

The Interface



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Taking 8 Bits to the 21st Century

Testing the Epson Stylus Printer with the Commodore

by Dick Estel

"Data data
everywhere,
and not a
thought to
think."

With prices dropping to reasonable levels, Commodore users began venturing into the ink jet printer world a few years ago. Experimentation and study of available information has led most Commodore users to the various printers sold by Canon. You can find reviews of various models in back issues of *The Interface*, *LOADSTAR*, *Commodore World* and other publications.

I acquired a Canon bubble jet with my first PC in the fall of 1996. It made good quality printouts, but it seems to have a strange feature--every so often it thinks it is out of paper, and refuses to print. You can take the paper out, put it back in, push on the spring operated piece of plastic it rests against, turn the machine on and off, and it still stubbornly declares that there is no paper. The usual solution is to turn everything off, do something else, then try again the next day. At this point, it normally works to perfection. I know two other users who have had this problem with their Canons.

In the spring of 1997 I began reading about a new Epson printer, the Color 600, which claimed to use a new technology to produce finer dots, and to print color pictures on glossy photo paper with no special cartridge, achieving "near-photographic" results. At that time many printers required a special ink cartridge to use photo paper. Considering the Canons' faults, and relatively poor color quality, I developed a serious desire for the Epson.

Being a new product, stores were asking full list price for it, but finally in August I found it for \$20 lower, and brought one home. The first one I owned gave me some serious problems after about

two and a half months--the material being printed would print offset from the actual paper, so that only about half the image actually printed.

I phoned the Epson company, and after the obligatory journey through several levels of voice mail, I talked to a nice lady who told me, since I had bought the printer just under three months ago, that I qualified for Epson Road Service. It turned out that this meant they would send me a new printer immediately, I would receive it *tomorrow*, and my only obligation was to pack up and return the old one at their expense. Sure enough, the new printer came the next day; the old one went back, and I have had no problems of any kind since (November of 1997).

The Epson Color 600 offers excellent single-sheet paper handling. I print the address and the message on our post card notices with it, and the cards go through without a hitch, as do envelopes. I have printed video tape cassette labels, the kind that come on a wax paper type backing with several different size and shape labels. The acid test is the sheet I use to print labels for envelopes. Labels for an ink jet come in a sheet of a dozen or more, depending on size. Mine have 30, and I rarely need 30 labels at a time. But I also hate sending a nice printed letter in an envelope with a label written by hand or typed on my antique Royal portable.

I finally decided I could print the labels I need, one or a dozen; then run the sheet again, starting where I left off (it involves entering returns till I get to the row and column where I want to start). I ran this sheet through the printer at least 10 times, and in the end it was showing a bit of wear and tear, but it went through like a charm every time.

Epson printers have generally been described as not working well with Commodore. I detest moving any equipment, but I felt an obligation to test

this printer on my C-128. So I spent a couple of hours connecting it to my C-128 via the Xetec Super Graphix Gold interface, and testing various programs. I left the interface just as I use it with my Star NX1020 Rainbow, which is transparent mode, no linefeeds. This works with The Write Stuff, GEOS, and most other programs.

The first test, with TWS, produced perfect results. I follow author Eric Lee's advice to "put your interface in transparent and select true ASCII" in the printer setup screen of TWS. The only concession I made to the ink jet was to set it for 62 lines instead of the normal 66. I got a nice, dark printout with no visible jaggies. The Epson understood all the same formatting commands I have been using with my Star 1020 Rainbow for years--centering, bold, proportional print, and various font sizes.

Next came graphics, which I was certain would be the true challenge. All graphic printing tests produced an elongated image that ran onto a second page, with one exception that I'll get into shortly. This has been a common experience for Commodore users with ink jets and 24 pin printers.

I started with GEOS, using the drivers that have been recommended for Canon bubble jets. The results were "interesting" to say the least. The color driver, Epson24PinColor printed the full page graphic that I tried. The only problem was that it printed a one and a half-inch strip of the graphic, then a bunch of garbage letters, another short strip, then lots of garbage, then another strip and so on. I turned off the printer after 21 sheets had gone through the printer, some of them containing only three characters.

Next I tried the recommended black & white driver, Epson 8-Pin 80 DPI, which made a very light picture, like a watermark, elongated and run over to the first two inches of a second page. Perhaps the light results were due to the printer having

no way to fill in the spaces between the large, widely spaced dots of the Commodore as opposed to the PC graphics it is designed for.

Next was Epson8-Pin3Pass, the driver I use most with my Star, and the driver I recommend to everyone who prints from GEOS on a non-Commodore printer. This produced results of normal "darkness," but sections of the page were printed about a quarter inch offset from the section above and below. It ran onto a second page.

The final GEOS effort was with the color driver I normally use with the Star, Epson 8-pin color. This created a printout in which the saturated colors went pastel, but everything lined up fine. It just needed 14-inch paper like all the graphics I tried.

Two tests to go: Print Shop and PrintMaster. For each program I entered the printer setup mode and chose the only Epson model shown. The test sheets for both printed OK, but they are both only a single line across the top of the page. I created a simple card with each program. Print Shop printed half the card, then everything locked up. PrintMaster produced the entire card, but as expected, with vertical stretching that would have fit on 14 inch paper.

I also tried the little program that has been published in The Interface and other newsletters that is supposed to overcome the elongated printing with 24-pin printers. This produced no improvement.

Conclusions? Since I had no intention of using this printer with my Commodore, I did not experiment

with DIP switch settings. This would probably have had little success, since the vertical distortion was the main problem. I believe there are ways to change the line spacing, which might overcome this problem. The failure of the little program to change spacing could have several possible causes--a misprint in the source; the application program or the printer undoing whatever it did (it must be run before the program is loaded), or just not meant to work with ink jets.

Nearly any ink jet will give good text results. The special quality of the Epson Stylus 600 is its color graphics capabilities. Considering this, it is probably overkill to buy this printer for use with a Commodore.

POSTSCRIPT:

Several months after completing the first draft of this article, I learned of some other GEOS drivers that are supposed to work well with ink jet printers. None of them

worked; one locked up everything, and the others produced garbage. (For the record, the drivers are Bjet/LQ1 (the lockup), Deskjet-LQ, and Deskjet+.)

Now I decided to throw all caution to the wind and took my Star out to the living room and connected it to the PC. Remember, although Star was once a big supporter of Commodore, this and most of their printers were intended to be connected to a PC. The Star handled text, including unusual and large fonts, quite well, producing results that were better than it does with the Commodore. This is not surprising when you consider this: When you buy a PC with the latest version of Windows, you get the latest version of dozens of



printer drivers. When you use the printer with the Commodore, you are using drivers that were mostly written about 10 years ago.

The results with color photos were way too dark and unacceptable for any use. However, simple color artwork printed with acceptable color, although there are noticeable stripes from each pass of the print head.

All printing from the PC to the Star was very slow--about the same speed as with the Com-

THE FIVE CENT REVIEW:

A Nickel's Worth of Opinion on Every Program I've Ever Used (Part 2 of a series)

by Dick Estel

The goal of this series is to present a capsule review of every program I've ever used enough to form a fair opinion. Where I feel comfortable doing so, I've provided a rating from 1 to 10, with 1 being best. In some cases I don't use the program any more because I use a PC program; but my assessment of the Commodore programs is still valid.

Although it's not hard to load a program from a directory listing or by simply typing `LOAD PROGRAM@8`, people have enjoyed making custom menus as long as we've had computers. My long-time favorite is the one we used on our club Disk of the Month, simply called **MenuMaker**. It has a clean, easy to use display; and lets you give a short description of each program. Some menu programs automatically include everything on the disk, but MenuMaker lets you chose the desired programs. This is a vital feature when you have a program such as Name That State, which includes 48 Doodle files, one for each continental U.S. state.

With the hard drive I've been using a very nice program called **EZ Loader Menu**. In keeping with the way files must be organized on large storage devices, this program lets you include files from any partition and/or subdirectory, and loads them from the menu. Another useful feature is the ability to give the program a meaningful name on the menu display. This is important for programs that contain several files, and may load from something called "Boot", "Loader," or some other uninformative name. I rate this program #1.

Telecommunications is not a major activity for me, but I've used several terminal programs. One of course was **Q-Link**'s proprietary terminal/interface program, which is useless with anything but Q-Link, and therefore useless for the rest of time. I've forgotten what C64 term program(s) I tried out; in the 128 mode I have tried **Bob's Term Pro**, **DesTerm**, and **NesTerm**. DesTerm was the best of these, with more features than I could ever use, but it had some problems working with my equipment, so I mostly used NesTerm, an older, simpler program. Since my BBS activity has always been very limited, the ability to save phone numbers in a file and autodial, which all these programs can do, is about all I ask. Another requirement is convenient upload/download capability, and most programs meet this requirement well. Ultimately I settled on **Dave's Term**, a program from LOADSTAR 128. Since it was a 1990's program, I assumed it would have all the latest capabilities. It does indeed--like all major terminal programs, it does a lot more than I will ever ask of it. When I used it to capture a lot of informational text from GENie, the 60,000 kb buffer was a definite advantage. However, the program had serious problems displaying text on the Internet. (Rated 3)

Uploading and downloading files from a BBS, including major on-line services like GENie or Q-Link often involves compressing and uncompressing the programs. The most commonly used

program of this type for Commodore has been **ARC**, including the self-dissolving version (SDA). Creating and dissolving ARC files and creating SDA's requires the use of a complex command structure, similar to MS-DOS. **Arc Aid**, a shareware program released a number of years ago by a high school age programmer, adds a menu-driven program to the basic ARC program, making it simple to create ARC or SDA files.

Self-dissolving ARC files, as the name implies, are dissolved just by loading and running them. ARC files can be dissolved with **Arc Aid**, as well as some other utility programs. **Arc Aid** is a bit flaky in some of its functions, but when you know how to avoid these problems, it performs its work very well (rated 4).

Another program that can dissolve ARC files is **Omega-Q**, a multi-purpose utility program distributed on Q-Link. In addition to dissolving ARC, LYNX and LIBRARY files, **Omega-Q** has a file copier, directory editor, and many other features. **Omega-Q** is available on many BBS's and club libraries, so the demise of Q-Link does not end the availability of this versatile program.

Uploading and downloading GEOS files requires an additional step. To upload them, they must be changed from the proprietary GEOS USR format to PRG or SEQ files. After downloading, they must be changed back. Several versions of a program called **Convert** are available to accomplish this. In the last days of Q-Link a programmer uploaded **GeoPack**, which not only does the conversion to and from, but also compresses and uncompresses the files. The convenience this version offers earns it a 2.

Now we come to a broad, indistinct category I call "fun stuff." Few of these are games as such, and I'm not much for traditional computer games. These tend to be trivia type programs, many of them focusing on a specialized subject, and many of them were published on LOADSTAR.

Anyone who came of age during the late 50's and fell in love with rock and roll will feel his/her pulse quicken at the sight of a title like "**Who Sang Teen Angel,**" which covers music from the mid '50's through the '80's and presents you with a song title, and a multiple choice listing of artists. ("Teen Angel" was one of the first and probably the most popular of the "dead girlfriend" songs.) If the song is from the 50's or the 60's, I can claim 100% accuracy; later material sometimes presents a challenge. There are similar programs covering history, U.S. presidents, authors, world cities, world capitals, and state capitals. I'm still trying to beat the default high score on some of these, but I can get 100% on state capitals every time.

A program I mentioned earlier, **Name That State**, offers a different type of challenge, requiring you to name a state after viewing an outline map. The state is shown in context of the entire continental U.S., and the only place I had difficulty is with some of the small northeastern states (mostly because it's hard to see the shape of the smallest ones). I showed this program to my 10-year old grandson and a friend, and they got as excited playing it as they do with shoot-em-up arcade games. Needless to say, I didn't tell them it

"IF YOU LIKE CARD GAMES, LOADSTAR IS THE BEST SOURCE"

was educational!

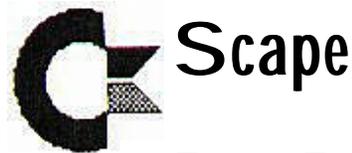
If you like card games, LOADSTAR is again the best source. They have published a few dozen solitaire games over the years, but my favorite is **Our Own Klondike**, on issue 120. The later versions have a great-looking, easy to use interface. And if you get frustrated because you don't win enough, hunt up **Kato's Solitaire**. You're almost sure to win! (I could not locate this with the LOADSTAR index program, but the time frame is during Kato's testimony at the O.J. Simpson trial.)

After the previous paragraph was written, LOADSTAR did it again--on issue 138 they topped themselves with a mouse-operated version called **Star Klondike**. Individual cards and arrays are moved around simply by clicking and pointing. Anti-mousers can stay with the earlier version, but if you're addicted to rodent input, this game can be learned quickly and easily (although beating it is a different story!)

The only other card game I play very much is Blackjack. I love to risk those big sums without really having to open my wallet! Of course, if you walk away thousands ahead, you can't spend it, but you don't have to wire home for bus fare when you lose! The best Blackjack game I have found is called **Blackjack Tutor** (you'll find it on the May 1991 Disk of the Month). There are of course many others, including **Casino Blackjack** on Loadstar 107.

Fresno PC Users Group

Meetings 1st Monday of each month, 7:30 p.m. at
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by Robert Bernardo



As a lad growing up in the 1960's, I was exposed to computers via the television medium. Going to the movies was out of the question, and so I sat close to the flickering TV screen, absorbing the way in which humans and computers interacted. One of my earliest recollections was watching the movie, "Kronos." It was a movie produced in the early 1950's on a B-movie budget, but it was filled with wondrous sights for a kid like me--a skyscraper-sized robot rampaging through the countryside; the heroes in pursuit of it through use of a helicopter; lots of showy, electrical effects; and the use of a building-sized computer. The computer displayed its readings via gauges on a wall and sent information to the humans by a paper (tickertape) printout. The scientist heroes would affectionately dub the behemoth computer some female name (Matilda, Jessie, Joanie?), speak to it in soothing tones, and receive vital information from it. When the computer became cantankerous, a few, gentle words and some twisting of the knobs would straighten it out.

1967 and my parents had their first color television. I plopped myself in front of the set and watched the very first episode of Star Trek. I didn't understand why the alien planet sky was red; I fiddled with the TV's color controls, but I never did get the sky to be blue. However, I did understand when Mr. Spock used the computers on board the starship Enterprise every week. The computers gave answers to things which the crew members could not easily determine. To my innocent, 12-year old mind, the Enterprise computers had to be real; they were full of multi-colored blinking lights and buttons, they had visual read-outs, they even spoke. When they broke down, Mr. Spock or Scotty would have to crawl under-

neath the consoles and open up access panels in order to repair computer boards. After a bit of thinking from Mr. Spock or a few choice words from Scotty, and after a bit of fiddling with the boards, the Enterprise computers would straighten themselves out in order to aide Captain Kirk and company in defeating the week's alien menace.

1983 and I bought my first Commodore computer. No, it was not the size of an office building nor did it have multi-colored blinking lights and buttons. No, it would not give me information on how to destroy giant robots nor tell me how to solve matters of galactic import. But here was something tangible... something I could touch and affect, and it would affect me in the way it responded. And if the Commodore didn't want to act properly, all I had to do was to work with the connecting cables or correct an errant tape/disk, or at most, replace the power supply.

My first major problem happened in 1986 with my C-128 computer and 1571 disk drive. I was using the new spreadsheet, Vizastar 128, to do grades, and a few nights before the grades were due, the 1571 refused to read the grades disk. In fact, it refused to load or save to any disk. In a panic, I mail-ordered for a new C-128D and sent the 1571 to the nearest Commodore service center at the time. Massive failure! The entire disk mechanism had to be replaced.

Since that time, I've slowly but surely become more self-reliant in repairs. It certainly helps to have a handy reference sheet, like the Commodore Diagnostician. I still solder, making big blobs of cold solder joints. However, if it's something that can be plugged in, like socketed integrated circuits, then there's no problem. Pop out the old IC, and plug in the new one. Speaking of IC's, it's good to have a few around or a source from which to buy the IC's. I have one or two C-64's that I use for parts. Most frequently, the

6581/8520 SID chips or the 6526 CIA chips fail in my machines. With no new production of the SID chips, prices are rising on remaining stock. Creative Micro Designs has them, Jameco Electronics in Los Angeles area may have them, and member Del Contreras has used ones, in addition to other solid-state parts.

Finding a source for parts can be like a scavenger hunt; you'll never know where or what you'll find. A few weeks ago at school I received an Mendelson Electronic Co., Inc., (MECI) parts catalog. What was in it? Among the various close-out items were new Commodore-compatible joysticks and Commodore-adaptable printer buffers. Enthused at my find, I picked up the latest Nuts & Volts magazine from Barnes & Noble Bookstore. Nuts & Volts is a magazine for the electronic hobbyist who likes to build projects. The magazine also contains many advertisements for all kinds of electronic doodads from various electronic parts companies. Within its pages I was able to find more joysticks, Commodore-specific chips, and even Commodore SFD-1001 disk drive cases and mechanisms (but no controller boards). I'm sure Fresno has its own version of this type of store, but HSC Electronics in Sacramento is a veritable goldmine: bins of resistors, IC's, transistors, power supplies, and Commodore-specific or Commodore-adaptable parts, and much more (though these tend to be old PC boards, monitors, and even complete systems).

With these sources out there and with some research, you too can fix your Commodore. Even if you can't lift a finger to replace a part, you can give your friendly service tech an idea of where to go to get a part. Then you can feel one with the old sci-fi heroes of the movies and TV. You can feel that you're fixing your computer.

Computer MAD-ness

Lloyd F. Warren found this in the 1990 Special Summer issue of MAD magazine, in a section that takes pot-shots at all kinds of activities (bowling, video games, football, etc.), people (Michael Jackson, Joan Rivers, Jesse Jackson, etc.), companies (MTV, Japanese auto makers, etc.). The one we're concerned with is called HOME COMPUTERS and reads as follows:

HOME COMPUTERS

...are valuable to any housewife who wants to keep a permanent record of her old grocery lists.

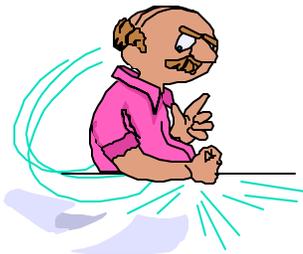
...let you put data that would normally fill a filing cabinet into a machine that takes up more room than that filing cabinet.

...are the only \$500 home appliances that are useless without \$3000 worth of optional accessories.

...provide us with the advanced equipment we need to make the same dumb mistakes that business and government agencies have been making for years.

...are manufactured by companies that may soon go broke because their computers failed to tell them they were making too many computers.

(Recycled from The Interface, April 1990)



Quoth the Raven: A Not Again!@

by Dan Gutman

What if Edgar Allan Poe had used a word processor?

For starters, we never would have known that his classic story, "The Murders In The Rue Morgue," was originally titled "The Murders In The Rue Trianon-Bas." If Poe had a computer on his desk-top, he would have simply inserted the better title on the screen and wiped the old one off forever.

Because there were no computers in 1841, we can look at Poe's handwritten corrections on his original manuscript. It's being displayed along with dozens of others from American history, science and literature in "Legacies of Genius," an exhibit at The Historical Society of Pennsylvania in Philadelphia. This exhibit, besides showcasing priceless manuscripts, also points out what is perhaps the only bad thing about word processing. With the advent of the personal computer in this decade, writers no longer leave a "paper trail" of their thoughts that can be studied by future generations.

The very advantage of writing on a computer is what will make future scholars curse the machines. Writers no longer need to painstakingly copy draft after draft by hand. If something isn't perfect, they can change it easily on-screen, and the old draft disappears forever. Almost every professional writer has now become a word processing convert.

Our written heritage is what links us to past generations. This written record of the evolution of ideas helps us gain insight into the world. The invention of the typewriter took away some of that information. Unfortunately, word processing pretty much eliminates it entirely. We will no longer be able to see how masterpieces were created.

Looking closely at a sheet of paper Edgar Allan Poe wrote on, you can see that he crammed as many as 15 tiny words on a line and an astounding 61 lines on a page. My word processor puts 26 lines on a page.

Poe hardly ever crossed out any words or inserted corrections. He was an editor's dream. So was Abraham Lincoln. His letter to New York Times editor Henry J. Raymond is neat and clean.

Charles Dickens, on the other hand, was pretty messy. In his manuscript of the "Pickwick Papers," he crossed out nearly one word on each line. Sometimes the word is removed; other times Dickens wrote another word over the crossed-out word.

Most writers, it seems, liked to make changes as their work progressed. You can see how Joseph Conrad kept changing his mind to make his sentences more active in "Lord Jim." Isaac Newton put nearly as much information in his margins as he did on the page itself. Ernest Hemingway, one of the few writers in this exhibit who used a typewriter, was not afraid to jot added notes and insert them in his margins.

"From now on, you won't be able to see the creative process in process," says Edwin Wolf, guest curator of Legacies of Genius. "I don't know, if that's good or is that bad?"

Wolf has no qualms about technology. He uses an Epson word processor.

"No one will be able to see original manuscripts," says Wolf. "Historians will have to judge works as they appear, not as they are made. This won't stop a writer from writing. It's only going to stop somebody from doing a Ph.D. dissertation on how it was done. They'll have to look for something else."

A hundred years from now, will scholars be able to study the writing of a Steven King or Tom Clancy to find out how their thought processes worked back in the 1980s?

On second thought, will anyone WANT TO?

Downloaded from Q-Link via COUGAR COURIER, Commodore User Group of Arizona; reprinted from an earlier issue of The Interface.

The Invisible Box

My favorite geoPublish trick is the use of the "invisible box." It's not something that's needed a lot, but when it is, it's really handy.

An invisible box can be used to cover up any unwanted information in a bitmap in Page Graphics mode. For example, say you have created a bitmap with special text that includes the date November 1996. Now you realize it is December 1996, but you don't want to take time to redo the bitmap. Click on the box tool, and draw a box over November 1996. Click on the width attribute and reduce the width to -0-, and select the non-transparent mode, and the box will cover the unwanted material, but be invisible. You can then enter the desired text on top of everything.

One caveat: A postscript printer will not recognize the invisible box and will print whatever is under it. I'm not sure what the results would be with a non-postscript laser printer or inkjet, but it is infallible with a dot matrix printer.

I also use the technique sometimes when I am joining two halves of a wide scanned picture, to cover up the overlap. You have to use the front to back tool to get everything layered properly, but when done with care, it does a great job.

—Dick Estel

I've Got Five Dollars and It's Saturday Night

Our April winner was Jack Fisette, the third name after Pat Spears and George Savaros. In May, Ben Brisco's name came up on the first try.

We draw names till there's a winner, stopping after the third name, and if none of them is present, the pot goes up to \$10 the next meeting.

Other 1999 winners have been Pat Spears and Jim Kirby.

Absentee names drawn in 1999 include Art Gumprecht, John Weaver Doug Cunningham, Zella Mallard, and Bill Clark.

Using an REU with the SX-64

(Disclaimer: The following information was downloaded from Q-Link. The reader is responsible for any risks associated with using this information)

You can use a 1750 RAM expander very successfully with an SX-64 if you modify the 1750 so that it has its own power supply that is separate from the SX-64. I have one that I have used for over 3 years with no problems.

What I did was to use a standard C-64 power supply. I purchased an 8 pin female DIN connector from Radio Shack and wired the 2 pins that correspond to +5 volts and ground on the male power supply plug. On the circuit board of the REU the 5 volt supply comes in on the double wide pad on the edge connector. If you trace that back, you will come to a black component labeled FB5. Remove the end nearest the edge connector from the circuit board and tape it so that it can't short out. Solder the +5 volt wire coming out of the DIN plug that you wired up to the other end of

FB5. Solder the ground lead to the negative end of component C28 (the end that faces the back of the REU).

This isolates the REU power from the SX-64 power and prevents any problems while allowing both devices to operate together. Also a standard C-64 power supply is sufficient to operate an REU that has been expanded to 2 meg if the REU is all that it has to power since a 2 meg REU draws about 0.43 amps which is well below the capabilities of the power supply.

Eliminating Excess Carriage Returns

If you capture text information from the Internet or via Email, you may find that there is a [RETURN] at the end of each line. This can cause formatting problems if the text is transferred to a word processor for printing.

There are several methods to remove the excess [RETURN]s. The Write Stuff 128 offers an option to remove them when the text is converted from PET ASCII to TWS format. This works fairly well, but not perfectly.

You can also use the Search and Replace feature of TWS or other word processors as long as you think about what you are doing and take steps to retain desired returns. If you have the need to this, contact us for detailed instructions.

LOADSTAR LETTER #39 presents several brief programs to accomplish this. A program called Velveeta (available in our library on utility disk 16) also has this capability. If you have a need to do this, contact the editor or leave Email and we'll connect you with the program that will serve you best.