC PROGRAMS FOR THE ADAM.....\$8.25
- FROM BASICS TO BASIC\$15.00
- HACKER'S GUIDE TO ADAM VOL. I.....\$11.95
- HACKER'S GUIDE TO ADAM VOL. II.....\$11.95
- HACKER'S GUIDE VOL. 1 & 2 PROGRAMS (Disk or DDP).....\$5.00
- LEARNING TO DRAW WITH ADAM (Z-80) (Disk or DDP)\$25.00
- LEARNING TO READ WITH ADAM (Z-80)\$25.00
- LEARNING TO WRITE WITH ADAM (Z-80) (Disk or DDP).....\$25.00
- MacADAM MANUAL.....\$19.95
- MacADAM DEMO FILES (Disk or DDP).....\$5.00
- N.I.A.D. PRODUCT REVIEW BOOK.....\$19.95
- N.I.A.D. PUBLIC DOMAIN REVIEW BOOK.....\$5.00
- THE BASIC ADAM\$16.95

MISCELLANEOUS SUPPLIES

- ADAMCON 01 VIDEO HIGHLIGHTS\$19.95
- Two hours VHS video tape highlighting the first ADAMCON in Florida.
- ADAM DIABLO HYTYPE I FILM PRINTER RIBBON.....\$4.95
- ADAM PRINT WHEEL.....\$6.55
- Specify font style for ADAM Printer: GOTHIC 12, SCRIPT 12/TITLE, ELITE 12, EMPHASIS/ORATOR, COURIER 10 OR PICA 10
- ADAM PRINTER DUST COVER\$8.95
- ADAM KEYBOARD DUST COVER.....\$8.95
- ADAM COMPLETE MEMORY CONSOLE DUST COVER.....\$8.95
- ADAM EXP. MOD. #3 MEMORY CONSOLE DUST COVER....\$8.95
- ADAM 5 1/4" OR 3 1/2" DISK DRIVE DUST COVER\$8.95
- DIGITAL DATA DRIVE HEAD CLEANING PAD.....\$.50
- ADAMOUSE MOUSE PAD\$6.95
- PANASONIC KX-P110i RIBBON for KX-P1080/1091\$9.95
- PANASONIC GENERIC RIBBON for KX-P1080/1091\$5.95
- PANASONIC KX-P115i RIBBON for KX-P1180/1190\$12.95
- 5 1/4" DISK DRIVE HEAD CLEANING KIT\$5.95
- 3 1/2" DISK DRIVE HEAD CLEANING KIT\$5.95
- 5 1/4" DISK STORAGE CASE (HOLDS 70 DISKS)\$5.95
- 3 1/2" DISK STORAGE CASE (HOLDS 50 DISKS)\$5.95

DISKS & DATA PACKS

- 256K NIAD ECONOMY ADAM DIGITAL DATA PACK.....\$2.00
- 10 256K NIAD ECONOMY ADAM DIGITAL DATA PACKS\$19.00
- 256K RIGHT DIRECTORY ADAM DIGITAL DATA PACK\$1.00
- 10 256K RIGHT DIRECTORY ADAM DIGITAL DATA PACKS ...\$9.00
- 50 5 1/4" DS/DD GENERIC DISKS with SLEEVES, TABS\$16.95
- 25 3 1/2" DS/DD 720K GENERIC DISKS.....\$16.95
- BONUS 5 1/4" DS / DD DISKS (10 Pack).....\$8.95
- BONUS 3 1/2" DS / DD DISKS (10 Pack).....\$11.95

N.I.A.D. BACKISSUES

- N.I.A.D. NEWSLETTER BACKISSUES..... \$3.00
- N.I.A.D. Newsletter Issues # 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 19, 20, 23, 42 and 55. These issues are not valid for any special pricing.
- N.I.A.D. NEWSLETTER BACKISSUES..... \$1.00
- All other issues besides the ones listed above. Valid for specials pricing which are offered from time to time. Check monthly specials section.

ENTERTAINMENT

ABOMINABLE SNOWMAN, THE	\$13.95
ACTIVISION'S DECATHLON	\$18.95
ADAM BOMB (64K)	\$19.95
ADAMWARS II	\$13.95
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AFL FOOTBALL	\$14.95
ALCAZAR	\$18.95
AQUATTACK	\$17.95
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BIBLE JEOPARDY	\$14.95
BLACK GOLD	\$15.95
BLOCKADE RUNNER	\$15.95
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CHESS CHAMP (64K)	\$15.95
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DINOSAUR DIG (64K)	\$16.95
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ELECTRONIC GAME PACK II	\$17.95
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MIND OVER ADAM	\$11.95
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MR. T SEARCH: GAMEPAK	\$9.95
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PHRASE CRAZE	\$17.95
PHRASE PAK I for Phrase Craze	\$9.95
PHRASE PAK II for Phrase Craze	\$9.95
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PRO FOOTBALL	\$18.95
PRO GOLF CHAMP	\$14.95
REEDY ENTERTAINMENT PACK	\$13.95
REEDY SOFTWARE LIBRARY	\$17.95
RIVER RAID	\$17.95
ROCK'N BOLT	\$18.95
SMARTGAMES PACK	\$9.95
SQUISH'EM SAM	\$18.95
STAGE FRIGHT	\$13.95
STATES RACE	\$9.95
STOCK MARKET GAME, THE	\$15.95
STRATOZAP	\$16.95
SUPER PARROT	\$12.95
SUPER ZAXXON (DDP)	\$9.95
TEMPLE OF THE SNOW DRAGON	\$21.95
TOURNAMENT TENNIS	\$18.95
TRIVIAPAK I	\$12.95
U-MATCH-EM	\$12.95

VASE OF TURR, THE	\$29.95
WING WAR	\$18.95
WIZARD'S PINBALL ARCADE	\$14.95
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CONSTRUCTION SETS

FAMILY FEUD WRITER	\$19.95
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MAGE QUEST CONSTRUCTION SET	\$13.95
PHRASE PAK CONSTRUCTION SET	\$9.95

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ADAM TUTOR, THE	\$9.95
AMERICA AT WAR (DDP)	\$9.95
CABBAGE PATCH: PIC SHOW (CART)	\$18.95
CHESS TUTOR #1	\$9.95
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EASY AS A, B, C & 1, 2, 3	\$11.95
EL ESPANOL	\$15.95
EXPERTYPE (DDP)	\$9.95
FRANCAIS POUR LES CHIC	\$15.95
GREAT INVENTIONS GAME (DDP)	\$9.95
MATH MENTOR	\$15.95
NIAD GOLD: SCIENCE & EDUCATION	\$9.95
ROYAL AMBASSADOR EDUC. PACK	\$9.95
SCHOOL DAZE	\$16.95
SMARTBASIC CONSTRUCTION KIT	\$12.95
WORLD CAPITALS (DDP)	\$9.95

MEDIA UTILITIES

ADAM CONNECTION, THE (IBM DISK)	\$24.95
ADAMCALC DOT MATRIX PATCH	\$9.95
ADAMLINK II DOT MATRIX PATCH	\$9.95
AUTOBACKUP (64K)	\$17.95
BACKUP 3.0 (DISK)	\$10.95
BASIC SYSTEM MGR 3.0 / FASTRUN	\$18.95
COPYCART+ V2.0 (DISK)	\$19.95
DISK DOCTOR	\$9.95
FILE MANAGER V2.0	\$17.95
FORMATTER II (DISK)	\$12.95
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NIAD GOLD: UTILITIES	\$9.95
PrBOOT	\$17.95
OPENFILER V3.0 with OPENRECIPE	\$14.95
RAMBOOT (64K)	\$19.95
SMARTDSK I for SmartWRITER	\$18.95
SMARTDSK II for DEVICE #2 (64K)	\$16.95
SMARTDSK III for SmartBASIC V1 & V2	\$24.95
SMARTDSK CART (64K)	\$29.95
SMARTMATE CART (PowerMATE)	\$29.95

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BUSINESS PACK I V2.0	\$18.95
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FILE PRINTER	\$14.95
INVOICER II (64K)	\$19.95
MISSPELLER for SpellingAIDE	\$18.95
NIAD GOLD: HOME & BUSINESS	\$9.95
SMARTFILER (DDP)	\$9.95
SOFTPACK I V2.0	\$18.95
SPEEDYWRITE V2.0	\$39.95
SPEEDYWRITE SPELL (64K)	\$24.95
SPELLINGAIDE	\$26.95
TAX HELPER 1990 (64K)	\$19.95

PRODUCTIVITY

ADAMLINK III+	\$24.95
ADAMLINK III UPGRADE TO III+	\$5.00
ADAMTALK V1.1 (EVE SS-CC)	\$19.95
ADDRESS BOOK / CALENDAR	\$9.95
AUTOWRITER	\$14.95
BASICAID V2.0	\$9.95
BORDERSPLUS for The Print Works	\$12.95
CLIP-ART VIEWER	\$24.95
E.O.S. FILE INDEXER	\$9.95
ELECT. FLASHCARD MAKER (DDP)	\$9.95
FLASH FACTS: HISTORY (DDP)	\$6.95
FLASH FACTS: VOCABULATOR (DDP)	\$6.95
FONTPOWER	\$14.95
LABEL WORKS, THE	\$24.95
MASTERING MUSIC	\$9.95
MR. T LIBRARY	\$10.95
PERSONAL CALENDAR UTILITY (64K)	\$19.95
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RECIPE FILER (DDP)	\$9.95
SMARTBASIC CART (V1.0 VERSIONS)	\$29.95
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SMARTLOGO (DDP)	\$15.95
SMARTTERM V1.02	\$15.95
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SPRITEPOWER	\$15.95
SUPERBASIC PLUS	\$9.95
SWIFT'S LABEL PRINTSHOP (64K)	\$19.95
VIDEOTUNES	\$21.95
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GRAPHIC DESIGN

CLIP-ART VOLUME I & II	\$12.95
CLIPPER	\$15.95
COLECO GRAPHICS PROCESS. CART	\$29.95
GRAPHIXPAINTER	\$19.95
GRAPHIXPIX I	\$14.95
GROOVY GRAPHICS	\$14.95
HAPPY CLIPS VOL. 1 TO 5 (Each vol.)	\$10.95
M&M GRAPHICS	\$9.95
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POWERPRINTS VOLUME I	\$11.95
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SMILEY FACE: WHAT AN ATTITUDE!	\$9.95
SNAPSHOTS VOL. I & II	\$10.95
SWIFTPRINT (64K)	\$15.95
YULE TOOLS I	\$16.95

\$4.00 DISK

N.I.A.D. PUBLIC DOMAIN SOFTWARE PLEASE NOTE: Specify VOLUME #, TITLE and DISK OR DDP

\$6.00 DDP

MISCELLANEOUS VOLUMES

- **SMARTBASIC BNDV # 1 - 36:** 36 different volumes containing assorted SmartBASIC enhancements, application, graphics, patch, utilities and other misc. Programs. Most volumes are auto-booting and contain SmartWRITER documentation.
- **SMARTBASIC UTILITIES UNDY # 1 - 2:** 2 different volumes containing SmartBASIC utility programs such as the copiers, backup utilities, patches and other misc. programs. Volumes are auto-booting and contain SmartWRITER documentation.
- **SMARTLOG UNDY # 1 - 5:** 5 different volumes containing SmartLOG enhancement, application, graphics, utilities, patches and other misc. programs. Volumes require the user boot SmartLOG first, contain SmartWRITER documentation.
- **ADAMCALC ANDV # 1 - 4:** 4 different volumes containing ADAMCALC spreadsheet formulas, tutorials and demonstrations. All volumes require the user to boot ADAMCALC first and contain SmartWRITER documentation.
- **CPM 2.2 CNDV # 1 - 54:** 54 different volumes containing CPM 2.2 utilities, games, interpreters, patches, compilers, word processors and other misc. programs. Volumes require the user boot CPM 2.2 first, most programs contain documentation.
- **VPD SIGNS SNDV # 1 - 2:** 2 different volumes containing SignShop/NewsMAKER graphic files for use with these programs by Strategic Software. Volumes require the user boot SignShop/NewsMAKER first and contain SmartWRITER documentation.
- **PRINBALL GAMES PNDV # 1 - 7:** 7 different volumes containing Prinball Construction Set graphical games which were designed with this public domain program by Coleco. Each volume is auto-booting and contains SmartWRITER documentation.
- **VIDEOTUNES SONGS VNDV # 1 - 3:** 3 different volumes containing many assorted song files each that are for use with Videotunes by FutureVision. Each volume requires the user to boot Videotunes, then load the song file.
- **MIDI SONGS MNDV # 1 - 8:** 8 different volumes containing many assorted song files each that are for use with Multi-Recorder by Bonafide Systems for the MIDI-MATE OS/2-ADVENTURE PACK VOL. # 2 - 5: 2 different volumes of Solo Adventures for use with Mage Quest by Reedy Software. Each volume requires the user to boot Mage Quest first and contain SmartWRITER documentation.
- **SUPER FRONT LINE DEMO:** A Coleco In-House demo of the never completed supergame version of the ColecoVision cartridge Front Line. Program is auto-booting and runs through two very detailed demo screens of the supergame with sound.
- **NIAD BACKSSUUE INDEX:** SmartWRITER database detailing the contents of past NIAD Newsletters through 1987. Requires that the user boot SmartWRITER first and then follow the SmartWRITER instruction manual in order to load the database.
- **DUKAS MINI-REVIEWS:** SmartWRITER database with mini-reviews of hundreds of software and hardware products. Requires that the user boot SmartWRITER first and then follow the included instruction sheet on how to access the database's contents.
- **NIAD SUPPORT DIRECTORY:** SmartWRITER database containing names, addresses, etc. of ADAM support firms and user groups by Hector Sanchez. Requires the user boot SmartWRITER and then follow the SmartWRITER instruction manual.
- **FLASH FACTS:** MUSIC STUDIES: Eight flashcard files for use with the Electronic Flashcard Maker by Coleco dealing exclusively with music theory. Requires the user boot E.F.M. by Coleco first and contain SmartWRITER documentation.
- **COLECO PRESENTERS: SOFTWARE:** Coleco self-booting database program containing lists of planned Coleco software and cartridges for the ADAM and ColecoVision. DDP ONLY.

GRAPHICS VOLUMES

- **FILE PICS VOL. # 1 - 4:** 4 different volumes of FILE picture files which can be viewed in SmartBASIC V1.0 with the included OBJVIEW program or in PowerPAINT, also contains SmartWRITER documentation.
- **READY ART GALLERY VOL. # 1 - 2:** 2 different volumes of 13 SmartPAINT format picture files to be viewed in SmartBASIC V1.0 with the included leader program or in PowerPAINT and other programs which support the SmartPAINT format.
- **DN & B PIX VOL. # 1 - 28:** 28 different volumes of 13 SmartPAINT format picture files to be viewed / edited in PowerPAINT, ShowOff!, etc.
- **PAINTMATES VOL. # 1 - 13:** 13 different volumes of clip-art, sprite and font files for use with PowerPAINT, Sprites-Over and CLIPPER by Digital Express, The Print Works or The Label Works by Walsen Software Co. and other assorted programs.
- **PAINTFORMS VOL. # 1 - 4:** 4 different volumes of assorted letterheads, labels font files and miscellaneous graphic files for use with PowerPAINT by Digital Express.
- **G.A.P. PIX VOL. # 1 - 3:** 3 different volumes of picture files for use with the Coleco Graphics Processor. All pictures are taken from Coleco / ADAM programs, and cards through the use of the cartridge version of The Coleco Graphics Processor.

ENTERTAINMENT VOLUMES

□ **SUPER BUCK RODGERS:** This is the supergame which comes with the ADAM

Computer and is offered here for replacement in the case of damage to your original. □ **PRINBALL CON. SET / HARD HAT MACK** (Best of Electronic Arts): Coleco 2 demo pinball games and an instruction sheet. Add \$2.00 for 40 page manual. □ **SUPER SUB-ROC:** Coleco supergame pack version of the Sub-Roc cartridge. This is a tremendous 3-D arcade action game with great graphics and a Hall of Fame option as well as an instruction sheet.

□ **TROLLS TALE:** Coleco supergame pack originally developed by Silix Software. This is a children's adventure game with good graphics and offers a strong challenge as well as an instruction sheet.

□ **JEOPARDY:** Coleco supergame pack of the popular television game show. Fabulous game with great graphics, multi-player ability, load / save games and a Hall of Fame options as well as an instruction sheet.

□ **CARBARRAGE PATCH KIDS: ADV. IN THE PARK:** Enhanced version of the popular ColecoVision cartridge of the same name, but with better graphics and added obstacles to be avoided by the general.

□ **TEMPLE OF APSHAI Revision 2:** Eprx supergame pack which was never released. This is a role playing adventure with graphics and some arcade sequences. Disk and DDP not compatible. Comes with instruction sheet.

□ **FALL GUY / VIDEO HUSTLER:** Unreleased cartridges on disk or ddp which were developed by Fox Games. Fall Guy is a combo driving simulation and arcade game. Video Hustler is a video pool game. Contains SmartWRITER documentation.

□ **YOKE'S ON YOU / MATH WIZ:** Cars which were developed by Fox Games & Sierra. Plays the role of a rooster in helping the chicken collect her eggs and a tremendous math skills arcade builder for ages 4-up. Comes with instruction sheet.

□ **CHESS (SARGON):** Great graphic chess game was developed in CPM and modified by Chris Bryeman. Comes on an auto-booting media and includes documentation on how to use.

□ **SCREEN DONKEY KONG JR.:** Coleco's In-House version of Super Donkey Kong Jr. with an additional 5th play level. MARIO BAKERY (arcade version doesn't even have this level). This version automatically runs through all screens.

□ **M.A.S.H. / SUPER COBRA:** Unreleased cartridge game developed by Fox Games. Two arcade sequences: Pick-up the wounded soldiers in the field and then remote airplane in the operating room and a helicopter arcade action game by Father Brothers in which you must destroy the enemy ground installations. Comes with SmartWRITER documentation.

□ **MEMORY MANOR / WORD FEUD:** Children's game by Fisher Price tests the memory capacities of your child. Good graphics and sound and unleased cartridge by Xerox in which you race against an opponent to find words hidden in the game board. Contains SmartWRITER documentation.

□ **CHESS SOLITAIRE:** Great graphics version of chess where you try to guess the moves of the masters (15 different classic games are included). Also contains a second game, Knight's Tour, and documentation in program.

□ **CARTILERS DUO / TOMARK THE BARBARIAN:** Unreleased cartridges by Xerox. Bomb your opponents gunnery position before he bombs yours. Good graphics and sound and save your girlfriend from the cave-man before your strength runs out! Contains SmartWRITER documentation.

□ **COLOSSAL CAVE:** Enormous text adventure program which was the forerunner to the line of Infocom text adventures known as ZORK.

□ **SUPER DAM BUSTER:** Subgame version of the cartridge with added screens and Hall of Fame. The only flight simulator available for ADAM and one of the best games ever made. Are you good enough to defeat the NAZI forces?

□ **THE BEST OF B.C.:** A two supergame pack with B.C.'S QUEST FOR TIRES and B.C. II: GREGG'S REVENGE developed by Coleco of Canada. Help Tora past obstacles to find Cure Chick and to find the Meaning of Life.

□ **MOUNG PHASE PAK:** An additional 300 phrases for use with Phrase Chaz by Reedy Software Compiled by George Drank. Contains SmartWRITER documentation.

UTILITY VOLUMES

- **EOS DISK MANAGER:** Coleco utility program which was supplied with the 5 1/4" 160K Disk Drive. Also contains the most current Coleco EOS Revision. Rev. 7.
- **DISPED CHECK V2.0:** Enhanced Coleco digital data base test program to assure proper speed operation of drives for best read / write performance. Best results will occur by purchasing disk from us instead of ddp and then copying over to ddp.
- **ADAM UTILITIES:** Coleco In-House utilities, test and demo programs contained on an auto-booting media. Memory expander required for some of the system testers. Also includes Adm Diagnostic and an instruction sheet.
- **MACADAM:** 280 / EOS Assembler written in machine code for the Intermatica to advanced machine code programmer. Contains a 20 page manual in SmartWRITER format.

□ **STRATEGIC SOFTWARE PATCHES:** SmartBASIC V1.0 programs for patching Strategic Software's SIGNSHOP, NEWSMAKER, MULTIVIEW, MICROWORKS, etc.

programs for use with dot matrix printers. Some major enhancements are made to the MultiWRITE Word Processor. Contains SmartWRITER documentation. □ **COLECO GAME COPY:** Coleco In-House cartridge copy utility as well as a media backup utility rolled into one program. Will copy most of the available cartridges. □ **SHAPPEAKER:** Great SmartBASIC V1.0 utilities for creating shapes and placing text on the HGR or HGR2 screen. Shapes created can be used in PowerPAINT. Contains SmartWRITER documentation. □ **MEDIA MATE:** Three tremendous utility programs for editing data packs and disks in SmartBASIC V1.0. Contains informative SmartWRITER documentation. □ **QUICKOPY V2.0:** Excellent machine code copy program (block and file) with additional ramdrive and ramcopy software. Compatible with all memory expanders and disk drive sizes. Contains a 57 page manual in SmartWRITER format. □ **COLECO IN-HOUSE PROGRAMS:** Six separate programs: three diagnostic programs along with the Turnell/Trois, ADAM and Music demo. □ **MIDI DRIVERS & DEMOS:** A collection of MIDI SmartBASIC V1.0 utilities programs along with technical information of the MIDI file setup. Contains SmartWRITER documentation.

PRODUCTIVITY VOLUMES

□ **ADAMLINK II:** Coleco's advanced telecommunications software with all the features of ADAMLINK I and the added ability to up and download ASCII files. Comes with addendum instruction sheets to the ADAMLINK I manual. □ **MARKET MONITOR:** Coleco of Canada management system program for the personal investor. Not totally bug free. Contains SmartWRITER documentation. □ **TAX PLANNER:** Coleco of Canada business software which will create a clearer and more complete picture of your tax situation. Contains SmartWRITER docs.

□ **INSTR-SPRITE V2.0:** Advanced sprite development package with many powerful built-in features. This is the crispier version of the copyrighted version 6.5 and is made available for demo purposes and a chance to test out before buying V2.5. □ **DAVINCI:** Great graphic design utility from France using a point-and-click method of operation along with a SmartBASIC V1.0 utility to convert DAVINCI files into GraphicPAINTER files. Contains SmartWRITER documentation. Disk ONLY. □ **X-10 CONTROL SOFTWARE:** Home appliances control / security system software. Requires a Serial Interface, Serial Cable and the X-10 Hardware. Contains SmartWRITER documentation.

□ **COLECO GRAPHICS PROCESSOR:** Coleco's graphic design utility used to create graphics for cartridges and supergames. Now, on an EOS media. Instructions are provided on the program as well as a picture file conversion program. Requires a memory expander. Cartridge version is available for \$29.95. □ **TDOS V4.56:** Super enhanced version of CPM 2.2 which operates much like MS-DOS. Adds many new features to make it a realer system to work with. Includes all utilities mentioned in the manual. Add \$4.00 for 31 page manual.

□ **SMARTBASIC V1.0:** Coleco's original SmartBASIC which came with the ADAM. This is available for replacement on DDV/DISK and has been enhanced for disk owners. □ **SMARTBASIC V2.0:** Coleco's extended/enhanced version of SmartBASIC V1.0 (4K version 28K) with memory expander access, but is not fully compatible with V1.0. Contains SmartWRITER documentation.

□ **FRENCH BASK:** Great modification of SmartBASIC V1.0 with demos. Must have version for the serious programmer that includes 10 new commands for using sprites, windows, easy color changes, etc.

□ **SMARTBASIC V2.1:** New modification of SmartBASIC V2.0 that adds macros for string inputs, formater and backup programs. Contains SmartWRITER documentation. □ **SMARTBASIC V2.0 40 COLUMN:** 40 column text version of SmartBASIC V2.0 which works in STDHEM or EXTEHM modes. No longer do you have to bother with a non-standard 31 column screen. Contains SmartWRITER documentation.

□ **DAVSTALIAN SmartBASIC:** Enhanced SmartBASIC V1.0 with Strankey display of some of the most often used SmartBASIC commands (e.g. RUN, LIST, SAVE, etc). □ **ADAM FORTH V1.1:** ADAM compatible version of this popular programming language. Comes with a number of programs on media and instruction sheet.

□ **COLECO PERSONAL CPM:** Coleco's In-House version which evolved into CPM 2.2. Made available for collection and as an easy way to test the ADAM components. Comes with instruction sheet.

□ **DTACKER:** Allows for the tracking of Hurricanes in the Gulf Coast area. Enter 14 x and Y coordinates and then save them as a file or view the hurricane in action on the high-resolution map of the area. Includes SmartWRITER documentation file. □ **DBF-1 CURTROM PRINTER SOFTWARE:** Specialized software patches for use in SmartWRITER. Used to input software commands. Available for the following printers: Parascopic 1080, 1001, 1002 or 1004, Star G10 or G20, Epson FX7K, Blue Chip, Crystal 780, Brother 2024L, Smith Corona Fastcard 80 and D2000, Ok 182 and 182.

□ **BASEBALL STATISTICAL:** Comprehensive stat compiler for pitching, batting and team statistics with full life of edit features, save option, print features for ADAM Printer or dot matrix by Wizard's List. Comprehensive instructions in SmartWRITER.



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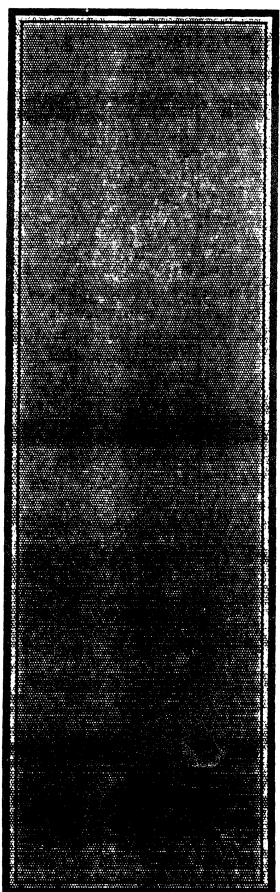
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▪ For GOD so loved the World that he gave his one and only SON, that whoever believes in him shall not perish, but have eternal life. For GOD did not send his SON to condemn the World, but to save the World through him. ▪ . . . John 3:16

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