kµgram®

VOL. 2 NO. 4

Official Newsletter of the KAYPRO USERS' GROUP

"WHAT KUGS ARE ALL ABOUT"

Bruce Meyers of Western Illinois KUG recently sent us a letter about how KUGGERS and KUGS are helping each other. (See Box 100 inside.) His opening paragraph "This is what KUG and the local chapters are all about:" started us thinking about all the different ways we have been helping each other through the KUG network.

As you have read in the KUGRAM these many months, articles and letters come from all parts of the world. Some of these letters are never published because they tell us about what a great job we're doing at KUG. Since the "great job" is really being done by you, let me share with you some of the correspondence that reminds us of what KUG is all about.

Every day we receive letters about how the articles in the KUGRAM have helped overcome some difficulty or have saved many hours of work. Most of these articles are written by YOU. You are helping other KUGGERS every time your letter is published.

Even after your letter is published, it continues to help. Many members tell us that they receive phone calls and mail about their articles and letters. Not only are these members helping each other, but many long-lasting friendships are being made.

The KUG Bulletin Board is another medium for mutual help and information. Although it is maintained by KUG, the messages and tutorial helps are sent by YOU. Information about local KUG meetings, how to patch a program, what's new at KAYPRO, how to get the treasure in "Adventure," or just a simple "howdy" are some of the ways you help each other through the KUG network.

Another new KUG service that you are using to reach, and work with, other members is the KUG SIG on CompuServe (GO PCS 25). Here you not only offer help and suggestions, but you are "uploading" programs to help others in their work and play. We can tell by the number of accesses on both the KBB and the SIG that you are helping to show "what KUG is all about."

We have received many thanks for our help in getting local KUGS started. But here again it was a mutual project. YOU sent for the free "How to Start a KUG" booklet. YOU sent us the post cards to be mailed in your zip code area. YOU started the meetings and YOU publish your own newsletter. Based on the local KUG newsletters we get, you're doing a very good job of helping each other on a local basis.

The KUG library is another way you have helped. Although local KUGS have their own libraries or individual members can "download" from CompuServe, many KUGGERS do not have modems or cannot attend meetings. Your contributions to the KUG library have been well regarded and appreciated by these members.

Many "KUG PALS" have been created internationally through your published letters and articles. Your letters also help us determine how we can improve the KUG network, so please keep them coming. Let us know about your experiences in reaching other members or just about your needs and wants. I'm sure there are many KUGGERS out there willing, ready and able to help.

Wait, I want you to meet my friend.
"Hey, KUGGER" .....

Box 100

Dear KUG,

This is what KUG and the local chapters are all about:

My phone rang; my daughter answered. The man from Montana said that he was having trouble with his Perfect Calc and could we help him. I was out of town, but my daughter gave him the number of the best man in town to give help. The man from Montana called and explained his prolem: he had spent many hours developing a complex worksheet. program and now it would not load.

My friend said he probably could help, but would the man please tell him how he happened to call. He explained that he needed help and looked in the KUGRAM. He found the name of our group—WILKUG—and liked the idea that we "will KUG."

After hearing the caller's problem, the WILKUG member told him that he probably had some "garbage" in the Perfect Calc file that would not load. He suggested that he load the file as a PW file, look for something that did not belong, edit it out, save it, and try to load it into PC again.

About 30 minutes later the phone rang again. The man from Montana reported that "It worked!" (Three calls from Montana to Illinois in less than one hour.) He had solved his problem and saved the many hours of work he had put in. (As I got the story, he worked for a lumber mill and was trying to use the computer to help the boss save some money and keep the place going.)

I take no credit for doing anything, but I was the organizer of our local, WILKUG, and the whole story just delights me.

We all help each other locally, but this long-distance help is really what both the local and the national KUG are all about.

Bruce Meyers
Western Illinois KUG
314 S. Campbell
Macomb, IL 61455

Dear KUG,

I don't know if I am your first member on the African continent, but at any rate Kaypro users are not exactly numerous here in Zaire. We in African Christian Mission are using my Kaypro IV as part of a Bible translation program, and whenever anything goes wrong, or any problem comes up, I either fix it myself or it doesn't get done. That's where the KUGRAM has been so very helpful. Every issue has contained something which I have needed.

We are using Perfect Writer to enter and edit the text of the Old Testament, and the many hints on how to "trick" Perfect Writer into formatting the way you want it to have been especially helpful.

We are also compiling a Swahili dictionary to be used with the Word Plus in checking our texts. If anyone has done something similar and has some suggestions, or if anyone else would be interested in a Zaire-Swahili spelling checker, let me know.

John Schirle
African Christian Mission
Box 53435
Nairobe, Kenya
East Africa

* * *

Dear KUG,

Some of you may be having data loss and total cessation of keyboard operation due to over-heating of your Kaypro II. It took me many months of frustration before I realized it was the high ambient temperature that was causing my problems and not something I was doing. If you have a Kaypro without a fan and your house or office room temperature ever rises over about 72 degrees F., even if it is air-conditioned, send me your name and address and I will mail you a sketch of a homemade exhaust fan which solves the problem. It mounts externally, can be easily removed, and no holes or other modifications are necessary to the cabinet. Total cost is under $20, and anybody can build one.

Lloyd Owens
922 Elm St.
Winnetka, IL 60093

Dear KUG,

In a recent issue someone suggested that it was possible to work text files with Perfect Writer and then use Wordstar to prepare them for printing.

Having tried this method with my last theater production, I can tell you that it works fantastically! To do so, you've got to edit your file with Perfect Writer in normal mode. Otherwise, you'll have to "find" all the Ctrl-N that PW places at the end of each line, and "replace with" simple spaces, then Ctrl-QQ Ctrl-B the entire document with hyphen-help off, plus find every tab and insert a return. This can be quite a job if your document is more than a couple of pages long. If you want to avoid those problems, simply enter your text in "normal mode" with PW. Although the screen will seem quite full, with words cut when they reach the end of the line, you'll find it handy when you finish the same file with Wordstar: Ctrl-QQ Ctrl-B with hyphen help off will work fine. Then you just make your final corrections, format your text, Ctrl-QQ Ctrl-B a last time with hyphen help on, and print.

If you write mainly in French, as I do, and don't want to activate three or four keys to print accent marks over letters, or buy the special keyboard with the implemented version of Wordstar (really a lot of money and a lot of new keys to depress) that comes with it, here is a way to do it with Wordstar and a daisywheel printer. (Mine is a Diablo 620.) First, you have to buy the daisywheel with those special characters (available for most printers). You then test it on your printer to see which key prints what. There are only three accent marks that go on most of the vowels.

On the special keyboard every one of the accented letters has a specific key. But my method is easier and somewhat less expensive:

1) With the French daisywheel on your printer, find out what character is printed when you activate PF (phantom space) and PG (phantom rubout). Normally, it should be "^" and "`".

(continued)

2) With the WS working diskette in drive B, run winstall on the installation diskette in drive A.

3) Name of file to install: WS.INS

4) At the main menu type "D" (for custom installation of printer).

5) Type "O" (for user's definition keys).

6) Program will then present you, one by one, the four keys reserved for your use. Choose any of the four. I chose Ctrl-PQ and Ctrl-PR because I've put them on my reconfigured keypad.

7) Type "C" to change their values:
Ctrl-PQ: 8h, 1Bh, 59h, 00h
Ctrl-PR: 8h, 1Bh, 5Ah, 00h

NOTE: It is essential that the 8h (backspace) be at the very beginning of the sequence; otherwise the result will be kind of messy. Special programs to reconfigure your keyboard should certainly simplify your work.

Once that is done, simply use any key like the backslash (\) for the accent circonflexe and the accent grave (`) for itself right after the letter to be accented. Before printing, Ctrl-Qa (find and replace) both accent marks by the control keys you've defined earlier (option GN, return immediately followed by Escape). All you have to do then is to re-form the entire text. Don't worry if your right margin seems fuzzy. If you want to see what the finished work will look like (you won't see the accent marks over the words, but they'll be printed), simply activate Ctrl-OD, which will erase from the screen the multiple functions that appear and realign the margin; you'll then have a good idea of what the printed page will be.

There is a simpler way to print over a character using Ctrl-PH as indicated in the manual. But the results are far from being the same. There will be holes in your lines, and the accent won't fall with the same precision on the letter it must cover. And you'll have fun in trying to align the right margin.

Jean-Paul Le Bourhis
4669 Boyer
Montreal, Quebec H2J 3E5 Canada

FREE With Your Order For Any 2 Or More Items On These Pages Get a —

Giant 12 Foot Coiled Extension Cord for Your Kaypro keyboard

Send for your free cord today. Enjoy that detachable keyboard. One Free Cord Per Customer

Regarding this coiled retractible cord. Don't be fooled by cheap imitations. This cord has been specially manufactured to match the unique electrical requirements of the Kaypro computer and meets demanding Kaypro-like specs. It is guaranteed to work with every model Kaypro II, IV, and 10. Don't settle for less from copycat advertisers. Other cords will fail and may hurt your system. Order your free cord today.

This free offer applies to any 2 or more separate items. For example, a Kaypro Quality Cover and one template equals 2 items. 2 templates equal 2 items, but a single box of diskettes is one item. We must reserve the right to end this offer. Don't be disappointed, order today. 12 foot cords sold separately at $12.95 per cord.

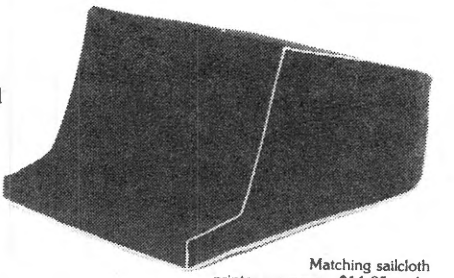
CENTRAL COMPUTER PRODUCTS
860 Central Avenue • Fillmore, CA 93015
(805) 524-4189

1984 Central Computer Products

Kaypro is a registered trademark of Kaypro Corporation

Introducing A Classic Form Fitting Kaypro Cover

Photo: Form fitting Kaypro cover.



At last, the classic Kaypro dust cover you'll be proud to own and use. This first rate computer cover is made from a premium, lint free, static free, washable, free breathing, and fade resistant sailcloth. It comes in a rich looking Navy blue or Royal blue, and has a smart contrasting silver gray piping and trim that adds a superior finished look. Made to form fit and protect a Kaypro that is set up and ready to use.

This remarkable dust cover makes you feel good and will keep your computer dust free and looking brand new for years to come. For a limited time only, your price for this factory direct, custom made, sailcloth Quality Cover is $16.95. When ordering remember to indicate color preference. This special low price is subject to change. You must be completely satisfied with your purchase of this cover or we will refund your money immediately. Order today.

Matching sailcloth printer covers are $14.95 each. Complete list sent with order.
New. Special two-piece Kaypro sailcloth cover. Set covers CPU and keyboard. $19.95 per set.

- Quality tailoring
- Easy care fabrics
- Attractive colors
- Professional appeal

Richly tailored inside and out. Look inside any of our Quality Covers; see the ultimate finishing; we use machines that sew with 3 needles so that no edge will ever unravel or shed lint. We stress perfection because you deserve the best. Compare for long-lasting satisfaction.

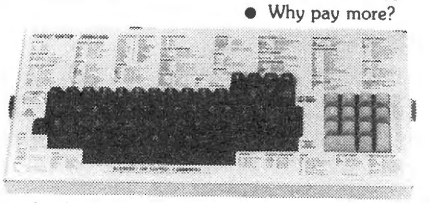
FACTORY DIRECT

Learn Software Commands Super, Super Fast!

Kleertex®

- $18.95 for one
- $35.00 for two
- $49.95 for three
- Why pay more?

Now Available:
Wordstar/MailMerge
dBase II



Time-saving Kleertex templates are made from a durable, non-glare plastic, and can be put on and lifted off the keyboard instantly. The software commands on Kleertex templates are easy to read and are conveniently arranged in alphabetical order. With a Kleertex template on your keyboard, software commands are only a glance away, at your fingertips. This makes it easy to learn programs that come with your Kaypro. Stop going back to the book to get a two or three keystroke software command or format. Now you can learn software commands super fast, so you can make better use of your powerful programs. The expertly organized Wordstar/Mailmerge template, for example, gets you into word processing in half the time. A special dBase II template cuts through the learning curve like a knife and gets you programming sooner. Kleertex templates for Perfect Writer/Filer and Perfect Calc get you moving fast on these programs too. Once you try Kleertex templates, you'll wonder how you ever got along without these useful tools. Central's special price for one template is $18.95. Choose any two templates for $35 and save. If you like, you may combine purchase of any of these four templates for super savings. Complete satisfaction is guaranteed or money-back. Makes learning software a breeze. Great value. Order today.

"Spikes and surges can be the greatest threat to your computer outside a 4 year old child with a jelly sandwich aimed for the disk drive slot."

Enemies of Kaypro®... Spikes, Surges, and Noise!

The Kaypro has enemies. But now you can protect it from the mish mash of electrical currents that race through your home or business. Powerful up-surges of current can actually blow out your machine. Less powerful, barely noticeable spikes, surges, and noise can silently degrade your system in time, ruining chips, destroying data, and causing expensive service calls.

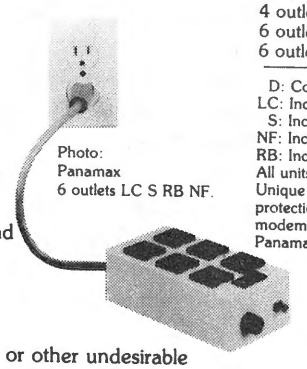


Photo:
Panamax
6 outlets LC S RB NF.

The Kaypro manual states, 'Line filtering will protect your Kaypro...from power surges or other undesirable occurrences from the power source." Surge protection will help your Kaypro provide years of trouble-free service. Also, if you plan to use your Kaypro to access information by modem, you must have a reliable high frequency noise (EMI/RFI) suppressor to insure against data loss and scrambling.

There are many "toy" surge suppressors on the market. They are smartly colored, but beware. The performance difference is amazing. The best surge and noise suppressors on the market are made by Panamax. Our "Panamax Challenge Certificate" tells all. It is a startling comparison of Panamax quality with 11 other well-known brands. One aspect of this revealing report tells how Panamax responds to and cuts surges in 5 or less pico seconds, while most other suppressors respond at a comparably slow 5 to 50 nanoseconds!

Check our regular low prices. Try the Panamax of your choice for 15 days. Receive the "Panamax Challenge Certificate" with your purchase. If not completely satisfied with your purchase, return for immediate full refund. Your Kaypro deserves Panamax protection, the best there is. Order today.

PANAMAX SURGE SUPPRESSORS

Description	List	Price
2 outlets, D	$89.00	$69.95
2 outlets, D NF	$109.00	$79.95
4 outlets, LC S	$107.00	$89.95
4 outlets, LC S NF	$127.00	$110.95
6 outlets, LC S RB	$124.00	$109.95
6 outlets, LC S RB NF	$144.00	$124.95

D: Connects direct to grounded wall jack.
LC: Includes 6 foot long heavy duty line cord.
S: Includes illuminated on/off switch.
NF: Includes EMI/RFI noise filter.
RB: Includes reset button.
All units include the added security of a 4 amp fuse.
Unique Panamax EMI/RFI noise filters provide protection in common and transverse mode. Essential for modem communications, multi-user stations, etc.
Panamax units are factory guaranteed for 24 months.

"Power line-associated problems are estimated to cause nearly 70 to 90 percent of the malfunctions in the IBM PC."

"Overvoltage can be fatal to both data and hardware alike."
P.C. Magazine, March 1983

PRICE PROTECTION POLICY

We have a super price protection policy: Central will match or beat any price you see listed in this publication on products also advertised in our ads. That's a promise. Try our friendly service today for affordable, price-protected, lightning-fast deliveries.

• Free Catalog •

Please send for our free catalog. Our catalog pricing policy is reflected on these pages. This policy is our motto: Fair Prices, Quality Products, Service, and Firm Guarantees.

Cables

Top quality, individually tested 36 pin Centronics-type standard parallel cables for all model Kaypros. These are made to work hard and long.
5 ft cables ... $18.95 each
10 ft cables ... $24.95 each

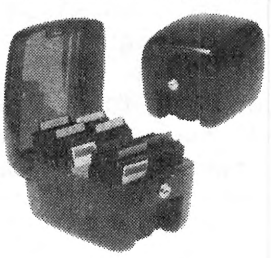
Top quality, individually tested ribbon modem RS 232C cables designed with reinforced clamps for a sure continuous connection and made especially for your Kaypro. These work every time.
2 ft cables ... $13.95 each
5 ft cables ... $15.95 each

SHOP-BY-MAIL
CENTRAL KAYPRO® SOFTWARE

Product Description	List	Central
Software		
ATI TRAINING DISKS		
CP/M	$ 75.00	$ 62.00
MBasic	$ 75.00	$ 62.00
Multiplan	$ 75.00	$ 62.00
Wordstar	$ 75.00	$ 62.00
BLUE CHIP SOFTWARE		
Millionaire	$ 59.95	$ 49.95
COMPUTRONICS		
VersaBusiness Series		
VersaLedger II	$149.95	$115.00
Any other modules	99.95	79.50
CONTINENTAL SOFTWARE		
Home Accountant Plus	$ 99.95	$ 79.95
FYI, INC.		
SuperFile NEW	$195.00	$175.00
FYI 3000	$395.00	$295.00
MICROSOLUTIONS		
Uniform Kaypro II	$ 69.95	$ 49.95
Reads 25 machine formats		
Uniform Kaypro IV & 10	$ 69.95	$ 49.95
Reads 40 machine formats		
PLU PERFECT SYSTEMS		
Plu Perfect Writer CP/M 2.2E	$ 39.95	$ 37.00
Backgrounder	$ 45.00	$ 42.00
CP/M 2.2E only	$ 32.00	$ 30.00
QUIC-N-EASY PROD.		
Q-Pro-4	$395.00	$295.00
SAN FRANCISCO COMP		
Power!	$169.00	$135.00
SOFTCRAFT		
Fancy Font NEW	$180.00	$149.00
STAR SYSTEMS		
The Accounting Partner	$395.00	$285.00
T/MAKER COMPANY		
T/Maker III	$275.00	$199.00
Hardware		
ADVENT PRODUCTS		
Anti-Glare Screen	$ 24.95	$ 21.95
5 Mhz Speed-Up Turbo Board	$ 99.95	$ 89.95
External Monitor Adaptor	$ 69.95	$ 59.95
ProGraphics	$299.95	$269.95
PANAMAX		
PowerMax	$459.00	$379.00
200 Watt Battery Back-up		
Supplies		
3M SSDD Kaypro II diskettes	10/box	$ 22.30
3M DSDD IV & 10 disks	10/box	$ 31.00
Dysan SSDD Kaypro II disks	10/box	$ 29.95
Dysan DSDD IV & 10 disks	10/box	$ 39.95
3M Head Cleaning Kits	$ 39.00	$ 21.95
3M Desktop Anti-Static Mats	$ 69.95	$ 49.95
Bookware		
Compleat Kaypro II, IV & 10	$ 16.95	$ 15.95
CP/M for the Kaypro with an Intro to dBase II	$ 16.95	$ 15.95
Wordstar and Friends	$ 21.95	$ 20.95
Guide to the Kaypro 10	$ 24.95	$ 23.95
Free Software Handbook	$ 17.95	$ 16.95

Free yellow Hi-Liter pen sent with every book order.
Prices, specifications, and offers subject to change without notice.

Lockable Diskette Defender



Handsome, sturdy, smoke-tinted acrylic tray holds 70 Kaypro-size diskettes. Flip-up lid keeps out dust, debris, and moisture, and locks securely to guard your important work. Comes with 7 dividers with index tabs for easy filing and to keep floppies upright to prevent bending, warping, and scratching. Tough and secure metal lock never comes in contact with diskettes because it is enclosed in a special plastic housing. Super value at $23.95 each. Keep prying eyes and sticky fingers away from your data. Guaranteed. Order today.

Do You Wish Writing Was Easier?

If you need to write, or want to write clearly, your Kaypro and the software program *Punctuation and Style* can help you get there faster. It improves, clarifies, and enriches your writing by identifying sentences with misused, redundant, faulty, cliched, or erroneous phrases, and shows you how to improve them. It helps you rewrite and check your work by quickly marking and annotating your files for easy correction. In addition to computer-fast identification of awkward, muddy, pompous, and wordy sentence structure, it also finds missing or improper punctuation, unbalanced quotes, wrong abbreviations, faulty capitalizations, and much more. *Punctuation and Style* actually improves your writing by mercilessly pointing out grammatical errors. After a few weeks with Oasis System's *Punctuation and Style* your writing is bound to become more dynamic, expressive, and honest. In time, you'll stop worrying about grammar and work on projecting ideas instead. After all, that's what writing is about.

Punctuation and Style makes writing and rewriting much easier. The list price of *Punctuation and Style* is $125. Central's price is $99. Experience the power of this valuable "Punctuation Checking and Writing Improvement Software" yourself. Order today to get this program fast.

Punctuation and Style works on files created with Wordstar or Perfect Writer. It comes with an easy to use, clearly written manual and is packaged in an attractive binder. Join thousands who now write with more confidence, faster, and better.

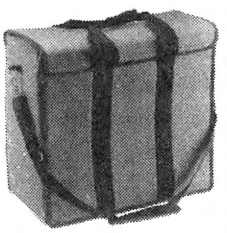
SmartKey II™ 3,750 Strokes per Key!

SmartKey II speeds up and improves accuracy in computing by reducing often used multiple keystrokes to single keys. It allows you to easily reprogram as many upper and lower case keys on your keyboard as you want, even while Wordstar, dBase II, Perfect Writer, or any other software is in operation. You can assign up to 3,750 characters to a single key. Once you have redefined keys, you can put them to work or change them at will. You can also store your "smart key" definitions in a special file for use later. Imagine saving complex command codes, boilerplate paragraphs, sentences, proper nouns, inventory numbers, or whatever, and then injecting any of them into your work with the stroke of a single key. This is a must-have, time saving computer program for all Kaypro users.

For a limited time only, Central's SmartKey II and SmartPrint II combination pack is only $79. These programs are regularly $129. SmartPrint II lets you give single-stroke commands to make your dot matrix printer produce italics, greek characters, graphic symbols, boldface, underlining, extended typefaces, accent marks, and much more. Order today to get these great programs fast.

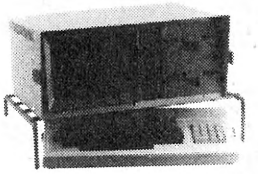
Warning: SmartKey II makes lesser programs look dumb, dumb, dumb. Comes with step-by-step manual.

Cordura Travel Case



A full featured, padded carrying case at a price that is down to earth. The Coverman Kaypro carrying case is made from a strong, super-material called "cordura." This material is rip, shred, and water resistant. The Coverman case comes fully padded and lined, so your Kaypro is protected from unexpected bumps and jolts. Since your Kaypro is completely enclosed in this case, it keeps rain, sand, and other debris out of your machine. The Coverman case comes with external carrying handles, and a detachable, heavily padded shoulder strap, that comes in handy when you have to carry your Kaypro over a long distance. There is also a large interior pocket, perfect for transporting manuals and diskettes. The Coverman Kaypro carrying case is regularly $79.95. Central is proud to offer this expertly constructed case at $59.95. Please indicate your choice of color: gray-green, dark blue, or brown. All straps and carrying handles are black. You must be completely satisfied with your purchase of this handsome travel case or we will refund your money immediately. Order today.

Perfect Kaypro® Stand



Simple, strong, sturdy, safe. These words describe an attractive, angled stand that provides a perfect spot to place your Kaypro. This stand is made from rounded, steel rods covered with a thick, shiny, soft, black polymer material that protects your Kaypro and table top from scratches. Unlike flat wood or acrylic panels used in other stands, the tough supporting rods of the Smart Stand (TM) do not obstruct air flow. In fact, since your Kaypro is lifted off the table top and gently angled by this stand, air rises up from under your computer, and flows freely through it to help keep it cool. When you're finished computing, you can slide the keyboard completely under the stand to create a working area on your desk. The Smart Stand is a super value at $34.95. Try it for 15 days. If not completely satisfied, send it back for a full refund. Matching 80 or 130 column printer stands are only $24.95. Order today to get the Smart Stand fast.

CENTRAL COMPUTER PRODUCTS
860 Central Avenue, Dept. 2G
Fillmore, California 93015
(805) 524-4189

Dear Central,

Please send me the items listed below. I want fast, friendly service. Don't forget to include my free 12 foot extension cord. I understand there is no charge for this cord if I purchase 2 or more items from these pages. My check, money order, or card no. is enclosed. Thanks.

Description	Price

Sub Total _____
CA Resident 6% Tax _____
Postage & Handling $ 3.00
Total $ _____

FIRM MONEY BACK GUARANTEE ORDER WITH CONFIDENCE

☐ Navy blue ☐ Royal blue
☐ Send free catalog ☐ Send free 12 foot cord
☐ Check enclosed ☐ Money Order enclosed
☐ Visa/Mastercard # _____
Exp. Date _____ Sig. _____
Name _____
Address _____
City _____ State _____ Zip _____

Phone Orders Accepted.
To order by mail use coupon, letter, or photo copy. Thank you.

Dear KUG,

Here is a tip on backing up Perfect Filer database files. Since each database requires a separate disc, I use three discs: one for Cub Scouts, one for Church, and a third for Personal Correspondence. In order to keep backup copies of my data files without tying up three more discs, I use PIP to transfer and rename the data file simultaneously. This way I can keep a backup of several databases on the same backup disc.

With my Cub Scout disc in drive A and my Backup disc in B, I do the following:

A> PIP <CR>
*B:DATACUB=A:DATABASE <CR>
*<CR>
Warm Boot

The process is repeated for my other discs by renaming the DATABASE files DATACHUR and DATACORR, respectively. If lightning strikes and I have to rely on my backups, the procedure can be reversed.

Here is the Perfect Filer address specification I use instead of LABEL.TXT. It seems more polite somehow to address by labels to Mr. and Mrs. or Rev. or Captain Whoever. I call it LABEL1.TXT.

<name.title> <name>
<address>

If you want to use the organization data block in your database, but do not want the organization to print out on your address labels, try this:

(Line 1) <name.title> <name>
(Line 2) <address.address1>
(Line 3) <address.city>, <address.state> <address.zip>

You might call it LABEL3.TXT if you have a limited imagination like mine.

LCDR John C. Connell, Jr.
Executive Officer
USS VREELAND FF1068
FPO Miami, FL 34093

* * *

Dear KUG,

RE: Perfect Writer formatting problems

Many Perfect Writer formatting problems mentioned by fellow KUGGERs can be solved with the knowledge that, contrary to the implication of the PW manual, "@style" commands can appear at just about any location in a file, not just at the beginning.

For instance, Brock Dethier says in Vol. 2, no. 2 of KUGRAM: "Now, if they'd just change the 'quotation' environment so it didn't indent every quotation." If the "indent" style parameter is set, for example, to "5 chars," then Perfect Formatter will indent every paragraph, including "quotation" environment paragraphs, by 5 spaces. To produce a "quotation" with an unindented first line, all one needs do is to insert "@style(indent 0 chars)" before the quotation. Then, assuming one wishes to return to a normal 5-space paragraph indentation after the quotation, one must insert "@style(indent 5 chars)."

Armed with the knowledge that "@style" commands can be inserted throughout a file, one can create numerous different formats within a document. One can easily switch, for instance, between single- and double-spacing. It is also possible to switch back and forth within a document between the "text" and "verbatim" environments, helpful in reproducing columns of data.

It may take a bit of experimentation before getting a document to print as desired using these techniques. One must keep in mind that in the "text" environment, Perfect Formatter apparently requires two hard carriage returns to recognize a new paragraph.

Often-used document formats can be stored on disk and inserted into a document using the "insert file" command to avoid retyping lengthy "@style" commands.

Stephen C. Scott
201 Westwood Ave.
Columbia, MO 65201

* * *

Dear KUG,

During the past year, I have made four international business trips with my KAYPRO II and have carried it into, and used it productively in, the following countries: Abu Dhabi, Dubai, Oman, Qatar, Iraq, Saudi Arabia, Baharain, Great Britain, West Germany, Switzerland, Japan, Nepal, Singapore, Thailand and the Peoples Republic of China (Mainland China). On my return to the United States, I have cleared through US Customs at Miami, San Francisco, and on two occasions, Dallas/Ft. Worth. In each instance there has been absolutely no problem with my not having an Export License.

On return, US customs will verify that the computer is of US manufacture. As most printers are made in Japan, I recommend that you do register these with US Customs prior to departure to prevent problems on bringing them back into the US. This is a simple procedure and can be accomplished by presenting the item to US Customs at the airport just prior to departure.

I use a PROWRITER 8510 printer with the KAYPRO. The computer and the printer both seem to be happy with either fifty or sixty cycles as long as they get somewhere close to 110 VAC. I can change the KAYPRO over to 220 volts with an internal jumper, but the PROWRITER does not have this capability, so I carry a 100 VA stepdown transformer for it. I added a BITS "PUPS" U.P.S. my last trip and it seems to work nicely to prevent RAM loss and to protect both the computer and printer from power spikes and fluctuations prevalent in some of the more underdeveloped countries.

Both the KAYPRO and the PROWRITER together with the U.P.S. are checked as baggage in two specially fitted padded equipment cases that I had made for them. I recommend that all of the disks have backups made of them and that they be hand carried to prevent them from being damaged by x-ray equipment used for both checked and unchecked baggage inspection at various international airports.

Alfred B. Cook
PO Box 776
Hurst, TX 75060

Dear KUG,

The following experience may be of use to the users of Perfect Filer. I was able to format my outputs just as I wanted to with one exception. No matter what I did, the length of a page seemed to be variable. The header line for the second page might appear after one page, after two pages, or anywhere in between or later. After doing other things for a couple of days, I got an idea. It turns out (and logically so) that you must put in a carriage return at the end of whatever will be a line on your output. I had made my member formats exactly the length of a line, so each entry came out okay, but the part of Perfect Filer that counts the lines only recognizes the carriage return as the end of a line. I added a carriage return to the end of the member format, and each page came out exactly the correct length.

Larry Dodson
3624 W. Frier Dr.
Phoenix, AZ 85021

* * *

Dear KUG,

Just a little note to help some other novices like myself. When constructing a SUBMIT file you must add a <CR> at the end of the file or the file will not run. It took me quite some time to realize that fact.

Ian Blair Fries, M.D.
268 Dutchmans Point
Mantoloking, NJ 08738

* * *

Dear KUG,

My father bought a modem recently. Since then, everyone in my family has gone "modem crazy." I have found lists and lists of BBS numbers. I have even found a Kaypro system called the Kaypro Systems House (759-6627). If anyone out there wants to give me some BBS numbers, or wants to get some numbers from me, or wants to trade programs (by modem), or just wants to talk through our modems, give me a call at 703-256-3018.

Mike Doff
3407 Barger Dr.
Falls Church, VA 22044

Dear KUG,

Greetings from fellow Kaypro lovers on the other side of the world. Allow us to introduce ourselves. We are the JAVA-KU (Java Kaypro Users, Indonesia). There are only about seven or eight of us, but we sure love our Kaypros! WE are a newly formed group and have a couple of questions we would like to ask other KUGGERS with the hope that those who are a bit more experienced might be able to help.

1) We have in our group Kaypro II's and a Kaypro 4. We have found that the K-4 will read disks formatted to the K-2 but we are not able to boot up even the top side of the K-4 disks on the K-2. If we wanted to trade "public domain" software, or copy files from one disk to another that are in these two formats, how do we do it?

2) Is it possible to hook up two or more Kaypros together (other than through a modem/phone line)?

3) Has anyone found a way to get a "daisy-wheel" printer to stop in the middle of a sentence at a pre-set position in order to change print wheels for a few words or a phrase? We have searched Perfect Writer for such a command. This is supposed to work well with dot-matrix printers and the @italic command, but what about the "daisies" who would like to change fonts in order to accomplish special effects?

We would appreciate any information you could provide. Being this far away from all the good sources of information makes it a bit frustrating at times. Please contact us at:

JAVA-KU (Java Kaypro Users)
c/o John C. Mulkey
Jl. Wahid Hasyim 5
Salatiga, Jateng
Indonesia

* * *

TIME to RENEW ?

Dear KUG,

Recently, while trying to format and print a lengthy document, I encountered the dreaded "Swap file full" message. I have since learned to break up my files into shorter sections (the PW manual recommends about 20 pages as a good length), and then creating a special file which I call "INCLUDE.MSS." This file contains some initial environment and/or style commands and a series of "@Include (filename)" commands that will ensure that each chapter begins on a fresh page.

By following the above procedure, it becomes relatively easy to make changes to your final document after it has been printed. For example, I found that the second section of a document I was working on ended in such a manner that the last page contained only one line of text, but had a footnote in that one line. I was able to use an "@newpage" command on the previous page to transfer some of the material from that page to the last one, thus making the document look much more professional. Upon completion, I merely inserted the following lines at the beginning of the file containing the second section:

@pagefooting (center= "@value{page}").

@set (page = n) where "n" was the last page of the previous section.

This was done in order to print the page number without the hyphen fences that normally get printed by PW.

After formatting and printing the file, I merely removed the old pages and inserted the new ones. This is certainly faster than waiting for a very long file to format and then print beginning at the page desired!

I hope this information will prove helpful to someone out there in KUGLAND. Keep up the good work. I'm looking forward to purchasing a modem soon so I can access the KUGSIG on CompuServe and find out more about this wonderful machine!

James N. Parker
10826 Cardigan Drive
El Paso, TX 79935

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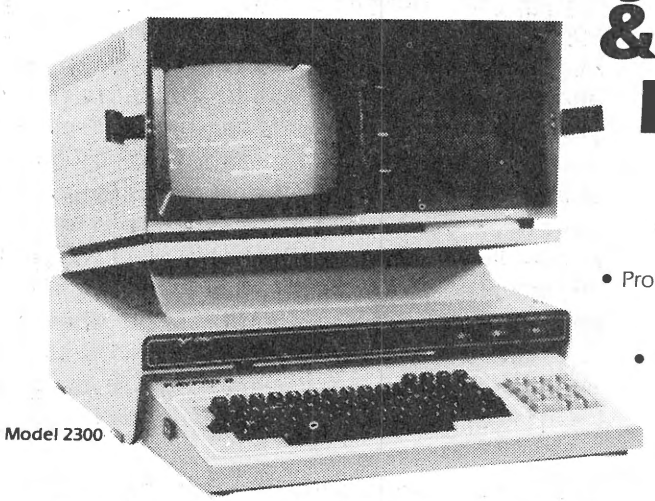

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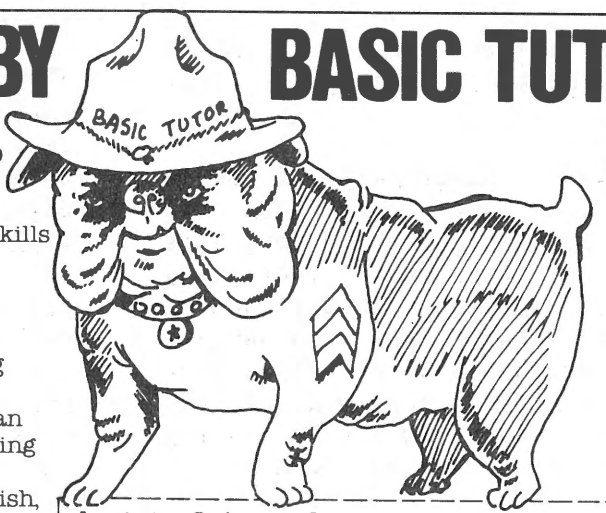

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Flexible Printing

by David G. Hoag

Dot matrix printers have many features and capabilities that are not usable with text composed, formatted, and printed with Perfect Writer, Formatter, and Printer. Things like half line offset superscripts and subscripts instead of the full line above or below provided by PW ... or a clean continuous underline instead of the individual "dashes" under each character which PW gives us are there in your printer but inaccessible to PW. With what I describe here you can do these things and more, such as change character size within your text to print a large, eye catching title or letter heading, change type style to emphasize a word, or do anything within the capability of your printer.

This ability is achieved by using a valuable feature of PW which allows you to insert a character translation table between characters you type onto the screen and the character code sent to your printer when you format your text. With this, selected characters can be used to initialize special printing features you want to appear in your document.

In the following description, I assume you have a little familiarity with the PFCONFIG procedure of PW. If not, it's not too difficult: Start with Edit Disk on A (use a copy for safety) and PW Installation Disk on B; boot with cont-C; and from A> type "b:pfconfig <RET>". Then follow the instructions and menus on the screen. I will identify between quotes the name of the menu item you should be using.

You will also have to search your printer user manual for the initialization codes for the printer features which you want to use within PW text. You'll need these codes in ASCII command character form. These codes are either "escape," using the symbol "^[" followed by some character, or "control," using the symbol "^" followed by some character. Note that your screen may show an up-arrow for the equivalent character shown on your printer as a caret (the little hat sitting above 6 on your keyboard).

You may have to refer to an ASCII code table to convert from the form given in your printer manual to this command character form. You'll also have to decide what little-used characters from your keyboard you will convert from their normal use to the function of sending these command codes to the printer. And lastly, you'll have to choose a name for a new "printer type" which will have this "Flexible Printing" capability. As a specific example, I'll show what I did for use with my OKIDATA 92 printer, but recognize that in general, your case will be different. There are four major steps:

STEP 1: Use "Define printer types" of PFCONFIG to "Define a new printer type" with the new name you've chosen. (The name I chose was "okif" standing for OKIDATA flexible.) The new printer type definition should be identical to that for your default printer type, except that you add item 16 with an answer "yes" for the use of translation tables, and an answer "0" for item 17 meaning translation table 0. (The name of your default printer type is identified in "Select the default printer type." Its definition is listed under "Update existing printer definition.")

STEP 2: Use "Edit character translation tables" of PFCONFIG to modify translation table 0 for your new use. Before you do this, it would be wise to go through the existing list of translation table 0 and make certain there is a one-to-one correspondence between the characters translated from and to. You should correct any differences. Then make the appropriate changes for the keyboard characters you are going to use for printer commands. In my case, the following translations were appropriate for the OKIDATA printer:

Decimal	Key	Translate to	Command	Oki use
126	~ (tilde)	-->	^[(Escape)	Multiple use
96	` (accent grave)	-->	^^ (Cont-^)	10 char/inch
92	\ (backslash)	-->	^\ (Cont-\)	12 char/inch
124	| (verticalslash)	-->	^] (Cont-])	17 char/inch
38	& (ampersand)	-->	^_ (Cont-_)	doubling char

(continued)

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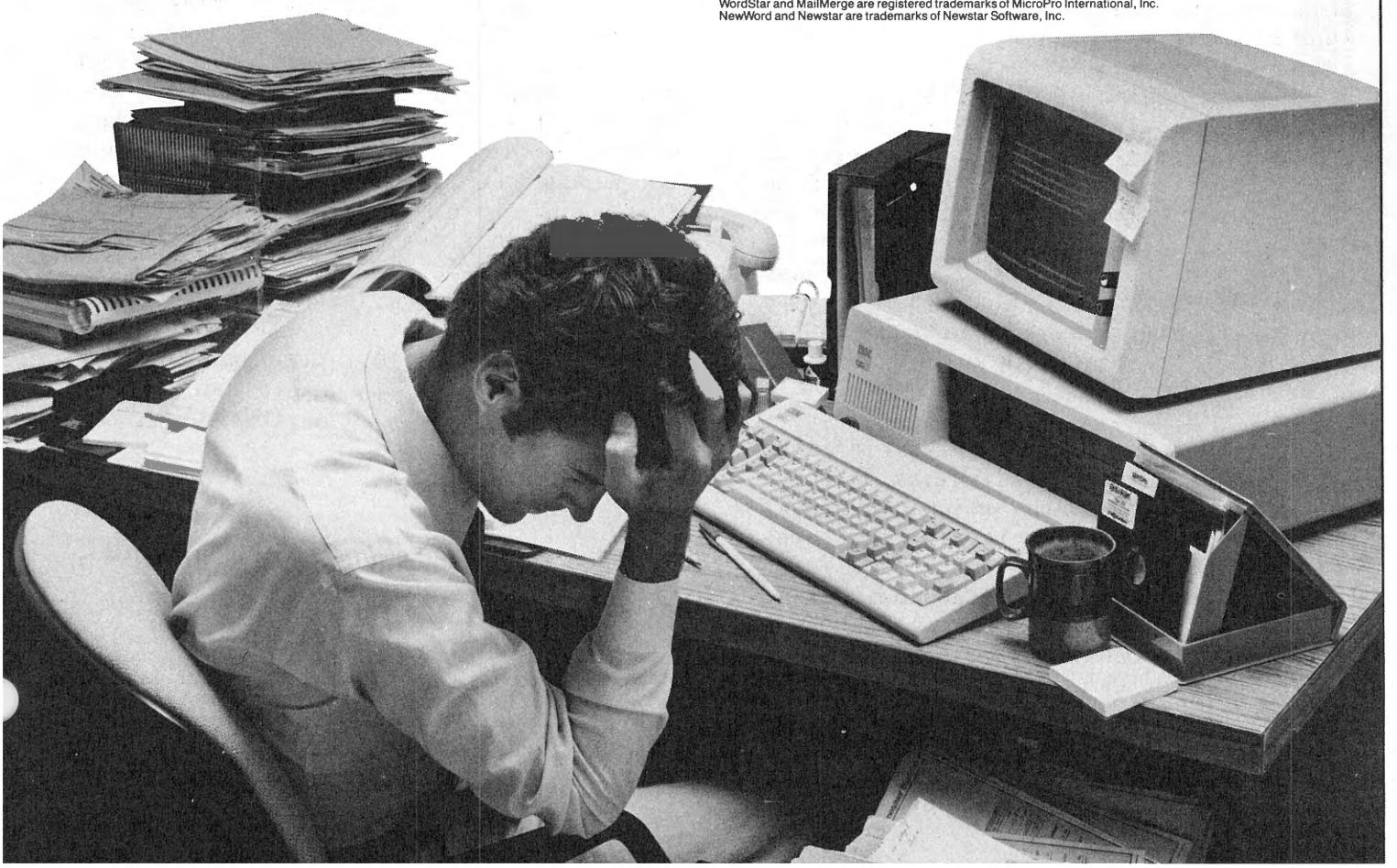

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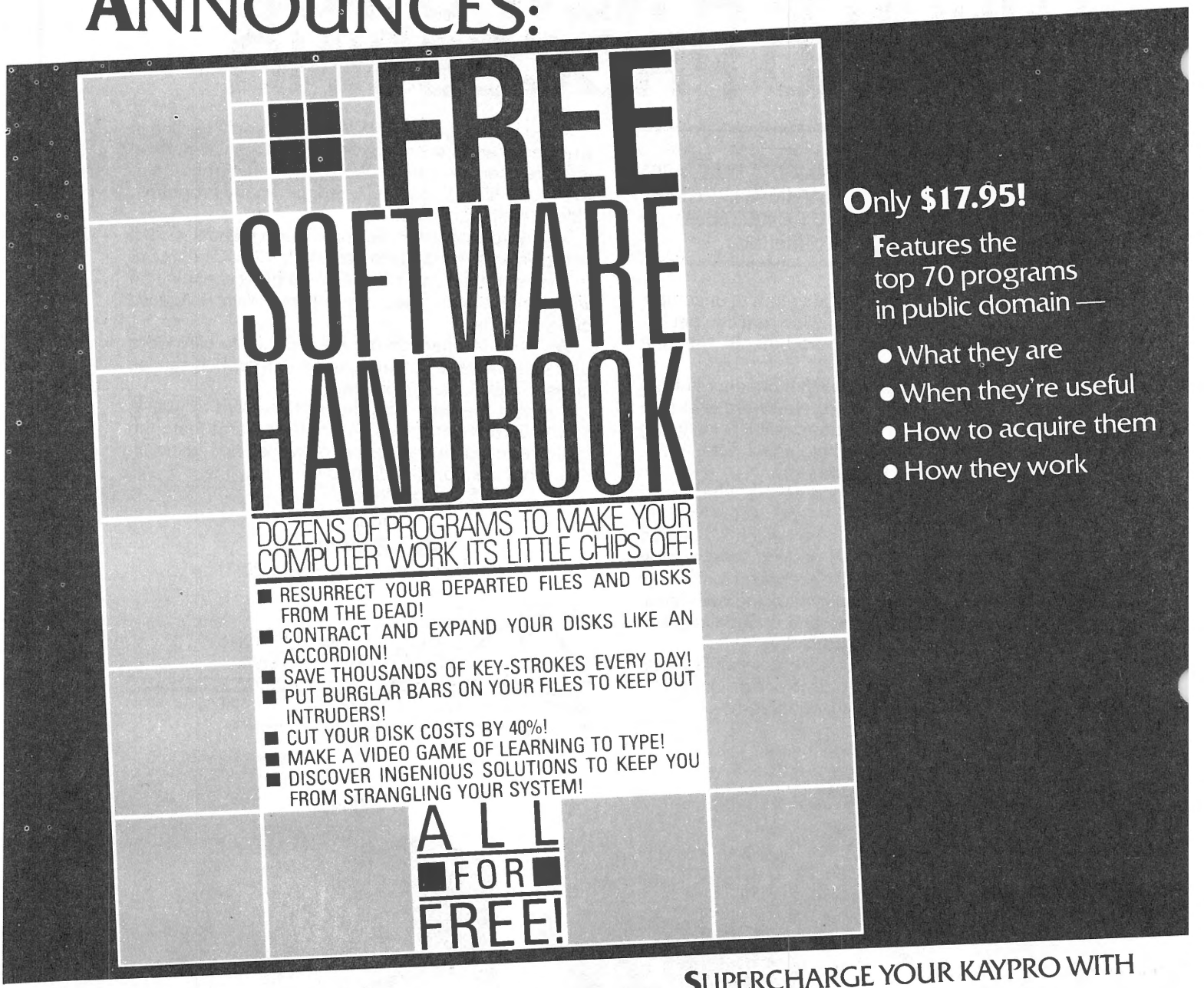

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(continued)

STEP3: Use these key characters in your document while in Perfect Writer as you type it whenever you want to change printing characteristics. For instance in my case typing ~Htext~I would make "text" print in enhanced form. &text` would make "text" print large sized at 5 char/inch in the middle of a line otherwise printing at 10 char/inch. And so forth. Your printer user manual will guide you in what you can do. To avoid extra white space in your final document, put these command characters with no space right next to the words you want printed differently.

STEP 4: When you are finished composing your document and after you identify to PW the name of the file you want to format, select from the next menu "D-Format for a different device type" and answer with your new printer type name (in my case "okif"). Then select "G-Start formatting now", and continue as usual.

NOTES: A. These new features are active only for text you format with your new printer type name. You have added, not lost, capability (all neatly stored in the file PF.DAT on your PW Edit Disk). Text normally formatted will allow you to use all the keys with their original meaning unchanged.

B. By a similar, but more complicated procedure not described here, it is possible to expand this technique to allow the insertion of entirely new characters within your text which you can make up ... such as a little happy face! You can even do limited graphics within your text to draw simple pictures on your printer nested neatly within your document.

C. This article in slightly different form was first published in the Nov-Dec 1983 issue of "The Boston Kugel". I have been getting letters with suggestions on using this procedure from others which I might pass on in a future Kugram article. Please write me about your experiences.

C. I'll try to answer questions by phone, evenings between 7 and 9 pm Eastern time ... phone: (617) 533-6353. ... David G. Hoag, 116 Winthrop St., Medway, MA 02053

Page One of Page ?

If page numbers had been intended to go at the bottom of the page, we would have been born with our eyes in our chins. For readers who turn pages to the left, however, nature and reason combine to require that single-sided typescripts be numbered in the upper right-hand corner.

One assumes that the errant numbers are capable of convenient repositioning with straightforward commands to be found in the thick manual. The manual does` indeed contain all the necessary commands—just as the dictionary contains all the necessary commands for writing Hamlet. The trick is to extract them and then arrange them in their correct order.

Writers who want to mark each page with both its own number and the total number of pages in the typescript should use the following procedure. I first format my file to the Kaypro screen, a not-very-time-consuming prologue to printing-out that anyone who cares at all about the appearance of his final copy will not omit anyway. Having ascertained by trial formatting that my typescript will be five pages long, let us say, I place these commands at the head of the file:

```
@PAGEFOOTING{}
@PAGEHEADING{RIGHT={Page  @VALUEPAGE of 5
pages}}
```

There is, as there often seems to be, just one more little wrinkle. My experience is that when the last line on a page ends short of the right margin—when it's the last line of a paragraph, for example, or when it's in Perfect Writer's Verbatim environment—any right or center pageheading will be misplaced on the following page. My solution is to avoid the Verbatim environment altogether, and to make sure, through screen-formatting and @newpage commands, that no page except the last ends on an incomplete line.

Melvin Plotinsky
4426 Sheffield Drive
Bloomington, IN 47401

* * *

HOMETAX - A Review

Hometax is a relatively inexpensive tax preparation program put out by the Learning Shack. It retails for about $100 and runs cleanly on the Kaypro.

Given the changing nature of taxes and thus tax preparation, computer applications in this area are either vastly complex (and expensive) or relatively simple (and cheap). Hometax is among the latter: if your business is tax preparation it won't be enough. However, if you are a normal working Joe with a few money-making (or -losing) projects on the side that may attract Federal interest, this could be the program for you. Let me put it this way; for 20% of the cost you get 75% of the tax preparation capability in a form that is easy to follow and use.

The strength of the system is the manual: it is virtually non-existent. In ten short pages it thanks you for buying the system and tells you how to load. It reminds you to hit control C when starting, cautions you to take your time (although revisions and rewrites are simple and straightforward) and tells you what information you'll need to answer the questions. In fact, the hardest part is to organize your records in the first place. How much money did that rental property lose? How did your expenses break down? Did you have any interest income? If so, from where? Basically, your records will need to be pretty well organized.

Let's face it, mine weren't. My tax forms were relatively complex; a dead horse or two comprising invested money and a weak moment, some interest income trickling in, a few items for the accelerated cost recovery hopper and a two-salary marriage with enough income to worry about taxes. So I leaned a bit on the options that the program offers such as: automatic calculation of A.C.R.S. depreciation and the ever-handy calculator function. Both worked charmingly and correctly.

The big timesaver of this program is that it automatically tracks and recalculates changes in one form to jibe with corresponding changes in another form. In other words, you needn't worry about not carrying over your interest income or medical deductions into the 1040A. This is a tremendous convenience when you screw up, a situation which I have found to be inevitable.

Regarding flaws: The primary limitation of the program is in the forms that it doesn't address other than ask for a summary of manual work you have completed. It doesn't address schedule D or schedule E. It just asks you to fill in the bottom line in the appropriate box. On page 10 of the manual there is a mistake or typo concerning depreciable basis. I think they meant 1984 when they said 1983. This could be a failure in the update but it does undermine confidence: are there similar oversights in the programming that you don't know about? Some of the control functions (control F for example) fail to work on certain levels of the program. This is understandable and logical but not very well explained or clarified.

The next step is to take all the forms, as printed, to your acountant for final rectification. I expect he'll have some changes, but much time - both his and yours - has already been saved, and final changes can be incorporated in a snap.

In general the flaws are tradeoffs. You get what you pay for but in this case I think you get a little more than you pay for. The toll free number which they encourage you to use is an impressive commitment to user support. I must confess that I did not find it necessary to use that number. Given my level of expertise with computers and taxes, I'd have to call that a positive recommendation.

Casey Cook
c/o Shannon & Associates
215 West Oak St.
Suite 500
Fort Collins, CO 80521

(continued)

* * *

Extra Parallel Ports

by David J. Christiano

In KUGRAM Vol. 2, no. 1, Tony Drake's BB note illustrated the Kaypro I/O port numbers. When doing I/O, these numbers refer at least in part to the addresses decoded by a 74LS138 3 to 8 decoder (U57 if you have a Kaypro schematic). This chip selects one of 8 lines depending on the values of the address lines A2, A3 and A4. Actually, there are other ports than those mentioned, such as for screen scrolling, disk controller select and transmit/receive baud rate select. I would like to concentrate on ports 8-11 and 28-31, the Parallel PIO (U54) and the SYSPIO (U72) respectively. Both of these chips are Z80 PIO's. (Unfortunately, in the Kaypro 10, these have not been utilized, and are thus not available to us.) The Z80 PIO is in essence a super interfacing device for parallel input/output. For some reason, Kaypro utilized two of these chips when only one was needed. But then, that provides us with an unadvertised bonus. Each PIO contains four ports and two PIO control registers. Pins 5 and 6 of the Z80 PIO are used to select between the two 8 bit ports and the two control registers. For instance, ports 28 to 31 would be selected as follows. The I/O decoder (U57) detects highs (i.e. +5v) on each of the A2, 3, 4 address lines. This corresponds to 111 binary or 7 decimal. The chip thus selects the SYSPIO since its Chip Enable (pin 4) is connected to the decoder pin corresponding to a 7 (111 binary). A2, 3 and 4 could represent any decimal digit from 28 to 31 depending on the values of A0 and A1. A0 and A1 are used by the PIO to in turn select one of the four port addresses on the PIO. For example, port 28 is the System Port, explained below. Port 29 is the corresponding control register for port 28. By sending proper information to the control register, we configure the corresponding port to either input, output, bidirectional or control. This is accomplished to writing a byte of data to port 29 (or 11 in the case of the Parallel PIO). The following are the bytes to send for each of the above.

(continued)

Mode	Binary	Dec	Result
Output	00001111	15	All bits output
Input	01001111	79	All bits input
Bidirect	10001111	143	All handshaking
Control	11001111	207	Bit input / output

This can be done in MBASIC by OUT 29,15 to set port 28 to output. Correspondingly, to initialize the "extra" ports 10 or 30, write a byte of control information to the corresponding control registers, ports 11 and 31. When selecting the control mode, the second byte written to the control register signifies which bits are input (1) and which are output (0). For example, to set bits 0, 2, and 3 to input and the rest to output would require a binary number of 1011000, or decimal 176. The following program illustrates the use of the SYSPIO port 28. Try it and "see" the results. Be cautious, however, when writing to the SYSPIO port! It controls other things, such as disk side select (bit 2), printer port handshaking (bits 3, 4), disk density select (bit 5), drive motor on/off (bit 6), and memory bank select (bit 7).

```
100 FOR I=1 TO 50
105 REM GET A NUMBER FROM 0 TO 3
110 J=I MOD 4
115 REM TIME DELAY LOOP FOLLOWS
120 FOR K=1 TO 100
130 NEXT K
140 REM IF WE LEAVE OUT THE NEXT 64,
145 REM WE WILL TURN ON THE DRIVES
150 OUT 28,64+J
160 NEXT I
```

There is no INP command in MBASIC, limiting the use of the input and control modes. Use of these ports can be maximized by using a language that allows direct manipulation of port I/O and single bit manipulation. The PIO can also be configured to provide interrupts when certain pins are high or low, and these provide tremendous use in real time application where single bits can be either monitored or manipulated one at a time. For further reading: Z80 Assembly Language Programming by Lance A Leventhal and 101 Projects for the Z80 by Frank P. Tedeschi and Robert Colon. Both go into great detail in the use of the PIO's from both a hardware and a software standpoint.

ALL KAYPROS ARE NOT CREATED EQUAL

KAYPRO 400/800KB UPGRADE KIT-The KAYPRO II uses the Tandon 100-1 single sided double density diskette drives (40 tracks 48 TPI). Each diskette is capable of storing 200KB per drive. The Legacy 800KB upgrade kit expands the storage capability of the KAYPRO II to 800KB per drive utilizing the TEAC 55F-double sided quad density diskette drives (80 tracks 96 TPI). The kit may be purchased with or without the drives. Once installed, the KAYPLUS 800 will store four times the amount of data as the standard KAYPRO II. Data integrity is maintained, as the KAYPLUS 800 will still read and write the standard KAYPRO II format (as well as the KAYPLUS 400 format). The kit comes complete with an enhanced format program that asks if you wish to format the disk as (S)ingle or (D)ouble sided as well as prompting the user to determine if the format is for 40 or 80 tracks. Installation of the kit requires a simple EPROM change, the addition of a 14 pin socket (with appropriate integrated circuit), cutting of two circuit traces, the attachment of 6 wires and the replacement of the diskette drives. The use of this enhancement is predicated on replacement of the standard drives with only the TEAC drives. No TEAC compatable drives will suffice. A speed increase of 12-18% could be expected with the installation of this kit, as the track access time is greatly enhanced over the standard drives. Also, the read/write heads of the TEAC drives only come into contact with the surface of the diskette when transfer of data occurs, at all other times, the heads lift off the surface of the diskette.

$118.

CPU HOP UP KIT-The KAYPRO II utilizes the Zilog Z80 microprocessor. The internal calculation speed of this processor is 2.5 MHZ (megahertz). In that the entire KAYPRO computer system is designed around the Z80 CPU (and associated chip set), to upgrade the computer to execute at a faster rate would require a major overhaul of the mainboard and the replacement of numerous components. Legacy offers an alternative of the 2.5 MHZ clock speed. The CPU hop up kit doubles the calculation speed of the Z80 to 5 MHZ with the use of the Zilog Z80B micro processor. All calculations performed will be done at a 5 MHZ rate and any I/O performed will be done at the normal (KAYPRO designed) rate of 2.5 MHZ (during which time, the CPU is put to sleep in a wait state). The effective increase is about 40%. Installation is completed within minutes. One simply removes the old Z80 CPU and one supportive chip, plug in our hop up kit and place one of the chips removed back onto the Legacy board.

***Also available for new 184 board runs at 4/8 MHZ.**

$118.

REAL TIME CLOCK-This kit is most unique for those applications that require the data and/or time stamping of data on the KAYPRO computer systems. The Legacy real-time clock allows for setting and/or getting the date and time to the second. A nicad battery is used for power backup (to insure failsafe operation) and is charged while you use your KAYPRO. The kit is installed by simply removing the Z80 PIO (parallel I/0 chip), plugging in the real-time clock board and replacing the PIO chip back onto the Legacy piggy back board. Included in this kit are two different COM files (complete with commented ASM source files) to set or get the date and time as well as MBASIC and assembly routines so you can access the clock with your own software.

$118.

8088 16 BIT CO-PROCESSOR-The co-processor uses the Intel 8088 micro-processor with up to 256K of RAM thereby allowing IBM compatibility to nearly any Z80 CP/M microcomputer system. The product gets its name from the co-processor relationship between the 8088 and the host computer. The processor communicates in an interrupt driven mode. This method does not take up much of either processors time in the back and forth communication cycle. The co-processor runs faster than the IBM-PC because its' clock speed is faster (not being restricted by the PC bus transfer rate). The communication of the computers is done through a specialized port provided on a daughter board included with the kit. Power requirements are small at about 750 milliamps of + volts. The product is delivered with both MS-DOS and CP/M 86 operating systems, equipped with 128k RAM and is field upgradable to 256k as an optional feature. When the computer system is being used as an 8 bit Z80 based machine the memory of the 8088 co-processor board may be used as a semiconductor disk (RAM disk). Programs can be run, compiled and copied to or from the RAM disk using PIP.

$600.

EXTERNAL DRIVES C&D-This product allows the addition of two more drives to the KAYPRO computer system. These additional drives (designated C&D) must be of the same recording type and density as the existing drives (A&B). KAYPRO II computers require SSDD (single sided, double density) drives. KAYPRO 4 units use DSDD (double sided, double density). The Legacy KAYPLUS 400/800 upgrades allow 4 half height drives mounted internal to the chassis. **This kit consists of a single printed circuit board (drive multiplexer). BIOS EPROM, cables and illustrated instructions.** **$118.**

MULTI-FONTS VIDEO GRAPHICS BOARD-The standard KAYPRO II/4 computer system does not have any graphic attributes. This field installable hardware peripheral utilizes the standard KII/4 CRT screen and is designed around the powerful NEC 7220 graphic display controller. The graphics option comes complete with firmware for drawing line vectors, arcs, circles, rectangles and point markers as well as downline loadable character sets. Other standard features include routines for filling rectangles with a pattern, blanking the display either dark or light and complementing all or portions of the display. The multi-fonts board also has panning (ability to pinpoint any section of the screen) and zooming (1 to 16 times the normal size). **$612.**

DIAGNOSTIC DISKETTE-An array of programs to assist in the diagnosis of hardware related problems. Programs are provided for the complete testing of Memory, Serial port & related components, Parallel port output, Disk drive read operation. Additional programs are provided for assisting in the alignment of diskette drives as well as screen adjustment.

$41.

EXTERNAL VIDEO MONTIOR ADAPTER-Our video monitor adapter allows the attachment of from 1 to 16 external monitors (attached in series) to a KAYPRO computer system. The kits installation requires the insertion of a composite video jack through the cooling vents in the rear of the cabinet. The video adapter comes complete with a horizontal sync alignment potentiometer (in case the monitor does not have a horizontal adjustment mechanism). **$118.**

EPROM UPGRADE-Upgrades of both EPROMs (programmable read only memory.) as well as the Character generation PROM have been greatly enhanced. This upgrade removes most of the BIOS errors thereby reducing the possibilities of BDOS errors. The character generation ROM has a new character set with enhanced character definition. **$41.**

MULTI-FONTS VIDEO GRAPHICS BOARD This field installable hardware peripheral utilizes the standard KAYPRO CRT screen and is designed around the powerful NEC 7220 graphic display controller (Resolution of 512 x 256 bit mapped graphics). The graphics option comes complete with firmware for drawing line vectors, arcs, circles, rectangles and point markers as well as downline loadable character sets. Other standard features include routines for filling rectangles with a pattern, blanking the display either dark or light and complementing all or portions of the display. The multi-fonts board also has panning (ability to pinpoint any section of the screen) and zooming (1 to 16 times the normal size).

$612.

SURGE PROTECTORS

SS120/2 - Duplex receptical model with standard three prong plug. Simply plug this Panamax surge suppressor into a standard 120 volt wall outlet and plug the equipment you want protected into it. **$89.**

SS120/4LCS - Four receptical model, with convenient, illuminated, master ON/OFF switch, and 6 ft. line cord with standard three prong plug. This model provides you with the opportunity to protect multiple, separate computers and peripherals, with just one unit. **$107.**

SS120/16LCS - Six receptical model, with convenient, illuminated, master ON/OFF switch, and 6 ft. line cord with standard three prong plug. Simply plug this Panamax surge suppressor into a standard 120 volt outlet and plug the equipment to be protected into it. This model provides you with the opportunity to protect word processing centers and entire computer systems, all with just this one unit. **$119.**

TALISMAN - is a terminal translation program that enables your computer to function the same as any terminal. Fundamentally, Talisman performs two different functions. First, it lets you re-map your keyboard into any configuration. Therefore, a single keystroke can producte the effect of several keystrokes pressed in sequence (from two keystrokes to 256). You can pre-program special keyboard overlays and save them on disk, using the keyboard overlay editor; or you can perform such programming "ON THE FLY" while you're actually running an application (word processor, spreadsheet, etc.) without disturbing the work in progress. Next, Talisman allows the screen mapping of virtually any terminal for emulation purposes. For example, you may wish to select one of the over 55 different terminals already pre-defined or you may wish to utilize the built-in terminal identifier to create your own terminal definitions. Emulation is still active during the MSDOS/CPM86 simulation modes if you have an 8088 installed in your system. **$125.**

PRINTER BUFFER The Buffer is an internal auxiliary device designed to work with almost any KAYPRO Computer and Centronics-compatible parallel printer.

Most computers are able to send data to the printer at very high speeds—usually much faster than it can be printed. The Buffer receives print data sent at a high speed; holds it if necessary; then sends it to the printer at the printer's correct speed. Once a document to be printed has been sent to the Buffer, you and your computer are free to go back to work.

Besides saving valuable computer time, the Buffer has advanced features which allow you to continue sending new files to the Buffer while copies of another document are being printed.

The Buffer is easy to intall, simple to operate, and offers a wide range of flexibility through the use of its advanced features. **$249.**

The PROGRAMMER/4+-is an affordable computer-controlled EPROM programmer easy for anyone to use. Using an ordinary modem cable, it plugs onto the RS-232 (serial) port of the Kaypro (or other CP/M systems).

Menu-driven software makes it simple to read and program EPROMs to and from memory or disk. An EPROM's contents can be saved to disk and that diks file modified for programming custom EPROMs. Data can be displayed on the screen in hex and ASCII. EPROMs may be tested for erasure.

A direct interface menu is included for more experienced users. Fully commented source code is also on the disk. The detailed owner's manual includes complete schematics.

The Programmer/4+ reads and programs the five most common types of EPROMs: 2716 (2K), 2732 (4K), 2732A, 2764 (8K), and 27128 (16K). **$199.**

SCREEN SAVER-Many people leave their computers on all day or all night. Although your Kaypro will never get tired, displaying a page of text, spreadsheet, etc, for long periods of time it accelerates screen damage. The characters you see on the screen are formed by streams of electrons striking the phosphor coating on the inside of the picture tube, causing individual dots to glow. Bombarding the same dots for long periods of time will eventually wear out the phosphor at those points, giving you a burned-out striped-looking screen such as you might see on an old TV set. This easy to install (no soldering) upgrade automatically dims your Kaypro's screen after three minutes without keyboard input. Touching any key immediately restores the display. An adjustment on the screen saver allows you to choose the degree of dimness. **$118.**

BUILT-IN 0-300/1200 BAUD MODEM-This kit provides modulator, demodulator, filters, phone line connection, and TTL level interface to the KAYPRO computer system. It measures 4" by 5" and is easily incorporated into the computer system by mounting beneath the main board. The modem connects directly to the power supply of the KAYPRO thereby eliminating the need for any external power source. The connection to the public telephone network is via a standard RJ11 phone jack. The LEGACY modem is Hayes smartmodem compatible (Bell 103/212A). Auto-dial, auto-answer with automatic line speed detection (0-300/1200 baud) are all standard features. **$429.**

8 INCH DRIVE ADAPTOR-For those users who desire the ability of downline loading software from a standard 8 inch IBM formatted diskette. This unit attaches to the drive multiplexer and enables the attachment of a single 8 inch floppy diskette drive to a KAYPRO II/4 as drive C. Once enabled (software controlled) the user may PIP (or transfer using virtually any CP/M software) data between the 8 inch drive "C" and the normal 5¼ drives "A or B" **$240.**

About Legacy's Upgrade Kits

The LEGACY upgrade kits are not really kits in the proper sense of the word, (you don't get a bag of chips & resistors with some hand scribbled notes on how to build the unit). All of these field installable products are fully tested, professionally manufactured, printed circuit modules designed with exacting precision in accordance with the computer manufacturers' specifications. None of the kits require any drilling or modification to the exterior of the computer, as each products is housed within the computer's cabinet. None of the kits (or any kits in the combination) require the replacement of the standard power supply. Each kit is provided with a complete structured set of illustrated instructions detailing every procedure to be performed.

	KAYPRO II	KAYPRO 4	KAYPRO 10	2/84 BOARD	4/84 BOARD	10/84 BOARD	ROBIE	Future Technology
400KB UPGRADE KIT	●	●		●				
800KB UPGRADE KIT	●	●		●	●			
CPU HOP UP KIT (5MHZ)	●	●						
CPU HOP UP KIT (8MHZ)				●	●	●	●	
REAL-TIME CLOCK	●	●	●	●				
MULTI-FONTS GRAPHICS	●	●	●	●	●	●		
EXTERNAL VIDEO ADAPTOR	●	●	●	●	●	●	●	
SCREEN SAVER	●	●						
DRIVES C&D OPTION	●	●						
8088 CO-PROCESSOR	●	●	●	●	●	●		
1200 BAUD INTERNAL MODEM	●	●	●	●	●	●	●	
EPROM PROGRAMMER	●	●	●	●	●	●	●	
8" DRIVE ADAPTOR	●	●						
FANCY FONT TYPE SETTING	●	●	●	●	●	●	●	
DIAGNOSTIC DISKETTE	●	●	●	●	●	●		
EPROM UPGRADE KIT	●	●						
PADDED CARRYING CASE	●	●	●	●	●	●		
CANVAS DUST COVER	●	●	●	●	●	●		

FANCY FONT Say good-by to "correspondence quality" and hello to *Fancy Font* 's high-resolution, proportionally spaced, letter quality. The range of available fonts and the flexibility of modifying or creating new characters and fonts far exceeds that of the daisy wheel printers (no need to change daisy wheels or type balls!). All this on low cost printers such as Epson MX-80, RX-80 or FX-80.

Fancy Font extends the capability and usefulness of your dot matrix printer. You are no longer limited to a fixed set of characters. Instead you can use over 3000 characters in the Fancy Font package and furthermore, can create any characters you like.
With *Fancy Font*, you can use your favorite editor or word processing package to create a file to be printed. Include as few or as many formatting directives as you desire. Then use our printing program to print your file.

KAYPRO PADDED CARRYING CASE-This product is a fully padded carrying case cand comes in two models (with or without a shoulder strap). Its construction is of high grade canvas (backpack type) material and has a zipper pocket for transporting paper, cable and manuals **$55.**

LEGACY ORDER FORM

NAME _____
ADDRESS
CITY _____ STATE _____ ZIP _____
PHONE ( ) _____

KAYPRO II ☐ KAYPRO 4 ☐ KAYPRO 10 ☐ 2/84 BOARD ☐
4/84 BOARD ☐ 10/84 BOARD ☐ ROBIE ☐

CHECK ☐ MONEY ORDER ☐ COD ☐
VISA ☐ MASTERCARD ☐ AMEX ☐

Card Number _____ Exp _____

California Residents Add Sales Tax
Shipping and Handling Charge $4.50

Signature _____

QUANTITY	DESCRIPTION

LEGACY Computer Systems

SENT TO: Legacy Computer Systems
26356 Carmel Rancho Lane.
Carmel, CA 93923
(408) 625-6562

DEALER INQUIRIES ARE INVITED

Word Wrap in Basic

During my first real experience programming in BASIC I ran across a problem when using long strings. BASIC just chops off the string at the end of the line and continues the string on the next line without regard for words, spaces, hyphens or whatever. A diligent search among the many published books and articles on how to program in BASIC revealed no routine to solve this problem. Surely others must have found a solution to this common difficulty which must occur whenever BASIC prints or lprints a string that is longer than the right margin, but I could not find it.

What I needed was a word wrapping routine. My daughter works with computers so I consulted her. She suggested I write a routine to inspect the last character of each line (where the right margin occurred) to see if that character was a space or a letter. If the last character happened to be a space, then that portion of the string could be printed on the first line as is. If, however, the last character was a letter, then the routine should decrement one position and make another inspection looking for a space. When a space was found, that portion of the string (up to the space) could be printed and the remainder of the string reexamined as before at the position where the right margin occurred. This could be done until the entire string was printed on as many lines as it took within the confines of the right margin. In this way, any words occurring at the end of the line would be wrapped around to the next line.

The subroutine I wrote at her suggestion follows. The program to demonstrate its use was written using 80 columns, so it looks pretty chopped up when reduced to the present margin. I hope it can be of use to other BASIC programmers.

```
100 ' Program named WORDWRAP for demonstrating a subroutine for word wrapping.
110 ' — by Charles Cooley, 2317 Chelmsford Court, Alvin, TX 77511
120 ' Variables: A$, B$, & C$ = Long strings used to test the subroutine.
130 ' T% = The length of the string.
140 ' U% = The right margin in pico columns (must be less than V%)
150 ' V% = Largest number of letters allowed in last word of the
160 ' line before the word is just cut off at the margin and
170 ' the rest of the word brought around to the next line.
180 ' W$ = The string to be printed.
190 LET U% = 50
200 WIDTH U%
210 WIDTH LPRINT U%
220 LET A$ = "A$ is a long string. The subroutine is designed to PRINT this string so that all the words that do not fit on one line are 'wrapped' around to the next line— unless, of course, they are longer than the value of V%."
230 LET B$ = "B$ is another long string with unusually long spaces included to see if the subroutine will also drop all leading spaces at the start of each line."
240 LET C$ = "C$ uses long words & hyphens. A Superduperspecialsubroutine must handle longer-than-usual-words as well as words-tied-together-with-hyphens. Try different values of U% in line 190 and different upper limits of V% in line 310."

250 LET W$ = A$: GOSUB 300
260 LET W$ = B$: GOSUB 300
270 LET W$ = C$: GOSUB 300
280 END
290 ' WORD WRAP SUBROUTINE
300 IF LEN (W$) < U% THEN LET V% =0: GOTO 340
310 FOR V% = -1 TO 24: IF V% = 24 THEN LET V% =0: GOTO 340
320 IF MID$ (W$,U%-V%,1) = CHR$(32) OR MID$(W$,U%-V%,1) = CHR$(45) THEN GOTO 340
330 NEXT V%
340 IF LEFT$(W$,1) = CHR$(32) THEN T% = LEN (W$): W$ = RIGHT$(W$,T%-1): GOTO 300
350 IF LEN (LEFT$(W$, U%-V% > U% THEN PRINT LEFT$(W$,U%): GOTO 370
360 PRINT LEFT$(W$,U%-V%)
370 LET W$ = MID$(W$, U%-V% +1)
380 IF LEN(W$) =0 THEN GOTO 400
390 GOTO 300
400 RETURN
```

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Alvin, TX 77511
(713) 331-8042

Editing PW Files for Hyphenation

How often have you wanted to eliminate too much space between words when printing a document with right justification, or excessively ragged right lines when printing it without justification? Ordinary typewriter style would use hyphens to make long words fit better.

How often have you found pages with "widows" or "orphans" -- those single lines of print at the top or bottom of a page when a paragraph ends or a new one begins? The "newpage" command can solve that problem, but only if you know where to insert it.

Try changing the console's default settings to match your hard-copy printer. After inserting a disk with Pfconfig into drive B and calling it up, select option 2-- Define Printer Types. On the second menu, select option 3-- Update Existing Printer Definition.

My default console device definition called for a paper width of 20320 micas instead of the 21570 for typewriter paper. It also specified a default page length suitable for a 24-line screen. Changing option 1 to 21570 micas and option 2, paper height, to 27940 micas (11 inches) solved my problem by matching the default settings for other printers. This lets me use the console command as a way of getting quick previews of a document's layout before printing it. The command "control-S" lets me stop the scroll whenever I want, but the scrolling pages will pause long enough by themselves to let me see any widows or orphans in the output.

The Perfect Formatter Selection Menu option "D", however, can be even more useful. By setting the default parameters for the File printer type and formatting to File, you can create a formatted document and then use a split-screen to compare the manuscript text line-for-line with the final output. This is how to approach hyphenation and "newpage" decisions.

Select the Pfconfig option 2, followed by option 3 on the next menu, and request "File" as the one to modify. Again, the trick is to define paper width as 21570 micas and paper height as 27940 micas, even though your little 24-line screen can't view an entire page at one time.

You can use the new B:*.FIN file as a directly readable file, which you can call up from the Main Selection Menu with an "E" command. You can also edit it directly, in spite of the "FIN." suffix, but if you try to edit it and then format it for your printer, you will get funny results because the Perfect Writer style parameters will have been discarded. To start the split-screen editing, call up the file you formatted to the File device. Before calling up the new B:*.FIN file, however, you should rename it with the "R" command on the Main Selection Menu. Try the next step without renaming the file and you will get a funny result (because of the way buffers get their names in Perfect Writer), but you won't lose anything. The new name may include any suffix you choose.

After renaming your B:*.FIN file, call it up, split your screen with the "Control-X, 2" command and then call up the original B:*MSS file with "Control-X, Control-F."

There you have it--a copy of your raw manuscript and a copy of your finished output on the same screen. Move through them together and you can see the places in the output that call for a modification in the manuscript. You may have to go through the exercise twice to make sure one change hasn't dislocated something, requiring a second change; but that is a small price to pay for hands-on editing power over the final output. For the hyphenation process, you can judge the best places to insert hyphens to create tight copy if you temporarily insert a style parameter, "justification no," at the top of your manuscript. This can be deleted before final printing of the hardcopy.

Joe Cobb
325 Pennsylvania Ave., S.E.
Washington, D.C. 20003
(202) 226-7850

National KUG Disks

by Sergio Weber

DISK 109 (UTILITIES 2)

@: Online expression evaluator for CP/M's CCP. A calculator at the CP/M level. ALLOC: Pad out the CP/M allocation vector, allowing you to PIP to the end (last track or sector) of the disk). CPMFILE: Describes file and directory locations of 8 inch disks (77 tracks, 26 sectors). DISPLAY: View a document file page by page, without "TYPE" and "CTRL-S." ERAQ: Go through the whole directory of a disk with a query-driven prompt asking whether you wish to erase each file. FIND: Finds mistakes in many .ASM files. INCPM: Gives information on undocumented CP/M commands. LASM: Update to LINK.ASM. A CP/M assembler. LOOK: Allows you to look for particular bytes in memory (2-9 bytes) and displays the address of each. PRIMR1 and PRIMR2: Overview of data communication (modem) technology. Q: Dumps memory from 00 to FF, so the user can see File Control Blocks (FCB's). RESOURCE: Disassembler for 8080 programs. SCRAMBLE: "Scramble" your files so that no one can read them without an 8-character password. SGEN: Gives you three (or more) system tracks in CP/M. SORTV: Sort program for variable-length record (list) files. SYNC-ERR: Sysgen CP/M 2.2 onto CP/M 1.4 systems, bypassing the "SYNCRONIZATION ERROR" message. UNLOAD: Allows a .COM file to be transformed into a hex file for subsequent data transmission. UNSPOL32: A version of "UNSPOOL ver. 3.2" which sends a standard CP/M file to the printer while still allowing all other system functions.

DISK 116
(MULTI-FORMAT DISK FOR KAYPRO II)

MFDISK2: Read and write disks for other computers (CP/M systems ONLY):
KAYPRO, Single Density & Double Density
OSBORNE I, Single Density & D/D
XEROX 820, Single Density & D/D
TRS-80, Single Density
TRS-80, MODEL III
IBM PC, Double Density
TI PROFESSIONAL, Double Density
MORROW MICRO DECISIONS, (MD2)
ZENITH Z-10, Double Density
NEC PC-8001a

DISK 117
(MULTI-FORMAT DISK FOR KAYPRO 4)

MFDISK4: Supports machines listed above as well as those with double sided disks.

DISK 118
(MULTIFORMAT DISK FOR KAYPRO 10)

MFDISK10: UNIFORM program using inverse video. Supports machines listed as well as machines with double sided disks.

DISK 119
(CONCENTRATION & 18 MBASIC GAMES)

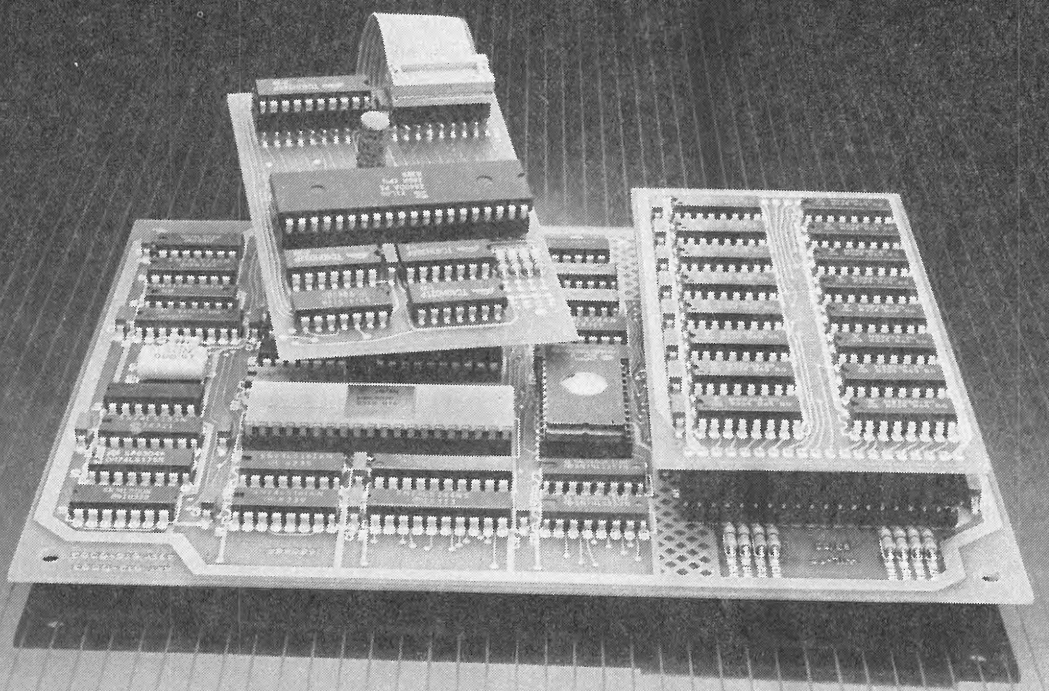
YOU WILL NEED MBASIC IN ORDER TO RUN THESE GAMES. IT IS BEST IF YOU SPLIT THE FILES ON THIS DISK ONTO TWO DISKS WITH A COPY OF MBASIC ON EACH. BE SURE THAT OIL.BAS AND OIL.INS ARE ON THE SAME DISK. RUN THE PROGRAMS BY TYPING: A>MBASIC <FILENAME> <CR> [DO NOT TYPE THE EXTENSION.] CHECKERS: Enter coordinates and play against the computer. CIVIL WAR: You apportion food, ammunition, salaries, strategies and are compared with actual battle outcomes. CONCEN: Concentration for two players. DODGEM: For one or two players. Race across a grid, blocking your opponent. DUCK: Graphics-oriented shoot-em game. GOBANG: Oriental board strategy game, a mixture of tic-tac-toe and Othello. KIDNAP: Adventure game. LSTGOLD: Adventure game. Automatically gives you a printout of instructions and tips. MILLION: Accumulate riches. OIL: Money-managing game of an oil business. POKER: For one or two players. QUEST: Adventure game. RALLY: 5-mile car race. STONEVIL: Search a millionaire's estate for his fortune. SWORDS: Rescue the princess from an evil lord's dungeon. TANK: Grid game. USOPEN: Graphics-oriented golf game. WALL-ST: Stock-buying game.

DISK 120 (HP CALCULATOR + MISC)

CALC: Turns your monitor into a fully functioning Hewlett-Packard Calculator. It enters and saves specific arithmetic functions. into a disk file; the memory registers operate as a calculation is carried out. CLNDR: Creates a calendar for any year, or for any month in that year, and prints it out.

* * *

MS-DOS, CP/M and RAM Drive For Your CP/M Computer



Now you can dramatically expand the software cabapilities of your CP/M computer with CO-POWER-88 from SWP Microcomputer Products.

Introducing CO-POWER-88, the powerful 16-bit, 8088 co-processor that upgrades your Z-80, CP/M computer to run both MS-DOS and CP/M-86. What's more, MS-DOS on the CO-POWER-88 is format and data compatible with the IBM-PC.

Available in 2 RAM sizes, 128k and 256k, the CO-POWER-88 runs at a quick 5.33 MHz. It gets its power from your computer's power supply and uses a maximum of just 750 mils at +5 volts.

Installation is simple.

When you order your CO-POWER-88, you'll receive two circuit boards: the Z-80 adapter board and the main processor board. You'll also receive a complete owner's manual and easy-to-follow installation instructions.

When your package arrives at your door, the world of 16-bit processing is just minutes away.

CO-POWER-88 does not replace your Z-80, so you can still run CP/M.

Imagine the versatility, compatability and power that CO-POWER-88 gives you, allowing for both CP/M and MS-DOS, IBM-PC compatibility processing.

And, as an added feature, CO-POWER-88's RAM can be used as a high-speed simulated disk drive when processing under CP/M.

How IBM-PC compatible is the CO-POWER-88?

Most MS-DOS, IBM-PC software will run under the CO-POWER-88. To inquire about a specific program, call or write us.

Contact your local SWP dealer, or order direct by mail.

If you own a Kaypro, Morrow, Zorba, Actrix, Osborne, Bigboard, Xerox 820, or SWP ATR8000, then CO-POWER-88 is for you! Contact your local SWP dealer, or use the convenient mail order coupon below. Better yet, for fastest delivery, use your credit card and shop by phone.

Credit Card Orders Save Time!
Call 817-469-1181 or 817-861-0421 And Order Now
Department KU/04
Or Mail Coupon to: SWP, 2500 E. Randol Mill Rd., Suite 125, Arlington, TX 76011

Please ship the following:
☐ 128k CO-POWER-88 with MS-DOS @ $400.00 + $10.00 shipping.
☐ 256k CO-POWER-88 with MS-DOS @ $500.00 + $10.00 shipping.
☐ CP/M-86 (16-Bit Disk Operating System) @ $60.00 + $5.00 shipping.
Configurations: (check one) 5 1/4" drive ____ or 8" drive ____
Brand of Computer _____
☐ I want to learn more about the CO-POWER-88. Enclosed is $1.00 (no checks please) for more literature, including a comprehensive listing of MS-DOS and CP/M-86 software that runs on the CO-POWER-88.

Method of payment:
☐ Personal Check enclosed (must clear bank before shipping)
☐ Certified Check or Money Order enclosed.
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BASIC TUTOR - A Review

BASIC TUTOR, a twenty-lesson course in Microsoft Basic programming, is available in a format for the Kaypro computer. It is obtainable from Logistics Software, Inc. P,O. Box 2423, Warminster, PA 18974.

The course consists of one disk with brief instructions. The disk supplied does not contain.MBASIC.COM, which must be PIPed on to it in order to run the program.

The lessons begin with a discussion of program symbols and equations and proceed to an examination of Input and Output, Read Data statements, DIM, subscripts, loops, functions, subroutines, and direct commands. Interspersed are frequent reviews and exams to test the student's progress and knowledge. The documentation suggests that one should master each lesson in fifteen to thirty minutes. A more realistic view, except for two or three of the lessons, would be from five to fifteen minutes. Some knowledge of arithmetic and algebra is assumed.

BASIC TUTOR covers fairly well the elementary details of MBASIC programming and as an introduction to the subject should be of benefit to those who work through it, but it is not likely that the average person will become an experienced and competent programmer from having completed this course alone. If it serves to prompt further study of the subject, it may serve its purpose and be worth the effort involved.

Guy N. Woods
P.O. Box 150
Nashville, TN 37202

Kaypro News

At COMDEX in Atlanta, KAYPRO introduced a Kaypro Letter Quality Printer. The suggested list price is $595.00. The printer looked like a Juki with the Kaypro logo. It was configured for the Kaypro and ran well.

The KAYPRO 2X, also mentioned but not shown, is the same as the new KAYPRO 2 but has double sided/double density drives and will sell for $1,595.00. The bundled software is the same as for the new KAYPRO 2.

PW Extensions

I've gained so much from all the KUGGERs who've shared their experiences with me over the last year that I want to give back a little.

After reading the Perfect Writer manual, I was left with the impression that, for a file to work properly, it was imperative that the filename have the ".mss" extension. Nay, nay! I've learned that more descriptive filename extensions (".ltr" for letters, ".doc" for document, ".txt" for text, ".dat" for data, etc.) can be edited, formatted, and printed just fine, provided you understand how Perfect Writer looks at the ".mss" extension. When you get ready to format a file, Perfect Formatter asks for the "name of file to format." Perfect Formatter will presume an ".mss" filename extension ONLY IF YOU DON'T TYPE AN EXTENSION. For example, if the name of the file you want to format is "chapter1.mss," you can simply type "chapter1" when asked for name of file to format, and the program assumes the ".mss" extension for you. However, if you decided to name your file more descriptively, such as "chapter1.txt," and you type in only "chapter1," the program will search in vain for the file "chapter1.mss" and won't be able to find it. Solution? Easy! When asked for name of file to format, just type in the complete filename WITH EXTENSION, (e.g. "chapter1.txt"), and Perfect Formatter will handle it "perfectly."

The only limitation to this is that, regardless of the extension on the text filename, the formatted output file will always have the ".fin" extension. Therefore, if you have two documents with the same name but different extensions (e.g. "chapter1.mss" and "chapter1.rpt"), both output files would be named "chapter1.fin"; but since two files cannot exist on the same disk with the same name, the second file you format will overwrite and destroy the first. Even this can be handled, however, if you select the option "name the output file differently" from the Perfect Formatter menu.

Larry Roberts
710 Park Ridge Circle
Marietta, GA 30067

"POKE" the Printer On

If you have written an MBASIC program and want to see it in hard copy without the necessity of putting "LPRINT" in each line, there is a way. Depending upon which version of MBASIC you have, all one needs to do is insert a "POKE" statement at the beginning of the program with a statement that asks whether or not you want hard copy of what was going to the screen:

If your MBASIC starts with all the program information on one line use the following:

POKE 16824,72 - turns printer on
or
POKE 16824,47 - turns screen on

If your MBASIC starts with all the program information on two lines, use the following:

POKE 16824,62 - turns printer on
or
POKE 16824,33 - turns screen on

Now when you "run" the program, if your printer is hooked up, what you see on the screen will also print as hard copy.

PROGRAM EXAMPLE

```
10 REM SENDS OUTPUT TO PRINTER
15 PRINT "DO YOU WANT HARDCOPY OF
     SCREEN?"
20 PRINT:INPUT;K$:PRINT
25 IF K$="Y" THEN POKE 16824,xx
30 IF K$="N" THEN GOTO xxx (program
     start line)
```

Play around with the above and see what you need to get it to work on your version of MBASIC. Also, you can get MBASIC to send to both screen and printer by using both POKE statements.

(Thanks to the Tallahassee KUG Newsletter for the above info.)

* * *

TIME to RENEW ?

More from SELECT

Select Information Systems is providing registered owners of the Kaypro version of Select: The Word Processor an opportunity to purchase the new version at a reduced rate. Select has agreed to do this to eliminate some of the problems you may have had getting support on the old version you bought with your Kaypro.

Select: The Word Processor retails for $295 and includes Teach, Merge/Print, and SuperSpell. It also incorporates 28 major enhancements, including the ability to create Wang-like glossary files, tabs and decimal tabs, overstrike, and (finally) the ability to move your cursor while in insert.

Select's offer to Kaypro User Group members is an opportunity to purchase the product (including SPELL) direct for a price of $100. The only requirement is that you send in your old Kaypro master disk to prove your prior ownership.

What you get for your $100 is:

1) A complete new 3.0 package including SPELL and new documentation.

2) A new registration card and serial number for new ownership.

3) Direct telephone support from Select once you've sent in the new registration.

If you're interested, Select suggests you send in your check and Master disk, or write for details to:

Select Information Systems
919 Sir Francis Drake Blvd.
Kentfield, CA 94904

ATTN: Liz/Kaypro Inquiries

This is a limited time offer good through August 15, 1984.

KUG will discontinue offering the Select updates since the cost of the disks plus the Select manual is almost the price of the "supported" Select from the company.

* * *

Library

#101 (Games) PAC-MAN & CHESS
#102 (Games) ELIZA & GOLF + Misc.
#103 (Modem) MODEM 795 for Tel. Comm.
#104 (Helps) HELP CP/M, MBASIC + Others
#105 (Utilities 1)
#106 (Games) ADVENTURE
#107 (Statistical) STATISTICS
#108 (Games) MBASIC MYSTERY
#109 (Utilities 2)
#110 (Pictures) POSTER PRINTOUTS
#111 (Graphics) KAYPRO 10 GRAPHICS
#112 (Helps 2) HELP PERFECT, SBASIC, Etc.
#113 (Business) SBASIC & MBASIC PGRMS
#114 (Directory) "LITTLE BLACK BOOK"
#115 (Games) STARTREK + 15 MBASIC GAMES
#116 MULTI-FORMAT DISK FOR KAYPRO II
#117 MULTI-FORMAT DISK FOR KAYPRO 4
#118 MULTI-FORMAT DISK FOR KAYPRO 10
(Multi-Format Disks run on CP/M only.)
#119 CONCENTRATION + 18 MBASIC GAMES
#120 HP CALCULATOR + MISC.
* #121 STANDARD FORTH
* #122 SOURCE FOR STANDARD FORTH

* New contributions

REMEMBER, we will send you a disk from our library for any contribution ON DISK to our library or to the KUGRAM.

If you would like to receive any of the above, send $10.00 (for each) to KUG LIBRARY at Box 100, Malverne, NY 11565. DO NOT SEND US ANY DISKS. Be sure to mention the disk name, number, your mailing address and I.D. number.

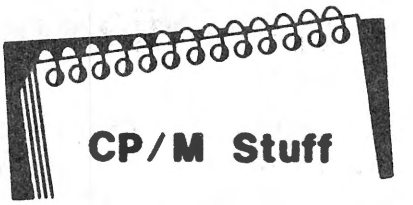
NOTICE

It's time for some KUGGERS to renew their membership. If your KUGRAM label has RENEW printed on it, your membership will expire after the next issue.

The renewal rate is $15.00 U.S.A ... $20.00 CANADA (U.S.Funds) and should be mailed to KUG RENEWAL, Box 100, Malverne, NY 11565.

******* I M P O R T A N T *******

Please write your ID# on the face of the check. The number on the KUGRAM label is your ID number.



One of the CP/M files that we use very often is the STAT.COM program. We use it as STAT *.* to see how much space each file on the disk takes. We use STAT to check the amount of space we have left on the disk. Now we're going to see much more from STAT.COM.

Place your CP/M disk in drive A and "warm boot" (ctrl C). Type STAT FAC.BAS. Notice that along with the amount of K space taken is also a R/W symbol. This means that the file FAC.BAS can be read or written to and can be ERAsed. Wouldn't it be nice if we could protect a file so that it could not be accidentally ERAsed? O.K. Let's do it.

At the A> type STAT FAC.BAS $R/O. Notice that the CRT gives you a message telling what has happened. Now type STAT FAC.BAS and you will see that the R/W symbol has been changed to R/O. Again at the A> type ERA FAC.BAS. (Don't worry, the CRT will give you one of CP/M's famous BDOS messages.) When you want to ERAse the R/O file, just type STAT FAC.BAS $R/W and then it can be ERAsed. Try STAT *.* $R/O and then do STAT *.* $R/W. Interesting!

Another of STAT.COM's fine achievements will allow you to remove a file from the DIRectory. Type STAT FAC.BAS $SYS and then call for a DIR. FAC.BAS seems to be missing. You can still run the program, but it cannot be PIPed or copied (unless you use the [R] parameter). This is great for keeping strangers away from your favorite programs. Just remember what they are, since they will not appear in the DIRectory. If you want them back in the DIRectory so that they can be PIPed, just type STAT FAC.BAS $DIR.

When using the $R/O, $R/W, $SYS, or $DIR, all the "wild cards" can be used.

STAT.COM has many more features that we will discuss in the next issue.

* * *

WORDSTAR by Chiang

FILE HANDLING WITH WORDSTAR

To call up a file that you already have on disk, you can do one of two things, as with Perfect Writer. You may type: WS <filename> <cr> when in CP/M, which will call up Wordstar and automatically give you the file you requested (creating an empty one if the file is new). Or you can enter Wordstar with just: WS <cr>. At the no-file menu, enter option D, and type in the filename you want. (No default name is supplied in Wordstar.)

Wordstar has three methods for saving files. You can see them on the CTRL-K menu, if you have a high level of help on-screen. They are as follows:

CTRL-K --- D : Save file, Done editing.
CTRL-K --- S : Save file, Resume editing.
CTRL-K --- X : Save file, eXit to system.

First of all, CTRL-K --- D. After you've edited the file to your satisfaction, this command will save the file on disk and return you to the no-file menu. From there, you can choose to work on another file, begin printing, or something else. This is a very commonly used command when you have several files to work with.

CTRL-K --- S corresponds to the Save File command in Perfect Writer. This will save the file, but the file will remain, for you to continue writing or editing. This will come in handy if you're working on a long file; you can put what you've already done on disk, so that in case of an accident you've saved your previous work on the file. However, an inconvenience of this command is that after saving, the cursor is put at the beginning of the file, instead of leaving you at your previous position. CTRL-Q --- P will bring you back, though.

CTRL-K --- X will save your file and then put you back in the operating system, CP/M. If you've completed work on your file and have no other tasks to perform in Wordstar, you'll use this command. (Of course, you could save and go to the no-file menu, and exit from there, but this is the same thing in one step.)

Now, what about the way Wordstar saves your files on disk? A very nice safety feature of Wordstar is incorporated into any kind of save procedure, this being the BACK-UP file. If you have just finished your latest revisions, you'll want it on disk instead of the old version. Wordstar will not overwrite the original on disk, however. It will create a backup file; the previous version will be stored under <filename.BAK>, while your latest version will simply be called <filename>. It will continually do this, everytime you save a new version of your file; you'll always have two files, the last version and the second to last.

Why does it do this? In case you had a brief moment of insanity, and changed an important file to hash; now you can come back later, and the unchanged version will still be there. You can't edit a file with the .BAK extension, for safety; you must rename it, and then work on it. Very handy, because it can keep you from making really big mistakes. Or, you may want to use it in a manner like the Write File command in Perfect Writer, where you can save the file you're working on under a different name. With Wordstar's backup, you can use the old version (after removing the .BAK) and give the new version a different name.

A drawback of this backup feature is that it takes up quite a bit of disk space; sometimes almost reducing available space to half. You can delete the backups if you don't feel you need them, but every time you work on one of your files, a backup reappears. One solution is to give all your files identical first names, differing only in their extensions (e.g. CHAPTER.1, CHAPTER.2, CHAPTER.3, etc.). This would produce only one backup file (CHAPTER.BAK), instead of a whole series of them.

Finally, one thing worth mention is CTRL-K --- Q, which is the Quit editing and abandon file command. It corresponds to the QUIT command in Perfect Writer. If the file you are working on hasn't been changed, then it will disappear and you'll be back at the no-file menu. If you have done some editing, it will ask you whether you really want to abandon your edited version, giving you the option of retaining it.

Best of KUGBB

FROM RICH BRUSKI ON KBB

The config program on the new 4-84 is a bit more versatile than the config program on the older model. It is possible to reconfigure the numeric keypad with up to four control characters. For example, in Wordstar ^PSQP will save your work and return you to your place in the document. Call up the config program, type "N" for the numeric keypad reconfig, type "4" for the number of characters to replace and enter a ^P,^S,^Q,^P. Make sure you save the reconfigured keypad to the Wordstar disk. A single keystroke will then save your work and return you to your place in the document. The config program also works for commands in dBASE, which accepts four-letter commands (edit, brow for browse, etc.) You can assign a four-letter word to any of the keys on the numeric keypad. Works great.

FROM RON ROCK ON KUGBB

To clear the screen and home the cursor when in CP/M just enter Ctrl-Z, ESCape, and <cr>.

FROM BILL PIERCE ON KUGBB

If you need to send a null string [chr(0)] to your printer via SBASIC, you need to insert the following little routine near the beginning of your program:

```
function pntchr (ch,chan=char)=char
var null=integer
based wboot=integer
null=0
base wboot at 1
if ch=0 then call (wboot+09H+chan*03H,
null,null,null,null)
end=ch
```

Then any time you would use chr(0), use pntchr(0,1) instead.

Patch Wordstar v. 3.3 (even though winstall with v.3.3 doesn't allow patching) by entering a plus sign (+) in response to the first menu. It's amazing how many undocumented functions of Wordstar there are.

Vendors

HOMETAX INCOME TAX PREPARATION SYSTEM
from
Learning Source, Inc.
17791 Fitch Street
Irvine, CA 92714

GRAPHICS PROGRAM FOR KAYPRO II AND 4
from
Research Service
Springfield Road
Charlestown, NH 03603

USED RIBBONS RE-INKED
from
Marlborough
93 34 Street
Brooklyn, NY 11232

FLOPPY DISKETTE ORGANIZER
from
The Disk Tree Company
404 Liberty Lane
Westerville, OH 43081

INTERNAL MODEMS FOR THE KAYPRO
from
Datasolvers, Inc.
509 South Fern
Wichita, KS 67213

SOFTWARE FOR THE KAYPRO
from
Overbeek Enterprises
P.O. Box 726
Elgin, IL 60120

INDEXED FILE SYSTEM FOR USE WITH MBASIC
from
Computer Professionals, Inc.
11 Regency Hills Drive, Suite 200
Greenville, SC 29607

PUBLIC DOMAIN SOFTWARE FOR KAYPRO II
from
CPMUG - The CP/M Users Group
1651 Third Avenue
New York, NY 10028

**

The VENDOR column is not advertising. We will list as many vendors as space allows. These listings in no way represent our endorsement.

In Response ...

... For information on matching your Kaypro II to the Okidata Microline or Pacemark printer write to: Okidata Corp., 111 Gaither Drive, Mount Laurel, NJ 08054. Ask for "User Tip #3097." This is a 33 page booklet on "How to use Perfect Writer with your Okidata printer." (Thanks to George Parker of Surfside, SC)

... The Multi-format disks will not run on MS DOS. If you are using the TRS-80 or the IBM PC, it must have the CP/M operating system available.

... Although Kaypro Corp. is no longer bundling the Perfect Software package, we will continue offering Perfect helps and tips through the KUGRAM. Additional information regarding the new Micropro software will also be available through the KUGRAM.

... Descriptions of the KUG Library disks will be available for any member that will send us a self-addressed stamped envelope. Please send your request to: KUG DISKS at Box 100 Malverne, NY 11565.

... The entire 1983 edition of the KUGRAM plus the Index and KUGRAM Binder is available for $25.00 shipped prepaid.

... A new and almost complete software catalog for the Kaypro Computer is available from your dealer. If he does not have it, check with Kaypro Corp.

... The CompuServe kit that is available from KUG ($35.00) comes with five hours of free connect time.

... The READ.ME file in KUG disk #110 (Posters) contains an error. It reads "Type UN TWEETY." it should say "Type UN TWEETY.PQC." Also on KUG Disk #115: To get hardcopy (on printer) of BANNER, or any other MBASIC file, use your word processor to change PRINT statements to LPRINT.

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S-BASIC TUTORIAL

Approximately 140 pages, including index, of letter size sheets for 3-ring binder covering the aspects of S-Basic Programming. (with references to M-Basic)

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To many of you the words "Public Domain Software" may sound like inexplicable buzzwords. But, in its simplest form, Public Domain means: FREE SOFTWARE for work and pleasure. Public Domain has become a catch-phrase for a variety of programs, helpful information, games, and even pictures which have been donated to the public by their authors. Programs which have been placed into the Public Domain may be copied, distributed, and used by anyone; but remember that software can only enter the Public Domain through an act of free will on the part of the author. Copying programs which don't meet this acid test is a violation of copyright law, and is referred to in the computer community as "piracy."

Of course since no one gets paid for writing P.D. software, many authors don't take time to debug and document their work before sharing it with the world. The result is that relatively few P.D. programs prove both useful and usable!

How does one locate the free programs that are worthwhile? Your user group, other owners, and your dealer are the best sources. Of course, it also helps if you're a bit inquisitive and have plenty of time and money to devote to the search. There are dozens of gems on the P.D. landscape. The trick is in finding them. It was this aspect of P.D. which inspired our new Free Software Handbook.

If you own a modem (and know how to use it), you can collect P.D. programs through telephone visits to Remote CP/M (RCP/M) systems scattered around the country. RCP/Ms are operated by their owners on a non-profit basis and are dedicated to distributing free software. Recently, some RCP/Ms have converted to a "members only" approach -- to help defer operating costs. However, the membership fees can be quickly recovered through the acquisition of one or two good programs.

Like many KAYPRO users, those of us at PeopleTalk were often frustrated by the lack of understandable documentation for the free programs we acquired. More than once we felt the benefits gained from a program weren't worth the time we'd put into it. We found ourselves wishing someone would mark a path through the P.D. jungle for us by writing a plain English guide to the best free software. Last December we decided to blaze a path of our own. The Free Software Handbook is the result. In researching the book we evaluated nearly 1,000 programs, but only the top 70 made the "final cut."

The most sought after types of P.D. software can be divided into two major categories: games and utilities. Games are fun; utilities are useful.

It's amazing how many high quality games are available in P.D. land! Whether you want entertainment for the kids or a challenge for yourself, you'll be pleased at the number of free games available. We've included the top 16 in the book.

Many Kaypro users have discovered that P.D. utilities can be tremendous work savers. Utilities are those wonderful little programs which help simplify your computing life. Your Kaypro came with utilities to copy and format disks, copy files, and check the space on a disk. But there's no way they can satisfy the needs of every user.

Many P.D. utilities were inspired by their CP/M counterparts. Often the free versions are so much better, or so much more versatile, that they make the originals obsolete. Some of them are so useful that no disk should be without them. Actually, the most difficult part of writing The Free Software Handbook was deciding which ones to document. We hope you'll be pleased with the 54 we chose.

Believe it or not, some of the finest upgrades available for your Kaypro are free! If you haven't yet discovered the wealth of P.D. land, take time to do so! We're betting you'll be glad you did...

The Free Software Handbook and the programs it covers are distributed through KAYPRO retailers.

The BACKGROUNDER

a review by Dottie Day

PluPerfect Systems' PPW K-1 disk with CP/M 2.2E enhancements was given a rave review in the Vol. 1 #4 issue of KUGRAM. Now the new PluPerfect Systems "Backgrounder" (their K-2 disk), the much-improved version of "Keypad/Helper," is finally out. Having worked extensively with both versions, I'm solidly impressed with what the new disk gives you, not only for the money, but in absolute terms. It has the capability of attaching any lengthy string (text or a series of commands, instructions sent directly to the printer, or execution of "CP/M" programs) not only to the keypad keys, but also to any keyboard key, upper or lower case, when preceded by a user-defined "alt" key (\ is provided with the program, but may be redefined). This puts almost unlimited power in your hands for the manipulation of any program. A set of such definitions can be constructed while in a user program, saved in a 1k file, and loaded when desired. Multiple "user definition" files can reside on a disk, to be loaded as needed or copied to another program disk. A BGCONFIG program can attach a particular set of definitions to a ".COM" file to be loaded with that program.

The "backgrounder" feature allows you to exit to "background CP/M" (with its own separate set of definitions--double your fun!) and execute any of the resident CP/M programs (i.e. ERA, REN, TYPE, SAVE, DIR, LOG) or several PPW utilities, without actually leaving what you're doing--sort of like sticking your head out the back door to call to a neighbor without leaving what's on the stove unattended. One of the most useful of these (an extension of the PPW "warm boot" feature on the K-1 disk) is a "hot boot" to allow you to change disks to read or write files on a different disk without getting horrid BDOS errors.

Another nice feature is the NOTEPAD program which allows you to call up a "notepad" file to consult or add notes to. In WordStar, this effectively gives you an extra buffer. (Any file could be temporarily renamed "notepad" for this purpose.)

The SNAPSHOT program is a handy screen dump to send to the printer whatever appears on a particular screen (a great way to get those printer configurations into hard copy!). Or, if you're fussy about how much goes to the printer, you can define a "macro" which marks a region, writes it to a file (along with printer instructions of your choosing), exits to "background" and TYPEs out the file and ERAses the file--a print region macro to be attached to a single key!

CPMCONFG from the K-1 enhanced CP/M2.2E allowed you to set your cold boot commands (what to execute following a cold boot); now BGCONFIG allows you to specify a second command to be executed after the first one. It also allows you to display and print out (using SNAPSHOT) any of your definition sets on any disk. The list of features is endless...

The manual itself, much rewritten and improved (KEYPAD owners take heart!) has invaluable tips, such as how to live without the menu (all 22k of it) in Perfect Writer. If you've used SWPCONFG to set up a larger swap file, you need the extra space. Or you may just want other goodies on your program disks. The necessary command-line comments for formatting and printing with non-default settings are here revealed.

Finally, as on the K-1 disk, a number of very useful public domain programs is provided as a "public service." An improved EX14 replaces the CP/M SUBMIT feature, and MODEM 9 (a new generation of the MODEM 7 family) runs beautifully with BG features supporting it.

Like the K-1 disk, the K-2 Backgrounder is a "must" for all Kaypro owners. It's available now for the Kaypro II and 4; I understand that if Kaypro ever settles on one version of the 10, a single BG version for the 10 will follow immediately!

What will PluPerfect Systems come up with next?

Both the K-1 and the K-2 disks can be ordered directly from:

PluPerfect Systems
Box 1494
Idyllwild, CA 92349

Chapter News

KAYMKUG
Contact: Doug Stevenson
2157 North Seminary
Chicago, IL 60614

AZKUG
Contact: Michael Rogers
5158 E. Tunder Dr.
Phoenix, AZ 85044

YAVAKUG
Contact: Julie Woodman
P.O. Box 68
Kirkland, AZ 86332

FULLKUG
Contact: Bill Walls
3241 Topaz Lane
Fullerton, CA 92631

SOBAYKSIG
Contact: Bob George
546 Douglas St.
Chula Vista, CA 92010

BAKUP
Contact: Gary Lippman
P.O. Box 20181
Oakland, CA 94620

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