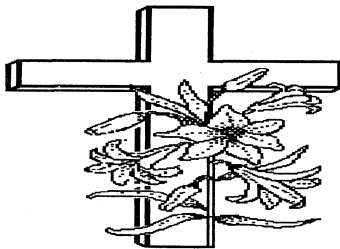


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Issue #62 March, 1990
 Editor: Lyle Marschand
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Happy Easter



Continuing our study of John chapter 2...

²³Now when He was in Jerusalem at the Passover, during the feast, many believed in

His name, beholding His signs which He was doing. ²⁴But Jesus, on His part was not entrusting Himself to them, for He knew all men, ²⁵and because He did not need anyone to bear witness concerning man for He Himself knew what was in man.

CHAP. 3 ¹Now there was a man of the Pharisees, named Nicodemus, a ruler of the Jews; ²this man came to Him by night, and said to Him, "Rabbi, we know that You have come from God as a teacher; for no one can do these signs that You do unless God is with him." ³Jesus answered and said to him, "Truly, truly, I say to you, unless one is born again, he cannot see the kingdom of God."

⁴ Nicodemus said to Him, "How can a man be born when he is old? He cannot enter a second time into his mother's womb and be born, can he?" ⁵Jesus answered, "Truly, truly, I say to you, unless one is born of water and the Spirit, he cannot enter into the kingdom of God. ⁶That which is born of the flesh is flesh, and that which is born of the Spirit is spirit. ⁷Do not marvel that I said to you 'You must be born again.' ⁸"The wind blows where it wishes and you hear the sound of it, but do not know where it comes from and where it is going; so is everyone who is born of the Spirit." ⁹Nicodemus answered and said to Him, "How can these things be?" ¹⁰ Jesus answered and said to him, "Are you the teacher of Israel, and do not understand these things? ¹¹Truly, truly, I say to you, we speak that which we know, and bear witness of that which we have seen; and you do not receive our witness. ¹²If I told you earthly things and you do not believe, how shall you believe if I tell you heavenly things? ¹³And no one has ascended into heaven, but He who descended from heaven, even the Son of Man. ¹⁴And as Moses lifted up the serpent in the wilderness, even so must the Son of Man be lifted up; ¹⁵that whosoever believes in Him have eternal life.

¹⁶For God so loved the world, that He gave His only begotten Son, that whosoever believes in Him should not perish, but have eternal life. ¹⁷For God did not send the Son into the world to judge the world, but that the world should be saved through Him. ¹⁸He who believes in Him is not judged; he who does not believe has been judged already, because he has not believed in the name of the only begotten so of God.

¹⁹And this is the judgement, that the light is come into the world, and men loved the darkness rather than the light; for their deeds were evil. ²⁰For everyone who does evil hates the light, and does not come to the light, lest his deeds should be exposed. ²¹But he who practices the truth comes to the light, that his deeds may be manifested as having been wrought in God."

Jesus' confrontation with Nicodemus is simply spoken but hard for most of us to do. It is because we are a people accustomed to thinking, 'anything worth having can't be easy to come by.' Most humans think that if they do a certain set of required duties or kindnesses we will somehow be rewarded in the next life, if not in our present life.

Jesus though, contradicts that attitude. Even though the Pharisees, which Nicodemus was a member of, believed in living a life of external holiness they lacked the understanding of the true meaning of holiness. Jesus said whosoever believes in Him will be born again. That is to say, **they will be made a new person inside.** Holiness can only come from within a man, not by willful intent.

"Whosoever," is a very broad term. God wanted to show how great His love for all people is when He spoke this word. Therefore any person who desires to become holy, saved and forgiven of his sins simply has to put his trust in Jesus and not in his own ability to be a good person by the power of his will.

This new birth or born again experience is such a small thing of God to ask of we humans. He already gave His Son as a sacrifice in place of us so we don't have to suffer any more guilt. We have so much to gain and nothing to lose but our pride and guilt feelings.

If anyone reading this story in John wonders how to go about being born again, I assure you it is simple. Simply ask God to come into your heart and make you a new person. Simple for us, expensive for God. I say this because if I were God and had died for a friend I would be very possessive and expectant and manipulative toward that person to be my friend in return. But God sacrifices Himself even in that He just waits patiently for our response. That is why the Bible says God is love. NO strings attached to His gift. **ONLY BELIEVE IN JESUS.** How simple yet so hard. At this time of Easter, the rebirth of life after a long winter, won't you ask Jesus into your heart so your sins can be forgiven and you can have a new life ?

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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 \$2.00. The March issue of N.I.A.D. is the 62nd issue published by N.I.A.D., there are 61 preceding issues. When ordering backissues, please specify the issue number and month.

→ The standard membership rate for 10 issues is **\$19.00 USA Third Class** and **\$26.00 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-Addresses Stamped Envelope) if you want a written reply. Also, any contribution sent in on DDP or DISK will be available 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 PUBLISH IT! DTP format files or even supply us with a high quality printout for reproduction in the newsletter. N.I.A.D. reserves the right to not advertise certain products.

→ If **0390** 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 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):

- *** April 12, 1990 ***
 May 10, 1990
 September 13, 1990
 October 11, 1990
 November 8, 1990
 December 13, 1990

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.



Happy Easter to all of you.

Easter is a wonderful time of year - the grass turns green again, buds appear and the spring flowers pop up. People begin to come out of their winter stupors and venture outside to take walks and greet others. Easter is not just when the spring time weather comes, but it is the celebration of the resurrection of Jesus Christ from the dead - truly the greatest story ever told.

Here at NIAD, we are continuing to bring you the most and the best for your ADAM. This issue contains a list of everything you ever wanted to know about Coleco/ ADAM cartridges - a special compilation by just for you. There are some names of cart's that I have never heard of on this list.

PUBLIC DOMAIN



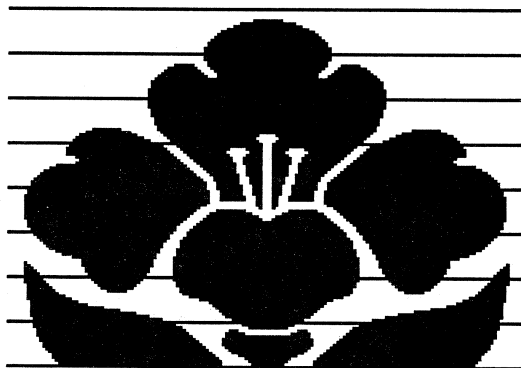
We (with the help of many of you) have compiled an awesome list of Public Domain (PD) software. We have some great PD software that rivals many of the commercial titles out for some computers. Where else could you get such great software for as little as **\$4.00 on disk and \$6.00 on tape?**

Just look at the titles that we have added to our PD list just this month: **CHES SOLITAIRE, MEDIA MATE, ARTILLERY DUEL, TOMARC THE BARBARIAN, WORD FEUD, YAHTSEE, PINBALL GAMES #3-7, N&B PIX #19-29.**

This list includes high quality arcade games, strategy games, utilities and graphics. Here you can get several disks full of software for under \$25.00 !

I encourage all of you to take advantage of PD software since it is such a great bargain. How can you go wrong at these prices. NIAD tests all these PD products so you know you are getting functioning software. Additionally, many have documentation files that provide operating instructions.

Take a look at page 21 - it is full of PD titles. If you haven't tried these PD programs I encourage you to. You won't be disappointed!!



SPRING


It seems as if it was just last week that I had finally finished the February issue and got it mailed out and here I am writing yet another editorial for the March issue. Of course, in between this period I have seen a few movies and had the chance to get out and play some basketball due to the great weather we are having here over the past couple weeks. Pretty soon it will be spring and then summer and everyone will be headed off to their favorite lake to have some fun in the sun, I know I can't wait to go water skiing again (it's a little hard to water ski on the ice right now especially when you wipe out face first into the thawing ice!!).

The summer months are a great time for everyone to enjoy, but it seems that the computer industry would like to see winter last all year around due to the inevitable sales slow down. This is a time when a lot of businesses finally call it quits because their profit margin has decreased so much and overstock problems become a tremendous drain, especially with a computer like the ADAM where a dealer buys a product and it is his, no matter if he doesn't sell the product after a year or two or three. This is so because there is no means for a dealer to stock balance products with the developer. This is a practice widely used for other computer systems, but basically can't be offered to ADAM dealers because of a tremendously smaller market. So where is this all leading into...SOFTWARE PIRACY!

Yes, those dreaded two words are back again (actually they never left) and it seems as if the situation is worsening each and every day. To think about the amount of money that someone like Tom Clary has lost due to software piracy on his ADAMLINK enhancements and all the other software developers who do not copy-protect their software. These programmers, myself included, are spending countless hours in front of our systems developing products which we know will never generate the amount of sales estimated to make a profit for all the time spent. We develop programs because we love this system and we want to see that other people who own and love ADAM have the chance to realize ADAM's full potential, whether it be game playing, business, simple home use or education.

What we are likely to see in the near future are more programs that are copy protected by the developer to protect their own investment. No one wants to spend countless hours developing a program and later find out that there are twice as many copies floating around than original purchased masters. For this one reason alone, we have lost many talented programmers who by now could have been developing the next generation of business software (IE: a new database, spreadsheet, word processor and even a desk top publisher that could all be integrated together) or the ultimate graphic design utility, etc. Believe you me, there are some very talented programmers out there who have basically refused to write any more software. So the next time the opportunity presents itself to pick-up up a copy of a program from a friend, think twice and ask yourself if it is really worth. In the long run, if you really love this system, you will be hurting yourself due to the fact that new software will not be developed!

The last item I would like to pass along here is that we have finally nailed down the new format for the user group meeting which we hold in our store the second Thursday of each month! The April meeting will be geared heavily to demonstrating the CompuSERVE telecommunications system. I plan on informing everyone on CompuSERVE (in the ADAM section) about our intentions so as to be able to fully demo every possible feature that CIS offers in the ADAM section as well as also going over some other non-ADAM features!



NIAD NEWS & UPDATES

⇒ As many of you are already aware, Coleco 160K Disk Drive are no where to be found anymore! All at once the supply just disapatted with no where else to turn to. For the current time, watch the Used & Swap Corner very carefully for used disk drives or people selling their systems (they might part with the disk drive). Also, pay close attention to local ad papers for used systems being sold.

⇒ A few other items are also in very short supply: ADAM Printer Power Supplies, Super Action Controllers, Exp. Mod. #2 Driving Controller and the Roller Controller. Each of these items have been taken out of the Product List, so please do not order these items. If we find another dependable source, we will inform you.

⇒ On a brighter note, the E&T Parallel Printer Interface now includes a small wire leading out of the addressor connection point on the board. This addition, coupled with the addition of a clip on the end of the E&T MegaRAM Expander addressor wire will elevate the need to solder a wire between the two boards or the MegaRAM and an Addressor Card to complete the addressing of the larger expander. All that is needed to be done now is to clip the two together.

⇒ Panasonic's special pricing on all their printer modules (we supply the KX-P1180 & 1191) are coming to an end this month. This will be the last chance you will have to upgrade your system with a dot matrix printer at the low price of \$199.95 for the 1180, \$239.95 for the 1180 with parallel interface and cable or \$249.95 for the 1191, \$289.95 for the 1191 with parallel interface and cable. The price increase will be anywhere from \$10 to \$25 on all configurations.

⇒ The new Genesis 16-Bit Game System has taken the videogaming industry by storm and we are now making this system available to you at discounted prices over our normal retail. If you purchase a system from us between **March 15 and April 22**, you will be eligible to receive a second Control Pad (joystick) **FREE** as well as a **FREE** game of your choice from Sega. For further details on the Genesis System, call or write us. Don't wait too long however, April 22 is the last day of eligibility to buy a system and receive a free control pad and game from Sega (an \$80 value).

⇒ Check out the New Products & Specials, we have reduced prices on many software titles and backissues of the newsletter. Many of the products are in short supply and will not be restocked, so don't delay on your order.

⇒ Pitman Software has recently upgraded their super smash arcade/strategy game, ADAM BOMB, to include the option of choosing which level, out of the 30 built-in, that you will start at! To receive this new version, send your ADAM BOMB original along with \$3, if paying by check - make payable to Steve Pitman, to cover return shipping and handling to:

Steve Pitman Software
3705 Church St.
Cincinnati, OH 45244

⇒ The AKRON ADAM BBS and the NEXUS BBS have both been taken down. We are sorry to see the AKRON BBS (John Lingrel's board) go by the way side since it was such a strong source for CP/M users. The NEXUS BBS has been taken down due to the recent split-up of THE SOFTWORKS FACTORY and no details have been released as to when

and if this BBS will ever be back on-line.

⇒ We are desperately in need of a CP/M Librarian to handle contributions and article writing on this alternative Disk Operating System. If anyone is interested in taken on this responsibility, please call or write us so that we may iron out some details. We have not has a CP/M Librarian for over a year now and too many questions have gone unanswered!

⇒ The PowerMATE Hard Drive turnkey system has been a real success to date. For further information on this product, read part 2 of Terry Fowler's review. The price of the HD system with one disk drive (be it 5 1/4" or 3 1/2") is still far cheaper than buying two Coleco Disk Drives. Also, Walters Software Co. is nearing completion on SmartMATE, a cartridge program that will allow for far greater compatibility when using the HD with EOS programs. Watch for further articles by Terry Fowler on PowerMATE.

⇒ The much awaited documentation manual and demo programs for the public domain title MacADAM are just about ready for distribution by Walters Software Co. Details are sketchy at the moment, but the combined effort of Jim Casey and Jim Walters should enlighten our use of this macro-assembler program and hopefully help out some of us basic programmers move into machine code programming. Walters Software Co. is also nearing completion of their newest utility cartridge which will include many of the features of the SmartDSK Cart as well as the addition of more power media utility functions. As soon as we hear word about the availability of these products and pricing, we will let you know.

⇒ A few bugs have been found in the adventure game, LORD SIMON'S CASTLE. The major bug is in saving a game which is in progress. The program doesn't check to see if a game has previously been saved and therefore does not delete the old game, which will free up that directory slot again. When another game is saved, it is added to the directory unless all the directory slots have been used up already by other files. This will cause a "NO MORE ROOM" error message and the program will crash. E&T Software has issued a recall on all copies sold, so if you wish to receive a refund on this game, send it back to us and we will issue you a credit or a refund. Please do not order this product until we pass along word that the bugs have been worked out.

⇒ Quiccopy V5.0 was not developed by GJMG ENTERPRISES. This new public domain contribution was finished up by an anonymous programmer and not GJMG. In fact, the last version which was completed and fully tested was V3.0, V4.0 was near completion, but it was never released. Please do not send any payments to GJMG for V5.0, they do not have a copy of V5.0 and therefore cannot supply you with it. We should have V5.0 available through the public domain within the coming month.

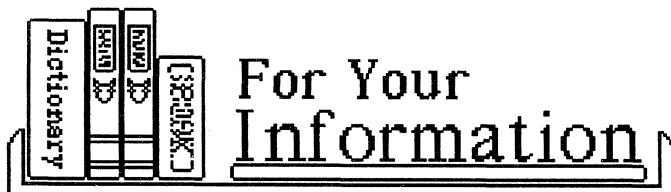
⇒ The much awaited release for commercial purchase of the DYNAMITE SOUND DIGITIZER and SmartCLOCK by Trisyd Video, ADAM IMAGE MAKER by Oasive Pensive Abacutors and the MIDI INTERFACE by Chris Braymen has not yet become a reality. Each of the developers is still busy at work completing software and instruction manuals that have caused the long delays. We eagerly await the release of each of these hardware products as you do. The only thing that we as ADAM owners can do is sit and wait while these products are finished up and hope that no further snags come along to delay their release any further. All items will definitely be released.

- Plans for ADAMCON 02, which will be held in Toronto, are progressing rather rapidly. If you are interested in attending this second ADAM Convention, read the press release by Richard Cleo. Response to ADAMCON 02 has already been tremendous and it looks as if this second coming together of ADAM owners will offer even more than the first! The cost for U.S. citizens will roughly be \$250 depending on the exchange rate.

- THE SOFTWARES FACTORY, owned and operated by Tony Patterson and Sol Swift, has closed it's doors. Further internal problems have caused the breakup of these two gentlemen. Tony Patterson has stated that all accounts due will be settled up before the final closure of T.S.F. and as far as the release of GoDOS, this is solely in the hands of Soloman Swift, who plans on restarting the company once again as well as honoring all subscriptions. As soon as we find out any further details, we will pass them along to you.

- S.M. VIDEO now has available the most current version of the public domain title COLECO GRAPHICS PROCESSOR (AKA: PROJECT NAME BY LINE) on cartridge! This new version is identical to the old version if running them off of disk or ddp, but when operating from a cartridge, it allows for one to capture screens right out of their favorite programs. Also, the cartridge version does not require a 64K memory expander. For further details on this product, see the review contained herein.

- We apologize for the long delay on the public domain title GRAPHICS CONVERTER. Due to the break up of T.S.F., we have not received this title yet and have been placing this package on a backorder status. We hope to have this package within the next two to three week period so that we can get these backorders settled up and also start into further work with C.G.P. ourselves.



TECHNOTE 29
ADAM PRINTER MALFUNCTION
 by Thomas Keene/IEAUG

Have you ever had this problem? When you first turn on your ADAM, the printer head moves to the left, the daisy wheel spins and spins and spins and nothing happens. The same thing happens when you pull the reset switch or in CP/M when you hit Control-P (^P). Sometimes, after a while, it may straighten up. The problem is almost invariably in the microswitch that the printhead activates when it reaches the left-most end of it's travel. This encounter opens the microswitch which is normally in the closed position.

As a rule, microswitches are a high reliability component, but they can malfunction; a lot depends upon the manufacturer. Trademarked switches are usually good for millions of operations. However, the switch Coleco used in this function is a nondescript component.

Replacing this switch will correct this malfunction in almost every case. It is easy to remove and no disassembly of the printer is necessary to get at it. Some soldering is involved, but any twelve-year-old would have no trouble with this.

PROCEDURE:

First turn off the power to the printer. To be completely safe, you may remove the ADAM from the A.C. Power Source altogether. With a small Phillips head screwdriver, loosen the two screws holding the

microswitch. Use care not to drop the screws into the printer. NOTE THE POSITION OF THE SWITCH. Lift it out so that you may remove the switch. You may desolder the two wires but there is plenty of wire, so I recommend clipping the wires up close to the switch with a small pair of wire cutters (dikes). Next, remove about 1/8 inch of insulation from the end of the two wires.

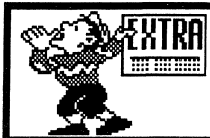
The microswitch you just removed is rated at 3 amps at 125 volts A.C. Your replacement switch should resemble the original switch as closely as possible. Most complete electronic supply houses will be able to match your switch physically. I strongly recommend that you replace it with a 5 amp switch. There is virtually no difference in price. The hole positions are pretty much universally standardized, but it is a good idea to bring your old switch with you when you buy the new one. Check it over. You need a switch that is normally closed, but 98% of the switches will come with both a normally open and a normally closed set of contacts. The shape of these switches can vary greatly. Try to find one whose contact lever resembles yours. Some have roller levers, while others are simply flat. The ADAM switch has a small arc at the tip of the lever. This is the kind to look for. Don't get taken on the price. Sometimes exact replacement parts for specific equipment may run to \$15. Forget it. Radio Shack gets about \$1.50 for theirs. Their catalog number 275-016 is rated at 5 amps at 250 volts A.C. and probably will work OK, even though it doesn't have the arc tip on the lever. An almost exact replacement is the SONY part number 1-516-309-00. It runs about \$3.00 and is of outstanding quality.

Next, solder the two wires to the COMMON and NC positions on the switch. Then replace the switch in the printer. Just be sure that the contact lever is pointing to the front of the printer (away from the platen). If you had noticed the switch position as you removed it (which I advised) you will encounter no problem at all. It is a trifle awkward getting the screws in, but you should have no real problem.

I have fixed several printers that had become slow to start, and this simple procedure has effected a 100% cure.

NEW PRODUCTS & SPECIALS

- o SpriteMASTER..... \$14.95
- by Murdoc Games
- o America At War.....\$6.95
- by A-WARE (DDP ONLY)
- o Backup 3.0\$10.95
- by MMSG (DISK ONLY)
- o Beyond Trek..... \$12.95
- by Digital Express (64K req')
- o C.P.K.: Picture Show..... \$14.95
- by Coleco (CART)
- o Dance Fantasy.....\$9.95
- by Fisher Price (CART)
- o Dinosaur Dig..... \$14.95
- by Pitman Software (64K req')
- o File Printer..... \$11.95
- by Adam's House (Dot Matrix)
- o Formatter II.....\$9.95
- by Walters Softw. (DISK ONLY)
- o Game Set #2.....\$9.95
- by Digital Express
- o The Heist..... \$14.95
- by MicroFun (CART)
- o MisSpeller..... \$14.95
- by Walters Soft. (for Spellingaid)
- o PaintMASTER..... \$15.95
- by Strategic Soft. (DDP ONLY)
- o Reedy Enter. Pack..... \$10.95
- by Reedy Software
- o Reedy Software Library. \$12.95
- by Reedy Software
- o Richard Scarry's Best.... \$16.95
- by Coleco (DDP ONLY)
- o SmartTERM V1.2..... \$12.95
- by Keheo Software
- o Softpack I..... \$14.95
- by E&T Software
- o The Solar System.....\$6.95
- by A-WARE (DDP ONLY)
- o States'N Capitals.....\$6.95
- by Parallel Soft. (DDP ONLY)
- o StratoZAP..... \$12.95
- by Ace Software
- o Sub Raiders..... \$17.95
- by Strategic Soft. (DDP ONLY)
- o Super Zaxxon.....\$7.95
- by Coleco (DDP ONLY)
- o The Vase of Turr.....\$24.95
- by Walters Software Co.
- o World Capitals.....\$6.95
- by A-WARE (DDP ONLY)
- o World Geography.....\$6.95
- by A-WARE (DDP ONLY)



CARTRIDGE ROUNDUP

by Jim Notini



What was made? What was released? What's considered public domain or not? What is still available and where? Has anyone seen...? These are some of the many questions that I have fielded over the two years which I have been working for N.I.A.D. about the status of Colecovision cartridges, which we all know can be played on the ADAM. Answers to these questions are long overdue and the following list (rather lengthy) details what cartridges were developed and released as well as developed but not released. The list is broken up into five separate categories which list the: **NAME, COMPANY** which released or developed the cartridge, cartridge **SIZE** in "K", whether the cartridge was **RELEASED** or not and if the cartridge is still **AVAILABLE** (this column will list out either available through TeleGAMES USA or N.I.A.D, if the cartridge was placed into the PUBLIC DOMAIN or if the cartridge is NOT AVAILABLE anymore).

Many people would say that since a cartridge is no longer available through a commercial retailer, that it should be considered public domain, BUT this is not entirely the case! The cartridge rights, of course, are still held by the company which developed the cartridge, but TeleGAMES USA could possibly have licensed the rights to some of these unavailable carts and have decided to hold off on production for awhile. Truthfully, it is very uncertain just what carts TeleGAMES USA owns the rights too and therefore has caused a lot of misconception around the ADAM community as to what is considered public domain. The best way to decide if a game is public domain or not is to look up the title on the below list. If the game is marked as unavailable, but was marked "YES" in the RELEASED column, then it is not public domain and of course, if the cart is still available through one of the many ADAM Dealers, then it is **NOT PUBLIC DOMAIN!**

I would like to thank Richard Salvati for the contribution of his own personal list which he compiled through what could only have been many strenuous hours of research in magazines, etc. Without his contribution, this list would have mainly dealt with carts which had been released. Most of the list comes directly from carts that I have copied onto disk (exactly 150) and this is how I am able to list the cart size in "K". I only wish that I did not sell off my original carts (106 in all) a couple years ago because these carts are going to become collector's items just as baseball cards, stamps, etc. are collector's items and they will be worth a pretty penny in the future.

There are some special requirements on a number of the below listed cartridges. Turbo, The Dukes of Hazard and Destructor require the EXPANSION MODULE #2 DRIVING CONTROLLER and both Pitstop and Fall Guy can use this controller. Super Action Baseball, S.A. Football, S.A. Soccer, S.A. Boxing - Rocky and Front Line require the SUPER ACTION CONTROLLERS, all games that function with the standard hand controller will work with these controllers. Slither and Victory require the ROLLER CONTROLLER and Omega Race can use it as well as this controller's ability to function as a cursor control (IE: a mouse) using many of the ADAM Computer programs! Also, Super Cobra and Defender will not operate properly when played on the ADAM. For this reason, Super Cobra has been placed into the public domain and Defender will be a likely candidate once the current supply of originals run out. Most of Coleco's cartridge utilities require at least a 64K Memory Expander (IE: Adam Diagnostic). Check the Product List to see if we still have the cartridge version or DDP/DISK version on games we have available. If you have any questions, feel free to write or call me about this list directly at N.I.A.D.

CARTRIDGE NAME	PRODUCED BY	SIZE	RELEASE	AVAILABLE THRU	RETAIL
□ 9 TO 5	FOX GAMES	?	NO	NOT AVAILABLE	
□ 2010: THE ACTION GAME	COLECO	32K	YES	TELEGAMES USA	\$24.95
□ ADAM DEMO	COLECO	24K	NO	PUBLIC DOMAIN	
□ ADAM DIAGNOSTIC	COLECO	32K	NO	PUBLIC DOMAIN	
□ ALCAZAR	ACTIVISION	24K	YES	TELEGAMES / NIAD	\$19.95 D/DP
□ ALPHABET ZOO	SPINNAKER	16K	YES	NOT AVAILABLE	
□ AMAZING BUMPMAN	TELEGAMES	16K	YES	TELEGAMES USA	\$29.95
□ ANTARCTIC ADVENTURE	COLECO	16K	YES	TELEGAMES USA	\$29.95
□ APPLE CIDER SPIDER	SIERRA ON-LINE	16K	NO	NOT AVAILABLE	
□ AQUATTACK	INTERPHASE	16K	YES	TELEGAMES / NIAD	\$19.95
□ ARTILLERY DUEL	XONOX	16K	NO	PUBLIC DOMAIN	
□ ASTRO CHASE	PARKER BROTHERS	?	NO	NOT AVAILABLE	
□ B.C.'S: QUEST FOR TIRES	SYDNEY DEVELOPMENT	16K	YES	TELEGAMES USA	\$29.95
□ B.C. II: GROG'S REVENGE	COLECO	24K	YES	TELEGAMES USA	\$29.95
□ BEAMRIDER	ACTIVISION	16K	YES	TELEGAMES / NIAD	\$24.95
□ BLANK TAPE RESTORER	COLECO	8K	NO	PUBLIC DOMAIN	
□ BLOCKADE RUNNER	INTERPHASE	16K	YES	TELEGAMES / NIAD	\$19.95
□ BLUE PRINT	CBS SOFTWARE	?	NO	NOT AVAILABLE	
□ BOULDERDASH	MICROFUN	16K	YES	TELEGAMES / NIAD	\$19.95 D/DP
□ BRAIN STRAINERS	COLECO	16K	YES	TELEGAMES / NIAD	\$19.95
□ BUCK RODGERS	COLECO	24K	YES	TELEGAMES USA	\$24.95
□ BUCK RODGERS TAPE RESTORER	COLECO	8K	NO	PUBLIC DOMAIN	
□ BUMP'N JUMP	COLECO	20K	YES	TELEGAMES USA	\$29.95
□ BURGERTIME	COLECO	16K	YES	TELEGAMES USA	\$29.95
□ CABBAGE PATCH KIDS: ADV. IN THE PARK	COLECO	16K	YES	TELEGAMES USA	\$19.95
□ CABBAGE PATCH KIDS: ADV. IN THE PARK+	COLECO	16K	NO	PUBLIC DOMAIN	
□ CABBAGE PATCH KIDS: PICTURE SHOW	COLECO	24K	YES	N.I.A.D.	
□ CAMPAIGN '84	SUNRISE SOFTWARE	16K	YES	TELEGAMES USA	\$19.95
□ CARNIVAL	COLECO	16K	YES	TELEGAMES USA	\$14.95
□ CENTIPEDE	ATARISOFT	16K	YES	TELEGAMES / NIAD	\$19.95

CARTRIDGE NAME	PRODUCED BY	SIZE	RELEASE	AVAILABLE THRU	RETAIL
□ CHALLENGER	COLECO	?	NO	NOT AVAILABLE	
□ CHESS CHALLENGER	COLECO	?	NO	NOT AVAILABLE	
□ CHOPLIFTER	COLECO	16K	YES	TELEGAMES USA	\$29.95
□ CHUCK NORRIS: SUPERKICKS (or KUNG FU)	XONOX	32K	YES	TELEGAMES USA	\$29.95
□ CONGO BONGO	COLECO	24K	YES	TELEGAMES USA	\$29.95
□ COSMIC AVENGER	COLECO	16K	YES	TELEGAMES USA	\$14.95
□ COSMIC CRISIS	TELEGAMES	16K	YES	TELEGAMES USA	\$14.95
□ DAM BUSTERS, THE	COLECO	32K	YES	TELEGAMES USA	\$29.95
□ DANCE FANTASY	FISHER PRICE	8K	YES	N.I.A.D.	
□ DECATHLON, THE ACTIVISION	ACTIVISION	16K	YES	TELEGAMES / NIAD	\$24.95
□ DEFENDER	ATARISOFT	24K	YES	TELEGAMES / NIAD	\$14.95
□ DESTRUCTION DERBY	COLECO	?	NO	NOT AVAILABLE	
□ DESTRUCTOR	COLECO	32K	YES	TELEGAMES USA	\$19.95
□ DIG DUG	ATARISOFT	?	NO	NOT AVAILABLE	
□ DINO EGGS	MICROFUN	16K	NO	NOT AVAILABLE	
□ DISK DRIVE BURN-IN	COLECO	8K	NO	PUBLIC DOMAIN	
□ DONKEY KONG	COLECO	24K	YES	w/ COLECOVISION	
□ DONKEY KONG JR.	COLECO	16K	YES	TELEGAMES USA	\$14.95
□ DR. SEUSS' FIX-UP THE MIXED-UP PUZZLER	COLECO	16K	YES	N.I.A.D.	
□ DRACULA	COLECO	?	NO	NOT AVAILABLE	
□ DRAGON STOMPER	STARPATH	?	NO	NOT AVAILABLE	
□ DRAGONFIRE	IMAGIC	16K	YES	NOT AVAILABLE	
□ DUKES OF HAZARD, THE	COLECO	32K	YES	TELEGAMES USA	\$29.95
□ EARTH DIES SCREAMING, THE	STARPATH	?	NO	NOT AVAILABLE	
□ ESCAPE FROM THE MINDMASTER	STARPATH	?	NO	NOT AVAILABLE	
□ EVOLUTION	SYDNEY DEVELOPMENT	16K	YES	TELEGAMES USA	\$24.95
□ FACEMAKER	SPINNAKER	8K	YES	NOT AVAILABLE	
□ FALL GUY	FOX GAMES	16K	NO	PUBLIC DOMAIN	
□ FATHOM	IMAGIC	16K	YES	TELEGAMES / NIAD	\$24.95
□ FINAL TEST	COLECO	8K	NO	PUBLIC DOMAIN	
□ FLIPPER SLIPPER	SPECTRAVIDEO	16K	YES	TELEGAMES USA	\$24.95
□ FORTUNE BUILDER	COLECO	32K	YES	TELEGAMES USA	\$29.95
□ FRACTION FEVER	SPINNAKER	8K	YES	TELEGAMES USA	\$29.95
□ FRANTIC FREDDIE	SPECTRAVIDEO	16K	YES	TELEGAMES USA	\$29.95
□ FRENZY	COLECO	20K	YES	TELEGAMES USA	\$24.95
□ FROGGER	PARKER BROTHERS	12K	YES	TELEGAMES USA	\$29.95
□ FROGGER II: THREEDEEPI	PARKER BROTHERS	16K	YES	TELEGAMES USA	\$29.95
□ FRONT LINE	COLECO	24K	YES	TELEGAMES USA	\$24.95
□ GALAXIAN	ATARISOFT	24K	YES	TELEGAMES USA	\$29.95
□ GAMMA TEST	COLECO	16K	NO	PUBLIC DOMAIN	
□ GATEWAY TO APSHAI	EPYX, INC.	16K	YES	TELEGAMES USA	\$24.95
□ GLOBE GRABBER	MICROFUN	?	NO	NOT AVAILABLE	
□ GORF	COLECO	16K	YES	TELEGAMES / NIAD	\$14.95
□ GUST BUSTER	SUNRISE SOFTWARE	16K	YES	TELEGAMES USA	\$19.95
□ GYRUSS	PARKER BROTHERS	16K	YES	TELEGAMES USA	\$29.95
□ H.E.R.O.	ACTIVISION	16K	YES	TELEGAMES / NIAD	\$24.95
□ HEIST, THE	MICROFUN	24K	YES	TELEGAMES / NIAD	\$24.95
□ HORSE RACING	COLECO	?	NO	NOT AVAILABLE	
□ ILLUSIONS	COLECO	16K	YES	TELEGAMES USA	\$29.95
□ IT'S ONLY ROCK'N ROLL	XONOX	16K	YES	NOT AVAILABLE	
□ JAMES BOND: 007	PARKER BROTHERS	16K	YES	TELEGAMES USA	\$29.95
□ JUKEBOX	SPINNAKER	8K	YES	NOT AVAILABLE	
□ JUMPMAN JR.	EPYX, INC.	16K	YES	TELEGAMES USA	\$24.95
□ JUNGLE HUNT	ATARISOFT	24K	YES	NOT AVAILABLE	
□ KEN USTON'S BLACKJACK / POKER	COLECO	16K	YES	TELEGAMES USA	\$19.95
□ KEYSTONE KAPERS	ACTIVISION	16K	YES	TELEGAMES / NIAD	\$24.95
□ LADY BUG	COLECO	16K	YES	TELEGAMES USA	\$14.95
□ LEARNING WITH LEEPER	SIERRA ON-LINE	16K	YES	TELEGAMES / NIAD	\$29.95
□ LINKING LOGIC	FISHER PRICE	16K	YES	NOT AVAILABLE	
□ LOGIC LEVELS	FISHER PRICE	8K	YES	NOT AVAILABLE	
□ LOOPING	COLECO	16K	YES	TELEGAMES USA	\$14.95
□ LORD OF THE DUNGEON	PROBE 2000	?	NO	NOT AVAILABLE	
□ LUNAR LEEPER	SIERRA ON-LINE	?	NO	NOT AVAILABLE	
□ M*A*S*H	FOX GAMES	16K	NO	PUBLIC DOMAIN	
□ MADDEN FOOTBALL	CBS SOFTWARE	?	NO	NOT AVAILABLE	
□ MELTDOWN	FOX GAMES	?	NO	NOT AVAILABLE	

CARTRIDGE NAME	PRODUCED BY	SIZE	RELEASE	AVAILABLE THRU	RETAIL
□ MEMORY MANOR	FISHER PRICE	16K	YES	PUBLIC DOMAIN	
□ MINER 2049er	MICROFUN	24K	YES	NOT AVAILABLE	
□ MOGUL MANIAC W/JOYBOARD	AMIGA	?	NO	NOT AVAILABLE	
□ MONKEY ACADEMY	COLECO	24K	YES	TELEGAMES USA	\$29.95
□ MONTEZUMA'S REVENGE	PARKER BROTHERS	12K	YES	TELEGAMES USA	\$29.95
□ MOONSWEEPER	IMAGIC	16K	YES	TELEGAMES / NIAD	\$29.95
□ MOTOCROSS RACER	XONOX	16K	YES	TELEGAMES USA	\$24.95
□ MOUNTAIN KING	SUNRISE SOFTWARE	16K	YES	TELEGAMES USA	\$19.95
□ MOUSE TRAP	COLECO	16K	YES	TELEGAMES USA	\$19.95
□ MR. DO!	COLECO	24K	YES	TELEGAMES USA	\$14.95
□ MR. DO'S! CASTLE	PARKER BROTHERS	16K	YES	TELEGAMES USA	\$29.95
□ MR. TURTLE!	COLECO	?	NO	NOT AVAILABLE	
□ MUSIC DEMO	COLECO	24K	NO	PUBLIC DOMAIN	
□ NOVABLAST	IMAGIC	16K	YES	TELEGAMES / NIAD	\$19.95
□ NUMBER BUMPER	SUNRISE SOFTWARE	16K	YES	N.I.A.D.	
□ OIL'S WELL	SIERRA ON-LINE	16K	YES	TELEGAMES USA	\$29.95
□ OMEGA RACE	COLECO	16K	YES	TELEGAMES USA	\$19.95
□ ONE ON ONE	MICROFUN	24K	YES	TELEGAMES USA	\$29.95
□ PASTFINDER	ACTIVISION	?	NO	NOT AVAILABLE	
□ PEPPER II	COLECO	16K	YES	TELEGAMES USA	\$14.95
□ PHASER PATROL	STARPATH	?	NO	NOT AVAILABLE	
□ PHEONIX	COLECO	?	NO	NOT AVAILABLE	
□ PITFALL	ACTIVISION	16K	YES	TELEGAMES / NIAD	\$19.95
□ PITFALL II	ACTIVISION	16K	YES	TELEGAMES / NIAD	\$24.95
□ PITSTOP	EPYX, INC.	16K	YES	TELEGAMES USA	\$24.95
□ POPEYE	PARKER BROTHERS	16K	YES	TELEGAMES USA	\$29.95
□ PORKY'S	FOX GAMES	?	NO	NOT AVAILABLE	
□ POWERLORDS	PROBE 2000	?	NO	NOT AVAILABLE	
□ PROJECT NAME BY LINE V1	COLECO	32K	YES	S.M. VIDEO	\$24.95
□ PROJECT NAME BY LINE V2	COLECO	32K	YES	S.M. VIDEO	\$24.95
□ PURSUIT OF PINK PANTHER, THE	PROBE 2000	?	NO	NOT AVAILABLE	
□ Q*BERT	PARKER BROTHERS	8K	YES	TELEGAMES USA	\$19.95
□ Q*BERT'S QUBES	PARKER BROTHERS	12K	YES	NOT AVAILABLE	
□ QUEST FOR QUINTANA ROO	SUNRISE SOFTWARE	16K	YES	TELEGAMES USA	\$19.95
□ QUICK STEP	IMAGIC	?	NO	NOT AVAILABLE	
□ RIP CORD	COLECO	?	NO	NOT AVAILABLE	
□ RIVER RAID	ACTIVISION	16K	YES	TELEGAMES / NIAD	\$19.95
□ ROBIN HOOD	XONOX	16K	YES	NOT AVAILABLE	
□ ROBOTRON 2084	ATARISOFT	?	NO	NOT AVAILABLE	
□ ROC'N ROPE	COLECO	24K	YES	TELEGAMES USA	\$24.95
□ ROCK'N BOLT	ACTIVISION	20K	YES	TELEGAMES / NIAD	\$19.95 D/DP
□ ROCKY: SUPER ACTION BOXING	COLECO	20K	YES	TELEGAMES USA	\$24.95
□ ROLLOVERTURE	SUNRISE SOFTWARE	16K	YES	TELEGAMES USA	\$19.95
□ ROUND UP	COLECO	?	NO	NOT AVAILABLE	
□ SAMMY LIGHTFOOT	SYDNEY DEVELOPMENT	16K	YES	TELEGAMES USA	\$29.95
□ SCRAPER CAPER	MICROFUN	?	NO	NOT AVAILABLE	
□ SECTOR ALPHA	SPECTRAVIDEO	22K	YES	NOT AVAILABLE	
□ SEWER SAM	INTERPHASE	24K	YES	TELEGAMES / NIAD	\$19.95
□ SHORT CIRCUIT	MICROFUN	?	NO	NOT AVAILABLE	
□ SIDE TRAK	COLECO	?	NO	NOT AVAILABLE	
□ SIR LANCELOT	XONOX	16K	YES	TELEGAMES USA	\$15.95 D/DP
□ SKIING	COLECO	?	NO	NOT AVAILABLE	
□ SKIING	TELEGAMES	8K	YES	TELEGAMES USA	\$29.95
□ SLITHER	COLECO	16K	YES	w/ ROLLER CONTR.	
□ SLURPY	XONOX	16K	YES	NOT AVAILABLE	
□ SmartBASIC RESTORER	COLECO	8K	NO	PUBLIC DOMAIN	
□ SmartDSK CART	WALTERS SOFTWARE	?	YES	N.I.A.D.	
□ SMURF PAINT'N PLAY	COLECO	24K	YES	TELEGAMES USA	\$14.95
□ SMURF PLAY'N LEARN	COLECO	?	NO	NOT AVAILABLE	
□ SMURF RESCUE IN GARGAMEL'S CASTLE	COLECO	16K	YES	TELEGAMES USA	\$14.95
□ SMURFETTE'S BIRTHDAY	COLECO	?	NO	NOT AVAILABLE	
□ SPACE FURY	COLECO	16K	YES	TELEGAMES USA	\$14.95
□ SPACE PANIC	COLECO	16K	YES	TELEGAMES USA	\$14.95
□ SPACEMASTER X-7	FOX GAMES	?	NO	NOT AVAILABLE	
□ SPECTAR	COLECO	?	NO	NOT AVAILABLE	
□ SPECTRON	SPECTRAVIDEO	16K	YES	TELEGAMES USA	\$29.95

CARTRIDGE NAME	PRODUCED BY	SIZE	RELEASE	AVAILABLE THRU	RETAIL
□ SPY HUNTER	COLECO	32K	YES	TELEGAMES USA	\$24.95
□ SQUISH'EM SAM	INTERPHASE	16K	YES	TELEGAMES / NIAD	\$19.95
□ STAR TREK	COLECO	24K	YES	TELEGAMES USA	\$29.95
□ STAR WARS	PARKER BROTHERS	16K	YES	NOT AVAILABLE	
□ STRIKE-IT	TELEGAMES	12K	YES	TELEGAMES USA	\$14.95
□ SUB-ROC	COLECO	20K	YES	TELEGAMES USA	\$14.95
□ SUPER ACTION BASEBALL	COLECO	20K	YES	w/ SUPER ACTION. CON	
□ SUPER ACTION CONTROLLER TEST	COLECO	6K	NO	PUBLIC DOMAIN	
□ SUPER ACTION FOOTBALL	COLECO	32K	YES	TELEGAMES USA	\$29.95
□ SUPER ACTION SOCCER	CBS SOFTWARE	32K	YES	TELEGAMES USA	\$29.95
□ SUPER COBRA	PARKER BROTHERS	16K	YES	PUBLIC DOMAIN	
□ SUPER CROSS FORCE	SPECTRAVIDEO	12K	YES	TELEGAMES USA	\$29.95
□ SWORD AND THE SORCERER, THE	COLECO	?	NO	NOT AVAILABLE	
□ TAC-SCAN	SEGA	?	NO	NOT AVAILABLE	
□ TANK WAR	TELEGAMES	16K	YES	TELEGAMES USA	\$14.95
□ TAPE DRIVE BURN-IN	COLECO	8K	NO	PUBLIC DOMAIN	
□ TAPE UTILITY REVISION 22	COLECO	8K	NO	PUBLIC DOMAIN	
□ TAPPER	COLECO	32K	YES	TELEGAMES USA	\$29.95
□ TARZAN	COLECO	24K	YES	TELEGAMES USA	\$19.95
□ TELLY TURTLE	COLECO	16K	YES	TELEGAMES USA	\$19.95
□ TEST MENU	COLECO	16K	NO	PUBLIC DOMAIN	
□ THRESHOLD	SIERRA ON-LINE	16K	YES	TELEGAMES USA	\$29.95
□ TIME PILOT	COLECO	16K	YES	TELEGAMES / NIAD	\$19.95
□ TIME RUNNER	MICROFUN	?	NO	NOT AVAILABLE	
□ TOMARC THE BARBARIAN	XONOX	16K	NO	PUBLIC DOMAIN	
□ TOURNAMENT TENNIS	IMAGIC	16K	YES	TELEGAMES / NIAD	\$29.95
□ TUNNELS & TROLLS	COLECO	?	NO	NOT AVAILABLE	
□ TURBO	COLECO	16K	YES	w/ EXPAN. MOD. #2	
□ TURMOIL	FOX GAMES	?	NO	NOT AVAILABLE	
□ TUTANKHAM	PARKER BROTHERS	12K	YES	TELEGAMES USA	\$29.95
□ UP & DOWN	SEGA	16K	YES	NOT AVAILABLE	
□ VANGUARD	COLECO	?	NO	NOT AVAILABLE	
□ VENTURE	COLECO	16K	YES	TELEGAMES USA	\$14.95
□ VICTORY	COLECO	24K	YES	TELEGAMES USA	\$14.95
□ VIDEO HUSTLER	KONAMI	8K	NO	PUBLIC DOMAIN	
□ WAR ROOM	PROBE 2000	24K	YES	TELEGAMES USA	\$29.95
□ WARGAMES	COLECO	24K	YES	TELEGAMES USA	\$24.95
□ WILD WESTERN	COLECO	?	NO	NOT AVAILABLE	
□ WINGS	CBS SOFTWARE	?	NO	NOT AVAILABLE	
□ WING WAR	IMAGIC	16K	YES	TELEGAMES / NIAD	\$24.95
□ WIZARD OF ID: WIZMATH	SYDNEY DEVELOPMENT	16K	NO	PUBLIC DOMAIN	
□ WIZARD OF OZ	COLECO	?	NO	NOT AVAILABLE	
□ WIZARD OF WOR	COLECO	?	NO	NOT AVAILABLE	
□ WORD FEUD	XONOX	8K	NO	PUBLIC DOMAIN	
□ YOKES'S ON YOU	FOX GAMES	16K	NO	PUBLIC DOMAIN	
□ Z-80 MACRO ASSEMBLER	COLECO	?	NO	NOT AVAILABLE	
□ ZAXXON	COLECO	24K	YES	TELEGAMES USA	\$24.95
□ ZENJI	ACTIVISION	16K	YES	TELEGAMES USA	\$19.95

This is by no means, a complete list of all the titles which were developed or even in the developmental stage by many of the companies listed above as well as many other numerous companies which were just entering the videogame market on the Colecovision Game System. One such example is the company which developed FORTUNE BUILDER for Coleco, CIRCUITS & SYSTEMS INC. Reports from their development team had it that another five cartridges were in the works and planned for release through 1985. It is unfortunate that these cartridges will never become available for one reason or another, but hopefully there is enough already available to keep everyone busy.

From time to time, we will continue to contact these companies to see if anything can be worked out to finally release these titles, but for the most part, the release of any new titles seems very unlikely. Our best bet at the current time is to support TELEGAMES USA as much as possible and just maybe they will be able to work some deals out with these companies to bring us new cartridges.

A last minute inclusion on this list is the column containing the **RETAIL** price of a cartridge that is still available through TELEGAMES USA. These retail prices are from their Winter 1989 Catalog and possibly could have changed by now. Also the list does not contain any prices on cartridges which we still have available. For the most current retail price on the cartridges which we still have available, check the Product List on Page 20.

A number of cartridges have also been made available on Data Pack or Disk. These titles are: **Alcazar**, **Rock'N Bolt**, **Boulder Dash**, **Tournament Tennis**, **Wing War**, **Fathom**, **Kung-Fu Superkicks**, **Pitfall**, **River Raid**, **Beamrider**, **Keystone Kapers**, **Pitfall II**, **Sewer Sam**, **Aquattack**, **H.E.R.O.**, **Decathlon**, **Zenji**, **Blockade Runner**, **Squish'em Sam**, **Moonsweeper**, **Nova Blast**, **Motocross Racer**, **Sir Lancelot**, **Campaign '84**, **Gust Buster**, **Quest for Quintana Roo**, **Rolloverture**, **Mountain King**, and **TeleGames Skiing**. The titles in boldface are only available on DDP or DISK.

ADAMCON 02

Press Release by Richard Clee

(Toronto, Canada) - ADAMCON 02, the second annual international convention for users of the Coleco/ADAM computer, will be held at the Ramada 400/401 hotel in Toronto, August 15th through 18th, 1990. User group members and major suppliers from across Canada and the United States have already indicated intentions to attend. The Toronto ADAM convention follows from the success of the first ADAM Convention, held in Orlando, Florida last October, which drew delegates from as far away as Vancouver Island, B.C.

The convention will be organized by the Metro Toronto ADAM Group (MTAG) and Loyal ADAM Users of the Golden Horseshoe (LAUGH), centered around the western end of Lake Ontario, with assistance from Monte Neece of the Metro Orlando ADAM User Group, organizer of ADAMCON 01. Convention Director is Ken Batcher, librarian of LAUGH, while MTAG president Richard Clee will serve as Conference Chairman. The conference will center around three days of seminars covering a wide range of topics useful to ADAM owners, including operating systems, software, new hardware, telecomm., graphics, and games. Specific sessions are expected to include introductions to CP/M, TDOS, SmartLOGO and the popular application programs. Terry Cairns, whose TAPPS Music BBS, (416) 741-2432, is the official ADAMCON board, will install & operate a demonstration board at the convention.

One afternoon will be reserved as a public time when anyone interested in ADAM software or hardware may visit the ADAM store area, comprised of commercial exhibitors, and the "garage sale" tables open to all delegates to buy, sell or trade for surplus items. Most major commercial ADAM suppliers are expected to be represented. Full conference information can be obtained from Conference Chairman Richard Clee - 21 Rondale Blvd. - Toronto, Ont., Canada M6A 1H6 - phone (416) 783-0316 after 7:30 p.m. (Eastern) weekdays, daylight hours weekends. Exhibitors assistance will be given by Convention Director Ken Batcher - 530 Kelvedon Mews - Mississauga, Ont., Canada L4Z 1G4 - phone (416) 270-1763 from 6 - 9 p.m. (Eastern) weekdays or 9 a.m. - 5 p.m. weekends.

The full conference fee will be \$299 Canadian per person and will include a room (double occupancy) for four nights, all conference events and facilities, three breakfasts, two lunches, formal reception and final banquet. There is an appropriate discount for early registration. Children accompanying registrants will be \$49 extra, to cover food costs. A reduced spousal fee is also available. Registrations paid in U.S. dollars will attract a discount based on current exchange rates. Other options include additional days at discounted room rates, or room upgrades at a suitable premium.

Local residents who do not require a room will pay \$149 for access to all conference meals, meeting facilities, and services. They will also be eligible for the draw prizes to be distributed at the final banquet, and the priority private access session to the ADAM store and garage sale. Further and more detailed information on ADAMCON 02 will be distributed through the usual user channels including interchanges on the CompuSERVE, Akron and Utah BBSs, the ADAM News Network, and all known established user groups.

According to Conference Chairman Richard Clee, "the ADAMCON 02 organizers have tried to arrange for the maximum amount of space flexibility, and our attendance estimates are optimistic. Still, if the overwhelming interest we have seen so far turns into actual attendance, we could end up having to turn away a few last-minute applicants. Any of those who can firm up their plans and register early might find it prudent to do so. Toronto, when the Canadian National Exhibition is on, is a very popular tourist destination, and space not reserved in advance can be hard to find".



USED & SWAP CORNER

=> Two Complete ADAM Standalone Computer Systems with single data drives and ADAM Daisy Wheel Printer for sale for \$125 each, plus shipping and handling. Both units are in excellent condition and have been tested with diagnostic software from Coleco. I also have some software to sell, all come with docs. Price for the software varies. Contact: Captain R.D. Symonds, MC, USN - Quarters 4148 - U.S. Air Force Academy - Colorado, 80840 - (719) 472-0811.

PHONE ORDERS ONLY! USED HARDWARE & CARTRIDGES

- Exp. Mod. #3 Complete with Colecovision, Printer, Etc. \$125.00
- ADAM Daisy Wheel Printer.....\$49.95
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- Cabbage Patch Kids: Adv. in the Park by Coleco.....\$10
- Cabbage Patch Kids: Picture Show by Coleco\$10
- Campaign '84 by Sunrise Software\$10
- Congo Bongo by Coleco.....\$15
- Decathlon by Activision\$10
- Donkey Kong Jr. by Coleco\$10
- Facemaker by Spinnaker\$10
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- Frenzy by Coleco\$10
- Front Line by Coleco.....\$15
- Gorf by Coleco.....\$10
- Jukebox by Spinnaker.....\$10
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- Logic Levels by Fisher Price\$10
- Looping by Coleco.....\$10
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- Omega Race by Coleco\$10
- Pepper II by Coleco.....\$10
- Popeye by Parker Brothers.....\$10
- Q*bert by Parker Brothers\$10
- River Raid by Activision\$10
- Roc'N Rope by Coleco\$15
- Rocky: Super Action Boxing by Coleco\$15
- Smurf Paint'N Play Workshop by Coleco.....\$10
- Smurf Rescue by Coleco.....\$10
- Space Fury by Coleco\$10
- Spy Hunter by Coleco\$15
- Star Trek by Coleco\$15
- Star Wars by Parker Brothers\$10
- Super Action Baseball by Coleco.....\$10
- Tarzan by Coleco\$15
- Turbo by Coleco.....\$10
- Tutankham by Parker Brothers.....\$10
- Venture by Coleco.....\$10
- WarGames by Coleco.....\$15
- Zaxxon by Coleco\$10



MORE HARDWARE OPTIONS

by Jim Notini



Know that you have a better understanding of what basic hardware products are available, hardware that is more or less considered amongst the top of everyone's want list, through last month's article, I will detail some further hardware items which are available, but aren't necessarily a requirement. A couple of the following hardware additions will work with the ADAM as well as any other micro-computer system available, so if you decide in the future to upgrade or add another system, you will not have to shell out more money to piece together another system.

The first hardware product that I will discuss is the addition of a monitor. As we all know, the ADAM was designed to be attached to a television set through the use of an A-B Switch Box as well as having the capability to output a picture to a monitor. Most people still use a TV set to display their picture and are very satisfied with it, while others have started with a TV and grew continuously more frustrated over the poor picture display. This is not a problem with the ADAM, but is basically a limitation as far as the TV hookup and set goes. With a television, the picture display is not nearly as sharp, vibrant and satisfying to the eye. Also, most TV sets do not allow for the adjusting of the horizontal positioning of the picture which can cause the right or left side of the display to be cut off and, of course, there is always the problem of over-scanning!

There are two kinds of monitors available which will work with the ADAM. The first is known as a Composite monitor can display in color, green or amber. This type of monitor is basically an enhanced TV picture tube with the capability of adjusting the picture positioning. The second type of monitor which will work on the ADAM is the RGB (Red, Green and Blue) standard. This monitor is a step above the Composite monitor in its display capabilities although its full potential is not realized on the ADAM because the ADAM was only setup to output a composite signal. Generally speaking, a color composite monitor can be found at a far cheaper price than an RGB monitor especially if you go with a green or amber unit, but it can't be used with an IBM, Amiga or Atari ST as the RGB monitor can. So if you decide to go with a composite monitor now, you could end up spending more money down the line for a new monitor. Composite monitors are all supplied with universal RCA input jacks so there is no problem attaching the ADAM Monitor Cable (5 pin din connector plugs into AUXILIARY VIDEO connector on the back of the Memory Console with two wires running out, each ending in the RCA connector), but not all RGB monitors are supplied with these two RCA input jacks (one for audio and one for video). In fact, most RGB monitors only have a 9-pin connector which strictly requires a RGB signal. There are a few RGB monitors out there that include both the 9 pin and dual RCA jack connections, and this is the monitor that you will have to go with as far as an RGB. A final note and a very important one is that the EXPANSION MODULE #3 ADAM SYSTEM can only be attached to a television set. There was an adaptor available to allow the EXP. MOD. #3 to hook-up to a monitor, but this item is no longer available. Also, there is a separate MONITOR RCA jack on the back of the Standalone ADAM System, this jack is for use with a monitor only and will provide the video signal to the monitor using the standard cable used to connect to a TV, no audio will be transmitted to the monitor's speaker(s).

If you are interested in telecommunications work, then you have two options to get the job done. The first is the internal COLECO ADAMLINK 300 BAUD modem which plugs into Slot #1 in the Memory Console. This modem, as many of you are finding out, is now very hard to find since all Coleco made only so many through 1984 and since then no

one else has bothered to develop a similar modem (although Trisyd Video did have their Sydmodem 1200 available as late as last summer, this was also an internal modem). ADAMLINK allows people to use their phone line to call bulletin board systems (run by an ADAM or some other type of computer) and even some of the more popular telecommunication services like CompuSERVE, PeopleLINK and GENIE. You may also up or download files to and from computers through the phone lines, although ADAMLINK I does not allow for this, subsequent version of the ADAMLINK software do allow for this transferring of files.

The 300 baud modem is sufficient for most person's needs, like myself, but there are those out there who are continually calling long distance and require a faster rate of data transfer. For those people, a 1200 or 2400 baud external modem is the answer to their needs, but the only way to use one of these external modems is by purchasing a Serial Port and Cable to be able to attach it to the ADAM. The drawback here is that there is no longer a source for Serial Ports, except the two that come built-on to the PowerMATE interface card, so upgrading to a faster external modem will also require some hard work in tracking a serial port down. If you do get lucky and find a serial port and start looking for a modem, stick with one that is Hayes compatible if you can't afford to buy an actual Hayes made modem. Also, an external modem can be used on any system which has a serial port or has the ability to add a serial port, as the ADAM does. The real advantage these modems have over the internal 300 baud is speed of data transfer over the phone lines, the 1200 baud external is 4 times faster and the 2400 baud external is 8 times faster. What scared many people away from the external unit previously was the fact that there weren't any EOS telecommunications programs available to work with the external modems, only CP/M offered telecommunications programs that could use the external modem. Now, however, all that has changed with the release of ADAMLINK III+ by Tom Clary last fall and the eagerly awaited release of ADAMLINK IV within the next month or two. With AL III+ and the soon to be released AL IV, the user can setup the program to work with the internal ADAMLINK 300 baud or a modem hooked up through a serial port. AL III+ and IV also support external modems that operate as fast as 19,200 baud, but the top speed modem that can be used on the ADAM is a 2400 baud. So if you want to get into Telecommin', watch the Used & Swap Corner or your local ad paper for people selling their systems, they might have a used modem or serial port!

The last item I will discuss is the Megacopy III Tape Maker. When Coleco developed the ADAM, they had no idea of how early an exit they would be making from the computer industry or any industry for that fact. Therefore, they left it up to Loranger to produce all the digital data packs for them. Even after Coleco went belly up, Loranger continued to produce DDPs for the ADAM, but there support also has dwindled and there DDPs are no longer as reliable. What Trisyd Video has provided us ADAMites (or those who don't have disk drives) with is the ability to produce our own DDPs out of ordinary audio cassettes! Megacopy attaches between the second data drive and the Memory Console pins for data drive #2 (two data drives are required) and comes with software that will allow the user to format around 15 different types of data packs for use on the ADAM. At the moment, Megacopy may not be a necessity because E&T Software is mass producing two different data packs (256K and 320K), but so many years down the road, you could possibly find yourself in need of more DDPs without any source to purchase them through. This is where Megacopy will come in handy and also for those who like to be able to supply for themselves the needed items. Also, Megacopy works great in fixing bad data packs!



PUBLIC DOMAIN WORKSHOP

PINBALL GAMES VOL. #3 THRU #7

Five more volumes of pinball games that were created by Digital Express Inc. with the public domain program, PINBALL CONSTRUCTION SET. Each of the five new volumes contain 10 different pinball games on an auto-booting media so that the PINBALL CONSTRUCTION SET is not required. NOTE: PINBALL GAMES VOL. #1 and #2 have recently been upgraded and no longer require PINBALL CONSTRUCTION SET, they are now auto-booting also.

CHESS SOLITAIRE

This public domain volume was contributed by Al Roginsky. **Chess Solitaire** is a game where you try to guess the next move of a chess game played by the masters. You get points 10 points for each right answer and 0 for a wrong answer. The first few moves of the confrontation between the chess masters are given to you, from here, you must decide what moves the masters probably made in order to win the game. Great graphics rendition of the chess board as well as all chess pieces represented via sprites. There are a total of 15 classic chess matches to choose from, each game detailed by the strategy used by the masters, the master's names and the year the two played the match. Included as a bonus is **KNIGHT'S TOUR**. **KNIGHT'S TOUR** is a chess puzzle that challenges the player to move the knight in such a way as to touch all the squares on the board. Sounds easy, it isn't, especially since the knight can't move to the same square twice. The knight moves as in a normal game of chess. Instructions are included within the program for both games.

MEDIA MATE

A collection of three media editors by D.L. Ewing, Brent Lymn and Guy Cousineau. **MEDIA EDITOR** allows for the disassembly of selected sections of a data pack, disk or memory. It presents the data on the screen first, the instruction code (HEX), followed by a disassembled instruction and mnemonic (if one exists). Full editing capabilities are built-in. **ABE** (Adam Block Editor) allows one to view and/or modify the data contained in any 1024 bit block of data from a data pack or disk. This allows one to repair directories that have been accidentally (or otherwise) destroyed, recover data from a bad ddp or disk, or even patch a program to personalize or even improve a program. **DISK EDITOR** is a full-fledged sector editor which allows one to load in blocks of data from a media and view this data in HEX or ASCII for editing. **MEDIA MATE** is supplied with a modified version of SmartBASIC V1.0, which is for the MEDIA EDITOR program ONLY! To use ABE or DISK EDITOR, first load your original copy of SmartBASIC V1.0 and then [BRUN] either one. Included on this media are two very informative SmartWRITER documentation files on how to use ABE and MEDIA EDITOR. DISK EDITOR is pretty straight forward.

N&B PIX VOL. #19 THRU #29

Eleven more volumes of SmartPAINT format pictures files for use with PowerPAINT, ShowOFF I, CLIPPER, SpritePOWER, SwiftPRINT or SmartBASIC V1.0 with the proper loader program, PIX.MGR. Each volume contains a baker's dozen (13) high resolution picture files which can be incorporated into one's own work. NOTE: PowerVERSES VOL. #1 is the same as N&B PIX VOL. #21 and PowerVERSES VOL. #2 is the same as N&B PIX VOL. 29! PowerVERSES are SmartPAINT format picture files of verses taken from the BIBLE.

C.G.P. PIX VOL. #2

A collection of 13 screen captures from Coleco cartridges, supergames and ADAM programs for use with the COLECO GRAPHICS PROCESSOR (also known as PROJECT NAME BY LINE). Pictures included on this volume are from such known hit titles as: 2010 The Graphic Game, Ken Uston's Blackjack / Poker, Burgertime, Carnival, A.E. (The Best of Broderbund), Diablo, Super Dam Busters, Super Donkey Kong Jr. - 5 Screen, Super Front Line Demo and Dragon's Lair.

ARTILLERY DUEL

An unreleased cartridge by XONOX. This is a two player combat, annihilation game. Two gunneries are placed into position on a mountain. It is the player's job to find the proper barrel angle and amount of gun powder to use while taking into account the wind factor and gunnery position on the mountain in order to blow-up the opponent first before he does the same to you. Very whimsical graphics and sound effects as well as animated sequences make this a great head-to-head game.

TOMARC THE BARBARIAN

An unreleased cartridge game by XONOX. The goal of the game seems to be to guide the hero, TOMARC THE BARBARIAN, through caverns while avoiding all sorts of nasties (IE. bats, rats, spiders, etc.) to eventually save his girlfriend, who has been imprisoned in a cage, from the caveman. Graphics are adequate, but game play is hurt from lack of documentation.

WORD FEUD

An unreleased cartridge game by K-TEL (XONOX). **WORD FEUD** is a word search game for one player, two players head-to-head or one player versus the computer (head-to-head). Game options include searching the display of letters for a word given by the computer, searching for a four letter word and also searching for a four or three letter word. This is a perfect educational game for children since game play is very simple and racing against the computer opponent or a human opponent to locate words in the display area is a real challenge.

MR. T YAHTSEE!

Play Yahtsee on your ADAM with this fabulous rendition of the ever popular game by MR. T SOFTWARE. You have 13 rounds, each allowing three rolls of the dice to score points. Includes instructions in the program as well as allowing for as many as nine players to go at it. Also, a scoreboard keeps track of the best scores for prosperity. This could easily pass as a commercial package.

SPEED CHECK V2.0

Coleco's updated version of the DATA DRIVE SPEED CHECK program. To clarify, Coleco went through many different stages of data pack formats before finally releasing the ADAM. The first SPEED CHECK program was designed for use with an older data pack format, therefore causing a slightly wrong reading of the operation speed of a drive. SPEED CHECK V2.0 will give a proper reading of the drive speed using any data pack that has been sold since late 1984.



BASIC PROGRAMMING
 by L.C. Austill
Chapter 11D & 11E
THE PATTERN PLANE & SPRITES

Imagine in your mind that there are 33 screens between yourself and the monitor screen. The last one is the so-called "Pattern Plane". This is the same plane that is used to produce text, but it has some other notable features. Pictures can be drawn on this plane in some detail. Further, when using SPRITES, the sprites will move over the pattern plane without destroying it although the picture in back of the sprite will not be visible through the sprite. Why? Because the sprites are on planes between you and the pattern plane.

All of these planes are controlled by the video display processor which has a separate 16K memory chip set aside for its use. The various sprites and pattern plane artwork are stored in this 16K chip known as VRAM. Storage is accomplished through a series of tables. There are three tables that control the pattern plane. These are:

Pattern Name - Pattern Generator - Color

These addresses, in VRAM, are stored at 64872/64873, 64874/64875, and 64876/64877 respectively. These locations are controlled by eight registers in the video chip. Access to the VRAM and video registers is through the OUT command in machine code.

Unfortunately, there is not much written on using the pattern capabilities. Searching through the index of our library, I could find no programs in the public domain that illustrate utilization of the capability. There is a discussion of the material in "Hacker's Guide to ADAM Vol. 1", but the Hinkles note that they have encountered problems in accessing the VRAM. The Hinkles do note the existence of several operating system commands that access VRAM. I have tried using these commands without success. In at least one of them, I suspect there may be an error, but I have not tried making the correction.

AUTO-AID by FutureVision (available through M.W. RUTH) has a series of machine language commands as part of their software that access VRAM. I have had excellent experience utilizing these commands thus I have not, until recently, tried to develop programs that use non-proprietary material. The binary system in AUTO-AID is easy to use and may be the best answer, at least at the moment, if you wish to get into art enriched graphics.

The pattern plane is divided into 32 columns and 24 rows (20 if HGR or GR is used). Each of these blocks contains eight rows of eight pixels each, or a total of 64 pixels. Two colors may be specified for each row of pixels in the block. Just as with SHAPES, each pixel is either "plotted" or left blank. This is accomplished through the use of 0's or 1's in the binary numbers that are established for each row in the block. Say there is a series of eight binary numbers that appear as follows:

00000001 - 00000011 - 00000111 - 00001111
 00011111 - 00111111 - 01111111 - 11111111

Now, we give an instruction, in numerical form where the high nibble is the color of the 1's and the low nibble is the color of the 0's and you have a small square with two sections of different color dividing the area.

Through the use of the pattern name table, the configuration of each of the 768 blocks is specified. The pattern generator table defines the eight bytes that will form the pattern. The corresponding section of the color table holds the eight bytes that define the colors.

More information on utilizing the pattern capability would be beneficial. The ability to use the pattern plane directly without going through AUTO-AID would speed up the process. I have been partially successful, but have never been able to get the picture below the eighth row on the screen.

SPRITES exist on the planes in front of the pattern plane. There may be up to 32 sprites, one to each of the planes. The sprites are controlled by two tables in the VRAM. The first is the Sprite Generator Table. The location in VRAM is defined in 64868/64869 in RAM. Each sprite in normal size covers a block 8 pixels x 8 pixels. It is defined by eight numbers. Using the same example as with the Pattern Plane, the 0's are one color and the 1's another and the color is defined for the entire sprite, not row by row. But the number is still high nibble for 1's, low nibble for 0's. A sprite may be plotted in any position on the screen, even wrap around positions.

The Sprites are controlled by the Sprite Attribute Table in VRAM. The address of that table is given by the values of addresses 64868/64869 in RAM. The Sprite Attribute Table consists of 4 bytes of information for each sprite. These bytes are:

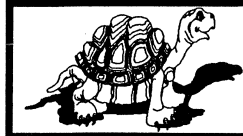
Y position (row) - X position (column)
NAME (the sprite number)
COLOR (the sprite color)

The definition of a sprite is not changed as it is moved around thus the only changes required are in the x and y numbers in the attribute table. This may be done quickly. When the numbers are changed, the Sprite disappears from its original position and reappears in the new position.

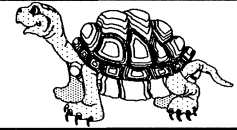
Sprites are versatile and good for games. They generally work better than SHAPES in that respect. There are two different sized Sprites that may be created and they may be magnified by two. All Sprites, however, must be treated the same -- you can't have a mixture of sizes through the use of the commands.

Once again, I spotted nothing in the public domain on Sprites nor in the Library Distribution Tapes. "Hacker's Guide to ADAM Vol. 1" has a program that works. Also, AUTO-AID has machine code routines that work very well with Sprites.

Sprites may be used with Version 1.0 of SmartBasic even though they aren't covered in the instruction manual. Version 2.0, however, makes considerable usage of the principle. In the documentation for Version 2.0, the subject is discussed at some length including the making of a sprite. For further sprite useage, SpritePOWER by DEI is a must.



SmartLOGO WORKSHOP LEARNING WITH LOGO PART 5 by Ricki Gerlach



The first four parts of "Learning with Logo" has been dedicated to learning about the Turtles. But then, I remembered how I wanted to print out my listings, and had to wait for my Adam SmartWRITER Printer to slowly print them out. A much faster way is to use a printer patch to activate the dot matrix printer every time I used the Print command.

First, lets learn the commands for printing. Unlike SmartBASIC, we do not use PR#1 and PR#0 to toggle the printer on and off. In SmartLOGO, we use two primitives to do this. The key word to turn on the printer is very easy to remember:

PRINTER <RETURN>

and the toggle to turn off the printer is likewise easy to remember:

NOPRINTER <RETURN>

A key point here, is that only TEXT will be sent to the printer, graphics will remain on screen, but not printed out on the printer, no matter if you have a dot matrix or not. We are presently working on a patch, and hopefully we will be able to print out the graphics via SmartLOGO some time in the future. In the mean-time, PowerPAINT by Digital Express Inc. will print them out, and later in the lessons we will go into that area.

The listing for a dot matrix printer patch is as follows. Please enter it exactly as shown. We have used some primitives that are very dangerous to a novice, but must be used to properly patch our SmartLOGO. These primitives are identified by a period (.) placed before the name. In the patch we use .DEPOSIT, which is the same as POKE in SmartBASIC. If you make a mistake, and place an incorrect value into that location, you will have to reboot your LOGO, and try again. So be very careful.

SmartLOGO DOT MATRIX PRINTER PATCH

```
TO .INSTALL :BASEADR :BYTELIST
  IF EMPTYP :BYTELIST [STOP]
  .DEPOSIT :BASEADR DEC FIRST :BYTELIST
  .INSTALL SUM :BASEADR 1 BF :BYTELIST
END

TO DEC :H
  IF EMPTYP :H [OP 0]
  IF EMPTYP BL :H [OP SUM ASCII :H IF NUMBERP :H [-48] [-55]]
  OP 16 * (DEC BL :H) + DEC LAST :H
END

TO PRDRIVER
  MAKE "STARTADR 204 - 10
  .INSTALL :STARTADR [F5 DB 40 E6 1 28 FA F1 D3 40 C9]
  .DEPOSIT 10935 194
  .DEPOSIT 10936 0
  .DEPOSIT 10940 194
  .DEPOSIT 10941 0
  .DEPOSIT 10964 194
  .DEPOSIT 10965 0
  .DEPOSIT 3373 183
  .DEPOSIT 3374 0
  .DEPOSIT 3375 0
  RECYCLE
END
```

After you have typed this, remember to save it, by using the command SAVE "PRDRIVER

Now, to use, every time you want to, first load SmartLOGO, then LOAD "PRDRIVER. After it is loaded, enter PRDRIVER, and it will load and run for you. Afterwards, remember to enter ERALL RECYCLE to free up those memory nodes for later use.

Learning with Logo Part 6 by Ricki J. Gerlach

In Part 5 we used a primitive that was the same as POKE in SmartBASIC, the primitive: .DEPOSIT. This lesson we will explore the other primitives also considered dangerous. We will also discuss what they actually do in SmartLOGO.

★ The primitive [.VERSION]

By entering this primitive, you will get only the version of your SmartLOGO. The version should be 3.11 or higher. Anything less, and you need an updated version.

★ The primitive [.PRIMITIVES]

By entering this primitive, you will get a listing of all the primitives that ADAM knows, but you should have fan fold paper if you plan on printing it out. It uses about four pages, and then it only lists the names, not the functions.

★ The primitive [.EXAMINE]

By entering this primitive, you can actually peek into a location of memory, to see what value is located there. This is the same function as PEEK in SmartBASIC. You can not change the value with this primitive.

★ The primitive [.DEPOSIT]

This is your POKE command like in SmartBASIC. You can change the value of any memory location with this command. You can also mess up your Logo, requiring a reboot. BEFORE you use this primitive, REMOVE your copy of SmartLOGO from the drive, so that you will not destroy it by error. Also save any work prior to poking around into the memory locations. This advice comes from lots of expertise in the area of destroying media and programs.

★ The primitive [.CALL]

This primitive is the same as in SmartBASIC, by which I mean that you can CALL or transfer control to a sub-routine in SmartLOGO, at the address in which you call. This primitive is great at locking up a program if you do not know what you are calling. Be very careful.

★ The primitive [.ALLOCATE]

By use of this primitive, you can reserve a part of the memory for special use. You can install a sub-routine here, or a machine language code command. You are limited here by the addresses you can reserve. The highest byte is 31740, and the lowest is 31740 - your value + 1. Remember that by reserving the memory, you cut out the readily available memory you use.

★ The primitive [.CONTENTS]

This primitive will print out a list of all objects that SmartLOGO knows in its memory, other than primitives. This includes all of your procedures, names, properties, and any unique words or symbols you have typed. You must enter the commands ERALL RECYCLE after you examine the contents to free up your memory.



TELECOMMUNICATIONS WORKSHOP



XMODEM PROTOCOL by Phillip Hansford

DOWNLOADED FROM THE AWAUG BBS

One of the most interesting things about a computer and a modem is the exchange of public domain files and programs over the telephone. A number of handshaking standards or 'protocols' have been developed to make this possible. One of the most important and widely used is the 'XMODEM' protocol (sometimes 'MODEM7' protocol; or 'Christensen' protocol, after it's originator, Ward Christensen). The XMODEM protocol makes it possible for many different kinds of computers to communicate with each other via modem and telephone.

Since a noisy phone connection may cause transmission errors, the XMODEM protocol can recognize and correct the errors when they occur. The XMODEM protocol has been upgraded several times since its invention about 10 years ago. However, all the upgrades are 'downward compatible' with earlier versions, so that even very simple programs can use it.

Data to be transferred may contain up to 8 bits per byte (that is why we can transfer '.COM' files). The data is sent in 128 byte clusters called 'p' (later versions of XMODEM can also transfer 1K byte packets). Each packet is checked for errors and if an error is found, the packet is sent again. The packet has a 'header' which is sent at the beginning, and a 'tail' which is sent at the end form:

HEADER / PACKET / TAIL ...(repeat for each packet)

The protocol uses several ASCII 'control codes' to run the process:

- ⇒ ACK (ACKNOWLEDGE, 06 hex, control-F)
- ⇒ CAN (CANCEL, 18 hex, control-X)
- ⇒ EOT (END OF TRANSMISSION, 04 hex)
- ⇒ NAK (NEGATIVE ACK., 15 hex, control-U)
- ⇒ SOH (START OF HEADING, 01 hex, control-A)
- ⇒ STX (START OF TEXT, 02 hex, control-B)

THE HEADER

The header consists of an SOH control code marker, followed by etc.), and then the two's complement or 'NOT' of the number (that is, the bits are reversed -- 1's are 0's, 0's are 1's).

If these three elements were to be added together they should equal zero, and that is one way to check for transmission errors at the receiving end.

THE TAIL

The tail consists of a 1 byte checksum, or alternately, a 2 byte CRC.

CHECKSUM and CRC

The checksum and CRC are used to detect errors. The receiving computer calculates the checksum or CRC for data it has received from a sending computer. If they match, data is OK. If they do not match, an error is indicated. The checksum is obtained by adding all the bytes of the header and packet together (ignoring carry). The checksum can catch 99.6 % of the errors. The CRC (Cyclic Redundancy Code) requires a more complicated calculation involving multiplication of the bytes, but it can catch 99.9 % of the errors. Thus, the use of CRC is preferred. Many systems give you the option of selecting either Checksum or CRC.

HANDSHAKING

The entire process is initiated by the receiving computer when it signals the sender to begin. That, and the way errors are handled, is why the XMODEM protocol is known as a 'receiver'. To begin the process, the receiver may send any of three different characters:

- ⇒ NAK -- indicates protocol with checksum
- ⇒ 'C' -- (capital 'C') protocol with CRC
- ⇒ 'K' -- (capital 'K') 1K packet protocol

The sender then sends the file. If the receiver receives the packet of data without errors (using checksum or CRC), it sends a ACK control code to the sender, and the next packet is transmitted. Otherwise, if an error was detected, the receiver sends a NAK control code to the sender and the same packet is transmitted again. This continues until all the data has been sent. End of data is indicated when the sender transmits an EOT control code and the receiver answers with an ACK.

1K PROTOCOL

More recently, added to the XMODEM protocol which permits 1K byte packets (ie. 1024 bytes). This 1K option always uses CRC (never checksum). The use of 128 byte data packets was a logical beginning because single density CP/M uses 128.

This is especially significant at the higher baud rates (such as 2400 baud) and for long distance because of transmission delay (especially via satellite). Thus the use of a larger 1K data packet can reduce transmission time somewhat, especially at the higher baud rates. However, the 128 byte data packet is faster if the phone connection is noisy (if an error occurs in a 1K byte packet, retransmission takes 8 times the normal byte packet). Most 1K software downshifts the sender automatically to 128 byte packets if excessive errors are detected; it also shifts down when the remaining sectors to be transmitted are fewer than 8. The Gender indicates it is sending a 1K byte packet by using STX instead of SOH in the header.

The XMODEM protocol also includes provision for a CAN (control-X) 'panic button' to abort the transmission.



ADAM BBS LISTING

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PowerMATE HARD DRIVE PART 2 (cont. from 02/90) Review by Terry Fowler

The EOS Menu screen provides six options so far, using the six SmartKEYS to make each selection. SmartBASIC V1.0 is already provided in patched form to boot from the Hard Disk. Pressing option III provides the Directory of Hard Disk 0, which contains the following files: HARDDISK, FILEMAN, SmartBASIC, BOOTCALC, BOOTSPLAT, BOOTMAC, BOOTTYPE, BOOTLOGO, BOOTFLASH and BOOTWRITE. Selecting SmartBASIC with the arrow and pressing RETURN brings SmartBASIC online within 2 seconds. Pressing the SHIFT and UNDO key together takes you back to the EOS MENU within 3 seconds. SmartKEY I provides you the ability to change drives. Our PowerMATE software was configured such that EOS file space was set for five 1 Meg Drives: 0, 1, 2, 3 and 4. You may use the Maintenance functions to provide as many as 10 1 Meg Drives for EOS use (CAUTION: Make a backup disk of all TDOS volumes before any Repartition of your Hard Drive!! EOS files may stay intact, but backup of Drive 0 with all the boot patches is wise!). Pressing SmartKEY I changes the logical (or ON-LINE) drive that you will use between these five drives. In my case, I have SmartBASIC programs on Drive 5 after repartitioning the Hard Disk for 10 1 Meg Drives, with the remaining 10 Meg split into the 4 TDOS Volumes (2050K and three 2788K size volumes). Selecting Logical Drive 5, followed by SmartKEY III to get Volume 0 Directory allows me to boot SmartBASIC as before, but now Hard Disk 5 programs are at hand with all the same results you expect. A 16 block program like my VOLLABELER program saved in binary format loads within 2 seconds from the Hard Disk, almost 8 seconds to load from a 5 1/4" disk! SmartBASIC recognizes the Hard Disk as device 2, drive 5 -- or 25> in place of the normal prompt. I use EZkeys to easily switch between the optional floppy drive (1>), Hard Disk drive with selected partition (2?>), ADAM Disk Drive (5>), and ADAM Disk Drive #2. Some programs may cause problems using the SHIFT / UNDO key combination to return to the EOS Menu. In this event, use the EOS Boot disk to quickly return to the Menu.

The EOS Menu also allows you to select your Optional Floppy (MI Floppy I) mounted in the unit. In this event, the boot program will select this drive to boot programs. You can also use SmartKEY IV to boot prepatched software from any drive. You may also select VI to install a parallel printer prior to booting. SHIFT / VI key allows you to Set the Date (a function that will soon be automatic with a clock chip installed in your ADAM). You may also ESCAPE to SmartWRITER or tap the WILDCARD key for TDOS. The EOS Menu returns in SmartWRITER when you press the SHIFT / UNDO key. In TDOS, type "EOS" to return to the menu.

As mentioned before, Drive 0 also contains FILE MANAGER. With this powerful program written by Tony Morehen for PowerMATE, you can transfer files to the Hard Disk. To bring up File Manager, press SmartKET III for the Directory of Hard Disk 0. Select FILEMAN and a second later the File Manager menu is on-screen! To set up ADAMCALC, transfer the original boot program named BASICPGM from your ADAMCALC datapack, renaming it ADAMCALC. Press SHIFT / UNDO to go back to the EOS Menu. If you transferred ADAMCALC to Hard Drive 1, then select the Logical Drive as 1 and get the Directory of Hard Disk 0 (by pressing SmartKEY III Boot from Hard Disk) and select BOOTCALC. In four seconds, ADAMCALC is loaded and waiting. Getting a program stored on HD Drive 1 (DRIVE 2) takes less than 20

seconds compared to 25 seconds from a 720K disk drive. You still have access to your Coleco Disk Drives and your PowerMATE Floppy (DRIVE 2). Press SHIFT / UNDO for the EOS Menu.

From the EOS Menu, we can press the WILDCARD Key to enter TDOS. SmartKEYS allow you to I - Copy, II - Rename, III -Delete, IV - List, V - Type and get the VI - Directory. TDOS allows you to configure for the type of equipment you have where incompatibility exists. If you have an Orphanware or E&T 720K 3.5" disk drive, you can configure an optional 3.5" 720K PowerMATE Floppy to be compatible with one or the other type of drive. To find out what the program is configured for, type RDPARM10 to display the Cylinder type - the last line ends with either C3 or C7 -- C3 is for the Orphanware and C7 is for the E&T types. To change this, type STPARM11. Also note that FILE MANAGER is available directly from TDOS as file, FM30B.COM. Type FM30B.COM and the first time you will be asked questions concerning your drives before the FM Menu appears. As with the EOS Menu version, you may select as your source ALL of the Hard Drive Volumes, HD Floppy, Coleco Disk Drives and Tape Drives. When a large memory expander is installed, the maximum buffer size reflects the size expander you have installed. This buffer works correctly for TDOS, but in EOS, you must select SmartKEY IV to Ignore Expansion Ram when making copies. This restriction in the use of File Manager in EOS is due to the fact that the Hard Disk Driver codes overwrite the Ram Disk Driver codes. This is being changed, and also Walters Software Co. is writing a new EOS program that will return use of the Ram Disk to the user while in EOS. Additionally, the new EOS will allow software to boot without patches, we understand! More on this later. Pressing ESCAPE while in File Manager (FM30B) will return you to TDOS. Volume D's directory contains the many software boot patches and documentation available from the EOS Menu. File Manager instructions are also available to be typed from Volume D. To return to the EOS Menu, select Volume A and type "EOS".

The EOS Menu Maintenance functions include: I - Krunch Logical Drive, II - Init Directory, III - Install Boot Block, IV - Install System, SHIFT / V - Format Hard Disk, and SHIFT / VI - Partition Hard Disk. SmartKEY I takes out deleted files from the selected logical drive, II will initiate the selected drive (done after the disk is repartitioned), III will install a boot block (using the system disk), IV will install the system on the hard drive and a boot medium, SHIFT / V will reformat the hard disk (the hard disk is furnished formatted and there should not be the need to reformat unless a power failure crashed the disk during a write operation!), and Shift / VI allows you to repartition the Hard Disk (as explained above, requires you to back-up all programs contained on the hard disk TDOS). Newly created partitions must then be initiated -- creating a Drive with a four block directory for program name storage. Four block directories provide space for 150 file names, and we can expect the new EOS to provide additional buffers for increased directory size.

Thusfar, we have transferred SmartLOGO and FLASHCARDS in addition to ADAMCALC, to three of the ten Hard Disk Volumes available, along with supporting programs. All available FlashFACTS fit along with the FLASHCARDS on a single volume, and over a third of the 1 Meg of space remains for future additions. A volume is dedicated to ADAMCALC and financial records from last year and for 1990. One volume is for SmartWRITER files, two volumes for SmartBASIC. Soon we will add ExperTYPE, SPLAT, MacADAM and others. Walter's new EOS system should open up the use of many popular titles directly from the Hard Drive. Right now, however, you can continue to boot as usual, all your software directly from your Coleco drives without conflict, leaving PowerMATE turned off. The interface will provide dot matrix

printer and Ram Disk use without PowerMATE being turned on, if you so desire.

PowerMATE is a great addition to the ADAM System that affords many features that separately would cost much more. Two 720K 3.5" disk drives alone would cost as much as PowerMATE with a 20 Meg HD and 720K Floppy (not to mention the interface ports). For many, PowerMATE will become the primary device on the ADAM System, organizing records and volumes of programs into one device. File Manager is provided to maintain files and backup copies, as well as print and edit files. With PowerMATE, you can expand your system easily, adding an external modem, terminal, dot matrix printer, 320K or 720K floppy (the floppy drive is only \$100 more). If you have a Coleco drive already, PowerMATE and optional floppy will work perfectly with it. You can even use your data drive(s) alone with PowerMATE. And, the best part, PowerMATE installs in a few minutes, with everything you need to get started right away. We believe PowerMATE is the perfect add-on to ADAM, providing a safe, organized, and speedy way to access your complete program library. More reports will be forth coming in the next months. Can we order your PowerMATE for you today! Call us if we can help or for the latest information. ADAM'S HOUSE is a distributor of all versions of PowerMATE, each one configured according to your specification. Call today!

SUPERCHARGE YOUR ADAM!

PowerMATE FEATURES:

- Self-contained external enclosure - 2 or 4 drives
- Plug-in interface board (goes in expansion slot #2)
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- Two RS-232 Serial Ports - one DCE and one DTE
- One standard Parallel Port (ADAM Compatible)
- Memory Expansion board signals (compatible with Orphanware and E&T boards)
- TDOS Version 4.1 operating system (much improved CP/M 2.2 replacement)
- EOS Operating System (including SmartBASIC for HD and patches for popular application programs)
- Installation and Utility software
- Public Domain software (including already patched communications programs)
- All necessary cables (2 RS-232, 1 Centronics, 1 Disk)
- Easy to follow installation instructions
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INTRODUCTORY PRICING:

MODEL	DESCRIPTION	PRICE
2/10	Single 10 MB Hard Disk	\$399.00
2/20	Single 20 MB Hard Disk	\$499.00
2/40	Single 40 MB Hard Disk	\$599.00
4/10	Single 10 MB Hard Disk	\$499.00
4/20	Single 20 MB Hard Disk	\$599.00
4/40	Single 40 MB Hard Disk	\$699.00
360K	Add-on 5 1/4" 360K Floppy Disk	\$100.00
720K	Add-on 3 1/2" 720K Floppy Disk	\$100.00
10M	Second 10 MB Hard Disk	\$125.00
20M	Second 20 MB Hard Disk	\$200.00
40M	Second 40 MB Hard Disk	\$275.00

The second hard drive category is only available for the PowerMATE 4, which has 4 drive bays available and has just become available.

All questions and orders should be directed to either: Micro Innovations - 12503 King's Lake Drive - Reston, VA - (703) 620-1372 OR ADAM'S HOUSE - Rt. 2 Box 2756 - Pearland, TX 77581 - (713) 482-5040.

C.G.P. CART

Review by Jim Notini

The Coleco Graphics Processor (AKA: Project Name by Line) was Coleco's In-House graphic design utility as well as functioning as a means of developing code for most of their cartridges and Supergames. C.G.P. also served as a means for Coleco programmers to port over code from VAX (not FAX) machines as well as send code from the ADAM to these VAX units. The main purpose of this program was in it's graphic design potential and ability to create sprites for implementation of graphics into their games.

The reason for the cartridge version is the fact that there were two different versions of the C.G.P. made and both of them were developed to run from a cartridge. The first version is dated 1985 and this is the version which is currently available through the many different public domain libraries of ADAM support firms including our own. This version originally was a cartridge, but was copied to disk (or ddp) with the CP/M cartridge copy utility, GAMESAVE. The problem with this version is that it requires a 64K Memory Expander in order to load up. The second version, dated 1986, will also work from disk or ddp, but the user will not gain any added features over the earlier version and will still need a 64K expander. But with the 1986 version on a cartridge, a memory expander isn't needed and the user will now have the ability to capture just about any screen which is being displayed by the ADAM at the time of the CARTRIDGE RESET switch being pressed.

This capture option will not function from the disk or ddp version of C.G.P. because in order to load C.G.P. from disk or ddp, you will have to press the COMPUTER RESET. Pulling the COMPUTER RESET causes ADAM to clear all memory as well as VRAM (Video RAM), then move EOS from the ROM chip to RAM, and after some other house cleaning, boot the drive which contains a disk or ddp. Since VRAM is cleared when the computer is reset, the picture which is on the screen at the time is also lost. Now if you have the 1986 version on cartridge, you can be playing any disk or ddp based game and pull the CARTRIDGE RESET with VRAM still left in tack because the computer wasn't reset, you are switching control to the Colecovision circuit board. This is important because the pictures which are displayed on the screen as well as sprites are stored in VRAM, and this 16K bank of memory is left unscathed when the CARTRIDGE RESET is pulled. I hoped I haven't lost you!

With this 1986 C.G.P. cart, you can capture screens out of supergames and save them to disk or ddp for further editing or conversion to a GraphixPAINTER file, which PowerPAINT can load. If you have cartridges which have been copied over to disk or ddp, you may also capture screens from these games. The only problems which you will run into when trying to capture a screen is if the screen is moving and also if there are a number of sprites displayed at the time. Moving screens will cause a major problem and more likely than not, you will end up with a screen full of scrambled graphics or nothing at all and in the case of sprites, they will be lost from the picture. Only the first pattern plane (0) will be captured, planes 1-32 which sprites are displayed in will be lost. When you capture a screen, the C.G.P. main SmartKEY menu will be displayed with a black background. To see the captured screen, press SmartKEY VI (GRAPHICS EDITOR).

This is truly an unbelievable utility program and to now have the added capability to capture pictures which can be implemented into newsletters or one's own programs is tremendous. If you are still not sure of the usefulness of this product, pick up the public domain version and also C.G.P. PIX VOL. #2 (a collection of 13 captured picture files from Colecovision carts and supergames that was put together by your's truly!). C.G.P. CART is only available through S.M. VIDEO for \$24.95 (see ad on page 17) and is considered public domain (most of the cost goes to cover the production of the cart).

This software is FREE!! You pay only the copy cost and SHIP/HAND. Most the software programs in S.M. VIDEO's library were never released and others are some that were but are no longer available from ADAM suppliers. This software well be taken out of are library if original's become available. TO THE BEST OF MY KNOWLEDGE ALL OUR SOFTWARE IN THE PUBLIC DOMAIN IS THE BEST AVAILBLE BUG FREE VERSIONS. IF YOU HAVE ANY UNRELEASED SOFTWARE OR A BETTER VERSION THEN THE ONE'S LISTED BELOW, S.M. VIDEO WILL PAY YOU \$35.00 FOR EACH ONE. WE ARE LOOKING FOR COLECO's BERENSTAIN BEARS,CABBAGE PATCH KID WORKOUT, CRANSTON MANOR,THE BEST OF SIERRA, SWORD AND THE SORCERER, ULYSSES AND THE GOLDEN FLEECE, OR ANY OTHER UNRELEASED HARDWARE, SOFTWARE, MANUALS, ETC.

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X-10 - Minh Ta's Home Appliance Control/Security System, SmartKEY DRIVEN!
M.I.D.I. - Minh Ta's Electronic Keyboard Program, SmartKEY DRIVEN !
DAVINCI - a few bugs, has manual to print out on printer
 * **PERSONAL CP/M** - Has a few bugs
MACADAM - NEW bug free with manual you can print out
FORTH - New Coleco Programming Language, very powerful, bug free
 * **ELECTRONIC FLASHCARD MAKER** - Unreleased version with ALEGBRA FLASH FACTS
 *** **PROJECT NAME BY LINE** (No other ADAM COMPANY has this version) \$24.95 ON CARTRIDGE. You DON'T need a memory expander and you get to capture game screens from any cartridge that was copied to disk or ddp or supergame and save them to Disk!! If this feature is not worth an extra \$20 and you have a memory expander, then pay \$4.95 for Coleco's DISK or DDP version. This program was used to design all or most of Coleco's software. This program is a programmer's dream come true. I give it an A+.

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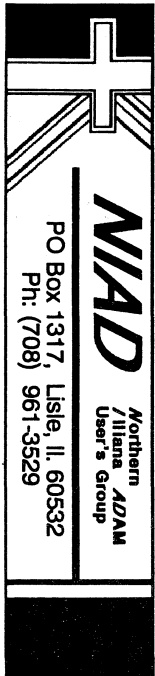
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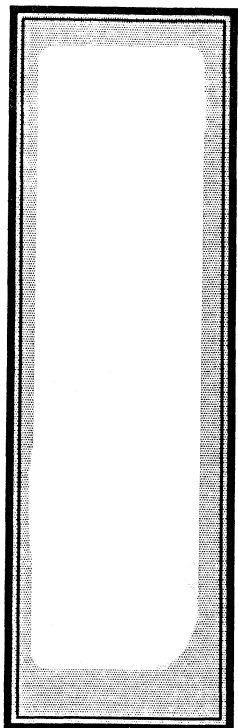
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- **PD SIGNS SNDV # 1 - 2:** 2 volumes of graphic files for use with either SignSHOP or NewsMAKER by Strategic Software, INC.
- **PINBALL GAMES PNDV # 1 - 7:** 7 volumes of pinball games that are for use with the PINBALL CONSTRUCTION SET program by Coleco.
- **VIDEOTUNES SONGS VNDV # 1 - 3:** 3 volumes containing many song files each that are for use with VideoTUNES by FutureVision.
- **SOLO ADVENTURE PACK VOL. # 2 - 3:** 2 volumes of solo-adventures for use with MAGE QUEST by Reedy Software.
- **RLE PICS VOL. # 1 - 4:** 4 volumes of RLE picture files which can be viewed in SmartBASIC V1.0 or PowerPAINT by Digital Express.
- **REEDY ART GALLERY VOL. # 1 - 2:** 2 volumes of 13 SmartPAINT format picture files to be viewed in SmartBASIC V1.0, PowerPAINT, etc.
- **N & B PIX VOL. # 1 - 29:** 29 volumes of 13 SmartPAINT format picture files to be viewed or edited in PowerPAINT, etc.
- **PAINTMATES VOL. # 1 - 12:** 12 volumes of clip-art, sprite and font files for use with PowerPAINT, SpritePOWER, CLIPPER, SmartBASIC, etc.
- **PAINTFORMS VOL. # 1 - 4:** 4 volumes of assorted letterheads, labels and miscellaneous graphic files for use with PowerPAINT.
- **PINBALL CONSTRUCTION SET / HARD HAT MACK:** Two great games combined in one package. This is a new bug free version with 2 demo pinball games. **Add \$2.00 for 40 page manual.**
- **SUPER SUB-ROC:** This is the supergame version of the cartridge and is tremendous. Hall of Fame option included.
- **TROLL'S TALE:** This is a children's adventure game with graphics, but is very challenging. Was supposed to be released by Coleco.
- **JEOPARDY:** Coleco's version of the game show, fabulous game with great graphics, multi-player capability, load/save games, Hall of Fame.
- **ADAM DIAGNOSTIC:** Coleco cartridge on ddp or disk for testing the components of the ADAM, requires a memory expander.
- **ADAMLINK II:** Advanced telecomm. software with all the features of ADAMLINK I and the added ability to up & download ASCII files.
- **SmartBASIC V1.0:** Replacement on DDP or DISK.
- **SmartBASIC V2.0:** Extended version of SmartBASIC V1.0 (49K), memory expander access, SmartWRITER documentation file included.
- **EOS DISK MANAGER:** Replacement on DDP or DISK.
- **CABBAGE PATCH KIDS: ADV. IN THE PARK:** Modified version of the cartridge with better graphics and added obstacles.
- **SPEED CHECK V1.0:** Check drive speeds to assure the proper operation of the read / write heads. For older data packs (pre-1984).
- **SPEED CHECK V2.0:** Enhanced Speed Check program by Coleco. Now will give a better reading of the data drive operation speed.
- **ADAM UTILITIES:** Coleco In-House utilities and demo programs. 64K required for some of the system tester utilities.
- **SUPER FRONT LINE DEMO:** Never finished supergame of the cartridge version. Runs through two demo screens with sound.
- **MACADAM:** Z80/EOS Assembler written in machine code for intermediate/advanced machine code programmers with docs.
- **MARKET MONITOR:** Management system for the personal investor. SmartWRITER documentation files included.
- **TAX PLANNER:** Creates a clearer and more complete picture of your tax situation. SmartWRITER documentation files included.
- **TEMPLE OF APSHAI Revision 2:** Role playing text adventure with graphics. Disk and DDP not compatible. Now with instruction sheet.
- **FALL GUY / VIDEO HUSTLER:** Unreleased cartridges on disk or ddp: driving simulation and a pool game. Docs on media.
- **YOKE'S ON YOU / MATH WIZ:** Unreleased cartridges on disk or ddp: help the chicken collect her eggs and math skills arcade builder.
- **NIAD BACK ISSUE INDEX:** SmartFILER database detailing the contents of past NIAD Newsletters through 1987.
- **UKAS MINI-REVIEWS:** SmartFILER database with mini-descriptions of hundreds of software and hardware titles.
- **ADAM SUPPORT DIRECTORY:** SmartFILER database containing names, addresses, etc. of ADAM firms by Hector Sanchez.
- **ONE-MINUTE FORMATTER:** A DEI contribution which will format 160K and 320K 5 1/4" disks as well as 3 1/2" 720K disks with verify.
- **A-CHESS (SARGON):** Great graphic chess game. Includes documentation file on how to use.
- **THE ANIMATOR:** Sprite development package for use in SmartBASIC V2.0. Some bugs in the program, but fun to play with.
- **FRENCH BASIC:** Great modification of SmartBASIC V1.0 with demos. Must have version for the serious SmartBASIC programmer.
- **SmartBASIC V2.1:** Great modification of SmartBASIC V2.0 that adds macros for certain string inputs with formatter and backup programs.
- **SmartBASIC V2.0 40:** 40 column text in STDMEM and EXTMEM modes. No longer do you have to deal with only 31 columns.
- **AUSTRALIAN SmartBASIC:** SmartBASIC V1.0 with SmartKEY display of some of the most often used SmartBASIC commands.
- **STRATEGIC SOFTWARE PRINTER PATCHES:** Dot matrix printer patches for SignSHOP, NewsMAKER.
- **MULTIWRITE PATCHES:** Great enhancements for Strategic Software's MultiWRITE Word Processor.
- **daVINCI:** Great graphic design utility from France with SmartBASIC utility to convert daVINCI files into GraphixPAINTER files. DISK ONLY.
- **X-10 SOFTWARE:** Home appliance control/security system. Requires a Serial Interface, Cable and the X-10 hardware or won't load.
- **COLECO PRESENTS: SOFTWARE:** Database containing lists of planned Coleco software for the ADAM by Coleco. DDP ONLY.
- **COLECO GAME COPY:** Coleco cartridge copy utility and media backup utility roled into one program.
- **5 SCREEN DONKEY KONG JR.:** Super Donkey Kong Jr. with an additional 5th play level, MARIO'S BAKERY (Level 9, 13, etc.).
- **SHAPEMAKER:** Great SmartBASIC V1.0 utilities for creating shapes and placing text on the HGR or HGR2 screen, includes DOC files.
- **COLECO GRAPHICS PROCESSOR:** Coleco's graphics design utility used to create graphics for cartridges & supergames. Instructions on Graphics Converter public domain volume. 64K Expander required.
- **C.G.P. PIC VOL. # 1 - 2:** 2 volumes of pictures files for use with the Coleco Graphics Processor, all taken from Coleco/ADAM programs.
- **GRAPHICS CONVERTER:** Two SmartBASIC programs which will convert daVINCI and C.G.P. picture files to GraphixPAINTER format.
- **M.A.S.H.:** Unreleased cartridge game on ddp or disk developed by CBS Software. Help the M.A.S.H. characters perform their job properly.
- **SUPER COBRA:** Helicopter arcade action game in which it is your job to destroy the enemy ground installations.
- **FLASH FACTS: MUSIC STUDIES:** Eight flashcard files for use with Electronic FlashCard Maker by Coleco dealing with music theory.
- **COLECO CHECK LIST:** Comprehensive list of software and cartridges developed or not for the Colecovision and ADAM systems.
- **MEMORY MANOR:** Children's game that tests the memory capacities of your child. Good graphics and sound. Documentation on media.
- **CHESS SOLITAIRE:** Great graphics version of chess where you try to guess the moves of the masters (15 different classic games to play).
- **MEDIA MATE:** Three tremendous utility programs for editing data packs or disk with informative SmartWRITER documentation files.
- **ARTILLERY DUEL:** Unreleased cartridge game on ddp or disk: bomb your opponents gun before he bombs yours. Good graphics & sound.
- **TOMARC THE BARBARIAN:** Unreleased cartridge on ddp or disk: save your girlfriend from the evil caveman before your strength dries up.
- **WORD FEUD:** Unreleased cartridge on ddp or disk: race against an opponent or computer to find words hidden in the game board.



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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

NIAD NEWSLETTER For →



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