

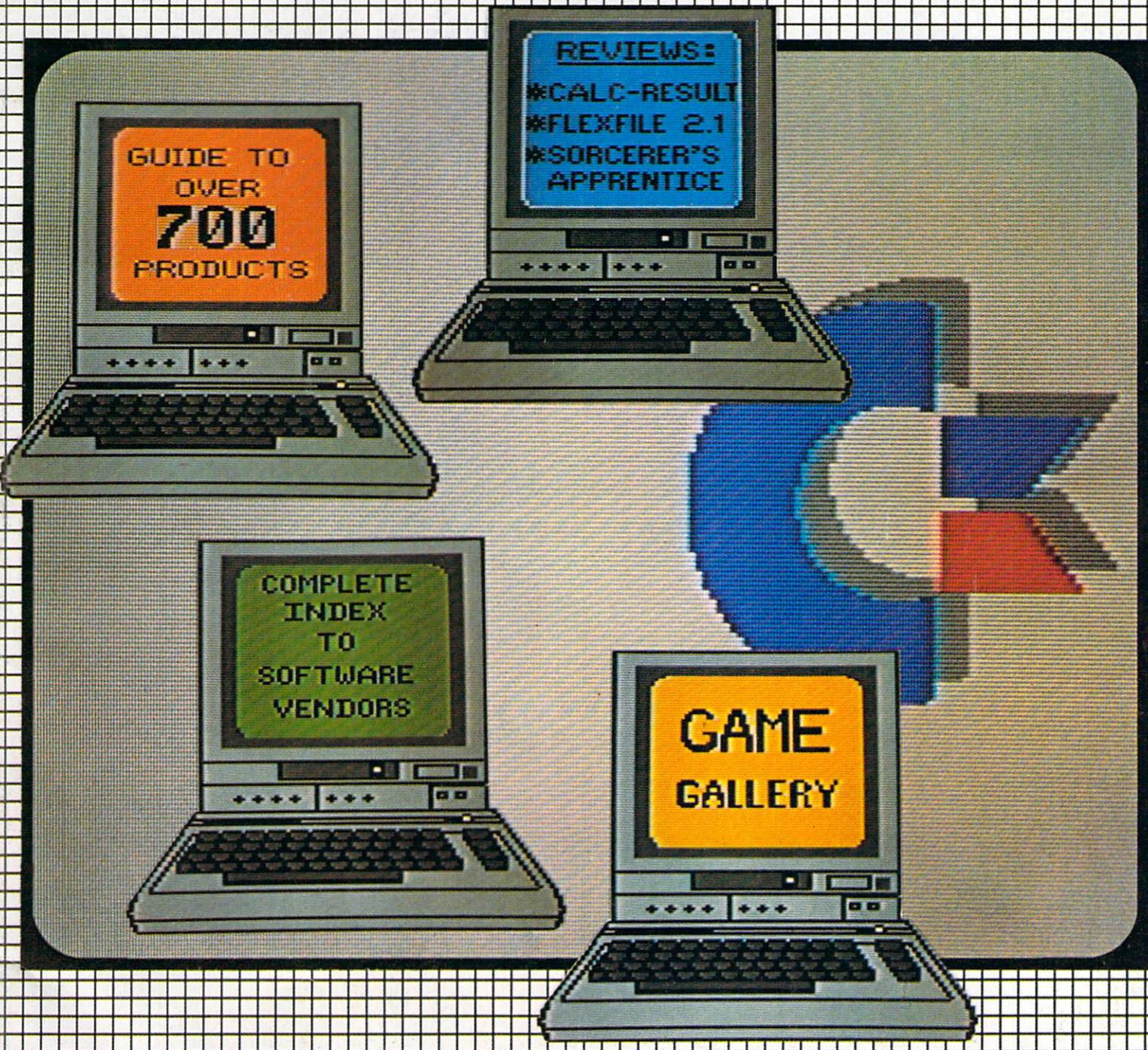
INFO 84

FALL 1983

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QUARTERLY REVIEW & PRODUCT GUIDE for the COMMODORE 64



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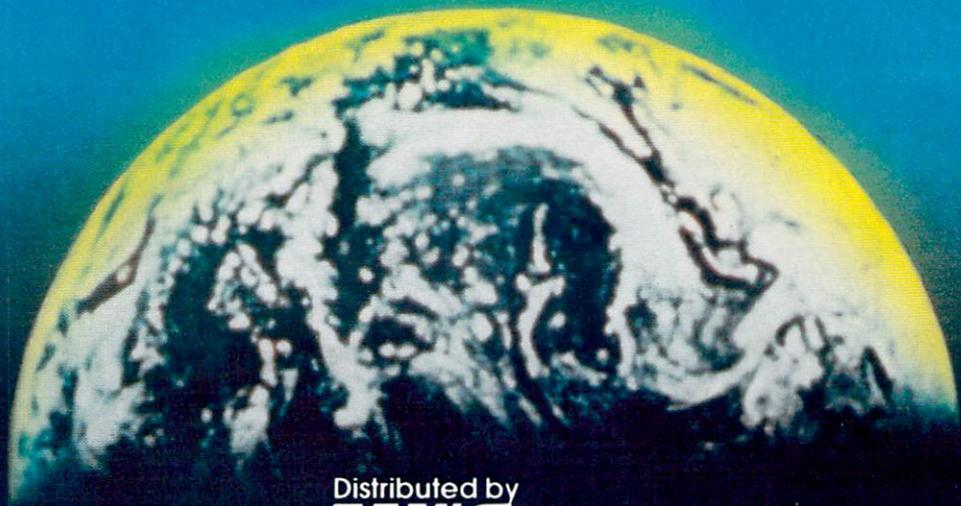
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Commodore 64

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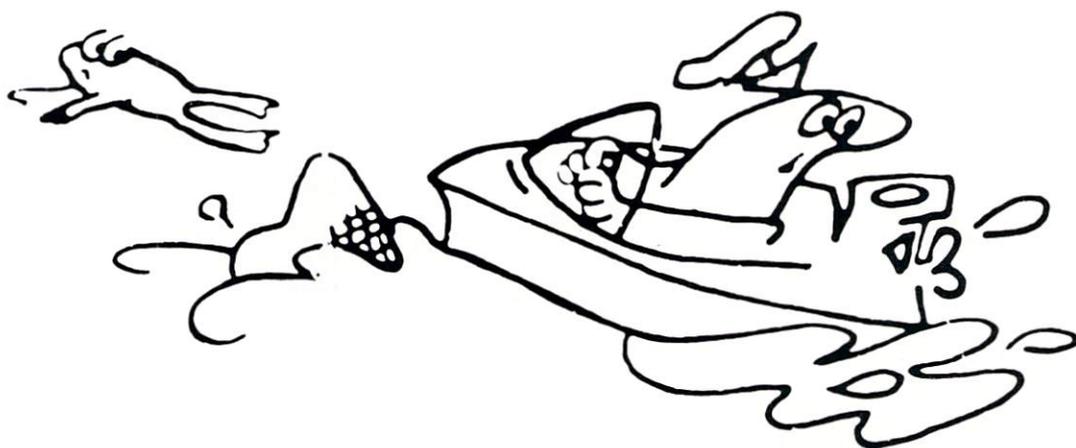
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WE WILL PUBLISH LETTERS WE FEEL ARE OF
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DUE TO OUR SMALL STAFF, WE CAN NOT ANSWER
READERS' CALLS. ALL LETTERS WILL BE READ,
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PET, CBM, VIC-20, AND COMMODORE 64 ARE
TRADEMARKS OF COMMODORE BUSINESS MACHINES

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WELCOME TO THE PREMIERE ISSUE OF INFO-64! WE ARE PLEASED TO BE A PART OF YOUR COMPUTING EXPERIENCE, AND HOPE YOU WILL FIND THIS AND EVERY ISSUE OF INFO-64 TO BE AN ENHANCEMENT TO YOUR UNDERSTANDING AND ENJOYMENT OF YOUR COMMODORE 64 COMPUTER.

COMMODORE 64'S AND 64-COMPATIBLE PRODUCTS ARE USED EXCLUSIVELY AND EXTENSIVELY IN THE PRODUCTION AND MANAGEMENT OF INFO-64. WE WOULDN'T HAVE IT ANY OTHER WAY. WE FEEL THAT USING THE EQUIPMENT WE ADDRESS, IN EVERY WAY WE CAN, IS THE BEST WAY TO STAY IN TOUCH WITH THE SUBJECT & THE NEEDS OF OUR READERS. (ACTUALLY, A PUBLISHING OPERATION IS LIKE A CONTINUAL EQUIPMENT TORTURE TEST; IF IT WORKS WELL FOR US, IT WILL PROBABLY WORK WELL FOR OUR READERS.) IF WE GO TO TYPESETTING FOR FUTURE ISSUES, IT WILL BE VIA THE 64 AND 64 SOFTWARE.

WE NOT ONLY ENJOY USING THIS TECHNOLOGY, BUT BELIEVE STRONGLY IN ITS VALUE AND ITS POSITIVE AFFECT ON THE WORLD.

IN THIS ISSUE WE HAVE ATTEMPTED TO GATHER AND ORGANIZE AS MANY 64 PRODUCTS AND VENDORS AS POSSIBLE. HANG ON TO THIS ISSUE FOR REFERENCE, WE WILL PROBABLY NOT PRINT AN ENTIRE CATALOG OF THIS SORT EVERY ISSUE UNLESS OUR READERS REALLY WANT IT. WE WILL PROVIDE QUARTERLY UPDATES AND FOCUS MORE ON REVIEWS, TRENDS, AND CURRENT DEVELOPMENTS. WE WELCOME YOUR FEEDBACK AND SUGGESTIONS FOR IMPROVING OUR NEW PUBLICATION, AND LOOK FORWARD WITH YOU TO THE EXCITING TIMES AHEAD.

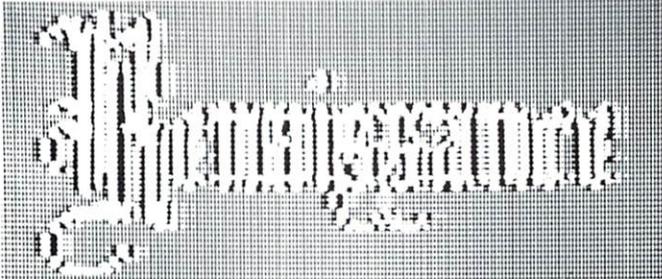
BENN DUNNINGTON
EDITOR/PUBLISHER

KLUDGE KORNER

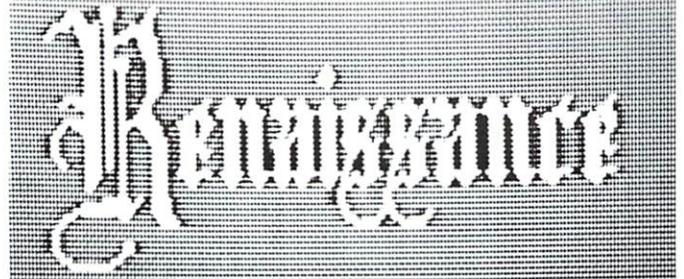
KLUDGE KORNER WILL BE A CONTINUING ATTEMPT TO GET READERS TO VOID THEIR WARRANTIES IN CREATIVE WAYS. RESEARCH SHOWS THIS TO BE AN EXCELLENT WAY TO LEARN, STIMULATE COMMUNICATION, AND INCREASE EQUIPMENT PERFORMANCE.

READERS WHO WISH TO CONTRIBUTE TO THIS VITAL PROCESS ARE ENCOURAGED TO SEND REASONABLY COHERENT MATERIALS TO:

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FRONT-CONNECTED



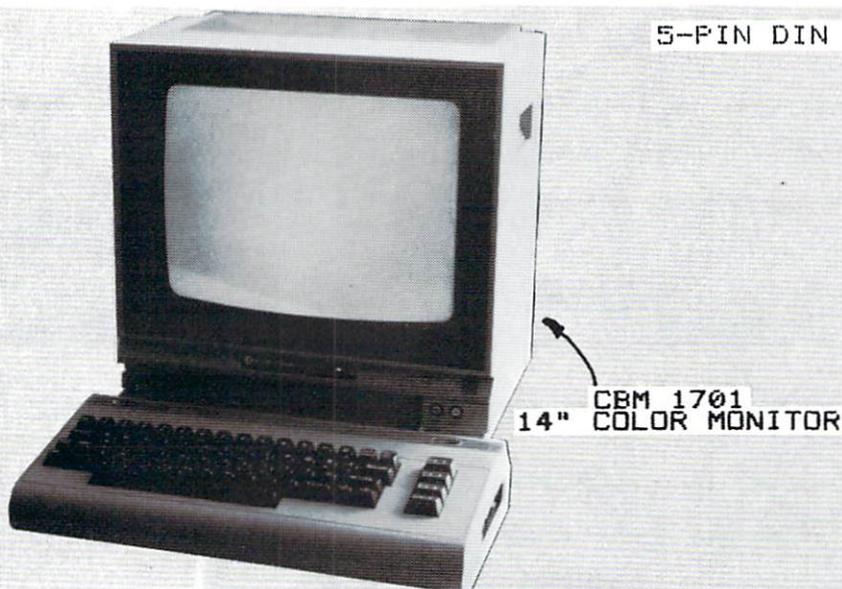
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RENAISSANCE IS A TRADEMARK OF UNITED MICROWARE INDUSTRIES.

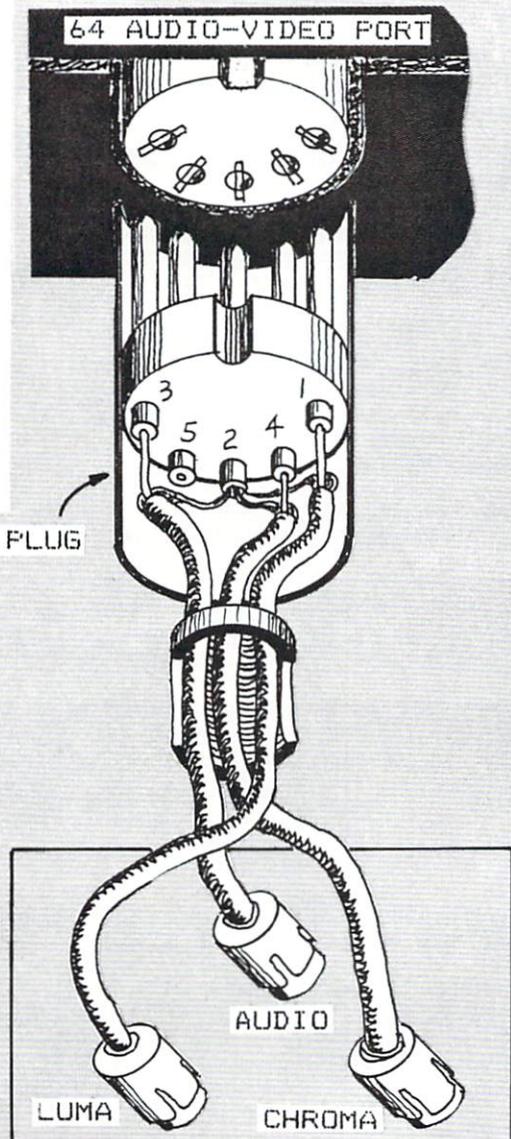
=== HOT-WIRING THE 1701 ===

COMMODORE'S NEW 1701 14" COLOR MONITOR IS A MARVELOUS ADDITION TO THE 64 LINE OF PRODUCTS. PROPERLY CONNECTED, IT IS CAPABLE OF BREATHTAKING COLOR AND IMAGE FIDELITY. IT WILL EVEN HANDLE 80-COLUMN OUTPUT FROM POPULAR DISPLAY-EXPANSION PRODUCTS.

UNFORTUNATELY, COMMODORE DOES NOT PROVIDE THE NECESSARY CABLE OR EVEN INSTRUCTIONS FOR DOING THIS. A CABLE WIRED AND CONNECTED AS SHOWN BELOW WILL UNLEASH THE FULL POTENTIAL OF YOUR DISPLAY. ALL SCREEN PHOTOS IN INFO-64 WERE SHOT DIRECTLY FROM A 1701 MONITOR WIRED THUSLY. THE CLOSE-UPS OF U.M.I.'S RENAISSANCE TITLE SHOW THE DIFFERENCE.



CBM 1701
14" COLOR MONITOR



1701 MONITOR BACK-PANEL INPUTS

If our word processing software is so great, why are we giving it away?



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As the leader in price/performance peripherals for Commodore 64™ and VIC 20™, we want you as a loyal customer. So to encourage you to sample our add-ons, we're giving away our WORD MANAGER software when you purchase any DATA 20 DISPLAY MANAGER or VIDEO PAK to expand your Commodore to 80 columns.



What's so great about WORD MANAGER?

The table tells the tale. This DATA 20 exclusive gives you powerful features found only on the most expensive word processing systems including mail merge, block move, search and replace. And we've written our word processing in machine language for fast execution and low memory requirements.

Compare the Top Three	Mail Merge	Feature Strip	Works With Any Printer*	Tape & Disk Capabilities	Full Screen Editing	80 Column Format
WORD MANAGER	•	•	•	•	•	•
WordPro®	—	—	—	•	•	—
Quick Brown Fox™	—	—	•	—	—	•

*Most standard serial or parallel printers require interface, not supplied.

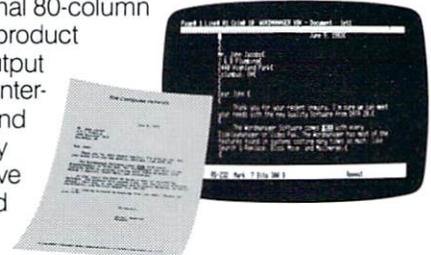
Best of all, WORD MANAGER is exceptionally easy to use. A self-adhesive feature strip for function keys makes

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What you see is what you print.

With our professional 80-column format, your printed product duplicates screen output precisely. You see centering, left justification and other features as they will print. So you'll save time, save paper, and get the exact results you want!

WORD MANAGER is really something—for nothing! Get it free with your DISPLAY MANAGER or VIDEO PAK from DATA 20. See your dealer or write: DATA 20 CORPORATION, 23011 Moulton Parkway, Suite B10, Laguna Hills, CA 92653.



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Price/Performance Peripherals

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RANDOM ACCESS

NEWS, RUMORS, & OPINIONS.

EXECUTIVE 64

WE ARE WORKING ON GETTING AN EVALUATION COPY OF THIS FOR THE NEXT ISSUE. WE WERE DISAPPOINTED TO HEAR THAT THE DISK DRIVES IN THE EXEC HAVE NOT BEEN IMPROVED IN ANY SIGNIFICANT FUNCTIONAL WAY. NOR HAVE THE OLD RUMORS OF AN 8088 OR 86 CO-PROCESSOR OPTION COME TO ANYTHING. STILL, A SELF CONTAINED 64 WORK-STATION IS GOING TO TURN A LOT OF HEADS (INCLUDING OURS) WHEN IT HITS THE SHELVES LATER THIS YEAR.

1520 PRINTER/PLOTTER

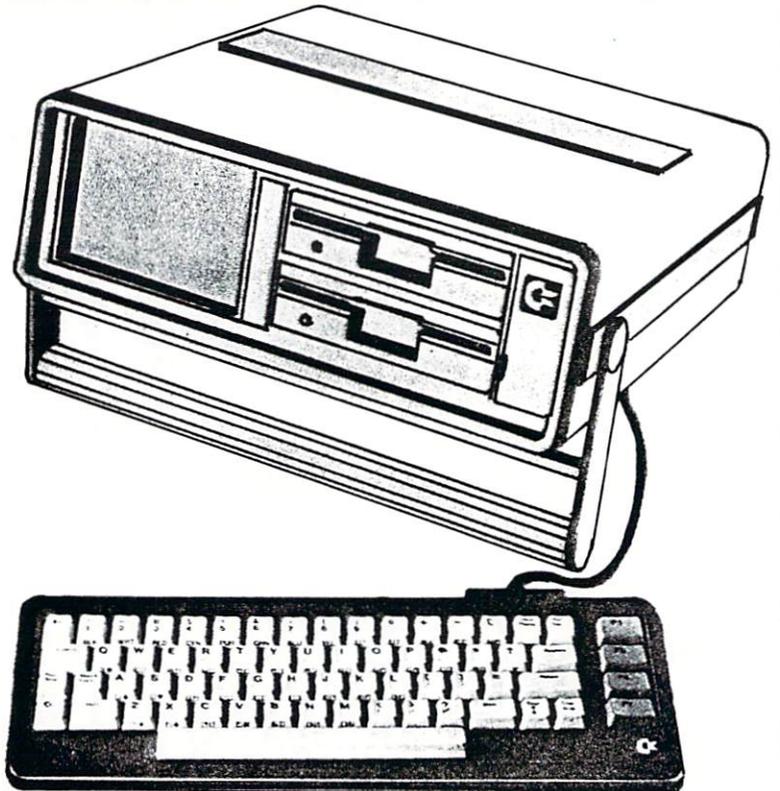
DIANE OTTINGER, COMMODORE P.R. INFORMS ME THAT THIS IS NOW AVAILABLE. (I GUESS IT JUST HASN'T MADE IT TO THE WEST COAST YET). LOOKS NIFTY, LIKE SOMETHING YOU COULD TAKE ALONG WITH YOUR EXECUTIVE 64.

TURBO 1541 SPEED-UP KIT.

REPORTS PERSIST ABOUT THE IMMINENT RELEASE OF THIS DEVICE WHICH CONNECTS THE 64 USER PORT TO THE 1541 MICROPROCESSOR SOCKET, BYPASSING THE SERIAL BUS AND PROVIDING DISK OPERATION AT "SPEEDS APPROACHING A 4040 DRIVE. SOFTWARE TRANSPARENT, THE ONLY QUESTION IS "WHEN CAN WE GET ONE?"

AVCOR

AVCOR OF TORONTO BLEW A LOT OF SOCKS OFF RECENTLY WITH THEIR ANNOUNCEMENT OF AN UNDER \$100.00 SOFTWARE PACKAGE THAT WILL CONVERT THE ALREADY MULTI-FACETTED 64 INTO A NAPLPS COMPATIBLE VIDEOTEX TERMINAL. (SEE MORE UNDER PRODUCT ROUND-UP; TELECOMPUTING PG. 34). THIS AT A TIME WHEN BELL TEL HAD JUST ANNOUNCED ITS \$900.00 DUMB (IN THE TECHNICAL SENSE) VIDEOTEX TERMINAL TO BE READY IN A YEAR. I CAN JUST SEE THE LINES OF PEOPLE WAITING TO BUY THAT NOW! WE HOPE TO HAVE THE AVCOR SOFTWARE IN TIME TO DO SOMETHING ON IT IN THE WINTER ISSUE.



NEW DATABASE SYSTEM FROM SOLIDUS.

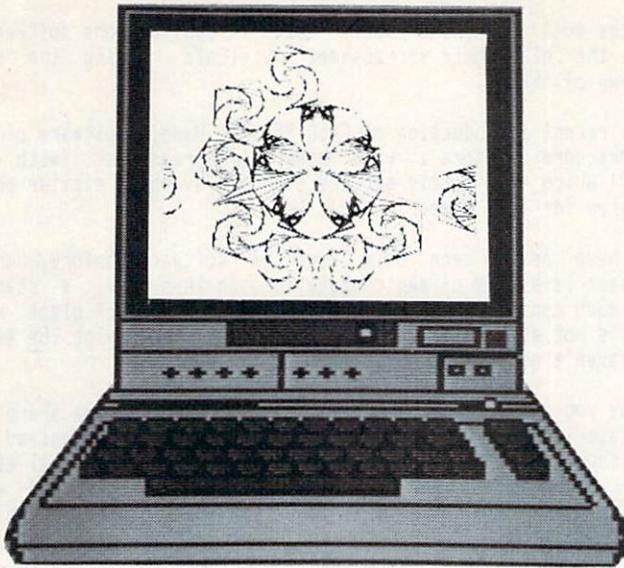
IN BETA TESTING NOW, THE "SYSRES" PEOPLE HAVE ADDED A GENERAL-PURPOSE FILING SYSTEM TO THEIR LINE. WORKS WITH 624 'CARDS' AND DOES SOME UNBELIEVABLE THINGS WITH THE 1541 DISK DRIVE, LIKE SOFTWARE CONTROL OF DRIVE STEPPER MOTOR, SOFTWARE INITIATED HEAD ALIGNMENT- STUFF LIKE THAT.

NEW COMPUTER TO BE 64-COMPATIBLE

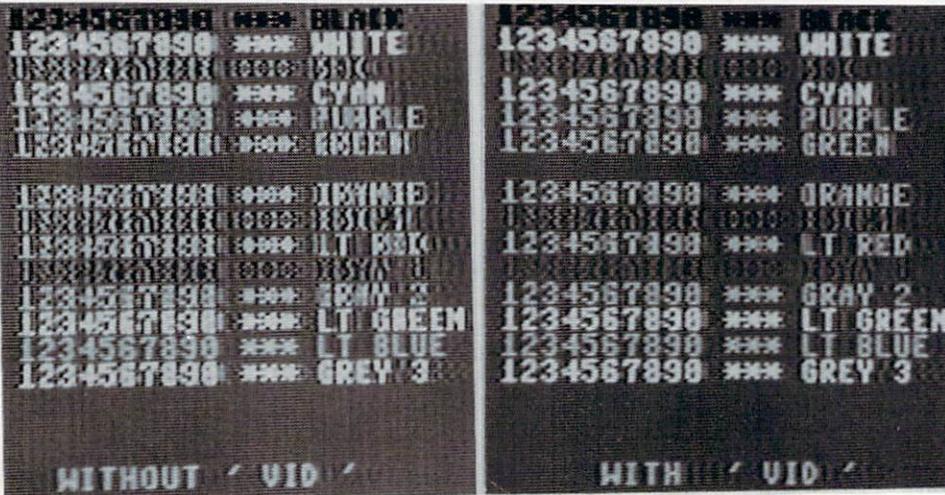
JERRY PIERSON, HEAD OF VIDEOBOOK CORP. IN SEATTLE, INVITED ME TO SPREAD THE WORD THAT HIS COMPANY WILL BE BRINGING OUT A NEW 8BIT/16BIT DUAL-PROCESSOR 500K COMPUTER WITH RGB NTSC VIDEO OUTPUT & KEYBOARD WITH 10-KEY PAD THAT WILL RUN APPLE, 64, AND IBM PC SOFTWARE! NOW FOR THE GOOD PART; THE NEW MACHINE, SCHEDULED FOR MARCH RELEASE, IS TO BE PRICED AT UNDER \$500.00.

(AND I USED TO WONDER WHAT THOSE STRANGE PULSATING LIGHTS OVER SEATTLE AT NIGHT WERE. IT WAS JUST JERRY'S LABORATORY WHERE JOB 1 SEEMS TO BE WARPING TIME-SPACE WITH THESE KINDS OF BOMBSHELLS.) I WILL ATTEMPT TO ACTUALLY MEET AND INTERVIEW THIS PERSON, IF POSSIBLE, FOR A REPORT IN A FUTURE ISSUE.

B.D.



DOUBLE-TAKE



HERE ARE TWO PICTURES WE SHOT AT INFO-64 ON A STANDARD SONY 19" COLOR TELEVISION SET.

WHAT'S THE DIFFERENCE? A LITTLE BLACK BOX (ACTUALLY A BROWN KNOB) FROM COMPUTER ACCESSORIES WHICH PLUGS INTO YOUR 5-PIN VIDEO OUTPUT, YOUR 64 DRIVES ANY STANDARD T.V. VIA THE RF CABLE AS PER NORMAL.

WE DID ONE LINE OF TEXT IN EACH COLOR ON A DARK BLUE BACKGROUND FOR THE PICTURE. FIRST COUNT THE NUMBER OF LINES READABLE IN THE LEFT PHOTO. TIMES UP: I GET 6. NOW WE PLUG IN THE 'VID' KNOB. COUNT AGAIN. DID YOU GET 11? HMMM....

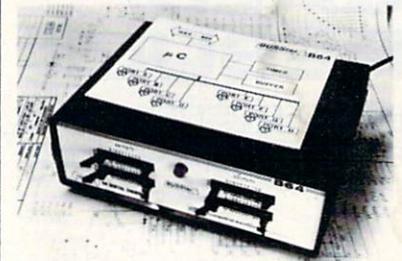
ACCORDING TO AN ASSOCIATE WHO TRIED ONE OF THESE ON ANOTHER SET, THE DEGREE OF IMPROVEMENT VARIES FROM 0 TO 90%. FOR 29.95 YOU CAN JUDGE FOR YOURSELF.

THE VIDEO IMPROVEMENT DEVICE (VID) IS AVAILABLE FROM:

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REVIEW:

CALC RESULT

HAND-RUBBED SOFTWARE?

BENN DUNNINGTON

One of the most useful and popular types of applications software being used today is the 'electronic spreadsheet' (VisiCalc being the original and best-known of these).

With the recent introduction of CALC RESULT, Handic Software of Sweden has given Commodore 64 users a very powerful spreadsheet (with some unique features) which will likely set the standard by which similar products will be compared for some time.

If you have never seen this kind of software before, an electronic spreadsheet is a kind of magic slate (or, in this case, a stack of magic slates) each consisting of numerous rows and columns of blank spaces. You say that's not much to write home about never mind paying the \$150.00? Ah, but we haven't got to the magic yet.

Let's say you own a fleet of 5 taxi-cabs, a calculator, a sharp pencil (with a new eraser), and a pad of paper. You decide to get organized and draw up a chart showing each cab, it's annual fuel consumption, total miles driven, and MPG. You draw up a neat chart with rows and columns and a space for each entry (much like figure #). You enter your figures in the blanks, do your division with your punch-box and enter your MPG's for all five cabs. Then you decide to add all your fuel for a total and likewise your miles. Then, as a finishing touch, you make another set of entries for average fuel, miles, and MPG. Now your picture is complete.

With an electronic spreadsheet, you also fill in your boxes (called cells) with labels and values (typing on screen), but instead of entering the computed value for MPG, you enter the FORMULA (using the cell coordinates ie: B9/B8) - MPG is then computed automatically and placed in that cell (B11). Also, once you have defined this relationship for the Ford (in our example), a few keystrokes will replicate those 3 cells (and their relationship to each other) for all the other cabs. Next, enter the fuel and miles figures in the correct spaces, and the MPG will magically appear below. Now for your totals and averages, you need only enter the formula SUM (B8:F8) to total all the cells from B8 thru F8, and MEAN (B8:F8) to get the average of the same figures etc.

Now for the fun part: You learn that the figures for the Chevy were wrong-out comes the eraser. You rub out the figures, re-calculate the MPG and also rub out and replace the totals and averages. So-long neat paper. Oh-oh, the Toyota was wrong too (rub rub). Maybe you would even like to know what your averages would have been if the Ford had been another Toyota, but you're afraid the paper won't live thru it.

With a spreadsheet program, you can easily change individual values and instantly see the affects on all related cells. This is the main concept common to all spreadsheet programs: the ability to define cells dynamically in a grid based on the changeable values of other cells in the grid.

CALC RESULT goes one step (or rather one dimension) farther. Let's say your cab company wants to create a similar sheet for each of the last 10 years in addition to a master sum and average summary of all 10 years taken together. Most spreadsheets would not allow this, at least not conveniently, but CALC RESULT is 63 columns across, 255 rows down, AND 32 PAGES DEEP (the third dimension) with the last page automatically gathering the cumulative results. The page you already created is used as a 'template' to replicate your worksheet on any number of additional pages saving a great deal of time and reducing opportunities for error.

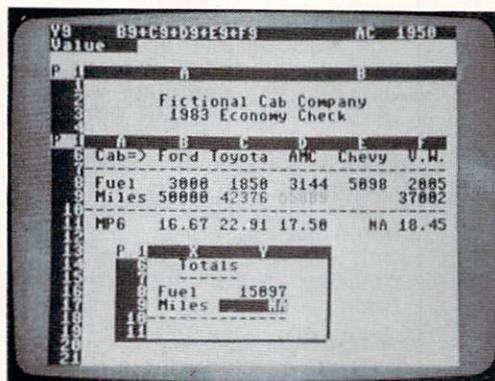


fig.1

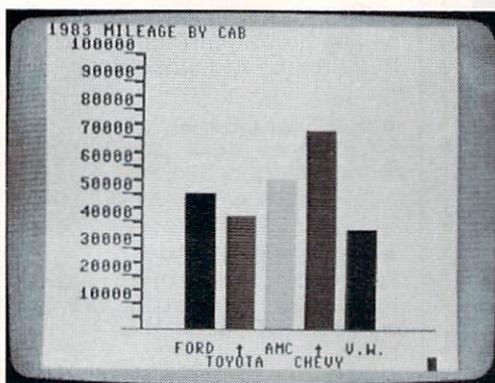


fig.2

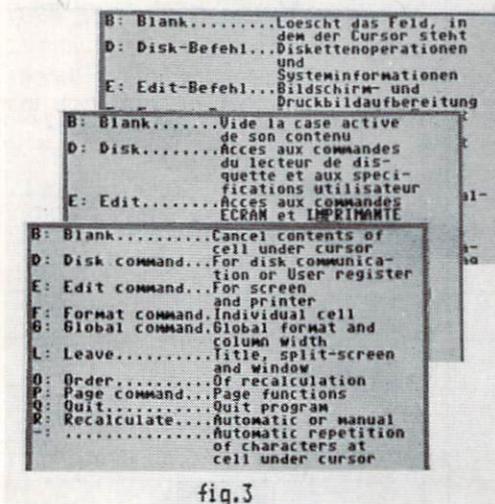


fig.3

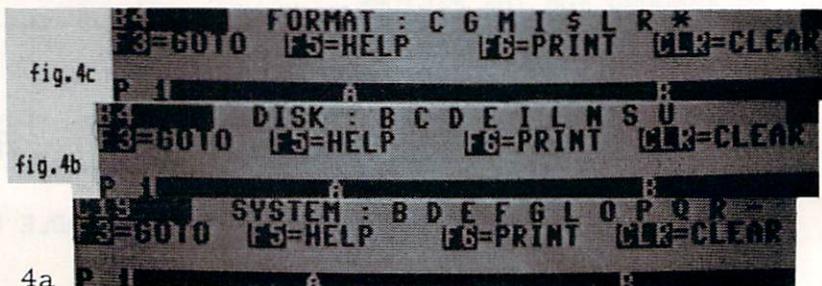


fig.4c

fig.4b

fig. 4a

A program of this nature can have all the muscle imaginable and still fail to be useful if it is confusing or difficult to manage with confidence. The value of CALC RESULT's high performance in this respect, while hard to quantify, cannot be over-emphasized. Much like the skillfully crafted furniture and tools for which the Swedes are renowned, CALC RESULT has a comfortable 'feel' and efficiency of design which makes it a pleasure to use regardless of the application.

CALC RESULT is loaded with features, many of them unique. Those familiar with the genre will notice that CALC RESULT more closely resembles Microsoft's Multiplan than Visi-Calc in the range and utility of enhancements to the basic theme.

Important keys to CALC RESULT's ease of use are the menu lines and help screens. Whenever you wish to access functions other than entering information into a cell, you start by pressing the f7 function key (I am glad to see this key being used consistently by many different software developers). This will cause the SYSTEM menu line to appear at the top of your screen (see fig.4a). Any time you have a menu line displayed, you may GOTO a specified cell, PRINT an exact copy of what's currently visible on the screen (set-ups accommodate most printers including the 1520 CBM plotter), CLR the sheet completely (you will be asked to confirm this), use one of the single-letter commands from the menu, or get HELP.

When you press f5, a help screen will appear with explanations of your menu options. Help screens are currently supplied in English, German, and French. Fig.3 shows the help screen which accompanies the DISK menu line. Help screens are provided for SYSTEM, DISK, EDIT, FORMAT, GLOBAL, & PAGE commands. Many of the sub-commands have additional prompts, minimizing the need to refer to the manual.

At all other times, a status line is displayed which includes current cursor position, type of info in cell (value or label), the actual contents of the cell, the method of calculation, and memory remaining. The status line in fig.1 is showing the cursor at Y9, a VALUE of five cells added together, AC (Automatic calculation by Column) and 1950 remaining memory 'spaces' (not actually a byte-count, but when it is zero, you're out of work space).

This spreadsheet is huge (over a half-million cells are defined), and could not begin to be displayed in its entirety (a quick calculation indicates a bank of 3,401 monitors would do the job). Fortunately the authors have provided several handy features to make handling this giant a snap.

Screens may be SPLIT either vertically or horizontally. Once split, you may jump back and forth between screens, scrolling each separately in any direction. Scrolling may be synchronized in both screens or independent (one keystroke toggles this function). Column widths may also be different either side of the split. While the screen is split, changes in one zone are still reflected in visible affected cells in the other. Fig.1 shows a horizontal split at the 5th row. The small square below the split is a WINDOW.

WINDOWS are further subdivisions allowing additional parts of the worksheet to be brought into view. One window at a time may exist on the screen with up to one split outside the window and one inside. This allows four separate and simultaneous viewing areas. Inside the window you may again jump between splits and independently format screen zones. When you are finished with your splits and windows, 2 keystrokes return the screen to normal. Screen splits and windows not only allow distant cells to be brought conveniently into view, but may also be used to look at up to 4 different pages at once. In addition, the leftmost column (where titles usually go) may be protected (like an invisible split) causing it to remain untouched at the left while other columns go scrolling by. These features are extremely useful and easy to manage.

Color is another element put at your creative disposal. It is nice to color income cells green and expense cells red, for instance. These cells retain their hues in the graphics mode, creating color-coded bar charts (fig.2). Some color is used consistently by the program: notice the cell at Y9 in fig.1. Here a red "NA" (not available) has appeared due to the missing value in cell E9 which is required by Y9's formula (displayed at the top of the screen). The system also flashes the screen red when an error occurs.

GRAPHICS are simple, but effective and easy to use. Any column or row may be selected for graphic display. Only numeric cells will appear. You are prompted for the min and max values of your Y-axis and a title. The bars are then drawn to your scale, colors and all. You may scroll the graph left and right, label the X-axis to suit, and dump the screen to your printer or plotter.

Numerous MATH FUNCTIONS are built-in such as MIN, MAX, or MEAN of an area. NET PRESENT VALUE, TRIG functions, most scientific functions, BOOLEAN operations and IF THEN ELSE are all supported. The capability to load other files including VisiCalc files is claimed via the use of DIF (data interchange format). I have not had an opportunity to verify this, but expect no problem.

Extensive FORMATTING and EDITING facilities provide the user with great freedom to change and manipulate works in progress. Cells may be locally or globally formatted in many ways including integer, max precision, dollar(2 decimal), symbolic (a '5' becomes '*****'), and left or right justified.

The program comes with an excellent manual/tutorial. It is a cartridge/disk product so you may make as many backups of your disk(s) as you desire. The authors urge frequent backups and maintenance of 3 copies.

There are 2 minor bugs I uncovered. Neither is patently serious and should be easy to eliminate in future releases: 1) Loading the diskette is like crossing a street in Chicago. On power-up, the drive spins, you are prompted to insert the diskette, it stops for a heartbeat and begins whirring again. It cycles like this endlessly until it senses the diskette. You are thus required to poise your diskette at the drive door and, with considerable dexterity, slip it in quickly during one of the brief pauses. 2) When handling files you will often be asked to enter a file name. Under no circumstances should you enter a file name at this point! If you do the system will crash and you will have to cross that street in Chicago all over again, possibly minus some hard-earned data. What the system really wants is cursor movement to select a title from the directory OR a carriage return and THEN a file name. Keep this in mind and you will be O.K.

All in all, a remarkable piece of work which I can heartily recommend.

B.D.

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FLEXFILE 2.1

MICROVIEW

ARBY FULLER

FLEXFILE 2.1 (BY MICHAEL RILEY) MAY COME IN A PLAIN VANILLA WRAPPER, BUT WHEN IT COMES TO AN AFFORDABLE AND EASY-TO-MASTER DATABASE MANAGER, YOU WILL HAVE TO LOOK FAR TO BEAT IT.

THE PROGRAM IS COMPLETELY MENU-DRIVEN AND CONFIGURES ITSELF TO ANY CONCEIVABLE NON-VIC CBM SYSTEM YOU MAY HAVE. FLEXFILE 2.1 CAN USE A SINGLE DRIVE, 2 SINGLE DRIVES, DUAL OR HARD DISKS, AND ALMOST ANY PRINTER MADE.

THE MANUAL LOOKS INSUFFICIENT AT FIRST GLANCE, BUT IS ACTUALLY ONE OF THE MOST THOROUGH AND EASY TO USE MANUALS I HAVE EVER READ.

FLEXFILE 2.1 IS WRITTEN IN BASIC. IT IS SUPRISINGLY FAST IN SPITE OF THIS. THE ONLY TIME IT REALLY DRAGS IS DURING DIRECT FILE MAINTENANCE, SO MR. RILEY ADDED A BATCH ROUTINE THAT LETS YOU ENTER DATA AS FAST AS YOU CAN TYPE, AND THEN MERGES THE MORNING'S WORK WHILE YOU EAT LUNCH. THE PLUS SIDE OF A DATABASE MANAGER IN BASIC IS THAT YOU CAN WRITE CUSTOM SUBROUTINES AND MODIFY FLEXFILE 2.1. RILEY ENCOURAGES THIS AND PROVIDES PLENTY OF USEFUL DOCUMENTATION TO THAT END. THIS IS ALSO AN EXCELLENT PIECE OF SOFTWARE TO STUDY FOR THOSE THAT WANT TO LEARN FROM A GOOD EXAMPLE.

SOME OF THE MORE NOTEWORTHY FEATURES INCLUDE:

- * DYNAMIC FIELDS (NO NEED TO SPECIFY FIELD LENGTHS (IF YOU HAVE EVER FOUND OUT LATER THAT YOUR FIELD WON'T HOLD YOUR DATA, YOU KNOW WHAT A BOON THIS IS)
- * OVER 1000 127-CHARACTER RECORDS TO A FILE ON A 1541 (3 TIMES AS MANY ON AN 8050)
- * 79 CHARACTERS TO A FIELD.
- * SORT ON ANY KEY FIELD (NESTED SORTS TO 5 DEEP).
- * NESTED SUBTOTALS (5 DEEP).
- * SEND CONTROL CODES TO PRINTER FROM WITHIN THE PROGRAM.
- * SEARCH WITH UP TO 20 CONDITIONAL TESTS LINKED TOGETHER.

- * WILD CARDS & PATTERN-MATCHING.
- * CONVERT RANDOM FILES TO SEQUENTIAL FILES FOR USE BY WORDPRO, PAPERCLIP, ETC.
- * RESTRUCTURE FILES (ADD OR CHANGE FIELDS) WITH ONLY ONE DISK DRIVE AND A CASSETTE DECK.
- * SNAP-SHOT OF SCREEN TO PRINTER.
- * BROWSE ON ANY FIELD.
- * STORE AND RECALL REPORT FORMATS.
- * CALCULATED FIELDS IN RECORDS OR REPORTS.
- * MORE / MORE / MORE
- * THE ONLY DBMS I KNOW OF THAT COMES WITH A 'TRY IT, YOU'LL LIKE IT' MONEY-BACK GUARANTEE!

ONE ESPECIALLY NICE FEATURE IS THE ABILITY TO ADD LINES AT PRINT-TIME TO MAILING LABELS WITHOUT HAVING TO WASTE FILE SPACE STORING THEM. IE: YOU WANT TO SAY "ATTN: PURCHASING DEPT." ON EVERY LABEL. MOST DATABASES REQUIRE THAT THIS BE PART OF A FIELD OR A SEPARATE FIELD STORED IN EVERY RECORD. RILEY'S APPROACH SAVES SPACE AND CONTRIBUTES ENORMOUSLY TO THE FLEXIBILITY THE OPERATOR HAS.

ONE OTHER NICETY: THE SOFTWARE IS PROTECTED BY A DONGLE IN THE CASSETTE PORT, SO YOU MAY MAKE AS MANY BACKUP COPIES AS YOU NEED OF THE SYSTEM DISK.

** NOTE ** FLEXFILE 2.1 SHOULD NOT BE CONFUSED WITH EARLIER VERSIONS OF FLEXFILE (WHICH HAVE BEEN REVIEWED ELSEWHERE) AND LACKED MANY OF THE FEATURES THAT MAKE 2.1 SUCH A WINNER.

FLEXIBILITY IS THE SINGLE RECURRING THEME THROUGHOUT THIS SOFTWARE, AND THE NAME FITS LIKE A GLOVE.

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```

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DIRECT FILE MAINTENANCE
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REPORT WRITER
CREATE SEQ FILE
LOAD FROM SEQ FILE
ALPHABETICAL REORDERING
FILE CALCULATIONS
RETURN TO DISK MENU
  
```

```

FLEX FILE 2.1 (C) 1983 MICHAEL RILEY

DISK MENU
CUSTOMIZE FLEX FILE
START A NEW FILE
OPEN AN OLD FILE
BACKUP DISK
LOAD PROCESSOR
VIEW SEQUENTIAL FILE
EXIT FLEX FILE
  
```

```

MAXIMUM RECORDS: 999
MAXIMUM CHARACTERS/RECORD: 127

ADD, REPL, CHANGE, DEL, TEXT, PREV, GOTO, FIND,
BRWSE, KEY, USER, TYPE, LIMIT, SNAP, RETURN
KEYS:
1 CATEG C.CODE
2 PRODUCT
3 COMPANY
4 ENT.CODE
5 C.CODE

WHICH KEY DO YOU WANT TO USE?
1
  
```

```

76 BUS D1 SCN FASVILLE 64
77 BUS D1 CIA INSTA-FILE
78 BUS D1 C15 POWERFILE
79 BUS D1 COD CREATE-A-BASE
80 BUS D1 D12 M-FILE
81 BUS D1 D16 DATA/SCAN
82 BUS D1 D18 FILE/CARD
83 BUS D1 D19 DATA/FILE PLUS
84 BUS D1 D21 DATA BASE 64
85 BUS D1 D23 ASERT
86 BUS D1 D24 ASERT
87 BUS D1 J11 JIMSAM 8.0 / 64
88 BUS D1 J12 MINT JIMI
89 BUS D1 M12 DATABASE MANAGER
90 BUS D1 M13 DISK DATA MANAGER
91 BUS D1 M15 YOUR FILING SYSTEM
92 BUS D1 M16 DIALOG
93 BUS D1 P12 INQUIRE-PAC
94 BUS D1 P13 SUPERBASE 64
95 BUS D1 P14 SUPERBASE 64
96 BUS D1 S11 FILING ASSISTANT
97 BUS D1 S12 DATAM
98 BUS D1 M15 FLEX-FILE 2.1
99 BUS D1 Z13 DELUXE ADDRESSER
  
```

```

KEYS: RECORDS
1 PRODUCT: FLEX-FILE 2.1
2 COMPANY: WEBBER SOFTWARE
3 C.CODE: MES
4 CATEG: BUS.D1
5 ENT.CODE: 214N
6 DESC: DBMS

ADD, REPL, CHANGE, DEL, TEXT, PREV, GOTO, FIND,
BRWSE, KEY, USER, TYPE, LIMIT, SNAP, RETURN

CHANGE RECORDS
WHICH FIELD? (ENTER 0 FOR ALL)
5
ENT.CODE:
214N
  
```

```

SEARCH CRITERIA

EQUALITY TYPES:
1 EQUALS
2 LESS-THAN
3 GREATER-THAN
4 PRECEDES
5 FOLLOWS
6 NOT-EQUAL-TO
7 PATTERN-MATCHES
8 SHARES-CODE-WITH
9 GREATER-THAN-FIELDH

YOU: SEARCH FOR STATEMENTS
IF (ENT.CODE GREATER-THAN 213 AND CATEG.
..BUS.*) THEN PRINT.

SEARCH CRITERIA
  
```

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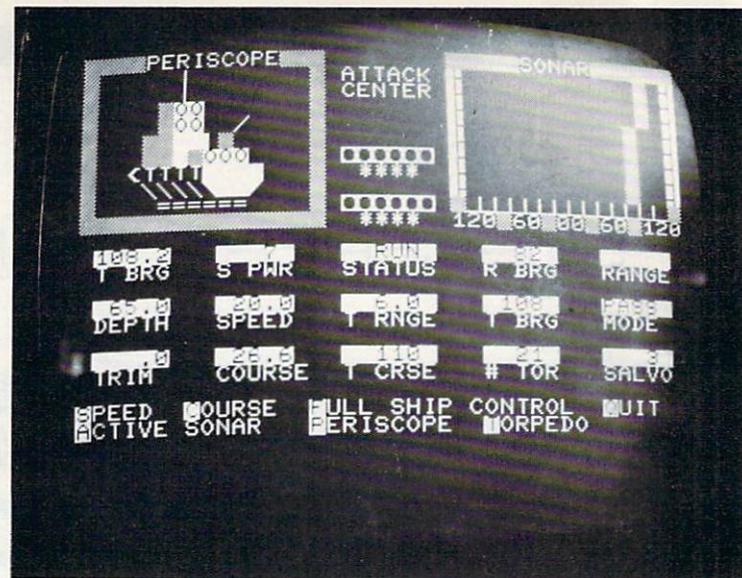
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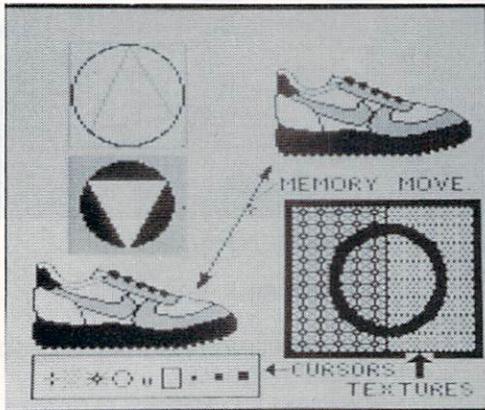
SORCERER'S APPRENTICE

FIG. 1

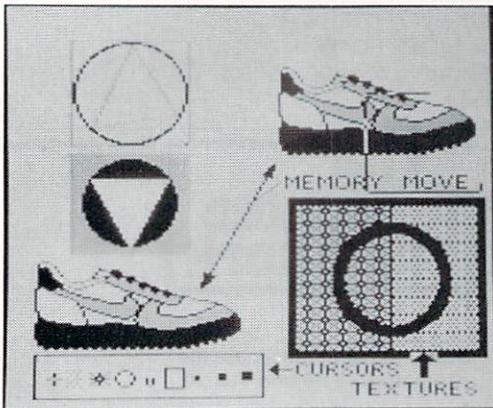


FIG. 2

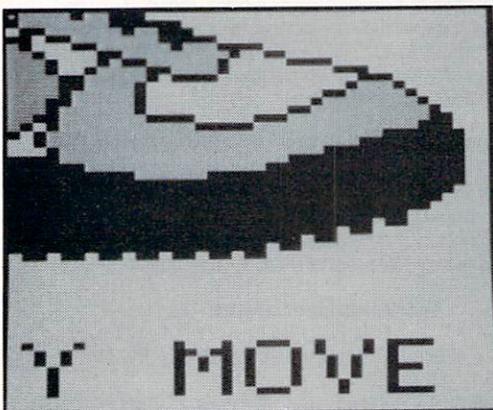


FIG. 3

REMEMBER WHEN YOU FIRST HOOKED UP YOUR 64 AND DROOLED OVER THE SPECIFICATIONS: "16 COLORS...HIGH-RES...320 X 200 BIT-MAPPED GRAPHICS ... SPRITES..." AND SO ON? REMEMBER HOW DISAPPOINTING IT WAS WHEN YOU FOUND OUT HOW HARD IT WAS GOING TO BE TO ACCESS ALL THOSE FEATURES FROM BASIC?

SORCERER'S APPRENTICE, WRITTEN BY ADAM BELLIN FOR EVENT HORIZON SOFTWARE IS A 'MUST' FOR ANYONE WHO HAS LONGED TO TURN THEIR COLOR MONITOR INTO AN ELECTRONIC EASEL AND UNLEASH THE ARTISTIC ANIMAL WITHIN THE 64.

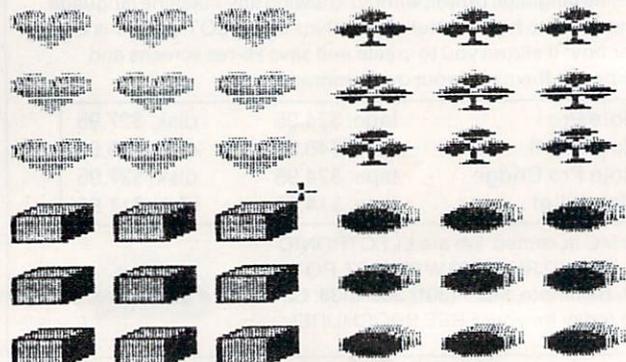
THE FIRST THING THAT STRUCK ME UPON OPENING THIS PACKAGE FOR THE FIRST TIME WAS THE SCANTY-LOOKING MANUAL WHOSE 7 QUARTER-SIZE PAGES EASILY HIDE IN A DISKETTE JACKET! AS I FIRED UP MY 64, HOWEVER, AND BEGAN PUTTING SORCERER'S APPRENTICE THROUGH ITS PACES, I SOON BEGAN TO WONDER IF A MANUAL WAS NECESSARY AT ALL! THE INCLUSION OF HELP SCREENS DESCRIBING ALL COMMANDS PLUS THE THOUGHTFUL DESIGN OF THE USER INTERFACE MAKE SORCERER'S APPRENTICE A DELIGHT TO OPERATE AND VIRTUALLY SELF-EXPLANATORY.

THO SIMPLE TO USE, THIS IS NOT A "SIMPLE" PROGRAM BY ANY MEANS. WRITTEN SKILLFULLY IN MACHINE LANGUAGE, SORCERER'S APPRENTICE IS POWERFUL AND VERY FAST.

AFTER LOADING, A COLORFUL TITLE SCREEN IS DISPLAYED; TOUCHING ANY KEY CLEARS THE SCREEN LEAVING YOU WITH A BLANK 'CANVAS' AND A CROSS-HAIR CURSOR IN THE CENTER AWAITING YOUR FIRST COMMAND.

YOU ARE NOW IN A GRAPHICS WORLD 160 DOTS WIDE BY 200 DOTS HIGH. THE MAIN TOOL AT YOUR DISPOSAL IS THE CURSOR. THE CURSOR IS YOUR LAYOUT PENCIL, TECHNICAL PEN, PAINTBRUSH, ERASER, RUBBER STAMP, AND POINTER ALL IN ONE. YOU MAY MOVE THE CURSOR IN A NUMBER OF WAYS; WITH THE REGULAR CURSOR KEYS, THE 'I, J, K, & M' KEYS, OR A JOYSTICK OR TRACKBALL (AND POSSIBLY A TOUCH-PAD) IN PORT # 2. I PERSONALLY FOUND THAT A SUCTION-CUP TYPE JOYSTICK (SUCH AS THE SPECTRAVIDEO 'QUICKSHOT') ANCHORED FIRMLY TO THE DESK-TOP NEAR MY COMPUTER WAS THE MOST COMFORTABLE AND GAVE THE MOST CONTROL. USING A HAND-HELD JOYSTICK IS AWKWARD BECAUSE ONE HAND IS OFTEN REQUIRED AT THE KEYBOARD FOR INVOKING A SCORE OF FREQUENTLY USED COMMANDS.

PRESSING THE JOYSTICK IN ANY DIRECTION WILL CAUSE A CORRESPONDING MOVEMENT FROM THE CURSOR. THE <RETURN> KEY TOGGLES BETWEEN HIGH-SPEED AND SLOW-SPEED CURSOR MOVEMENT. THIS IMPORTANT FEATURE ALLOWS YOU TO TRAVEL ABOUT THE SCREEN VERY QUICKLY AND THEN MAKE YOUR MARK WITH CONFIDENCE-INSPIRING ACCURACY. THE INCREMENT WITH WHICH THE CURSOR MOVES MAY BE SELECTED FROM THE NUMBER KEYS AT ANY TIME AND RANGES FROM A SINGLE DOT TO 9 AT A TIME. THIS IS USEFUL FOR MAKING GRIDS AS WELL AS TEXTURES WITH SOME OF THE DIFFERENT CURSORS. YES, THERE ARE 9 DIFFERENT CURSORS (SEE BOTTOM OF FIGURE 1) SELECTED BY THE <-> KEY (THERE IS ALSO AN INVISIBLE CURSOR IF YOU WANT).



SORCERER'S APPRENTICE IS AVAILABLE FROM:
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 (DISK 49.95)

DRAWING IS A SNAP WITH SORCERER'S APPRENTICE. TOUCHING <W> (WRITE) TURNS ON THE 'INK', <Q> (QUIT) TURNS OFF THE 'INK', AND <E> ERASES. NORMALLY THE CURSOR IS IN THE POINT MODE (PRESS <.) AND DRAWS LINES OF ONE DOT THICKNESS. IN THE PAINT MODE (PRESS <P>), THE ENTIRE CURSOR LEAVES A TRAIL (THE BLACK CIRCLE OVER THE TEXTURES IS DRAWN WITH THE LARGE SOLID RECTANGLE CURSOR IN THE PAINT MODE - FIG. 1). TEXTURES ARE POSSIBLE (SEE FIG. 1) BY SELECTING AN APPROPRIATE CURSOR INCREMENT AND, IN PAINT MODE, DRIVING ONE OF THE CURSORS AROUND.

IN ADDITION TO AUTO-FILLED GEOMETRIC SHAPES, YOU MAY FILL ANY SHAPE BY USING <CTRL><F> WHEN THE CURSOR IS 'INSIDE' THE SHAPE. AMAZINGLY, THE SHAPE DOES NOT NEED TO BE CLOSED TO FILL. IF YOU DRAW A GIANT 'V' AND WANT TO FILL IT WITH A COLOR, JUST EXECUTE THE FILL PROCEDURE AS DESCRIBED ABOVE-THE 'V' WILL FILL RIGHT TO THE TOP WITH COLOR AND STOP! ALL THE GRAPHIC FILLS I HAVE EVER TRIED ON OTHER SYSTEMS WOULD SIMPLY KEEP GOING AND PAINT THE ENTIRE SCREEN! THE OTHER SIDE OF THE COIN IS THAT SOME COMPLEX SHAPES WILL REQUIRE FILLING FROM MORE THAN ONE CURSOR POSITION TO COMPLETE.

TO DRAW LINES BETWEEN POINTS, YOU POSITION THE CURSOR AT THE DESIRED STARTING POINT AND EITHER PRESS THE FIRE BUTTON ON THE JOYSTICK OR PRESS THE SPACE BAR. THIS 'SETS' THE ORIGINAL POINT. YOU THEN MOVE THE CURSOR TO THE DESIRED END POINT AND PRESS <F1>: AUTOMATICALLY, A STRAIGHT LINE IS DRAWN. THE ORIGIN POINT REMAINS SET UNTIL A NEW ONE IS SET ELSEWHERE, SO YOU CAN DRAW THINGS LIKE WHEEL SPOKES RAPIDLY BY SIMPLY MOVING THE END POINT ABOUT THE CIRCUMFERENCE AND PRESSING <F1> AT EVEN INTERVALS.

ARMED WITH ALL THE ABOVE FEATURES, YOU WILL NO DOUBT BE DRAWING SOME PRETTY FANCY STUFF. EVENTUALLY YOU WILL WANT TO GET MORE DETAILED WITH ONE PART OR ANOTHER OF YOUR DRAWING. PRESSING <CTRL><W> WILL CAUSE A 'WINDOW' TO APPEAR IN PLACE OF THE CURSOR (SEE UPPER RIGHT OF FIG. 2). THE WINDOW MAY BE MOVED JUST LIKE THE CURSOR. THE WINDOW REPRESENTS THE AREA THAT WILL FILL THE ENTIRE SCREEN WHEN YOU TOUCH THE <RETURN> KEY. IN FIG. 3 YOU CAN SEE THE SCREEN PRODUCED BY ACTIVATING THE WINDOW IN FIG. 2. IN THIS MAGNIFIED MODE YOU HAVE ABSOLUTE CONTROL OF UNIT DOTS.

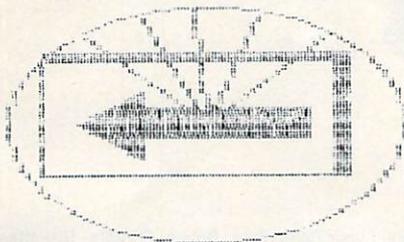
4 STANDARD GEOMETRIC SHAPES CAN BE DRAWN AUTOMATICALLY. ALL 4 CAN BE DRAWN EMPTY OR FILLED (SEE INSCRIBED SHAPES AT UPPER LEFT OF FIG. 1). RECTANGLES ARE DRAWN BY SETTING A POINT AT ONE CORNER, MOVING THE CURSOR TO THE DIAGONALLY OPPOSITE CORNER, AND TOUCHING <F2>. TRIANGLES SIMILARLY ARE DRAWN BY SETTING TWO POINTS, MOVING TO THE THIRD, AND PRESSING <F5>. TO DRAW A CIRCLE YOU SET A POINT AT THE CENTER, MOVE TO THE DESIRED RADIUS AND TAP <F7>, OR FOR AN ELLIPSE TOUCH <CTRL><F7>. EACH SHAPE WILL ALSO BE AUTO-FILLED WITH THE DRAW COLOR IF YOU USE THE SHIFTED FUNCTION KEY (IE <FB> FOR FILLED CIRCLE).

YOU MAY HAVE NOTICED TWO IDENTICAL JOGGING SHOES IN THE PICTURE. NO, I DIDN'T HAVE THE PATIENCE TO DRAW BOTH. I DREW ONE AND USED THE LAST AMAZING FEATURE OF THIS SYSTEM-MEMORY MOVE. TO REPLICATE AN OBJECT, YOU SIMPLY SET POINTS AS IF TO DRAW A RECTANGLE, ONLY INSTEAD OF F3, YOU USE THE UP-ARROW AND SUDDENLY, ANYWHERE YOU MOVE YOUR JOYSTICK, A REPLICA OF THE CONTENTS OF THE RECTANGLE FOLLOW, LEAVING THE ORIGINAL IN PLACE! TO DROP OF THE COPY, JUST TOUCH <RETURN> WHEN IT'S WHERE YOU WANT IT.

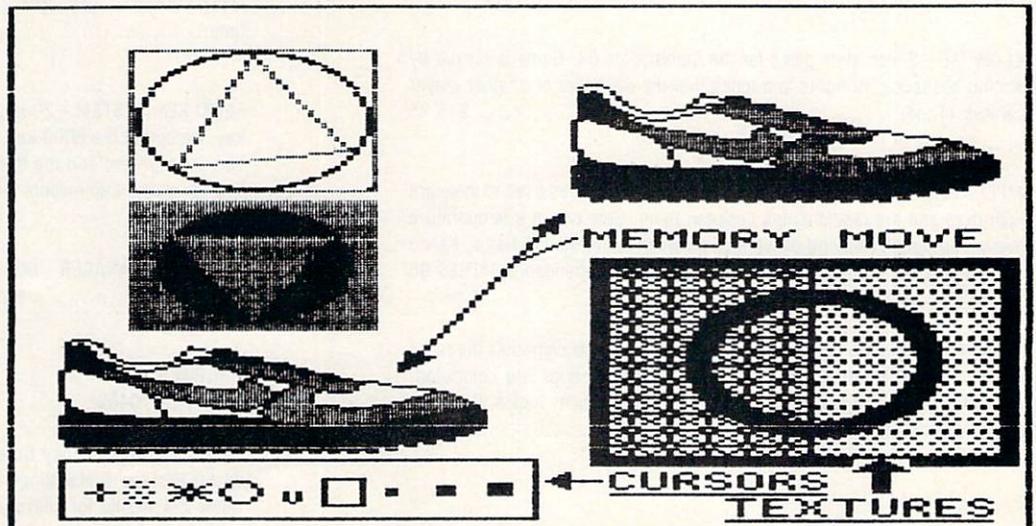
TWO IMPROVEMENTS WOULD REALLY COMPLETE THIS PACKAGE FOR ME. FIRST, AN ON-SCREEN DIRECTORY ROUTINE SO I WOULDN'T HAVE TO RELY ON MY MEMORY FOR STORED DRAWING NAMES. ALSO AN UN-FILL COMMAND WOULD REALLY BE NIFTY (FOR THOSE OF US WHO LIKE TO CHANGE OUR MINDS.) ERASING IS JUST TOO SLOW.

ALL IN ALL, ONE OF THE NICEST LITTLE PRODUCTS I'VE SEEN THIS YEAR.

BENN DUNNINGTON / EDITOR



SCREEN DUMP OF FIGURE 1 USING CARDCO PRINTER UTILITY ROUTINE (@ MEMORY LOC.0) AND GEMINI 10-X PRINTER. NOTE VERTICAL SHORTENING OF IMAGE. PRINTER DUMP DECODES COLORS INTO BLACK, WHITE, AND A MEDIUM-GRAY.



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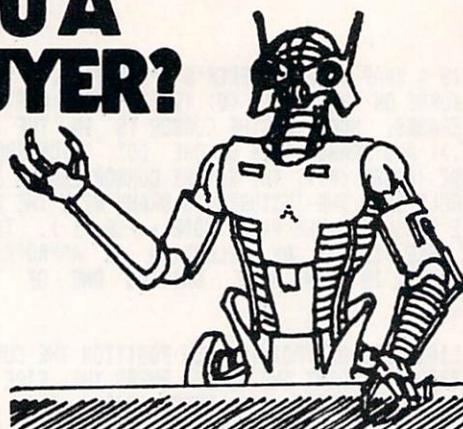
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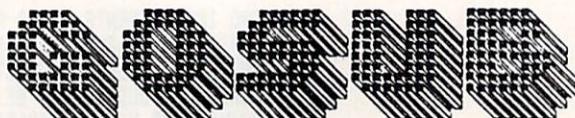
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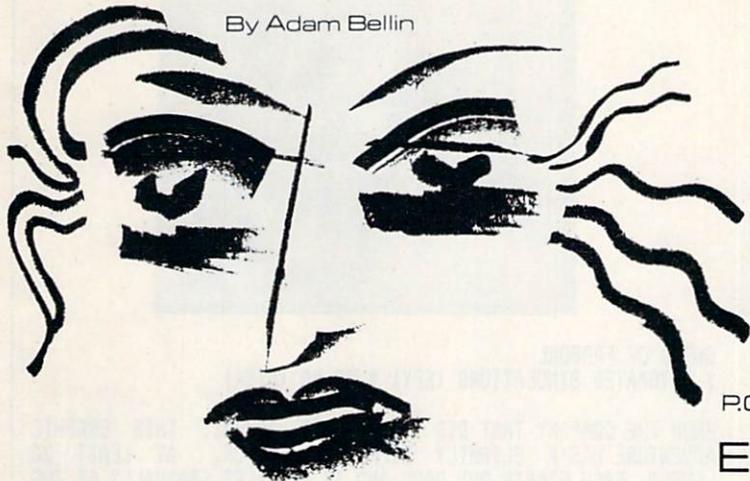
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SAMPLER DISK — 2 programs — \$10.00

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AVAILABLE

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Football Scout \$79.50
Master Grades \$39.50

SCHOOL P.O. AND
PERSONAL CHECKS
WELCOME.

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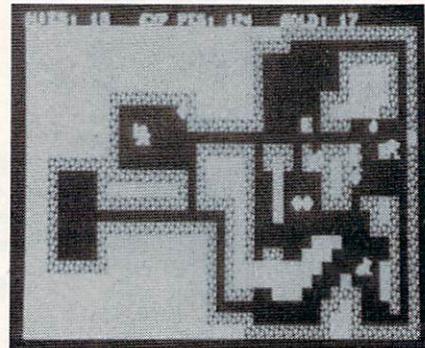


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Phone: (313) 477-0897 (Between 4:00 pm and 11:00 pm)



GALLERY

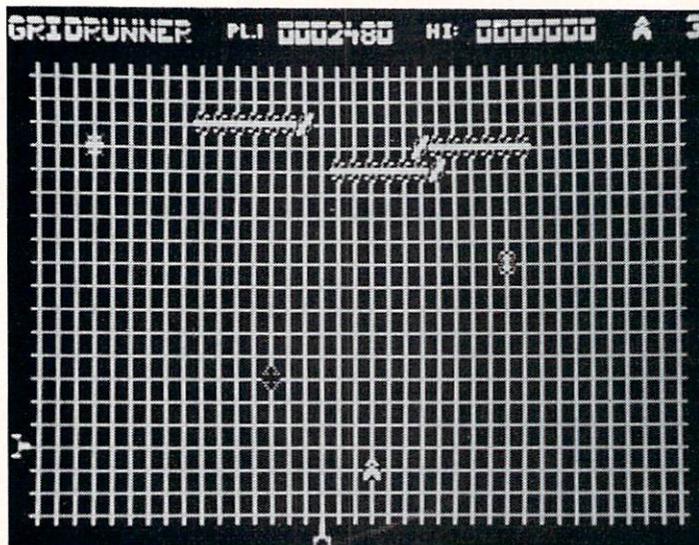


SUSPENDED, "A CRYOGENIC NIGHTMARE"
 † INFOCOM (INF) † 49.95 (DISK)

UNIQUE INTERACTIVE-PROSE ADVENTURE FROM THE COMPANY THAT BROUGHT US ZORK AND DEADLINE. IN THIS ONE YOU COMMAND 6 ROBOTS WITH DISTINCT PERSONALITIES AND VARIOUS ABILITIES IN AN EFFORT TO AVOID A PLANET-WIDE CATASTROPHY FOR WHICH YOU HAVE SOLE RESPONSIBILITY. INFOCOM HAS DEVELOPED A VERY SOPHISTICATED PROGRAM WHICH RESPONDS TO WHOLE SENTENCES OF CONVERSATIONAL ENGLISH AND RECOGNIZES OVER 600 WORDS. A NICELY-DONE MAP OF THE UNDERGROUND COMPLEX WHERE THIS TAKES PLACE IS INCLUDED ALONG WITH SOME CONVENIENT PIECES FOR KEEPING TRACK OF YOUR ROBOTS' WHEREABOUTS.

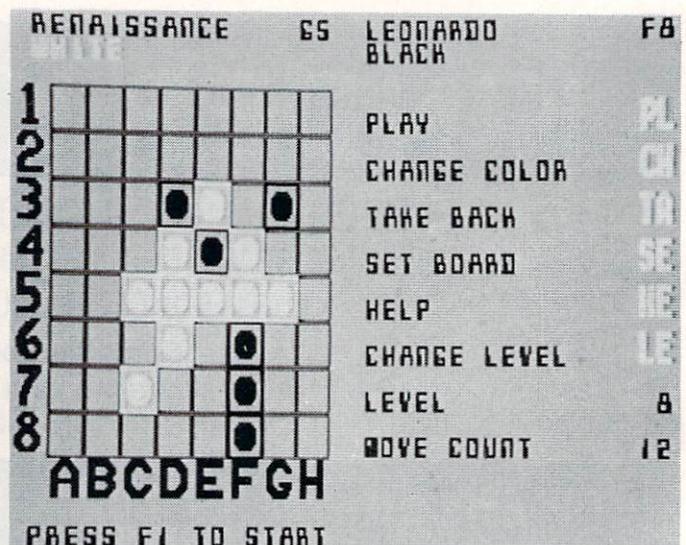
SWORD OF FARGOAL
 † AUTOMATED SIMULATIONS (EPY) † 29.95 (DISK)

FROM THE COMPANY THAT DID TEMPLE OF APSHAI, THIS GRAPHIC ADVENTURE HAS A SLIGHTLY DIFFERENT FLAVOR. AT LEAST 20 LEVELS, EACH STARTS OUT DARK AND IS REVEALED GRADUALLY AS THE WARY PLAYER MAKES HIS WAY ABOUT. TREASURE, TRAPS, MONSTERS, & MAGIC ABOUND. GOOD GRAPHICS AND SOUND. ENTIRE LEVEL IS ON SCREEN AT ONE TIME, ELIMINATING FREQUENT DISK ACCESSES. JOYSTICK REQUIRED.



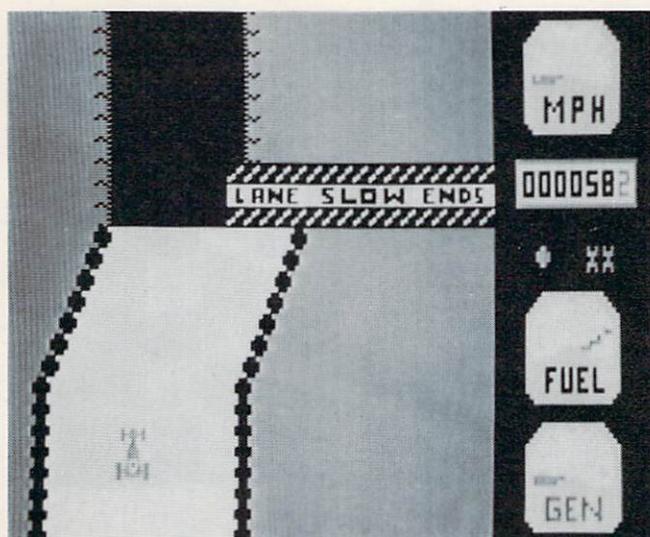
GRIDRUNNER
 † HUMAN ENGINEERED SOFTWARE (HES) † 39.95 (ROM)

FAST, RESPONSIVE, CENTIPEDE-LIKE GAME FOR ONE PLAYER WITH JOYSTICK. SUPER SOUND-EFFECTS, COLORFUL GRAPHICS, AND CUSTOM CHARACTERS. SUCCESSIVE LEVELS INCREASE IN DIFFICULTY. COMPLEXITY OF POSSIBLE INTERACTIONS KEEPS THIS GAME INTERESTING AND UNPREDICTABLE.



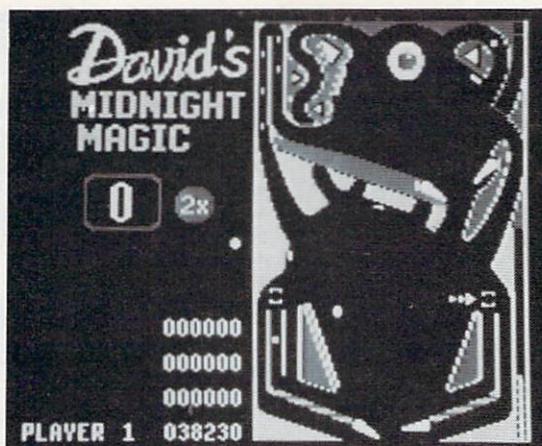
RENAISSANCE
 † UNITED MICROWARE INDUSTRIES (UMI) † 29.95 (TAPE)

SMART VERSION OF REVERSI A.K.A. OTHELLO. USING THE JOYSTICK OR KEYBOARD YOU PIT YOURSELF AGAINST A MASTER. EXTENSIVE OPTIONS ALLOW FOR SKILL-LEVEL, SPECIFIC BOARD SET-UPS, TAKING BACK ANY NUMBER OF MOVES, SWITCHING SIDES, OR GETTING ADVICE FROM YOUR ADVERSARY. THE COMPUTER HIGHLIGHTS SQUARES AS IT CONSIDERS ITS OPTIONS. FASCINATING.



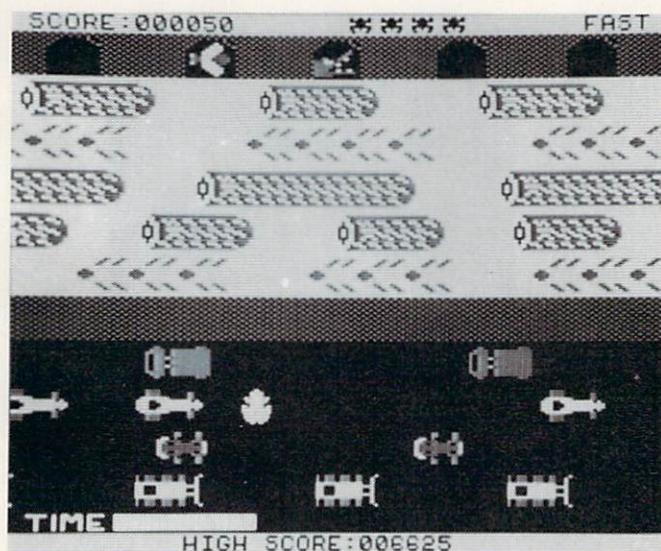
MOTOR MANIA
 * UNITED MICROWARE INDUSTRIES (UMI) * 29.95 (TAPE)

SMOOTH-SCROLLING ANIMATED DRIVING GAME IS QUITE ENJOYABLE. FINE SOUND-EFFECTS AND GOOD USE OF SPRITES. NEGOTIATE AN EVER-CHANGING ROADWAY KEEPING AN EYE OUT FOR LOGS, BOULDERS, GLASS, AND OTHER HAZARDS. OTHER DRIVERS MAY TRY TO CUT YOU OFF AND AN OCCASIONAL FIRE-ENGINE WILL BROADSIDE YOU IF YOU'RE NOT ON YOUR TOES. PULL INTO A GAS-STATION FOR FUEL AND REPAIRS; OR PASS IT BY FOR EXTRA POINTS. JOYSTICK REQUIRED.



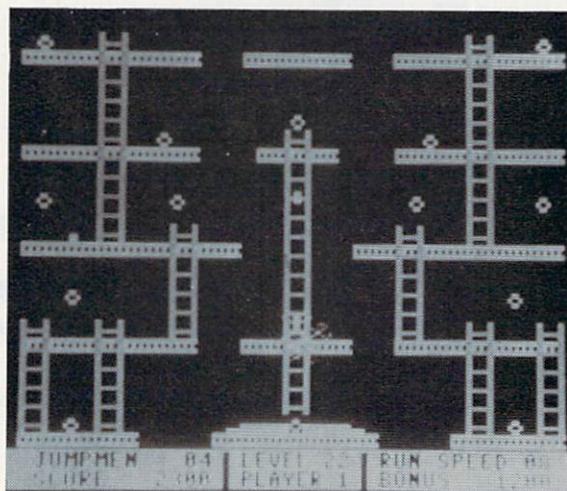
DAVID'S MIDNIGHT MAGIC
 * BRODERBUND SOFTWARE, INC. (BRO) * 34.95 (DISK)

THIS SEEMS TO BE THE CURRENT IN-HOUSE FAVORITE AT INFO-64. STAFFERS HAVE BEEN SEEN REPEATEDLY PERFORMING UNAUTHORIZED & EXTENSIVE EVALUATIONS. TOTALLY CONVINCING PINBALL SIMULATION FOR UP TO 4 PLAYERS. BALL ACTION HAS UNCANNY REALISM. ROLLOVERS / BUMPERS / DROP-TARGETS / MULTIPLE BALL PLAY / 'GUNCH' WITH THE SPACE BAR (ONCE TOO OFTEN AND YOU WILL TILT AND LOSE BONUS POINTS FOR TURN.) THE SOUND COULD HAVE BEEN A LITTLE BETTER CONSIDERING THE SID'S CAPABILITIES, BUT IT STILL RATES FIVE STARS IN OUR BOOK.



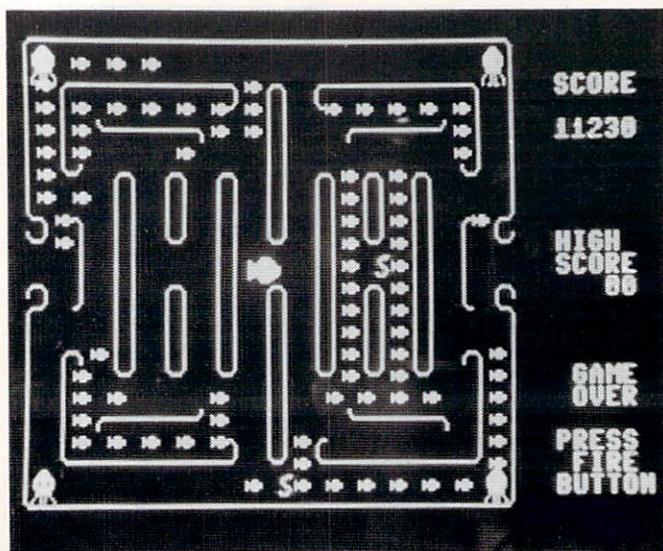
FROGGER
 * SIERRA ON-LINE INC (SIE) * 34.95 (TAPE OR DISK)

THE OFFICIAL VERSION OF THE POPULAR ARCADE GAME BY SEGA COMES TO THE 64 WITH EVERY NUANCE INTACT EXCEPT THE COIN-SLOT & THE AROMA OF PIZZA. IMPRESSIVE MUSIC AND SOUND. SMOOTH ANIMATION. YOU CAN'T GET CLOSER TO THE ORIGINAL THAN THIS.



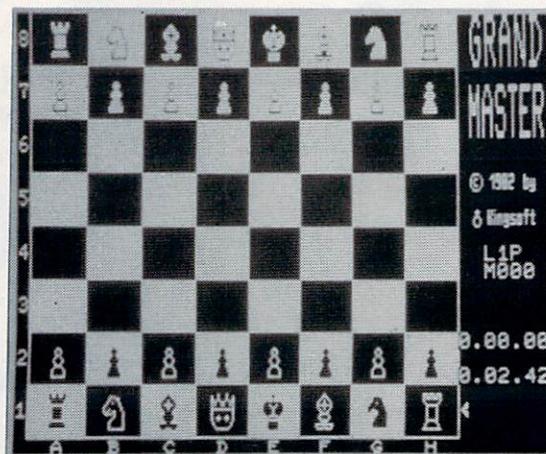
JUMPMAN
 * AUTOMATED SIMULATIONS (EPY) * 39.95 (DISK OR TAPE)

PERHAPS THE HOTTEST-SELLING GAME ON THE MARKET RIGHT NOW & NOT WITHOUT REASON. 31 DISTINCTLY DIFFERENT LEVELS WITH DIFFERENT THEMES PREVENT THE EARLY BURNOUT OF SINGLE-SCREEN GAMES. RESPONSIVE ACTION WITH 8 SPEEDS AND MANY PLAY OPTIONS. THE PUZZLE SCREENS WILL CHALLENGE YOUR LOGIC SKILLS AS WELL AS YOUR REFLEXES. JOYSTICK REQUIRED.

**PAKACUDA**

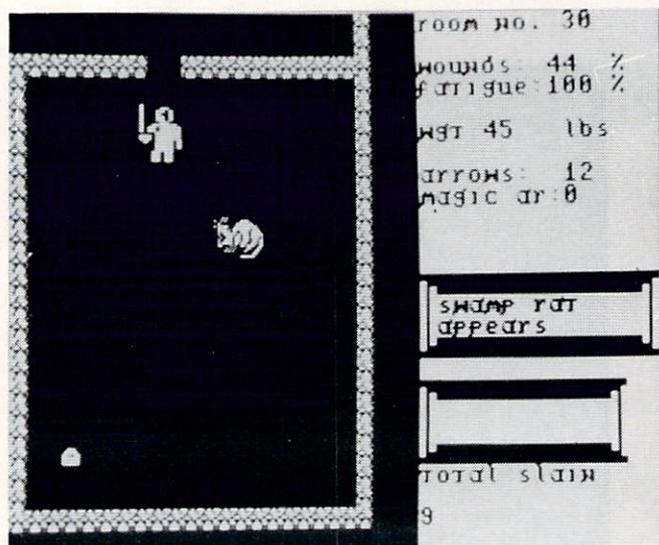
‡ COMM*DATA COMPUTER HOUSE (CDC) ‡ 19.95(TAPE)/23.95(DISK)

GOOD VERSION OF THE GAME IT LOOKS LIKE. YOUR PAKACUDA IS PURSUED BY 4 NASTY OCTOPI WHILE YOU MUNCH ON LITTLE GOLDFISH AND AN OCCASIONAL FLASHING EEL (WHICH GIVES YOU THE STRENGTH TO TAKE ON THE OCTOPI). JOYSTICK REQUIRED.

**GRAND MASTER**

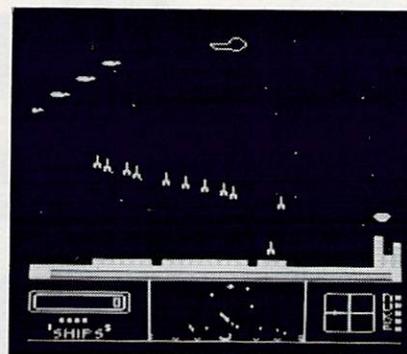
‡ UNITED MICROWARE INDUSTRIES (UMI) ‡ 32.95 (TAPE)

SMART CHESS GAME IN THE TRADITION OF RENAISSANCE. THE COMPUTER PLAYS A SHREWD GAME, BUT IS A PATIENT TEACHER AS WELL. AT ITS MOST SKILLFUL LEVEL, YOU ARE THE ONE WHO WILL NEED PATIENCE AS IT TAKES GRANDMASTER 2 HRS. PER EXPERT MOVE. (IN ITS TOURNAMENT LEVEL, IT ONLY TAKES 30 SECONDS.) SUPPORTS CASTLING, EN PASSANT AND AUTOMATIC PROMOTION.

**TEMPLE OF APSHAI**

‡ AUTOMATED SIMULATIONS (EPY) ‡ 39.95 (disk)

EXCELLENT RENDITION OF THE AWARD-WINNING GRAPHICS ADVENTURE. MAKES GOOD USE OF THE 64'S HIGH-RES, SOUND, AND SPRITE CAPABILITIES- SURPASSING THE APPLE AND ATARI VERSIONS. WE LIKE THE ELFEN TEXT FONTS, AND SPRITE-ANIMATION. ADDITIONAL MODULES ALLOW EXTENDED ADVENTURES FOR SEASONED ADVENTURERS.

**REPTON**

‡ SIRIUS SOFTWARE INC.(SIR) ‡ 39.95 (DISK)

THIS IS A VERY FAST SPACE-COMBAT GAME WITH THE BEST FEATURES OF 'DEFENDER' PLUS SOME IMAGINATIVE ENHANCEMENTS. YOU HAVE PESKY QUARRIORS BUILDING A BASE STATION, RANDOM-ZAPPING DYNE-BEAMS / DRAYNES STEALING YOUR GRID-ENERGY, AND A CLUSTER OF OTHER NASTY CRAFT ON YOUR CASE. SCANNER-MAP / NUKES (SMART BOMBS) / SHIELDS / RAPID FIRE / TRAINING MODE / INSTRUCTION AND DISPLAY MODES. A PROFESSIONAL JOB IN EVERY WAY.

64 PRODUCT ROUND-UP

The following is a guide to products currently available to the 64 user. It is as complete as the paint-job on the Golden Gate Bridge (& for similar reasons). Each product title is accompanied by a 3-character code representing the manufacturer or primary agent (a complete list of which follows this article), media (where applicable), price, availability, and a rating in the form of from 1 to 5 stars. Only products which Info-64 has tested are rated (others receive 'N.A.'). Ratings are our best attempt to sum up the combined quality of the product's performance, ease of use, error-handling, and documentation. It is left to the reader to judge the VALUE of a product by comparing price against quality. (This list is presented as a convenience to our readers, and every attempt has been made towards fairness and accuracy. Info-64 is not liable for any errors or omissions.)

LEGEND: (D)=DISK
(T)=TAPE
(R)=ROM CARTRIDGE
(D/T)=2 VERSIONS
(T+D)=ON TAPE / HAS DISK VERSION INCLUDED
(R&D)=USES ROM AND DISK TOGETHER
Q4=FOURTH QUARTER '83
Q1,Q2,Q3=1984 QUARTERS
M.L.=MACHINE LANGUAGE
W.P.=WORDPROCESSOR/(ING)

business software

===== BUSINESS ACCOUNTING =====

PRODUCT NAME	VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
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====>> (COMMODORE HAS ANNOUNCED THE ACQUISITION OF THE INFO DESIGNS SERIES LISTED BELOW (IDC). EXPECTED PRICES UNDER COMMODORE'S LABEL ARE EXACTLY 1/2 THOSE LISTED HERE. THESE PACKAGES ARE VERY THOROUGH AND PROFESSIONAL WITH EXTENSIVE REPORTING CAPABILITIES AND EXCELLENT DOCUMENTATION. ALL MODULES CAN PASS AND SHARE THE SAME DATA AND LINK TOGETHER THRU A MASTER MENU ROUTINE. THEIR ONLY DRAWBACK IN THE PAST HAS BEEN THE HIGH PRICE.)

GENERAL LEDGER	IDC.....(D).....	199.00	NOW	****
ACCOUNTS RECEIVABLE/BILLING	IDC.....(D).....	199.00	NOW	****
ACCOUNTS PAYABLE/CHECKS	IDC.....(D).....	199.00	NOW	****
INVENTORY	IDC.....(D).....	199.00	Q3	NA
PAYROLL	IDC.....(D).....	199.00	Q3	NA
CALENDAR	IDC.....(D).....	149.00	NOW	N.A.
APPOINTMENT SCHEDULING-				CALLABLE FROM ACCOUNTING MODULES.
COMMUNICATIONS	IDC.....(D).....	149.00	Q3	NA
				(completes above series)

GENERAL LEDGER	TEX.....(D).....	129.95	NOW	NA
PAYROLL SYSTEM	TEX.....(D).....	129.95	NOW	NA
ACCOUNTS PAYABLE	TEX.....(D).....	129.95	NOW	NA
ACCOUNTS RECEIVABLE	TEX.....(D).....	129.95	NOW	NA
CLIENT ACCOUNTING	TEX.....(D).....	229.95	NOW	NA
TOTL.BUSINESS 3.6	TOT.....(D).....	95.00	NOW	****
INTEGRATED SMALL-BUS. ACCOUNTING PACKAGE: A/R / A/P / INVENTORY / INVOICES / STATEMENTS / PURCHASE ORDERS. NO GENERAL LEDGER, BUT EVERYTHING ELSE YOU NEED TO GET THE JOB DONE. WELL DOCUMENTED (EXCEPT THE HARD TO READ LIGHT-BLUE INK ON YELLOW PAPER, CHUCK?), WITH MANY CONVENIENCE FEATURES.				
GA 1600 ACCOUNTING	DES.....(D).....	395.00	NOW	NA
(combined G/L, A/R, A/P: 2 drives required.)				
ASSORTED BOOK AND RECORD KEEPING	SOU.....(D).....			(most under 100.00)..NOW..NA
INVENTORY PACKAGE	MSP.....(D).....	99.95	NOW	NA
(full-featured inventory package.)				
PAYROLL SYSTEM	MSP.....(D).....	99.95	NOW	NA
GENERAL LEDGER	MSP.....(D).....	99.95	NOW	NA
(up to 75 accounts.)				
INVENTORY	LUN.....(D).....	49.95	NOW	NA
INVENTORY	WRD.....(?).....	30.00	NOW	NA
GENERAL LEDGER	AAR.....(D).....	69.95	NOW	NA
INSTA-LEDGER	CIM.....(NA).....	NA	NA	NA
CYBER-FARMER	CYB.....(D).....	195.00	NOW	NA
GENERAL LEDGER / INVENTORY / BUDGET ANALYSIS / CASH FLOW / DEPRECIATION / LOAN MANAGEMENT				
DATABOOKS	DMI.....(D).....	395.00	SEP	NA
G/L A/R A/P BILLING, INVOICING. SINGLE DRIVE SYSTEM. MENU DRIVEN / WILL MERGE WITH THEIR DBMS (AVAILABLE LATER THIS YEAR) / INCLUDES COUPON FOR FREE INVENTORY MODULE / PASSWORD- PROTECTION / UNIQUELY PACKAGED IN BRIEFCASE WHICH ORGANIZES MANUALS, PAPERWORK, RECORDS & DISKETTES.				
ACCOUNTS RECEIVABLE/PAYABLE	ECP.....(NA).....	21.95	NA	NA
THE ACCOUNTANT (G/L B/S P&L)	ECP.....(NA).....	29.95	NA	NA
INVOICE EASE 64	ENT.....(NA).....	39.00	NA	NA
SUPERBYTE BUSINESS PAK	POW.....(D).....	100.00	NA	NA
INCLUDES: G/L / INCOME STATEMENT / BALANCE SHEET, A/R, A/P, WORDPROCESSOR / SPREADSHEET / INVENTORY / CHECKBOOK MAINTENANCE / MAILLIST / 6 UTILITIES				

==>> THE FOLLOWING ARE MODULES IN A SERIES WHICH ARE ALL: PASSWORD PROTECTED / MENU-DRIVEN / STAND-ALONE OR INTEGRATABLE WITH THE OTHER MODULES / FLEXIBLE REPORTING:

GENERAL LEDGER TMW.....(D).....99.00.....NA...NA
CASH FLOW MANAGEMENT TMW.....(D).....99.00.....NA...NA
PAYROLL MANAGEMENT TMW.....(D).....99.00.....NA...NA
ACCOUNTS PAYABLE AND CHECKS TMW.....(D).....99.00.....NA...NA
ACCOUNTS RECEIVABLE AND INVOICING TMW.....(D).....99.00.....NA...NA
SALES ANALYSIS MANAGEMENT TMW.....(D).....99.00.....NA...NA
INVENTORY MANAGEMENT TMW.....(D).....99.00.....NA...NA

===== PERSONAL BUDGETING & MANAGEMENT PACKAGES =====

PRODUCT NAME MEDIA PRICE AVAIL RTG.
VENDOR CODE

====>> THE FOLLOWING 3 MODULES CAN BE USED STAND- ALONE OR LINKED IN ANY COMBINATION; EXTENSIVE DOCUMENTATION INCLUDES FLOW CHARTS AND EXCELLENT ILLUSTRATIONS

FINANCE I PGI.....(D/T).....39.95/36.95.....SEP..NA
CHECKBOOK MAINTENANCE / CHART OF ACCOUNTS / CHECK SEARCH / CHECK WRITER
FINANCE II PGI.....(D/T).....29.95/26.95.....SEP..NA
NET WORTH/INCOME/EXPENSE STATEMENTS / DETAIL AND SUMMARY BUDGET ANALYSIS
FINANCE III PGI.....(D/T).....29.95/26.95.....SEP..NA
PAYMENTS CALENDER / APPOINTMENTS CALENDAR / MAILING LIST / COLOR GRAPH DESIGN PACKAGE
COLOR ACCOUNTANT PGI.....(D/T).....79.95/74.95.....SEP..NA
INCLUDES ALL THE ABOVE MODULES; SAVINGS OF 15.90 TO 19.90
HOME ACCOUNTANT CON.....(D).....150.00.....SEP..NA
APPEARS TO BE SIMILAR IN SCOPE TO 'COLOR ACCOUNT' ABOVE. LOOK FOR A SIDE- BY- SIDE COMPARISON OF THESE TWO PACKAGES IN THE WINTER ISSUE OF INFO-64!
BUDGETEER ABA.....(T/D).....19.95/22.95.....NOW..NA
PART BUDGET MANAGER, PART SPREADSHEET. PRODUCES BAR CHARTS OF MONTHLY TOTALS AND AVERAGES. ALLOWS 999 COLUMNS BY 99 ROWS FOR WORKSHEET
PERSONAL FINANCE ASSISTANT RAI.....(?).....59.95.....NA...NA
PERSONAL FINANCE 1 SPE.....(T).....19.95.....NA...NA
G/L & EXPENSE REGISTER- MENU DRIVEN
BUDGET AID MIQ.....(NA).....69.95.....NA...NA
MENU DRIVEN / CHART OF ACCOUNTS / USER-DEF CATEGORIES / CHECKBOOK W/RECONCILIATION / COLOR GRAPH ANALYSIS
THE MONEY MANAGER (BUDGET AND CASH FLOW SYSTEM) TM2.....(D/T).....24.95.....NOW..NA

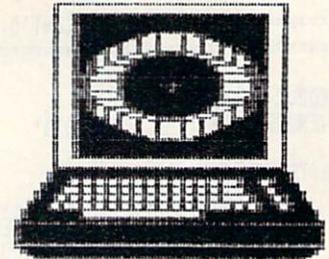
HOME FINANCE MANAGER SMC.....(D).....59.95.....NA...NA
BUDGETING / 3-ACCT CHECKBOOK / DEDUCTION FLAGS / CHARTS & GRAPHS
FAMILY FINANCES SOP.....(D).....33.95.....NA...NA
MENU-DRIVEN / BUDGETING / EXPENSES AND INCOME / CHECKBOOK MGR. / SUMMARIES & JOURNALS
CCI BOTTOM LINER CCI.....(D).....98.75.....SEP..NA
HELPS FAMILIES OR SMALL BUSINESS CONSOLIDATE A WIDE RANGE OF INCOME AND EXPENSES. SUMMARIES GENERATED CAN BE USED FOR PROFIT- LOSS AND NET WORTH STATEMENTS AS WELL AS TAX DATA
LEDGER MWS.....(D).....29.95.....NOW..NA
300 TRANSACTIONS / UNLIMITED ACCOUNTS
HOUSEHOLD FINANCE CRE.....(D/T).....39.95/29.95.....NA...NA
ACCOUNT-MASTER RAY.....(D/T).....24.95/24.95.....NOW..NA
ACCOUNT-PAC PAC.....(T/D).....29.95/29.95.....NOW..***
FINANCE LUN.....(D).....57.95.....NA...NA

===== TAXES =====

TAX HANDLER PGI.....(T/D).....34.95/39.95.....1-84.NA
(1040, sched. A, sched. 6)
TAX-MAN SAU.....(D/T).....39.95.....NA...NA
COMPUTES TAX TABLE / SCHEDS X,Y,Z / INCOME AVERAGING / W/PRINTER FORMS
GATOTAX GAT.....(T).....NA.....'84..NA
TAX HELPER MAG.....(D/T).....NA.....'84..NA
STOCK PORTFOLIO MANAGER BAB.....(D/T).....34.95/29.95.....NA...NA
STOCK HELPER (TRACK AND ANALYZE STOCKS) MAG.....(NA).....NA.....NA...NA

===== CHECKBOOK MANAGEMENT =====

CHECKBOOK MANAGER MSP.....(D).....69.95.....NOW..NA
VICHECK UMI.....(T&D).....29.95.....NOW..***
CHECKBOOK MANAGER WITH PRINTER OPTIONS
64 CHECKBOOK MANAGER DES.....(D/T).....40.00/35.00.....NOW..NA
INSTA-CHECK CIM.....(NA).....NA.....NA...NA
64 CHECKBOOK MANAGER CMS.....(D/T).....39.95/34.95.....NOW..NA
PASSWORD PROTECTED / 250 CHECKS PER FILE / 100 DEPOSITS / 50 ACCOUNT CHARGES
64 CHECKBOOK MANAGER DES.....(D/T).....40.00/35.00.....NOW..NA
PASSWORD PROTECTED / 400 CHECKS PER FILE / 200 DEPOSITS / 100 ACCOUNT CHARGES
CHECKBOOK ACCOUNTING ('UNLIMITED CHECKBOOK') MIQ.....(NA).....24.95.....NA...NA
CHECKBOOK BALANCER (250 CHECK CAPACITY) GAT.....(T).....9.95.....NOW..NA
CHECK MANAGER GOS.....(T).....29.95.....NOW..NA
CHECKBOOK BALANCER GTR.....(T).....10.00.....NA...NA



CHECK HELPER
 MAG.....(D/T).....NA.....NOW..NA
 CHECKEASE
 T&F.....(D/T).....34.95/29.95.....Q4...NA
 OVER 600 CHECKS / INTERFACES WITH COMMODORE'S 'PERSONAL
 FINANCE' / RECONCILIATIONS / FORWARD & REVERSE REVIEW /
 DEDUCTABLE FLAGGING / PRINT BY CATEGORY

===== LOAN PROGRAMS =====

LOAN ANALYZER
 CRE.....(D/T).....19.95/14.95.....NOW..NA
 LOAN CALC
 FAN.....(D/T).....11.95/9.95.....NA...NA
 AMORTIZATION PROGRAM
 INP.....(D).....30.00.....NOW..NA

===== MISCELLANEOUS HOME PROGRAMS =====

INSTA-SCHED
 CIM.....(NA).....NA.....NA...NA
 PERPETUAL CALENDAR
 GTR.....(NA).....10.00.....NA...NA
 THE MONTHLY MANAGER (TIME & BUDGET MGR.)
 CDC.....(NA).....29.95.....NA...NA
 DECISION MAKER
 CRE.....(D/T).....19.95/14.95.....NOW..NA
 CAR COSTS
 CRE.....(D/T).....19.95/14.95.....NOW..NA
 HOME INVENTORY SYSTEM
 GAT.....(T).....9.95.....NOW..NA
 HOME INVENTORY
 CRE.....(D/T).....19.95/14.95.....NOW..NA
 HOME INVENTORY
 MIQ.....(NA).....29.95.....NA...NA
 UTILITY TRACKER & FORECASTER
 MIQ.....(NA).....29.95.....NA...NA

===== SPREADSHEETS =====

PRODUCT NAME
 VENDOR CODE MEDIA PRICE AVAIL RTG.

CALC RESULT
 CMS.....(C+D).....149.95.....NOW..****
 (SEE REVIEW THIS ISSUE)
 MULTIPLAN
 CBM.....(NA).....<100.00.....NA...NA
 MICROSOFT'S POPULAR ADVANCED SPREADSHEET PACKAGE IS
 SLATED FOR ACQUISITION AND RELEASE BY COMMODORE LATER
 THIS YEAR.
 SPREADSHEET ASSIST
 RCC.....(NA).....125.00.....NA...NA
 BUSICALC
 SEW.....(NA).....69.00.....NOW..NA
 PRACTICALC
 CSA.....(T/D).....35.00.....NOW..NA
 CALC-PAC
 PAC.....(NA).....74.95.....NA...NA
 COPYCALC
 WRD.....(NA).....20.00.....NA...NA
 INSTA-CALC
 CIM.....(NA).....NA.....NOW..NA
 FINANCE CALC
 ENT.....(NA).....69.00.....NA...NA
 BCALC
 MTS.....(D/T).....44.95/39.95.....NOW..NA

===== WORDPROCESSING =====

PRODUCT NAME
 VENDOR CODE MEDIA PRICE AVAIL RTG.

WORDPRO 3 PLUS/64
 PRO.....(NA).....89.95.....NOW..****
 SOLID, FULL-FEATURED, AND A STANDARD OF THE INDUSTRY.
 WIDELY SUPPORTED BY OTHER VENDORS' PRODUCTS. COMPLETE
 WITH ALL USUAL FEATURES PLUS TRUE GLOBALS (THRU ENTIRE
 DISK IF DESIRED), LINKED DOCUMENTS FOR UNLIMITED LENGTH,
 NUMERICS, AND COMPATIBILITY WITH SPELLMASTER AND SEVERAL
 OTHER MAJOR PRODUCTS. THE ONLY FEATURES LACKING ARE
 ON-SCREEN FORMATTING, MULTI-COLUMN FORMATTING AND
 BUILT-IN DICTIONARY.
 WORDPRO 1 PLUS/64
 PRO.....(T).....39.95.....Q4...NA
 (WORDPRO 'JUNIOR' ON TAPE / SIMILAR FEATURES LESS
 GLOBALS.)
 PAPER CLIP
 BAT.....(D/T).....125.00.....NOW..NA
 THIS HAS THE LONGEST LIST OF FEATURES OF ANY
 WORDPROCESSOR WE HAVE SEEN, AND IS GENERALLY GETTING THE
 SAME 3RD-PARTY SUPPORT AS WORDPRO III PLUS/64
 WORDMANAGER
 DAT.....(R).....* FREE.....NOW..NA
 FREE WITH THE PURCHASE OF ANY DATA-20 80-COLUMN VIDEO
 EXPANSION CARTRIDGE. FEATURES: 80 COLUMNS (NATURALLY) /
 ON-SCREEN FORMATTING / KEYBOARD 'FEATURE STRIP' / DISK &
 TAPE STORAGE / MAIL-MERGE
 SCRIPT 64
 RTC.....(NA).....139.95.....NOW..****
 FULL-FEATURED WITH SEARCH & REPLACE, NUMERICS, SCREEN
 FORMATTING, AND DICTIONARY SOFTWARE BUILT IN (YOU MUST
 BUILD THE VOCABULARY YOURSELF. SUPPORTS 80 COLUMNS WITH
 RICHVALE'S NEW COLOR-80 SOFTWARE (SEE VIDEO ENHANCEMENTS
 SECTION)
 EASY SCRIPT
 CBM.....(NA).....50.00.....NOW..****
 SIMILAR TO WORDPRO 3 PLUS. HAS ON SCREEN FORMATTING AND
 HORIZONTAL SCROLLING.
 EASY SCRIPT
 PRE.....(D).....99.00.....NA...NA
 SAME NAME, DIFFERENT COMPANY. LINKS WITH THEIR
 'SUPERBASE 64' DBMS SOFTWARE.
 TOTL.TEXT 2.6
 TOT.....(D/T).....44.00/40.00.....NOW..***
 WRITTEN SKILLFULLY IN BASIC WITH MACH. LANG. SUBROUTINES
 FOR INCREASED SPEED. FEATURES INCLUDE MERGING OF LABELS
 CREATED WITH TOTL.LABEL 2.6 FOR FORM LETTERS ETC.
 MENU-DRIVEN. NO SEARCH & REPLACE.
 MIRAGE CONCEPTS WORD PROCESSOR
 MIR.....(D/R).....99.95.....SEPT.NA
 LINKS WITH THEIR DATABASE MANAGER AND SPELLING CHECKER /
 40 OR 80 COLUMNS (80 COLUMN MODE DOES NOT REQUIRE ANY
 ADDITIONAL HARDWARE / MANY MORE FEATURES
 WORDCRAFT
 UMI.....(NA).....149.00.....NA...NA
 HESWRITER 64
 HES.....(R).....44.95.....NOW..***
 CARTRIDGE-BASED WORDPROCESSOR. NOT AS VERSATILE AS
 'WORDPRO-CLASS' COMPETITORS

===== WORDPROCESSING CONT'D. =====

PRODUCT NAME VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
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WRITE NOW

CAR.....(R).....49.95.....SEPT.NA
FULL-FEATURED WITH GLOBAL SEARCH & REPLACE / ARABIC OR
ROMAN PAGE NUMBERING / AUDIO CASSETTE INSTRUCTIONS WITH
MANUAL / UP & DOWN SCROLLING / LINKS WITH 'MAIL NOW' /
SAVES TO TAPE OR DISK.

COPY-WRITER

CGR.....(NA).....145.00.....NOW..NA
FEATURES INCLUDE DOUBLE COLUMNS & SHORTHAND.
WORD MACHINE

CBM.....(D).....19.95.....NOW.***
YOU GET A MINI WORDPROCESSOR AND MENU-DRIVEN MAILING
LIST PROGRAM SUITABLE FOR LIGHT-WEIGHT LETTER WRITING
AND MAILINGS. DEFINITELY WORTH THE MONEY IF THIS IS ALL
YOU NEED. ALSO INCLUDED ARE DOS 5.1 AND A NICE PROGRAM
THAT WILL ADD A 'SMART' DIRECTORY MENU TO ANY OF YOUR
DISKETTES.

QUICK BROWN FOX

QBF.....(R).....65.00.....NOW..NA
A POPULAR AND FULL-FEATURED WORDPROCESSOR
PAGE MATE

ABC.....(D/T).....40.00.....NOW..NA
BY MICHAEL RILEY, AUTHOR OF FLEX-FILE.

RAPIDWRITER

HDM.....(T+D).....59.95.....NOW..NA
LISTABLE BASIC PROGRAM; LACKS GLOBALS AND NUMERICS. EACH
COPY IS CUSTOMIZED FOR YOUR PARTICULAR PRINTER &
INTERFACE.

WRITER'S ASSISTANT

RCC.....(NA).....125.00.....NOW..NA

WORD CRAFT ULTRA 64

CIM.....(NA).....NA.....NA..NA

INSTA-WRITER

CIM.....(R).....NA.....NA..NA

MAXI-PROS

AAR.....(D/T).....24.95/19.95.....NA..NA

SOFT-WRITER

RAY.....(D/T).....24.95.....NOW..NA

WORDPAC

PAC.....(D/T).....74.95.....NOW.***

WORDPROCESSOR PLUS

WRO.....(D/T).....30.00.....NOW..NA

WORD MITE 2

NEL.....(D/T).....16.95/14.95.....NA..NA

LETTER MITE 2

NEL.....(D/T).....16.95/14.95.....NA..NA

GATOS LETTER

GAT.....(T).....12.95.....NA..NA

MICROTEXT

LIT.....(NA).....NA.....NA..NA

SCRIPT EASE

MWS.....(T).....39.50.....NA..NA

===== SPELLING CHECKERS =====

SPELLMASTER

SMS.....(D).....89.00.....NOW.***
(18,000-WORD SPELLING-CHECKER. CAN BE EXPANDED-ADDING
YOUR OWN WORDS (UP TO 1500 MORE) AS NEEDED. WORDPRO--
COMPATIBLE, COMMODORE-APPROVED.

MIRAGE CONCEPTS SPELLING CHECKER

MIR.....(NA).....NA.....NA..NA

QUICKSPELL

QBF.....(NA).....NA.....NA..NA

EASY SPELL

PRE.....(NA).....NA.....NA..NA

===== DATABASE MANAGEMENT =====

PRODUCT NAME VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
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FLEX-FILE 2.1

WES.....(D).....110.00.....NOW.***+
(SEE REVIEW THIS ISSUE.)

MIRAGE CONCEPTS DATABASE MANAGER

MIR.....(D).....99.95.....NOW.***
ALL MACH. LANG. / FREE FORM RECORD DESIGN AND INPUT /
CALCULATED FIELDS / RESTRUCTURING / 2000 CHARS. PER
RECORD / PRE-DESIGNED APPLICATIONS TEMPLATES TO BE
AVAILABLE / CREATES SEQUENTIAL FILES FOR POPULAR
WORDPROCESSORS / 250 CHARS. PER FIELD / 200 FIELDS PER
RECORD / CALCULATED FIELDS / ENTIRE PROGRAM RESIDES IN
RAM SO DISKS NEED NOT BE SWAPPED DURING OPERATION / WE
FOUND THE MAILING LABEL ROUTINES TOO RESTRICTIVE AND
REGRET THE INABILITY TO SEND PRINTER CONTROL CODES FROM
WITHIN THE DBMS. WELL-DOCUMENTED WITH HANDS-ON
TUTORIALS.

DELPHI'S ORACLE

BAT.....(NA).....150.00.....NA..NA
8000 CHARS., 99 FIELDS, 9 SCREENS PER RECORD / REPORTS /
MAIL LABELS / PASSWORD PROTECTION.

POWERFILE

CIS.....(D).....130.00.....NA..NA
MENU DRIVEN / APPLICATION TEMPLATES INCLUDED / 254 CHAR.
PER RECORD / 254 CHAR. PER RECORD / SORT ON ANY FIELD /
SORT 5 DEEP / CREATES SEQUENTIAL FILES FOR
WORDPROCESSORS

DISK DATA MANAGER

MSP.....(D).....79.95.....NOW.***
UP TO 1200 RECORDS PER FILE / SORTS 2-DEEP / SEARCHES
3-DEEP / 18 FIELDS PER RECORD / 24 CHAR. PER FIELD /
MENU-DRIVEN

EASYFILE 64

CBM.....(D).....99.95.....Q3..NA
COMMODORE'S LONG-OVERDUE ADAPTATION OF TMQ SOFTWARE'S
'FILE-FAX'.

ASERT

GTC.....(D).....NA.....NA..NA
MENU-DRIVEN WITH SAMPLE RECORDS INCLUDED. 30 FIELDS PER
RECORD / 180 SEARCH WORDS / BUILT-IN STATISTICAL
CAPABILITIES / SORT ON ANY FIELD / COMPILED BASIC WITH
ML SORT ROUTINES

INSTA-FILE

CIM.....(NA).....NA.....NA..NA

CREATE-A-BASE

CDC.....(NA).....39.95.....NA..NA

COMPILED BASIC / 8 DEEP SORTS / MENU-DRIVEN

MINI JINI

JIN.....(R).....89.95.....NOW..NA
ENTRY LEVEL DBMS / 500 RECORDS PER DISKETTE / SINGLE
DEPTH SEARCH AND SORT (AD-ON MODULES ALLOW DEEPER SEARCH
AND SORTS) / INTERFACES TO JINSAM 8.0 / AVAILABLE IN
ENGLISH, SPANISH, AND FRENCH (GERMAN SOON) /
APPLICATIONS TEMPLATES AVAILABLE FOR 14.95 EA. - 24 TO BE
RELEASED OVER NEXT TWELVE MONTHS (GIFT CERTIFICATES
AVAILABLE IN DENOMINATIONS EQUAL TO PRODUCT PRICES)

JINSAM 8.0 FOR THE 64

JIN.....(D).....199.95.....Q4..NA
64 VERSION OF THE WELL-KNOWN DATABASE MANAGER / 4 LEVELS
OF SECURITY / RESTRUCTURABLE / UNLIMITED SORTS AND
SEARCHES / 1000 RECORDS / 1500 CHAR. PER RECORD / 255
FIELDS PER RECORD

DATALOG

MWS.....(D).....39.50.....NOW..NA
DATABASE MANAGER- INTERFACES TO MOST WORDPROCESSORS

DATMAN
 SWC.....(D).....59.95.....NA...NA
 19 FIELDS / SEARCH, SORT, PRINT REPORTS AND LABELS /
 INTFCS TO WORDPRO ETC.

M'FILE
 DEE.....(D).....109.95.....NOW..NA
 MENU-DRIVEN / 32 FIELDS PER RECORD / 250 CHARS. PER
 RECORD / 78 CHAR. PER FIELD / 1000 RECORDS PER DISKETTE
 / CALCULATED FIELDS / SORT ON ANY FIELD / FAST KEY
 SEARCH / CREATE SEQUENTIAL FILES FOR WORDPROCESSORS

DATA BASE 64
 ENT.....(NA).....69.00.....NA...NA
 DATA/FILE PLUS

DIG.....(D).....99.95.....NOW..NA
 UP TO 2000 RECORDS PER DISK
 SUPERBASE

PRE.....(?).....NA.....NOW..NA
 IMPRESSIVE SOUNDING SPECIFICATIONS INCLUDE: 1000 CHARS.
 PER RECORD / UP TO 4 SCREENS PER RECORD / FILE SIZE TO
 16 MILLION CHARS. / RESTRUCTURING / SPREADSHEET,
 CALENDAR, AND CALCULATOR FUNCTIONS / LINKS TO EASY
 SCRIPT WORDPROCESSOR / READY-MADE TEMPLATES AVAILABLE

YOUR FILING SYSTEM
 MTS.....(T&D).....49.95.....NOW..NA

FILING ASSISTANT
 RAI.....(NA).....125.00.....NOW..NA

INQUIRE-PAC
 PAC.....(D).....69.95.....NOW..NA

===== MAILING LISTS AND GENERAL FILING SYSTEMS =====

PRODUCT NAME	VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
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TOTL.LABEL 2.6	TOT.....(D/T).....	24.00/20.00	NOW..	***	
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MACH.LANG. SUBROUTINES SPEED CRITICAL OPERATIONS.
 COMMENT LINES / SORTING / BROWSE / MERGES WITH TOTL.TEXT
 2.6

MAILING LIST
 MSP.....(D).....54.95.....NOW..NA
 PRINTS 4-UP / 1200 ENTRIES PER DISK MAX

MAIL NOW
 CAR.....(D).....39.95.....FALL.
 MACH. LANG. SORTS / ASSEMBLY LANGUAGE PROGRAM /
 MENU-DRIVEN / SUPPORTS 600 ENTRIES / 1 TO 3 LABELS
 ACROSS / COMMENT LINE / CATEGORY FIELD / SOR BY ZIP,
 CATEGORY, LAST NAME, OR STATE / SEARCH ANY FIELD- WILD
 CARDS SUPPORTED / INCLUDES DISK BACK-UP UTILITY / LINKS
 WITH 'WRITE NOW'

COMMODORE 64 MAILLIST
 RAK.....(D/T).....17.95/14.95.....NA...NA
 MAINTAINS 300 ENTRIES

MAILFILE
 STE.....(T).....14.95.....NA...NA
 MANAGES 200 ENTRIES PER FILE

MAILING LIST 64
 ENT.....(NA).....39.00.....NA...NA

DELUXE ADDRESSER
 BRI.....(T+D).....40.00.....NA...NA

ADDRESS MITE
 NEL.....(D/T).....16.95/14.95.....NA...NA

INSTA-MAIL
 CIM.....(NA).....NA.....NA...NA

MAIL IT 64
 LIT.....(NA).....NA.....NA...NA

QUICKMAIL
 GBF.....(NA).....NA.....NA...NA

DATA-PAC
 PAC.....(D).....39.95.....NOW..NA

64 MAILING LIST
 DES.....(T/D).....30.00/35.00.....NOW..NA

THE MAILING LIST
 GAL.....(T/D).....27.95/29.95.....NOW..NA

MAILING-LIST
 LUN.....(T/D).....39.95/44.95.....NOW..NA

THE MAILER
 SUS.....(D).....38.00.....NOW...***

MAILING LIST
 LOG.....(T).....24.50.....NOW..NA

MAILING LIST V2.0
 SPE.....(T).....19.95.....NOW..NA

===== GENERAL LIST & FILING PROGRAMS =====

PRODUCT NAME	VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
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DIARY 64	CMS.....(D/T).....	39.95/34.95	NOW..	NA	
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ELECTRONIC NOTEBOOK- KEEPS TRACK OF APPOINTMENTS, PHONE
 NUMBERS, MEETINGS, BIRTHDAYS, ETC. / ACCESS BY VARIOUS
 KEY (DATE, NAME, ETC.)

DATA MANAGER
 TMW.....(D/T).....24.95.....NOW..NA

SDB 64
 SIP.....(D).....39.95.....NA...NA
 GENERAL PURPOSE FILING SYSTEM FOR ADDRESSES, HOBBIES,
 ETC. SORT & RETRIEVE BY ANY FIELD. MENU- DRIVEN WITH
 PRINTOUT CAPABILITY

TAPEWORM
 ECP.....(NA).....12.95.....NA...NA
 TAILORED EXPECIALLY FOR KEEPING TRACK OF YOUR TAPES AND
 RECORDS

LIST HELPER
 MAG.....(NA).....NA.....NA...NA
 EDIT, ENTER, AND SORT VARIOUS LISTS

LIST MITE 2
 NEL.....(D/T).....16.95/14.95.....NA...NA
 GENERAL LIST MANAGEMENT FOR INVENTORIES, COLLECTIONS,
 ETC.

OMNIFILE
 STG.....(D/T).....19.95.....NA...NA

DATAFILE
 FAM.....(D/T).....17.95/15.95.....NA...NA

INVENTORY MANAGER
 GOS.....(NA).....19.95.....NA...NA

FILE/CARD
 DIG.....(D).....29.95.....NOW..N.A.

DATA/SCAN
 DIG.....(D).....29.95.....NOW..N.A.

===== MISCELLANEOUS BUSINESS AND PERSONAL SOFTWARE =====

PRODUCT NAME	VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
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TOTL.TIME 2.6	TOT.....(T/D).....	35.00/39.00	NOW..	***	
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USEFUL FOR SCHEDULING AND MANAGING PROJECTS

QUICK-CHART
 ABA.....(T/D).....14.95/17.95.....NOW..N.A.
 TOOL FOR CREATING BAR CHARTS OF VARIOUS DATA

RESEARCH ASST.
 TOT.....(T/D).....35.00/39.....NOW...***
 UNIQUE CROSS-REF. TOOL FOR BIBLIOGRAPHIES ETC.

BIBLIOGRAPHER
 GEM.....(D).....50.00.....NOW..N.A.
 CROSS-REFERENCING PROGRAM

DATE DUE

MWS.....(D).....39.50.....NOW..NA
LIBRARY UTILITIES TO MANAGE OVERDUES ETC. PRODUCES
HARDCOPY / SORTS & SEARCHES
MASTER LIBRARY PROGRAM

MWS.....(D).....39.50.....NOW..NA
INTERESTING PROGRAM FOR MANAGING LARGE COLLECTIONS OF
COMPUTER DISKETTES. CATALOGS OVER 8000 TITLES / M.L.
SORTING / SEARCHES AND FLAGS DUPLICATE TITLES / MORE
CCI RETAILER 64

CCI.....(D).....1073.00.....NA...NA
INTEGRATED HARDWARE/SOFTWARE POINT OF SALE SYSTEM.
INCLUDES: IEEE-488 INTERFACE WITH BASIC 4.0 / COMPUTER
CONTROLLED CASH DRAWER / TRANSACTION DISKETTE /
INVENTORY DISKETTE / MACHINE LANG. MONITOR AND TERMINAL
SOFTWARE / MONITOR- PEDESTAL / USER'S MANUAL
FARM MANAGER I (GENERAL BUSINESS)

CYB.....(D).....49.95.....NOW..NA
INCLUDES: INVESTMENT / LOAN ANALYSIS / LAND PURCHASE /
MACHINE COST / AND BUSINESS STUDY PROGRAMS.
FARM MANAGER II (BEEF PRODUCTION)

CYB.....(D).....49.95.....NOW..NA
INCLUDES: BEEF CALF PRODUCTION / CATTLE FEEDER / HEAVY
CATTLE / BEEF MARKETING / AND RATION ANALYZER PROGRAMS
FARM MANAGER III (PORK PRODUCTION)

CYB.....(D).....49.95.....NOW..NA
INCLUDES: PIG PRODUCTION / PIG FEEDER / HEAVY HOGS / AND
RATION ANALYZER

====> SEE 'CYBER FARMER' UNDER BUSINESS ACCOUNTING, FOR A
COMPREHENSIVE FARM ACCOUNTING PACKAGE.

NUMERIC KEYPAD (SOFTWARE)

CYB.....(D).....14.95.....NOW.***
CONVERTS PART OF YOUR KEYBOARD INTO A NUMERIC CLUSTER
MORE SUITABLE FOR FINANCIAL AND ACCOUNTING WORK. STICK-
ON LABELS INCLUDED FOR KEY-TOPS. 'KEYPAD' CAN BE TOGGLED
ON AND OFF EASILY DURING OPERATION, AND ROUTINES MAY BE
COPIED ONTO APPLICATION DISKETTES FOR CONVENIENCE.

FORM GENERATOR

SIM.....(NA).....19.95.....NA...NA
APPOINTMENTS

SIM.....(NA).....24.95.....NA...NA
TASK ORGANIZER

SIM.....(NA).....24.95.....NA...NA
PRO SPORTS STATS (FOOTBALL)

ECC.....(D).....\$285.00.....NA...NA
AWESOME SOUNDING DATA BASE ON DISK WITH EVERY
CONCEIVABLE STATISTIC FOR NFL AND USFL GAMES SINCE 1970.
IMPLIES YOU WILL BE ABLE TO PICK WINNERS MORE OFTEN BY
CONSULTING YOUR COMPUTER BEFORE A GAME. (WEEKLY UPDATES
ARE INCLUDED FOR \$15 PER MONTH.) IF YOU LIKE THIS
PACKAGE, THEY HAVE SIMILAR SYSTEMS FOR BASEBALL, HOCKEY,
AND BASKETBALL. THIS SEEMS LIKE A NATURAL FOR THE
SOFTWARE INDUSTRY, AND WE EXPECT TO SEE CONSIDERABLE
COMPETITION IN THIS AREA IN THE NEXT YEAR.

NEW TENANT FILE

FAB.....(D/T).....27.95/24.95.....NA...NA
ACTIVE AND CLOSED TENANT DATA FILES / OCCUPANCY AND RATE
SPREADSHEETS

UTILITY FILE

FAB.....(D/T).....20.95/17.95.....NA...NA
MONITORS, ANALYZES, AND FORECASTS VARIOUS UTILITY
CONSUMPTIONS. REQUIRES DAILY INPUT

INVENTORY CONTROL PROGRAM

INP.....(D).....55.00.....NA...NA
PAYROLL MASTER

LIT.....(NA).....NA.....NA...NA

===== TEACHING AND ADMINISTRATIVE AIDS =====

GRADEPRO

GEM.....(T/D).....25.00.....NOW..NA
FULL-FEATURED GRADING UTILITY, ALLOWS WEIGHTED OR
STRAIGHT AVGS., GENERATES BAR GRAPHS OF GRADE
DISTRIBUTIONS, AUTOMATIC GENERATION OF PROGRESS REPORTS.
MASTER GRADES PROGRAM

MWS.....(D).....xx.xx.....NA...NA
COMPREHENSIVE GRADES MANAGEMENT SYSTEM FOR TEACHERS.
INCLUDES ATTENDANCE / POINT- SYSTEM, PERCENTAGE, AND
LETTER GRADE TRACKING AND REPORTING / UP TO 200 STUDENTS

===== TYPING AND KEYBOARD MASTERY =====

TYPING TUTOR + WORD INVADERS

ACA.....(T).....21.95.....NOW.****+
THIS IS THE BEST TYPING TUTOR WE HAVE SEEN YET; IT CAN
GET YOUR CHILDREN TOUCH- TYPING IN SHORT ORDER AND BRING
AN OLD HAND UP TO SPEED. INCLUDES EXCELLENT TRAINING
MODULES AND AN ARCADE-TYPE MODE TO LIVEN THINGS UP AND
PUT SOME PRESSURE ON.

HAPPY TUTOR

PAC.....(T).....19.95.....NOW.***+
THIS IS A PRETTY FAIR TYPING TUTOR WHICH USES A HAPPY
FACE AND ANNOYING SOUND EFFECTS TO PRESSURE YOU

MASTER TYPE

LIG.....(D).....39.95.....NOW..NA
EARNED INFOWORLD'S HIGHEST RATINGS. WE LIKE THE PITCH;
"LEARN TO TYPE OR GET BLOWN TO BITS". COMBINES
INSTRUCTION WITH ARCADE PLAY.

TOUCH TYPING TUTOR

TAY.....(T/D).....19.95/24.95....NOW..NA
19 LESSONS AND 12-PG. MANUAL.

QUICKFINGER

QBF.....(NA).....NA.....NA...NA
QUICK BROWN FOX'S OWN TYPING TUTOR.

KIDS ON KEYS

SPI.....(R).....NA.....NA...NA
FROM SPINNAKER'S LEARNING GAMES SERIES.

===== PROGRAMMING INSTRUCTION =====

INTRODUCTION TO BASIC: PART 1

CBM.....(T).....21.00.....NOW.***
TWO CASSETTES, THOROUGH MANUAL, & FLOW-CHART TEMPLATE
(!). WELL DONE PACKAGE TAKES THE BEGINNER THRU THE
FUNDAMENTALS WITHOUT TEDIOUS TYPING IN OF EXAMPLE
PROGRAMS.

COMMODORE 64 TUTORIAL VOL. 1

CYB.....(D).....24.95.....NOW..NA
SELF-CONTAINED LESSONS ON DISKETTE (NO MANUAL). INCLUDES
INTRO TO KEYBOARD AND 7 INTRO TO BASIC LESSONS

COCO

HES.....(D/T).....49.95.....NOW..NA
PROGRAMMING INSTRUCTION SYSTEM

COCO II

HES.....(D/T).....44.95.....NOW..NA
UNIQUE APPROACH TO GAME PROGRAMMING INSTRUCTION; STEPS
USER THRU THE STRUCTURE OF A SAMPLE GAME UNTIL THE USER
IS ABLE TO ALTER OR TOTALLY RE-WRITE THE GAME.

STEP BY STEP

PDI.....(D).....59.95.....NA...NA
GRADUATED INSTRUCTION ON BASIC AND PROGRAMMING
TECHNIQUE. ABOUT TWENTY HOURS OF INSTRUCTION WITH
QUIZZES.

PROGRAMMING IN BASIC

LYN.....(VIDE TAPE)..49.95.....NA...NA
CLOSE TO 2 HRS. OF PROGRAMMING INSTRUCTION (BASIC) ON
VHS OR BETA CASSETTE.

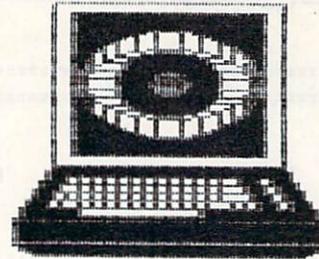
===== QUIZ DESIGN =====

PRODUCT NAME
VENDOR CODE MEDIA PRICE AVAIL RTG.

QUIZMASTER
RAY.....(T).....9.95.....NOW..NA
CREATE YOUR OWN QUIZZES OF ANY LENGTH ON ANY SUBJECT.
EASYQUIZ 64
CBM.....(D).....19.00.....NOW..***
CREATE LESSONS AND ADMINISTER MULTIPLE CHOICE QUIZZES.
QUIZ-KIT
LOG.....(T).....14.50.....NOW..NA
CREATE YOUR OWN QUIZZES OF ANY LENGTH ON ANY SUBJECT.
SPELL-IT!
LOG.....(T).....12.50.....NOW..NA
CREATE YOUR OWN SPELLING QUIZZES
MULTIPLE CHOICE
MWS.....(D+T).....29.50.....NOW..NA
CREATE UP TO 150 QUESTION AND ANSWER SETS PER DISK. ANY
NUMBER MAY BE EXTRACTED FROM THESE AND SCRAMBLED. TESTS
MAY BE CONDUCTED VIA THE SCREEN OR PRINTED OUT.
QUIZ ME
SIM.....(NA).....14.95.....NA...NA
OMNITEST
ST6.....(D/T).....29.95.....NA...NA
DRILLMASTER
ST6.....(D/T).....17.95.....NA...NA
QUIZ AND DRILL SYSTEM. COMES WITH STATE CAPITOLS AND
VOCABULARY QUIZZES.

===== GENERAL =====

MATHPAK
LOG.....(T).....49.50.....NOW..NA
6 PROGRAMS (AVAILABLE INDIVIDUALLY FOR 12.50 EA.):
STATISTICS, LINEAR EQUATIONS, DATA AND FUNCTION
PLOTTING, FUNCTION ANALYSIS, COMPLEX FUNCTIONS, AND
MATRIX OPERATIONS. SOME INCLUDE PLOT AND GRAPHING
ROUTINES FOR PRINTER.
YOU CAN DO MATH!
MTS.....(D).....49.95.....NOW..NA
UNIQUE CONCEPT - DESIGNED TO OVERCOME "MATH ANXIETY" BY
DETECTING YOUR PROBLEM AREAS AND GIVING THEM SPECIAL
ATTENTION.
ADD/SUB
BOS.....(NA).....16.95.....NA...NA
SINGLE OR MULTIPLE DIGITS. OPTIONAL PICTORIAL
REPRESENTATION. SHOWS BORROWING AND CARRYING. AUDIO
FEEDBACK.
NUMER-BECI
BOS.....(NA).....16.95.....NA...NA
NUMBER RECOGNITION / COUNTING / GROUPING / SHAPE, SIZE, &
NUMBER DISCRIMINATION
THE MATH TEACHER
CTC.....(T).....39.95.....NOW..***
FIRST GRADE THRU 9TH. (+ - * /)
MATH TUTOR
GTR.....(T).....15.00.....NA...NA
K-6 ADDITION AND SUBTRACTION
'ABC'
THO.....(D/T).....21.95/18.95.....NA...NA
THE ALPHABET FOR PRESCHOOLERS. GRAPHICS AND SOUND
PINBALL MATH
TAY.....(D/T).....24.95/19.95.....NA...NA
TRIVIA!



DIG.....(T/D).....14.95/19.95.....NOW..NA
YOUR CHOICE OF GENERAL & MOVIES / SCIENCE & HISTORY /
LITERARY & QUOTATIONS.
VOCABULARY MASTER
GAT.....(T).....20.00.....NA...NA
500- WORD VOCABULARY BUILDER.
LANGUAGE TUTOR
DIG.....(T).....14.95.....NOW..NA
3 LEVELS EACH; GERMAN OR SPANISH - OR ALL 3 ON ONE DISK
FOR 29.95.
CONSTELLATION QUIZ
GAT.....(T).....15.00.....NA...NA
ASTRONOMY LESSONS AND QUIZZES
EDUCATION PAK
COMPUTERMAT.(D/T).....29.95/24.95.....NOW..NA
4 PROGRAMS: GEOGRAPHY MATCH / MATH ADVENTURE / RULER /
MICRO
BLACKJACK TUTOR
BRI.....(T).....14.95.....NA...NA

===== EDUCATIONAL COLLECTIONS =====

PRODUCT NAME
VENDOR CODE MEDIA PRICE AVAIL RTG.

64 PUBLIC DOMAIN
CBM.....(D).....250.00.....NOW..***
646 PROGRAMS ON 52 DISKS WITH INDEX. COVERS BROAD RANGE
OF SUBJECTS AND AGE-GROUPS. MOSTLY EDUCATIONAL WITH
SOME ENTERTAINMENT, ADMINISTRATIVE, AND DEMONSTRATION
SELECTIONS. NOT ORIGINALLY AVAILABLE TO INDIVIDUAL
CONSUMERS, EXCEPT THRU SCHOOLS AND CLUBS, THE SET IS
BEGINNING TO SHOW UP FOR SALE AT SOME DEALERS NOW.
EDUCATIONAL ASSORTMENT
MED.....(T).....from 7.95.....NOW..***
150+ SELECTIONS; GRADES K THRU COLLEGE. LIMITED USE OF
GRAPHICS; THESE ARE MOSTLY RE-WRITES OF OLDER PET
PROGRAMS
EDUCATIONAL ASSORTMENT
MGR.....(T).....12.95-EA.....NOW..NA
OVER 100 PROGRAMS ON WIDE RANGE OF ACADEMIC SUBJECTS
GRADES 1 - ADULT. PRICES COME DOWN FOR SIX OR MORE
SELECTIONS. DISKS AVAILABLE FOR EXTRA CHARGE.
EDUCATIONAL ASSORTMENT
PGI.....(T).....8.95.....NA...NA
FOR AGES 3-9, SOUND AND GRAPHICS, MOST INTERFACE WITH
PGI'S EDUMATE LIGHT PEN. ENTIRE SET AVAILABLE ON
DISKETTE FOR \$79.95
EDUCATIONAL ASSORTMENT
MPH.....(D/T).....NA.....NA...NA
GRADES 4 THRU COLLEGE. ALL SUBJECTS INCLUDING SAT
ANALOGIES, ANAGRAMS, CALCULUS, PHYSICS, AND CHEMISTRY.

graphics

===== GRAPHICS =====

PRODUCT NAME	VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
SORCERER'S APPRENTICE	EHS.....(?)		49.95	NOW	***
SEE REVIEW THIS ISSUE					
'64 PENCIL	DUN.....(D/T)		24.95	NA	NA
M.L. HIGH-RES DRAWING, SINGLE-KEY COMMANDS / JOYSTICK 'PENCIL' / 10 SPEEDS / BLOCK DUPLICATION / ERASE / 1525 PRINTER DUMP / SAVE TO DISK OR TAPE					
SCRIBBLER	SNX.....(T)		35.95	NOW	NA
HIGH-RES. DRAWING IN MULTI-COLOR MODE, MAGNIFY, PAINT, & CIRCLE COMMANDS; JOYSTICK REQUIRED.					
PAINT WIZARD	DMO.....(R/D)		< 40.00	NOW	NA
DRAW ON THE SCREEN. AUTOMATIC CIRCLES, LINES, PATTERNS.					
DOODLE	DMN.....(T/D)		29.95	NOW	NA
MACHINE LANG. DRAWING ROUTINES INCLUDE PAINT & ERASE WITH 8 BRUSH SIZES, DUPLICATE, ENLARGE, REDUCE, REVERSE, MIRROR. MENU- DRIVEN / COLOR NOT SUPPORTED.					
DELTA DRAWING	SPI.....(R)		NA	NA	NA
SKETCH PAD 64	DIG.....(D)		19.95	NOW	***
"WORKS LIKE A SPIROGRAPH AND AN ETCH-A-SKETCH..." SAVE TO DISK. "SLIDE-SHOW" MODE.					
SCREEN-GRAPHICS-64	ABA.....(T/D)		24.95/27.95	NOW	NA
ADDS 20+ COMMANDS TO BASIC ALLOWING SIMPLE MEANS FOR DRAWING POINTS, LINES, BOXES, AND SPRITES. DISPLAYS CAN BE SAVED TO TAPE OR DISK.					
'64 GRAFIX SAMPLER	MID.....(T)		19.95	NOW	**
SIMPLE SPRITES AND SIMPLER HIGH-RES. ROUTINES. THE PUBLIC DOMAIN STUFF GOING AROUND IS MUCH MORE IMPRESSIVE.					
'64 PANORAMA	MID.....(T)		19.95	NA	NA
19 PRE-DIGITIZED DRAWINGS AS WELL AS A HIGH-RES. DRAW ROUTINE FOR JOYSTICK AND DUMP TO CBM PRINTER.					

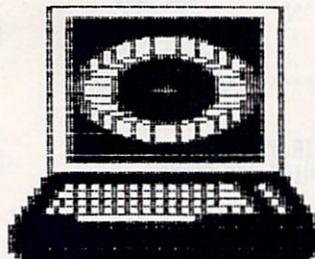
===== PLOTTING / CHARTS / & PRINTER GRAPHICS =====

PRODUCT NAME	VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
QUICK CHART	ABA.....(D/T)		17.95/14.95	NOW	NA
PRESENTATION CHART- MAKER					
MATH GRAPH	SIM.....(NA)		19.95	NA	NA
PRINTER UTILITY PROGRAMS	CAR.....(T)		19.95	NOW	***
ALLOWS SCREEN DUMPS (NORMAL OR REVERSED) TO GEMINI, EPSON, AND PROWRITER PRINTERS. ALSO ALLOWS PRINTING OF ENTIRE CBM CHARACTER SET (GRAPHICS SYMBOLS TOO). ALSO INCLUDES TWO LARGE PRINTER FONTS FOR BANNERS OF VARIOUS SIZES.					

'64 BANNER/HEADLINER	MID.....(T)		19.95	NA	NA
USE TO CREATE LARGE BANNERS ON A VARIETY OF PRINTERS.					
BOLDFACE	LOG.....(T)		18.00	NOW	NA
ALLOWS USE OF 3 CUSTOM FONTS FOR SPECIAL EFFECTS PRINTING.					

===== SPRITES EDITORS =====

PRODUCT NAME	VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
SPRITE DESIGNER	ACA.....(NA)		16.95	NOW	NA
BOASTS ELABORATE MANIPULATIONS FOR SPRITES INCLUDING: MERGE, ROTATE, SHEAR, TRANSLATE, REVERSE, REFLECT, INTERSECT, ETC.					
SPRITE-64	CRO.....(NA)		49.95	NA	NA
ASSEMBLY LANG. / SUPPORTS 64 SPRITES ON SCREEN AT ONE TIME / USE JOYSTICK OR PADDLES / ADDS VARIABLES TO BASIC (SPRITE %, SX%, SY% ETC.) NO POKES NEEDED.					
SPRITE-AID	ABA.....(T/D)		14.95/17.95	NOW	NA
FULL-FEATURED SPRITE EDITOR: SAVES SPRITES AS READY-TO-USE DATA STATEMENTS. SUPPORTS JOYSTIKS, KEYBOARD, AND MULTI-COLOR.					
DELUXE SPRITE SHAPER	QUA.....(T/D)		29.95/31.95	NOW	***
MULTI-COLOR SPRITE EDITOR.					
SPRITE EDITOR	LUN.....(T)		32.95	NOW	NA
CREATE MULTI-COLORED SPRITES.					
SPRITE WRITER	ACS.....(NA)		19.95/24.95	NOW	NA
SPRITEWRITER	PIX.....(T)		18.95	NOW	NA
SPRITE FUN 64	ENT.....(NA)		30.00	NA	NA
SPRITE GEN	FAN.....(D/T)		17.95/15.95	NA	NA
SPRYTEBYTER	FOX.....(D/T)		34.95/29.95	NOW	NA
MENU-DRIVEN / SUPPORTS MULTI-COLOR / JOYSTICK OR KEYBOARD / M.L. ROUTINES / OVER 60 COMMANDS / ROTATE, INVERT, OBTERT, SYMMETRY, AND/OR, REVERSE, MOVIE ETC. / CREATE UP TO 128 SPRITES PER FILE. INCLUDES 'GAMEMAKER' ROUTINE TO AID GAME DEVELOPMENT.					
SPRITEMAKER	GTR.....(T)		10.00	NA	NA
SUPER SPRITE	LIT.....(D)		NA	NA	NA
MULTI-COLOR CHAR. EDITOR	JUS.....(D/T)		21.95/19.95	NA	NA
CREATE YOUR OWN CHARACTER SETS. LOAD AND SAVE / 192 CHARS. AT A TIME / ROTATION AND SHIFTS / CURSOR CONTROLLED					



music

===== MUSIC =====

PRODUCT NAME	VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
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THE STAFF
 PMS.....(T/D).....14.95/19.95.....NOW..NA
 "POLYPHONIC MUSIC EDITOR AND GENERATOR. ENTER UP TO 93 MEASURES OF 3 PART HARMONY ON EASY TO USE GRAPHIC DISPLAY."
 SYNTHY-64
 ABA.....(T/D).....29.95/32.95.....NOW..NA
 CREATES VARIOUS SOUNDS AND MELODIES WITHOUT POKES VIA SIMPLIFIED COMMANDS ADDED TO BASIC.
 (6502 machine code listing...25.00)
 (manual only.....5.00)
 SOUND SHAPER
 QUA.....(T/D).....9.95/11.95.....NOW..***
 KEYBOARD CONTROL OF SOUNDS. ALL FEATURES OF SID MAY BE MANIPULATED FROM GRAPHIC SCREEN MENUS. SOUNDS ARE AUTOMATICALLY CONVERTED INTO READY TO USE POKES AND DATA STATEMENTS FOR YOUR OWN PROGRAMS AT THE PUSH OF A KEY.
 MUSIC MAGIC
 ACS.....(T/D).....19.95/24.95.....NOW..NA
 DIRECT KEYBOARD CONTROL OF SOUNDS.
 EARLY GAMES MUSIC
 CDU.....(NA).....NA.....NA...NA
 ASSORTMENT OF GAMES THAT INTRODUCE 4 TO 12 YEAR OLDS TO THE BASICS OF MUSIC.
 MUSIC MAKER
 COM.....(D/T).....24.95/19.95.....NOW..NA
 ENTER SHEET MUSIC NOTES FOR PLAYBACK IN 3 VOICES. INCLUDES SAMPLE TUNES.
 NOTE PRO I
 ELI.....(D/T).....27.95/24.95.....NOW..***
 SIMILAR TO NOTE PRO II BUT WITHOUT TRANPOSE AND ARRANGE / 4 OCTAVES / ONE MEASURE INPUT DISPLAY / NO FILE JOIN
 NOTE PRO II
 ELI.....(D/T).....49.95/46.95.....NOW..***+
 HIGH SPEED PLAY / 8 MEASURE TREBLE CLEF INPUT DISPLAY / VARIABLE DURATIONS / LEGATO OR STACCATO / TRANPOSE / 8 OCTAVE / RE-SEQUENCE / SID CONTROLS / FILE JOINING / TONE PRESETS
 NOTE PRO BRIDGE
 ELI.....(D/T).....27.95/24.95.....NOW..NA
 M.L. SUBROUTINE WHICH MAY BE COPIED AND ADDED TO USER'S PROGRAMS ALLOWING ACCESS FROM BASIC TO NOTE PRO FILES. FULL DOCUMENTATION.
 MUSIC MAKER 64
 ENT.....(NA).....39.00.....NA...NA
 SUPER 64 MUSIC MAKER
 SEY.....(T).....19.95.....NA...NA
 PLAY, MODIFY, SAVE, AND LOAD MUSIC.
 DELTA MUSIC
 SPI.....(R).....NA.....NA...NA

===== MISCELLANEOUS =====

PRODUCT NAME	VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
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PRO-BOWL
 ACS.....(D).....199.95.....NA...NA
 RECORD KEEPING AND HANDICAPPING FOR BOWLING LEAGUES (...WE WOULD ADD 'WELL-FUNDED' BOWLING LEAGUES)

RECIPE BOX
 ARI.....(D).....19.95.....NA...NA
 MENU-DRIVEN 'KITCHEN DATA BASE': SEARCH BY INGREDIENT / SEARCH BY CATEGORY / SEARCH BY BOTH / MEASUREMENT & SERVING CALCULATIONS / DUMP TO PRINTER
 DIET CALC
 MYS.....(D/T).....24.95/19.95.....
 (WE THOUGHT IT WOULD BE CUTE TO PUT THIS ONE RIGHT AFTER 'RECIPE', ABOVE.) TELL THE COMPUTER WHAT YOU ATE AND WHAT YOU DID, AND IT WILL CALCULATE YOUR GAIN (OR LOSS)
 BASKETBALL STATS
 MWS.....(D).....39.50.....NA...NA
 MENU-DRIVEN AID FOR COACHES: TRACK 18 PLAYERS THRU 30 GAMES / REPORTS ON FIFTEEN STATISTICS (ELEVEN ARE PRE-DEFINED) / PRINTER SUPPORTED
 FOOTBALL SCOUT
 MWS.....(D).....79.50.....NA...NA
 GET THE JUMP ON YOUR RIVALS: ANALYZE OTHER TEAM'S OFFENSE / UP TO 50 PLAYS PER GAME STORED / 6 GAMES MAY BE LINKED FOR A 300- PLAY COMPOSITE REPORT. 3 REPORTS: INDIVIDUAL PLAYS, TENDENCIES, ZONE-HASH-DOWN-DISTANCE CHART.
 ASSORTED RANGE OF PROGRAMS
 MID.....(SEND FOR CATALOG).....NA...NA
 ASSORTED RANGE OF PROGRAMS
 PTM.....(NA).....NA.....NA...NA

entertainment

===== ARCADE & ACTION GAMES =====

PRODUCT NAME	VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
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GRIDRUNNER
 HES.....(NA).....39.95.....NOW..***+
 (SEE "GALLERY" THIS ISSUE.)
 RETRO BALL
 HES.....(NA).....39.95.....NOW..***+
 M.L. AIR-HOCKEY SIMULATION, JOYSTICKS REQ'D.
 MOTOR MANIA
 UMI.....(NA).....29.95.....NOW..***+
 (SEE "GALLERY" THIS ISSUE.)
 FROGGER
 SIE.....(T/D).....34.95.....NOW..***+
 (SEE "GALLERY" THIS ISSUE.)
 JUMPMAN
 EPY.....(NA).....39.95.....NOW..***+
 (SEE "GALLERY" THIS ISSUE.)
 CRUSH-CRUMBLE-CHOMP
 EPY.....(NA).....29.95.....NOW..NA
 DINOSAURS VISIT YOUR CITY- YOU ASK THEM TO LEAVE.
 PAKACUDA
 CDC.....(T/D).....19.95/23.95.....NOW..***+
 (SEE "GALLERY" THIS ISSUE.)
 CENTROPODS
 CDC.....(T/D).....19.95/23.95.....NOW..***+
 CENTIPEDE THEME/ M.L. / JOYSTICK.
 EVOLUTION
 SDP.....(NA).....NA.....NA...NA
 99 LEVELS, ARCADE SOUND, HI-RES GRAPHICS, M.L.
 FORT APOCALYPSE
 SYN.....(D/T).....34.95.....NOW..***+
 TAKE YOUR JET COPTER DOWN THRU TUNNELS AND CAVE. GOOD ARCADE ACTION; JOYSTICK.

===== ARCADE & ACTION GAMES contd. =====

PRODUCT NAME
VENDOR CODE MEDIA PRICE AVAIL RTG.

PROTECTOR II/ SHAMUS/ THE PHARAOH'S CURSE/ SURVIVOR/ SLAM BALL/ DRELBS
SYN.....(T/D).....34.95 EA.....NOW..NA
HIGH-RES. M.L. ANIMATED ARCADE GAMES.
FAST EDDIE
SIR.....(NA).....34.95.....NOW..***
CUTSIE GAME GETS OLD FAST. NONETHELESS, THE GRAPHICS ARE SMOOTH AND EVERYTHING WORKS.
REPTON
SIR.....(NA).....39.95.....NOW..***
NOW THIS IS A FIRST-RATE DEFENDER TYPE GAME! M.L. OF COURSE. GREAT ACTION, ANIMATION, SOUND, AND PLAY FEATURES.
TWERPS/ TURMOIL/ DEADLY DUCK/ FANTASTIC VOYAGE/ ALPHA/ BLADE OF BLACKPOOL/ CRITICAL MASS/ SNAKE BYTE/ SPIDER CITY/ SQUISH/ TYPE ATTACK
SIR.....(NA).....39.95 EA.....NOW..NA
SPORE WAR
DIG.....(T/D).....14.95/19.95.....NOW..NA
ARCADE SHOOT-EM-UP.
MAZE-BLOCKADE
DIG.....(T/D).....14.95/19.95.....NOW..NA
COLLISION
TOP.....(T/D).....12.95/15.95.....NOW..NA
RENEGADE F-16/ FIREFIGHTER/ MONEY MINEFIELD/ MOONLANDER/ PEDESTRIAN
LUN.....(NA).....19.95 EA.....NOW..NA
TORPEDO
SUS.....(T/D).....25.95/27.95.....NOW..***
SUB-HUNT GAME WITH GAUGES AND A SONAR SCREEN.
SUBWAR 64
CCI.....(D/T).....23.95/19.95.....NOW..NA
SUB-HUNT SIMULATION GAME WITH GAUGES, PERISCOPE VIEW, AND SONAR.
TERMINAL ZONE
CCI.....(NA).....19.95.....NOW..NA
BOMBER MISSION/ JOYSTICK RGR'D.
THUNDERBOLT
CCI.....(NA).....19.95.....NOW..NA
FLY YOUR SPACECRAFT VS. HOSTILES/ JOYSTICK RGR'D.
SPACE RAIDER
CCI.....(NA).....19.95.....NOW..NA
SHOOT THE ALIENS/ JOYSTICK.
RUNWAY 64
SUS.....(T/D).....25.95/27.95.....NOW..***
INSTRUMENT-BASED FLIGHT SIMULATOR GAME. NOT ANIMATED.
STELLAR TRIUMPH
INT.....(NA).....24.95.....NOW..NA
SKIER 64
ABA.....(T/D).....14.95/17.95.....NOW..NA
JOYSTICK OR KEYBOARD. SOUND & SPRITES.
ANNIHILATOR
VCT.....(NA).....19.95.....NOW..***
SMART-BOMBS & BLASTERS, ANIMATION
KONGO KONG
VCT.....(NA).....19.95.....NOW..NA
ROLLING BARRELS, LADDERS, & THE FAMOUS GORILLA.
LAZER BLAZER
ACS.....(T/D).....24.95.....NOW..NA
CANDY-MAN
STA.....(NA).....24.95.....NOW..***
MUNCH THRU THE FAMILIAR MAZE. M.L. W/ SCROLLING WINDOW. USES KEYBOARD GRAPHICS.
SHOOTING GALLERY
EME.....(NA).....21.95.....NOW..NA
M.L. ARCADE GAME.

ARCADE PAK
COM.....(NA).....24.95.....NOW..***
3 GAMES: HEAD ON, ALIEN INVASION, & TARGET COMMAND.
GAME PAK
COM.....(NA).....14.95.....NOW..***
3 GAMES: DRAGON CHASE, DEFLECT, & FLIP-IT.
SEAWOLFE
AAR.....(D/T).....24.95/19.95.....NA..NA
M.L. SEA- WAR GAME / JOYSTICK.
ZEUS
AAR.....(D/T).....24.95/19.95.....NA..NA
M.L. / THUNDERBOLTS, GODS, & SHIELDS.
NEUTRAL ZONE
ACC.....(D/T).....34.95.....NOW..NA
DEEP SPACE COMBAT/ ALL M.L. HI-RES. SMOOTH SCROLLING (360 DEG.) / 3-D REALISM / FANTASTIC SOUND EFFECTS.
LAZER BLAZER
ACS.....(D/T).....24.95.....NA..NA
FAST-MOVING CYCLE GAME/ JOYSTICKS
4-GAME PAK
ADA.....(D/T).....29.99.....NA..NA
SERPENTS/ ATOMIC MAN/ ALIEN INVASION/ HEAD ON.
VOYAGER 64
BIL.....(D/T).....24.95.....NA..NA
M.L. MULTI- SCREEN.
MISSION 64
BRI.....(T+D).....19.95.....NA..NA
SPACE SHOOT-EM-UP / JOYSTICK OR KEYS.
SERPENTINE
BRO.....(R).....39.95.....FALL.NA
M.L. HUNGRY SNAKES / JOYSTICK.
DAVID'S MIDNIGHT MAGIC
BRO.....(D).....34.95.....NOW..****
SEE "GALLERY" THIS ISSUE.
CHOPLIFTER
BRO.....(R).....44.95.....FALL.NA
ONE OF THE MOST POPULAR HOME ARCADE GAMES EVER. NOW FOR THE 64 / JOYSTICK.
ATTACK OF THE MUTANT CAMELS
HES.....(R).....44.95.....NA..NA
SEQUEL TO 'GRIDRUNNER' / FAST AND FUN / JOYSTICKS.
ATTACK OF THE PHANTOM KARATE DEVILS
PHA.....(D/T).....34.95.....NA..NA
LOVE THE NAME! MARTIAL-ARTS THEME/ JOYSTICKS.
KILLER PILLER
CAS.....(NA).....9.99
.....NA..NA
APE CRAZE / LOGGER / SUPERCUDA / PEGASUS ODYSSEY / ESCAPE MCP
CDC.....(D/T).....27.95.EA.....NOW..NA
MOONDUST / TRASHMAN / ASTROBLITZ / SAVE NEW YORK (ALL REQUIRE JOYSTICK)
CRE.....(R).....34.95.EA.....NOW..NA
POOYAN / MOON SHUTTLE
DAS.....(D).....34.95.EA.....NA..NA
AIR STRIKE / JET BOOT JACK / VENUS VOYAGERS / TOPSEE TURVEE / MONSTER SMASH
DMD.....(R/D).....< 40.00.EA.....NA..NA
SHOOTING GALLERY
EME.....(NA).....21.95.....NA..NA
ALL-STAR BASEBALL / PITSTOP
EPY.....(NA).....NA.....NA..NA
STAR LEAGUE BASEBALL
GAM.....(NA).....NA.....NA..NA
ARMADA / INTERCEPTOR
GTR.....(T).....10.00 EA.....NA..NA
VOYAGER
GTR.....(T).....15.00.....NA..NA
LASER STRIKE
ISI.....(D/T).....29.95/24.95.....NOW..***

ROADTOAD / CHICKEN CHASE
 M&B.....(T).....19.95.....NA...NA
 M.L. / HI-RES COLOR GRAPHICS & SOUND.
 3-D MAN
 NUF.....(T).....19.95.....NOW...***
 HOW PAC-MAN WOULD LOOK FROM THE 'GRID' / SPRITES, SOUND
 / JOYSTICK.
 KOOKY CLIMBER
 REN.....(D/T).....24.95.....NA...NA
 SHOOTING GALLERY
 REN.....(D/T).....23.95.....NA...NA
 CROSSFIRE / JAWBREAKER
 SIE.....(D/T).....34.95.....NA...NA
 CYCLONS
 SNX.....(D/T).....31.95/27.95.....NA...NA
 ALL M.L. HI-RES GRAPHICS & SOUND.
 SKI-RUN / BUNNY
 STC.....(T).....20.00 EA.....NA...NA
 METEOR
 STC.....(T).....12.00.....NA...NA
 ZWARK
 SWC.....(D/T).....24.95/19.95.....NA...NA
 ALL M.L. HI-RES / SPRITES / SOUND
 SPACE SENTINEL
 T&F.....(D).....29.95.....NA...NA
 SPRITE & CHAR. GRAPHICS WITH 3-VOICE SOUND.
 SUICIDE STRIKE / JUICE / KID GRID
 TRO.....(NA).....34.95 EA.....NA...NA
 CHOMPER MAN
 VCT.....(NA).....19.95.....NA...NA
 FIRE ANTS AND KILLER BEES
 WIZ.....(D/T).....24.95/22.95.....NA...NA
 ALL M.L. / 2-PLAYER MULTI- LEVEL

===== STRATEGY, SIMULATION, PARLOR & CASINO =====
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PRODUCT NAME	VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
RENAISSANCE (OTHELLO)	UMI.....(T).....		29.95		NOW...***
(SEE "GALLERY" THIS ISSUE)					
GRANDMASTER (CHESS)	UMI.....(T).....		32.95		NOW...***
(SEE "GALLERY" THIS ISSUE)					
==>> ODESTA'S "MIND OF MAN" SERIES (CHESS 7.0 / CHECKERS 2.1 / ODIN) ARE HIGHLY REGARDED IN APPLE, ATARI, AND TRS-80 CIRCLES. SOON TO BE AVAILABLE FOR THE 64, THESE ARE THE BEST! (THE WHOLE SET MAY BE PURCHASED TOGETHER IN A CLASSY BOX AT A REDUCED PRICE.)					
CHESS 7.0	ODE.....(D).....		69.95		04...NA
CHECKERS 2.1	ODE.....(D).....		49.95		04...NA
ODIN (OTHELLO)	ODE.....(D).....		49.95		04...NA
COMPELLO	FAN.....(D/T).....		17.95/15.95		NA...NA
PSI WARRIOR	EPY.....(NA).....		NA		NA...NA
3-D CHESS-LIKE GAME.					

==>> AVALON HILL GAME COMPANY HAS SEVERAL GAMES WRITTEN FOR THE PET WHICH RUN FINE ON THE 64 (CHARACTER GRAPHICS ONLY). TITLES INCLUDE: TELENGARD / ANDROMEDA QUEST / PLANET MINERS / NORTH ATLANTIC CONVOY RAIDER / MIDWAY CAMPAIGN / B-1 NUCLEAR BOMBER / DRAW POKER / NUKENAR / COMPUTER FOOTBALL STRATEGY / COMPUTER STOCKS AND BONDS.
 AH6.....(T).....16.00 TO 24.00...NOW...***

BANDIT (SLOT MACHINE SIMULATION)
 CAS.....(NA).....15.99.....NA...NA
 CASINO CRAPS
 GPM.....(T).....12.95.....NOW...NA
 64 BLACKJACK
 DES.....(T).....18.00.....NOW...NA
 64 KENO
 DES.....(T).....16.00.....NOW...NA
 ROCKY LARUE'S CASINO
 GAT.....(T).....29.95.....NA...NA
 SLOTS / BLACKJACK / KENO / POKER / CRAPS / & MADAM
 MAGENTA'S LOUNGE! ALL INCLUDED.
 BACKGAMMON
 STC.....(T).....24.00.....NA...NA
 64 YAHTZEE
 DES.....(T).....20.00.....NOW...NA
 SPRITES AND SOUND FOR UP TO 10 PLAYERS.
 MONOPOLY
 MYS.....(D/T).....24.95/19.95.....NA...NA
 KENTUCKY DERBY
 SIM.....(NA).....19.95.....NA...NA
 KONNECT FOUR
 GPM.....(T).....10.95.....NOW...NA
 CODEBREAKER
 GTR.....(T).....20.00.....NA...NA
 EUCHRE
 HUT.....(D/T).....29.95.....NA...NA
 FOUR HANDED EUCHRE: YOU VS. 64- GOOD LUCK!
 CRIBBAGE 64
 LIT.....(D/T).....NA.....NA...NA
 CRIBBAGE
 ABA.....(T/D).....14.95/17.95.....NOW...NA
 64 DOES THE SCORING AND DEALING.
 SEARCH SERIES
 T&F.....(T).....19.95 EA.....NA...NA
 FIND WORDS IN GRIDS OF LETTERS: 3 PACKAGES, EACH WITH 3
 CATEGORIES: WORDSEARCH (CAPITALS/ JUMBLED/ ANIMALS) -
 SPORTSEARCH (PRO TEAMS/ COLLEGE TEAMS/ SPORT GAMES) -
 ARCADESEARCH (HOME VIDEOD GAMES/ ARCADE VIDEOD GAMES/
 FAMOUS VIDEOD GAME CHARACTERS).
 64 MIND BOGGLER
 DES.....(T).....15.00.....NA...NA
 WORDRACE
 DON.....(D/T).....24.95/19.95.....NOW...***
 FOR 1-4 PLAYERS / 2000 WORDS AND DEFINITIONS / MULTIPLE
 CHOICE GUESSING GAME / WORDS, SPORTS, & FAMOUS PERSONS
 SECTIONS
 SPELLATHON
 FAN.....(D/T).....21.95/19.95.....NA...NA
 WORDLORD (HANGMAN)
 GTR.....(T).....15.00.....NA...NA
 WORD MATCH
 SIM.....(NA).....14.95.....NA...NA
 SCRAMBLERS (3 WORD GAMES)
 RAM.....(T).....19.95.....NA...NA
 NUMBER JOTTO
 SIM.....(NA).....14.95.....NA...NA
 64 FINANCE
 DES.....(T).....20.00.....NOW...NA
 STOCK MARKET SIMULATION.
 WALL STREET
 THW.....(T/D).....24.95.....NOW...NA
 FUR TRAPPER
 BRI.....(T).....14.95.....NA...NA
 HIGH SEAS
 BRI.....(T).....14.95.....NA...NA

===== COLLECTIONS =====

PRODUCT NAME	VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
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CURSOR 64 (#1-#5)

CUR.....(T).....12.95-each.....NOW..***
EACH TAPE CONTAINS FROM ONE TO THREE PROGRAMS FROM THE
AUTHORS OF CURSOR MAGAZINE (FOR THE PET). COMPLETELY
RE-WRITTEN FOR THE 64'S ADVANCED FEATURES.

64 COLLECTION (#1-#2)

PUB.....(T/D).....10.00-EA.....NOW..***
ABOUT 30 SELECTIONS ON EACH. MOSTLY ENTERTAINMENT. GREAT
VALUE!

===== ADVENTURE GAMES (TEXT) =====

PRODUCT NAME	VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
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====>> THE INFOCOM ADVENTURE SERIES ARE THE LEADING TEXT-
BASED ADVENTURE GAMES. THEY ALL INCORPORATE A VERY
POWERFUL LANGUAGE INTERPRETER (PARSER) WHICH HAS A
VOCABULARY OF ABOUT 600 WORDS, ALLOWING INPUT OF WHOLE AND
MULTIPLE SENTENCES INCLUDING ADJECTIVES (IE: TAKE THE ROUGH
OBJECT AND THE LONG DEVICE. PUT THE OBJECT AND THE DEVICE
IN THE OPEN CONTAINER.). THIS IS VERY IMPRESSIVE TO
EXPERIENCE AND GIVES AN UNCANNY SENSE OF INTELLIGENCE IN
THE MACHINE. (INFOCOM EMPHASIZES THAT GRAPHICS HAVE BEEN
DELIBERATELY OMITTED TO ENHANCE THE USE OF THE
IMAGINATION. WE FEEL IT IS MORE LIKELY DUE TO THE
DIFFICULTY & EXPENSE OF WRITING GRAPHICS ROUTINES FOR THE
WIDE NUMBER OF SYSTEMS WHICH THEIR GAMES WILL RUN ON NOW.
WE FEEL THAT SIMPLE GRAPHIC ON-SCREEN MAPPING WOULD AD
TREMENDOUSLY TO THESE OTHERWISE EXCELLENT GAMES AND NAIL A
5-STAR RATING TO BOOT!)

ZORK-I

INF.....(D).....39.95.....NOW..***
THE ORIGINAL ADVENTURE CLASSIC.

ZORK-II

INF.....(D).....39.95.....NOW..***

ZORK-III

INF.....(D).....39.95.....NOW..***

DEADLINE

INF.....(D).....49.95.....NOW..****+
YOU ARE THE DETECTIVE SOLVING A MURDER IN THIS EXCITING
ADVENTURE. VERY REALISTIC CHARACTERS WITH DISTINCT
PERSONALITIES

STARCROSS

INF.....(D).....39.95.....NOW..***
SCIENCE FICTION THEME.

SUSPENDED

INF.....(D).....49.95.....NOW..****+
SEE "GALLERY" THIS ISSUE.

DUNGEONS OF DEATH / ESCAPE FROM MARS / PYRAMID

AAR.....(D/T).....19.95/14.95.EA..NA..NA

TREASURE PAK (ADVENTURE / CAVES OF SILVER / SHUTTLE VOYAGE)

COM.....(D/T).....19.95/14.95.....NOW..NA

CARNAC CAVERNS

LIT.....(NA).....NA.....NA..NA

EERIE MANSION

MYS.....(D/T).....24.95/19.95.....NA..NA

WHO-DUN-IT / BANSHEE CASTLE

RAM.....(NA).....19.95 EA.....NA..NA

ADVENTURE PAK 1 (JACK AND THE BEANSTALK / COMPUTER

ADVENTURE / MOON BASE ALPHA

VCT.....(T).....19.95.....NA..NA

ADVENTURE PAK 2 (AFRICAN ESCAPE / HOSPITAL ADVENTURE / BOMB
THREAT)

VCT.....(T).....19.95.....NA..NA

===== ADVENTURE GAMES (GRAPHIC) =====

TEMPLE OF APSHAI

EPY.....(D/T).....39.95.....NOW..***+

SEE "GALLERY" THIS ISSUE.

UPPER REACHES OF APSHAI

EPY.....(D/T).....19.95.....NOW..***

EXPANSION MODULE FOR "TEMPLE" ABOVE.

CURSE OF RA

EPY.....(D/T).....10.95.....NOW..***

EXPANSION MODULE FOR "TEMPLE" ABOVE.

GATEWAY TO APSHAI

EPY.....(D/T).....NA.....NA..NA

NEWEST SEQUEL TO "TEMPLE" SERIES.

SWORD OF FARGDAL

EPY.....(D/T).....29.95.....NOW..***

"JUNIOR" VERSION OF TEMPLE GAMES. SIMPLER COMMAND
INTERFACE FOR YOUNGER OR LESS PATIENT PLAYERS.

ROBBERS OF THE LOST TOMB

TMW.....(T/D).....24.95.....NOW..N.A.

WARRIOR OF RAS SERIES (DUNZHIN / KAIV / WYLDE / ZIGGURAT)

INS.....(D/T).....39.95 EA.....NA..NA

REAL-TIME ADVENTURES IN M.L. WITH HI-RES COLOR GRAPHICS,
SOUND.

GOTHMOG'S LAIR

PRG.....(D/T).....39.95.....NOW..NA

GYPSUM CAVES

ADI.....(D/T).....16.95/14.95.....NA..NA

THE WIZARD'S TOWER

AAR.....(D/T).....19.95/14.95.....NA..NA

MOUNTAIN KING

CBS.....(NA).....NA.....NA..NA

GRAVE ROBBERS

VCT.....(T).....14.95.....NOW..***+

===== OTHER RECREATIONAL SOFTWARE =====

MOONDUST

CRE.....(R).....34.95.....NOW..NA

UNUSUAL GAME WHICH CREATES MUSIC AND PLEASING GRAPHICS
IN SEARCH OF THE MOST AMAZING THING

SPIN.....(D).....39.95.....SEP..NA

ANOTHER UNUSUAL GAME WHICH EXPOSES CHILDREN TO
PROBLEM-SOLVING (WITH ALIENS), ECONOMICS, NAVIGATION,
ETC.

FACEMAKER

SPI.....(R/D).....34.95.....NA..NA

UP FOR GRABS

SPI.....(R).....NA.....NA..NA

STORY MACHINE

SPI.....(R/D).....34.95.....NA..NA

KINDERCOMP

SPI.....(R/D).....29.95.....NA..NA

FRACTION FEVER

SPI.....(R).....NA.....NA..NA

COSMIC LIFE

SPI.....(R).....NA.....NA..NA

FAMILY PAC 64 (3-IN-1)

ENT.....(NA).....55.00.....NA..NA

BABIES OF THE DIRT

ENT.....(NA).....35.00.....NA..NA

ESCAPE FROM SIMON CITY

GTR.....(T).....15.00.....NA..NA

MAGGIE ('ARTIFICIAL INTELLIGENCE')

RAM.....(T).....19.95.....NA..NA

VECTRON

SIM.....(NA).....14.95.....NA..NA

SPACE CADET

FAN.....(D/T).....17.95/15.95.....NA..NA

GUNSLINGER

FAN.....(D/T).....17.95/15.95.....NA..NA

FLIGHT 64

FAN.....(D/T).....17.95/15.95.....NA..NA

programming

===== PROGRAMMING LANGUAGES =====

PRODUCT NAME
VENDOR CODE MEDIA PRICE AVAIL RTG.

COMAL

CIG.....(D).....15.00.....NA..NA

LEN LINDSAY HAS BEEN WRITING FERVENTLY ABOUT THIS RELATIVELY UNKNOWN LANGUAGE FOR SOME TIME NOW. WE LIKE HIS ENTHUSIASM AND DEDICATION AND HOPE THE LANGUAGE BECOMES AVAILABLE IN IT'S FINAL 64 VERSION SOON. IT SOUNDS LIKE A VERY WORTHY HIGH- LEVEL LANGUAGE (FAST, STRUCTURED, SUPPORTING GRAPHICS AND SOUND DIRECTLY) WHICH MAY YET TAKE A PLACE BESIDE BASIC, FORTH, AND PASCAL. FOR A THOROUGH TREATMENT OF THE SUBJECT, SEE 'COMMODORE' MAGAZINE- VOL4, NUMBER 3 (FALL '83).

644 FORTH

PER.....(D).....99.95.....NOW..NA

FORTH 79 WITH EXTENSIONS, FULL SCREEN EDITOR AND ASSEMBLER, SUPPORTS HI-RES, CHARACTER, AND SPRITE GRAPHICS, SOUND CAPABILITIES. FULL I/O, IEEE AND BASIC DATA FILE COMPATABILITY, MANUAL WITH EXAMPLES OF BASIC TO FORTH CONVERSIONS, TRACE FOR DEBUGGING.

FULLFORTH+

MCT.....(D).....100.00.....NOW..NA

ENHANCED FIG FORTH: STRINGS, FLOATING POINT, EDITOR, COND. ASSEMBLER, INTERPRETER. TARGET COMPILER AVAILABLE FOR 50.00.

64-FORTH

CMS.....(D).....59.95.....NOW..NA

FIG FORTH WITH EXTENSIONS: VIRTUAL MEMORY / COMPILED CODE / TEXT EDITOR AND MACRO ASSEMBLER / DISK & PRINTER I/O / DOUBLE PRECISION MATH / FILE HANDLING WORDS / COMES WITH 400 WORDS.

FORTH

MIN.....(D/T).....37.95.....NA..NA

FIG-FORTH WITH ASSEMBLER / EDITOR / FLOATING POINT / GRAPHICS / SOUND / TUTORIAL / SUPPORT. (ALSO AVAILABLE ARE TWO TUTORIALS FOR \$13 EA.: GAMES, GRAPHICS, AND SOUND / ARTIFICIAL INTELLIGENCE.)

64 FORTH

HES.....(R).....59.95.....NOW..NA

FIG-TYPE IMPLEMENTATION WITH FULL-SCREEN EDITOR AND HORIZONTAL-SCROLLING WINDOW.

KMM PASCAL

MCT.....(D).....85.00.....NOW..NA

"...TRUE COMPILER THAT GENERATES MACHINE CODE FROM PASCAL SOURCE...EDITOR, COMPILER, TRANSLATOR INCLUDED."

Z-80 VIDED PAK (CP/M)

DAT.....(R&D).....299.95.....NOW..NA

CP/M OPERATING SYSTEM AND Z80 MICROPROCESSOR WITH 80-COL. DISPLAY GENERATOR ALL IN ONE PACKAGE. IF YOU ARE INTERESTED IN CP/M FOR YOUR 64, THIS IS PROBABLY THE WAY TO GO. DATA 20 IS CONSIDERING A SUPPORT SERVICE REGARDING FORMATTING OF CP/M SOFTWARE FOR USE ON THE 1541.

ACTION

OSS.....(R).....99.00.....NA..NA

SOON TO BE RELEASED FOR THE 64. CLAIMS TO BE FASTEST 8-BIT LANGUAGE (OVER 100 TIMES SPEED OF BASIC). 128-COLUMN SCREEN EDITOR / MONITOR MODE / ONE-PASS COMPILER.

TURTLE GRAPHICS II

HES.....(R).....59.95.....NOW..NA

LOGO

CBM.....(D).....99.95.....04...###

WE HAVE TRIED THE PROTOTYPES AND THEY ARE SUPER! A NATURAL FOR THE 64.

VANILLA PILOT

TAM.....(T/D).....29.95.....NOW...###

SOLID IMPLEMENTATION OF THE POPULAR AUTHORING LANGUAGE WITH TURTLE GRAPHICS.

===== PROGRAMMING AIDS / LANGUAGE EXTENSIONS =====
===== & DEVELOPMENT TOOLS =====

PRODUCT NAME
VENDOR CODE MEDIA PRICE AVAIL RTG.

SYSRES

SOL.....(D).....95.00.....NOW..NA

BY ALL ACCOUNTS- THE TOP PRODUCT OF ITS TYPE. ABSOLUTELY LOADED WITH FEATURES; FAST-SCROLLING/ RE-DEFINE KEYS/ AUTO & RE-NUMBER/ TRUE MERGES/ FIND-CHANGE WITH WILD-CARDS/ SPACE AND REM REMOVAL/ 3 TRACE MODES TO NAME A VERY, VERY FEW.

GRAPHDOS

INT.....(D).....39.95.....NA..NA

ADDS 12 DOS COMMANDS / 11 HI-RES GRAPHICS COMMANDS / 5 LO-RES GRAPHICS COMMANDS / & 12 MISC. COMMANDS TO BASIC. INCLUDES 20-COMMAND MINI-MON.

PETSPEED

SME.....(D).....150.00.....NOW..NA

POPULAR COMPILER USED BY MANY SOFTWARE DEVELOPERS CURRENTLY. CBM APPROVED.

TINY BASIC COMPILER

ABA.....(T/D).....19.95/22.95.....NOW..NA

FLOATING POINT COMPILER SUPPORTS IF/THEN, END, INPUT, GOSUB, GOTO, PRINT, REM, RETURN, STOP, USR, PEEK, AND ALL MATH FUNCTIONS. PRODUCES A COMMENTED LISTING OF EQUIVALENT 6502 CODE TO SCREEN OR PRINTER.

BASM (COMPILER/ ASSEMBLER)

COA.....(D).....99.95.....NOW..NA

"...UP TO 130 TIMES FASTER THAN BASIC...USES THE SYNTAX OF BASIC WITH ASSEMBLY LANGUAGE DATA TYPES AND ADDRESSING MODES."

DTL COMPILER 64

CIM.....(NA).....NA.....NA..NA

64 COMPILER

DES.....(NA).....100.00.....NA..NA

THE LAST ONE

CMS.....(NA).....<100.00.....FALL.NA

THIS PROGRAM IS A PROGRAM THAT WRITES BASIC PROGRAMS FOR THE USER BASED ON THE USERS CONCEPTS WHICH ARE EXTRACTED BY THE COMPUTER THRU A QUESTION & ANSWER PROCESS. WHEN "THE LAST ONE" HAS ALL THE INFORMATION IT NEEDS, IT WRITES THE (SUPPOSEDLY BUG-FREE) PROGRAM! ALSO GENERATES FLOW CHARTS AND DOCUMENTATION FOR YOUR NEW PROGRAM. IF YOU HAVE AN APPLE II OR IIE, THIS SAME SOFTWARE COSTS \$395; ON EVERYTHING ELSE IT IS \$495!

MAE (MACRO ASSEMBLER EDITOR)

EAS.....(D).....99.95.....NOW..NA

COMPLETE 6502 DEVELOPMENT SYSTEM/ WIDELY USED IN THE SOFTWARE INDUSTRY. INCLUDES WORDPROCESSOR.

6502/6510 PROFESSIONAL DEVELOPMENT SYSTEM

HES.....(T).....29.95.....NOW..NA

ONE- OR TWO-PASS ASSEMBLER USING STANDARD MOS MNEMONICS AND OPERAND FORMATS.

HESMON 64

HES.....(R).....39.95.....NOW...###

6502/6510 M.L. MONITOR WITH MINI-ASSEMBLER.

MINI-MON

INT.....(T/D).....24.95.....NOW..NA

CMAR 64

CIM.....(NA).....NA.....NA..NA

DEVELOP 64

FRE.....(D/T).....59.95/54.95.....NA..NA

PTD-6510

PTE.....(D).....65.10.....NOW..NA

ADVANCED DEBUGGER; STEP, BREAKPOINTS, WINDOWING, SUPER COMPLEX CONDITIONAL BREAKS, SYMBOLIC DEBUGGING, PATCH, SHOW PRIOR 128 STEPS, COMPILED BASIC-LIKE LANGUAGE

DECMON
 60S.....(NA).....14.95.....NA...NA
 EDIT & INSPECT CONTENTS OF MEMORY. CONVERT BETWEEN FOUR
 NUMBER BASES.
 BASIC AID
 MTS.....(D).....29.95.....NA...NA
 DISK UTILITIES INCLUDE: RENUMBER/ SEARCH & REPLACE/
 SUBROUTINE EXTRACT/ PROGRAM MERGE/ LINE NUMBER &
 VARIABLES CROSS-REF.
 SCREEN GRAPHICS 64
 ABA.....(D/T).....27.95/24.95.....NOW..NA
 ADDS OVER 20 COMMANDS TO BASIC FOR DRAWING LINES, BOXES,
 PLOTTING POINTS, MANIPULATING SPRITES. HI-RES &
 MULTI-COLOR MED.-RES. MODES.
 SIMON'S BASIC
 CBM.....(R).....NA.....NOW..NA
 WE ARE HEARING RAVES FROM OUR CANADIAN FRIENDS WHO HAVE
 USED THIS PACKAGE. ADDS 114 COMMANDS TO BASIC. HI-RES /
 STRUCTURED PROGRAMMING / MUSIC COMMANDS / & PROGRAMMING
 AIDS SECTIONS.
 64 DISK CLONE
 DES.....(D).....15.00.....NA...NA
 ONE-PASS BACKUP FOR 2 SINGLE DRIVES.
 DISKIT 64
 PTE.....(D).....75.00.....NA...NA
 FAST SINGLE DISK BACKUP WITH UTILITIES.
 COPY CAT 64 (DISK BACKUP W/ UTILS.)
 VIM.....(D).....19.95.....NA...NA
 COPYMAKER
 CGR.....(D).....30.00.....NA...NA
 FAST SINGLE DRIVE BACKUP ROUTINE.
 BACKUP V1.0
 SWP.....(T).....24.95.....NA...NA
 CASSETTE BACKUP ROUTINES.
 MENU MAGIC
 SIM.....(NA).....19.95.....NA...NA
 DISKETTE FILER
 SIM.....(NA).....24.95.....NA...NA
 CASSETTE FILER
 SIM.....(NA).....14.95.....NA...NA
 PRINTER UTILITY PROGRAMS
 CAR.....(T).....19.95.....NOW...###+
 ALLOWS SCREEN DUMPS TO EPSON, GEMINI, OR PROWRITER
 PRINTERS. REVERSE DUMPS / FROM PROGRAM OR KEY-TRIGGERED.
 ALSO PROVIDES FOR PRINTING OF GRAPHICS CHARACTER SET.
 INCLUDES LARGE-FONT BANNER ROUTINES FOR PRINTER.
 PET LOADER
 ECI.....(T).....23.95.....NOW..NA
 PET EMULATOR
 CBM.....(D).....19.95.....NOW...###+

===== TELECOMPUTING =====
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PRODUCT NAME	VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
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AVCOR VIDEOTEX SOFTWARE PACKAGE

AVC.....(D).....	UNDER 100.00.....	FALL..NA			
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THIS PROMISES A WHOLE NEW DIMENSION TO TELECOMPUTING AS
 WE KNOW IT NOW. NAPLPS COMPATIBLE COMMANDS IMPLEMENTED
 INCLUDE: DOMAIN/ TEXT (SUBCOMMANDS; ROTATION, PATH,
 INTER-CHARACTER SPACING, INTER-ROW SPACING, CHARACTER
 FIELD DIMENSIONS) / TEXTURE/ SET COLOR/ SELECT COLOR/
 WAIT/ RESET/ POINT/ LINE/ ARC/ RECTANGLE/ POLYGON/
 FIELD/ INCREMENTAL POINT/ UNDERLINING/ CANCEL/ NULL/ 8 &
 7 BIT MODE/ UNPROTECTED FIELDS. INTERPRETS INCOMING
 COLORS TO THE NEAREST 64 COLOR. USES FULL 320 X 200
 HI-RES. PERMITS EITHER 300 OR 1200 BAUD COMMUNICATIONS.
 THIS SYSTEM APPARENTLY DOES WITH SOFTWARE WHAT COSTS
 \$400- \$1000 TO DO WITH HARDWARE ON OTHER PERSONAL
 COMPUTERS. LOOK FOR A REVIEW ON THIS SOFTWARE IN THE
 WINTER ISSUE.

SMART 64 TERMINAL

MTS.....(NA).....	39.95.....	NOW...###+			
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USER-DEFINED PARAMETERS (BAUD, PARITY ETC.) / COMPILED
 BASIC/ ONE-KEY LOG-ON / UP & DOWN-LOAD / 28k SAVE BUFFER
 / BASIC TO TEXT TO BASIC CONVERSION / PRINTER SET-UPS /
 BUILT-IN WEDGE COMMANDS / TIMER / WORDPRO- COMPATIBLE /
 FORMATTED END-OF-LINE / ENTIRE 28k BUFFER DUMPS TO DISK
 IN 3.5 MIN. / VISUAL INDICATION OF BUFFER SPACE
 REMAINING / ECHO OF TRANSMITTED DATA / SPECIALLY
 DESIGNED TO OPTIMIZE ACCESS TO COMPUSERVE & COMMODORE'S
 COMPUSERVE DATABASE. (THIS IS THE WAY YOU GET FREE
 SOFTWARE WITH YOUR MODEM.)

KTERM VERSION 2

KAT.....(NA).....	14.95.....	NOW...###+			
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30k SAVE BUFFER/ LISTABLE BASIC/ AUDIBLE KEY-CLICK/
 KEEP- DISCARD KEYS/ ONE-KEY LOG-ON / UP, DOWN-LOADING.

'64 TERMINAL

MID.....(NA).....	29.95.....	NOW...###+			
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SMOOTH SCROLLING/ 24k SAVE BUFFER/ FULL-SPEED XMIT AND
 RECEIVE/ MENU SELECTABLE TERM. CONFIGURATION (PARITY,
 BAUD, ETC)/ DUMP TO PRINTER OR SCREEN ONLY. (NO UP/DOWN
 LOAD)

SUPERTERM '64

MID.....(T).....	99.00.....	FALL.NA			
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SIMILAR TO '64 TERMINAL (ABOVE) WITH UP AND DOWN LOADING.
 COMPACT

CGR.....(NA).....	129.00.....	NOW..NA			
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THIS IS A SERIAL INTERFACE, CABLE, AND SOFTWARE PACKAGE
 FOR TELECOMPUTING; FEATURES DOWNLOAD AND FILE-
 CONVERSIONS (ASCII, BASIC, BINARY, & MAE). YOU SUPPLY
 THE MODEM.

CTE ("DUMB" TERMINAL SOFTWARE, SELECTABLE BAUD RATE)

MSD.....(NA).....	NA.....	NA...NA			
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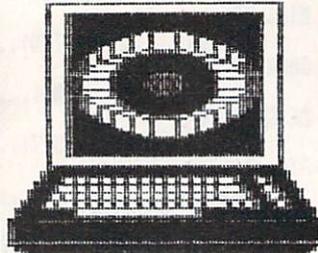
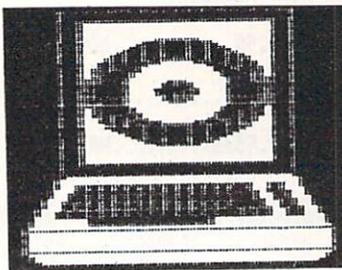
SMART TERMINAL

BYR.....(D/T).....	18.95/16.95.....	NA...NA			
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SMOOTH SCROLLING / TRANSMITS ALL ASCII CONTROL CODES /
 KEY REPEAT / 4 PRE-LOAD LINES / MENU DRIVEN /
 TRANSMITTED AND RECEIVED CHARACTERS IN DIFFERENT COLORS.
 OMNICOH

STG.....(D/T).....	34.95.....	NA...NA			
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UP-DOWN LOAD / DUMPS TO PRINTER.



===== MULTI-PURPOSE INTERFACES =====
===== & NETWORKING =====

PRODUCT NAME
VENDOR CODE PRICE AVAIL RTG.

C64-LINK
RTC.....150.00.....NOW..***
DATA TRANSFER BETWEEN ANY DEVICE AND ANY OTHER DEVICE
(IE: SERIAL-PARALLELS, IEEE-SERIAL, PARALLEL-SERIAL ETC.
/ BASIC 4.0 COMMANDS / SIMPLE NETWORKING OF SEVERAL
64'S / M.L. MONITOR / RESIDENT TERMINAL SOFTWARE / CP/M
COMPATIBILITY.

BUSCARD
BAT.....199.00.....NA...NA
ADDS 'BASIC 4' COMMANDS / IEEE INTERFACE / FULLY
COMPATIBLE WITH OTHER SOFTWARE / BUILT-IN CENTRONICS
PRINTER PORT / RESIDENT M.L. MONITOR.

VICTREE
SEW.....89.95.....NOW..NA
ADDS BASIC 4.0 COMMANDS; PROVIDES PRINTER INTERFACE FROM
USER-PORT.

INTERPOD
OCS.....180.00.....NOW..NA
CLAIMS ACCESS UP TO 30 RS232 AND IEEE DEVICES THRU SERIAL
PORT OF 64 WITH COMPLETE USER TRANSPARENCY.

VIC/64 SWITCH
CMS.....149.95.....NA...NA
LINKS UP TO 8 64'S WITH SHARED DISK DRIVE AND PRINTER.

CEENET
SEW.....NA.....NA...NA
NETWORKS UP TO 64 CBM 64'S TOGETHER. ALL MAY SHARE
COMMON PERIPHERALS. APPLICATIONS SOFTWARE SUPPORTS
INTER-NETWORK MAIL, TERMINAL LINKING, FILE PROTECTION,
AND DATABASE SUPPORT. UP TO 255 CEENETS CAN BE
INTERCONNECTED.

===== A/D D/A DATA ACQUISITION ETC. =====
=====

UNIVERSAL LABORATORY INTERFACE
GEM.....750.00.....NA...NA
2 12-BIT ANALOG OUTPUTS AND INPUTS / 1 8-BIT DIGITAL
OUTPUT AND INPUT. PROGRAMMABLE FROM BASIC WITH PEEKS AND
POKES.

TEMPERATURE MEASUREMENT AND CONTROL
AME.....129.00.....NA...NA
DISPLAY GRAPHICS / HARD COPY OUTPUT / ALARMS AND SET
POINTS / DISK FILE DATA STORAGE / 1 - 256 SENSORS / .01
DEG. ACCURACY.

SEQUENCER
GLO.....299.00.....NA...NA
M.L. ROM SOFTWARE WITH A PLUG-IN HARDWARE INTERFACE
CONTAINING 16 OPTO-ISOLATED INPUTS AND OUTPUTS WHICH CAN
BE INDIVIDUALLY ADDRESSED. SOFTWARE PROVIDES FOR
TESTING OF INPUTS AND OUTPUTS FOR VARIOUS LOGIC AND
ACTIVITY STATES. STEPPER MOTOR DRIVE ROUTINES UNDER
TIMED INTERRUPTS / 3 COUNTDOWN TIMERS (1 SEC. TO 18 HRS)

VIC/64 RELAY CARTRIDGE
CMS.....59.95.....NOW..NA
PLUGS INTO USER PORT; 6 RELAY OUTPUTS / 2 OPTOCOUPERS
FOR INPUTS. TURN APPLIANCES ON/OFF UNDER PROGRAM
CONTROL.

VICONTROLLER
GEN.....59.95.....NA...NA
CONTROL UP TO 256 LIGHTS, APPLIANCES, ETC. COMMANDS: ON
/ OFF / ALLON / ALLOFF. USES BSR REMOTE SWITCHES / PLUGS
INTO USER PORT.

AUTO CLOCK
PRG.....129.95.....NA...NA
SOFTWARE CONTROL OF AC DEVICES / 256 YEAR CALENDAR / 2K
CMOS BATTERY BACKED RAM / MENU-DRIVEN SOFTWARE / 19 USER
ACCESSIBLE SUBROUTINES

BUSSTER A64
CMC.....495.00.....NA...NA
DIGITAL LINE INPUT MODULE / SELF CONTAINED IEEE BUS-
COMPATIBLE DEVICE / READS AND STORES DATA FROM UP TO 64
DIGITAL TTL LEVEL LINES, THEN SENDS INFORMATION BACK TO
COMPUTER. PROGRAMMABLE THRU BASIC.

===== STANDARD INTERFACES =====
=====

PRODUCT NAME
VENDOR CODE PRICE AVAIL RTG.

CIE (IEEE 488 INTERFACE)
MSD.....NA.....NA...NA

C232 (RS232 INTERFACE)
MSD.....NA.....NA...NA

CX-6402 RS232 INTERFACE
ECX.....59.95.....NA...NA

ADA 6410 (RS232 INTERFACE)
CMC.....79.00.....NA...NA

MODEM INTERFACE
BMT.....21.95.....NA...NA

===== VIDEO ENHANCEMENT =====
=====

VIDEO PAK 80
DAT.....179.95.....NOW..***
40 COL. COLOR / 80 COL. MONOCHROME; INCLUDES TERMINAL AND
SCREEN-PRINT SOFTWARE.

Z-80 VIDEO PAK
DAT.....299.95.....NOW..NA
ABOVE FEATURES PLUS CP/M COMPATIBILITY VIA BUILT-IN Z-80
MICROPROCESSOR.

COLOR-80 SOFTWARE.
RTC.....(DISK).....39.95.....AUG..NA
WE CAN HARDLY WAIT TO SEE THIS. 80 COLUMNS FROM
SOFTWARE. USES NO BASIC RAM / COMPATIBLE WITH C-64
LINK. IMPLIES COMPATIBILY WITH 1701 MONITOR. WE JUST
MISSED REVIEWING IN THIS ISSUE, WILL BE IN WINTER
'INFO'.

SCREENMAKER
CGR.....179.95.....NA...NA
80 COL. BOARD WITH SOFTWARE LINK.

VID (VIDEO IMPROVEMENT DEVICE)
CAC.....29.95.....NOW..***
PLUG THIS LITTLE WIDGET INTO YOUR 5-PIN VIDEO PORT AND
HOOK YOUR T.V. TO THE USUAL RF PLUG. VISIBLE
IMPROVEMENT OF PICTURE QUALITY ON MANY TV'S (SEE SIDE BY
SIDE PHOTOS WE SHOT - THIS ISSUE.)

===== EXPANSION BOARDS ETC. =====
=====

CARDBOARD 5
CAR.....69.95.....SEPT.NA
ATTRACTIVE, FUSE-PROTECTED 5-SLOT EXPANSION BOARD FOR
THE 64. EACH SLOT HAS 4 LED STATUS INDICATORS AND TWO
SWITCHES TO DIRECTLY CONTROL VARIOUS MEMORY AND ACCESS
FUNCTIONS. TWO MASTER SWITCHES AND INDICATORS ALLOW
OVERRIDE AT ANY TIME. CAN BE USED TO SIMPLY ELIMINATE
CONSTANT INSERTION AND REMOVAL OF CARTRIDGES, OR WITH
SWITCHES AND IMAGINATION, SOME MORE INTRIGUING
APPLICATIONS BECOME POSSIBLE.

EXPANDOPORT 4
MSD.....NA.....NA...NA
4 PORTS WITH FUSE AND RESET.

4-SLOT EXPANDER
 PTI.....69.95.....NA...NA
 4 SLOTS, 4 TOGGLE SWITCHES, RESET & FUSE.
 SOFTWARE BOX
 SAW.....149.00.....NA...NA
 8 SLOTS, EACH SWITCHED, 110 V. OUTLETS, RESET, OPTIONAL
 5 V. POWER SUPPLY.
 BUSMASTER (6-SLOT, SWITCH SELECT, FUSED, LEDS)
 RAN.....79.95.....NA...NA
 BUSMASTER-II
 RAN.....99.95.....NA...NA
 SAME AS ABOVE ONLY W/ SOFTWARE SELECTABLE SLOTS (ALLOWS
 MEMORY PAGING TO 6X64 K)
 7-SLOT EXPANDER BOARD
 BAZ.....69.00.....NA...NA
 4-SLOT EPROM CARD
 BAZ.....59.00.....NA...NA
 PQ/64
 GLO.....299.00.....NA...NA
 64 VERSION OF 'PROMQUEEN'- READS, PROGRAMS, EDITS, &
 RUNS 2500 & 2700 SERIES EPROMS. W/ SOFTWARE.
 PQ/64 RS
 GLO.....49.00.....NA...NA
 PERFORMS RS-232 VOLTAGE CONVERSIONS FOR PQ/64.
 ROM PACKS (FOR ABOVE)
 GLO.....39.00.....NA...NA

===== OTHER INTERFACES =====
 =====

PROMETHIUS I
 VID.....49.95.....NA...NA
 SOFTWARE AND INTERFACE ALLOW 64 TO CONTROL A PANASONIC
 6500 VCR.
 CARDETTE
 CAR.....39.97.....NOW...***
 INTERFACE ALLOWS USE OF NON-CBM CASSETTE DECKS. IT SEEMS
 THAT THE ECONOMY TYPE TAPE DECKS ACTUALLY WORK BETTER
 WITH THIS THAN THE PREMIUM TYPES.
 CBM 64 RABBIT CARTRIDGE
 EAS.....39.95.....NA...NA
 CLAIMS 6X NORMAL CASSETTE LOAD & SAVE. WITH 12
 ADDITIONAL COMMANDS.
 GRIZZLY
 EPD.....NA.....NA...NA
 UNINTERRUPTABLE POWER SYSTEM: KEEP COMPUTING FOR TWENTY
 MINUTES AFTER A TOTAL POWER OUTAGE. GIVES YOU TIME TO
 SAVE YOUR FILES, ETC.
 LEMON / LIME / PEACH / ORANGE
 EPD.....NA.....NA...NA
 LINE OF AC FILTERS AND SURGE PROTECTORS TO PROTECT
 COMPUTER EQUIPMENT.

===== PRINTER INTERFACES =====
 =====

PRODUCT NAME	VENDOR CODE	MEDIA	PRICE	AVAIL	RTG.
CARD/PRINT + 6 (FOR GRAPHICS)	CAR.....		79.95.....	FALL	NA
SOON YOU WILL BE ABLE TO GET FULL COMMODORE CHARACTER SET TRANSLATION (AS WELL AS ASCII VALUES FOR NON-IMPLEMENTED CHARACTERS) IN A NEWLY DESIGNED PACKAGE. THIS AT THE SAME PRICE THAT MADE THE OLD CARD/PRINT THE BEST VALUE IN PRINTER INTERFACES. (SUITABLE FOR USE WITH: OKIDATA 82,94,92,94, EPSON MX 80, RX 80, FX 80, GEMINI 10X, PROMWRITER, CITOH 8510, NEC 8023, AXIOM 6P 100, AND BANANA PRINTERS.) KEEP UP THE GOOD WORK, ED!					

CARD/PRINT B
 CAR.....49.95.....SEP...***
 ENHANCED REPLACEMENT FOR THE OLD CARD/PRINT AT A MUCH
 LOWER PRICE. FEATURES INCLUDE NEW HOUSING WHICH MOUNTS
 NEATLY TO BACK OF 64 INSTEAD OF HANGING OUT AT THE END OF
 THE CABLE / 3 MICRO-SWITCHES FOR LOCKING THE PRINTER AND
 INTERFACE IN VARIOUS CONFIGURATIONS.
 MW-302 PRINTER INTFC.
 MWE.....119.95.....NOW...NA
 CONNECTS 64 SERIAL PORT TO CENTRONICS-TYPE PARALLEL
 PRINTERS. TRANSLATES CBM ASCII TO STANDARD ASCII.
 DATA 20 PRINTER INTERFACE (CONNECTS TO MODEM PORT)
 DAT.....69.95.....NA...NA
 CX-6401 SERIAL TO PARALLEL PRINTER INTFC.
 ECX.....89.95.....NA...NA
 CPI (PARALLEL PRINTER INTFC.)
 MSD.....79.95.....NA...NA
 TYMAC 'CONNECTION'
 MWD.....119.00.....NA...NA
 INTELLIGENT PARALLEL INTFC. USES DISK/SERIAL PORT /
 DISPLAYS FULL GRAPHICS SET OR CONVERTS TO TEXT
 EQUIVALENT / PRINTER RESET SWITCH / LED INDICATORS/
 FACTORY CONFIGURED TO YOUR PRINTER MODEL.
 TYMAC PARALLEL CABLE W/ DRIVER
 MWD.....29.95.....NA...NA
 PRINTER SPECIFIC 'ECONOMY' INTERFACE; SOFTWARE AVAILABLE
 ON DISK TO SUPPORT GRAPHICS PRINTING.
 SMART ASCII
 MID.....59.95.....NOW...NA
 USES THE MODEM PORT, SO YOU CAN'T CONVENIENTLY USE YOUR
 PRINTER MODEM AT THE SAME TIME. WE CONSIDER THIS TO BE
 A SERIOUS LIMITATION.

===== MASS STORAGE DEVICES =====
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PRODUCT NAME	VENDOR CODE	PRICE	AVAIL	RTG.
PETDISK II (3",5",8",8" DUAL)	CGR.....	895.00.(5").....	NOW	NA
CLAIM 10 X SPEED OF 1541 DRIVES. CHECK COMPATIBILITY WITH COMMERCIAL SOFTWARE BEFORE BUYING.				
MSD DISK DRIVE	MSD.....	NA.....	NA	NA
CLAIMS COMPATIBILITY WITH 1541 DISK SOFTWARE / SOFTWARE- RECONFIGURABLE OPERATING SYSTEM / SERIAL & IEEE INTERFACES.				
ESF-20/64 STRINGY-FLOPPY	EXATRON.....	199.00.....	NOW	NA
THIS DEVICE PROMISES TO BE AN ECONOMICAL ALTERNATIVE TO DISK DRIVES; PRICE AND PERFORMANCE FALLING SOMEWHERE BETWEEN DISK AND TAPE. THE MAJOR PROBLEM IN THE PAST HAS BEEN LACK OF SOFTWARE IN THIS FORMAT. NOW IT SEEMS SOME SOFTWARE HOUSES ARE FINALLY BEGINNING TO PRODUCE "WAFER" PRODUCTS.				
UNITRONICS WAFERDRIVE MODULE	UNI.....	UNDER 100.00.....	FALL	NA
THIS IS AN IMPLEMENTATION OF THE EXATRON TECHNOLOGY IN A 64-COMPATIBLE PLUG-IN (USER PORT) WAFER DRIVE. CLAIMS SOME OPERATIONS AS FAST AS 1541. COMES WITH 2 BLANK WAFERS AND ONE GAME (MINER 2049ER) ON WAFER. COMPANY HOPES TO HAVE 30-40 COMMERCIAL PROGRAMS AVAILABLE ON WAFER THIS FALL.				

===== COMPUTER SIGHT & COMMUNICATIONS =====

MICRON EYE CAMERA

MTI.....295.00/485.00.....NOW..****
TWO MODELS OF SOLID STATE IMAGING DEVICE (THE DIFFERENCE BEING IN THE MAXIMUM DISTANCE DEVICE MAY BE FROM COMPUTER). BOTH CONNECT TO EXPANSION PORT OF 64, SOFTWARE INCLUDED ALLOWS DISPLAY OF IMAGES TO SCREEN. GRAY-SCALE / SOFTWARE CONTROLLED SHUTTER / FRAME STORE & COMPARE ROUTINES SUPPORTED. LOOK FOR A FULL REVIEW IN WINTER ISSUE OF INFO-64.

DIGI/CAM

FOV.....395.00.....NA..NA
SOLID STATE IMAGING SYSTEM / 4 GRAY SCALE LEVELS / RS232 INTERFACING / FRAME STORE AND COMPARE.

HESMODEM

HES.....79.95.....NOW..****
FUNCTIONALLY IDENTICAL TO VICMODEM / TERMINAL SOFTWARE INCLUDED FOR 64.

VICMODEM

Commodore Bus. Machines.....79.95.....NOW..****

MIGHTY MODEM

PPP.....79.95.....NA..NA

300 BAUD MODEM W/ TERMINAL SOFTWARE

BAZ.....89.00.....NA..NA

HERMES I (300/ 600/ 1200/ & 2400 BAUD!)

VID.....99.00.....NA..NA

MORE THAN JUST A MODEM, THIS DEVICE HAS SPECIAL CAPABILITIES (SLEEPING INSIDE FOR THE MOMENT) INTENDED TO MAKE IT THE KEY IN A REVOLUTIONARY NEW KIND OF INTERACTIVE INFORMATION SCHEME WHICH IS BEING HATCHED IN THE EMERALD CITY.

SPEAKEASY (WITH 64 ADAPTER)

PPP.....91.95.....NA..NA

COMVOICE

GEN.....149.00.....NA..NA

TEXT-TO-SPEECH CONVERSION / UNLIMITED VOCABULARY / 4 LEVELS OF INFLECTION / PLUGS DIRECTLY INTO EXPANSION PORT.

VOTRAX PERSONAL SPEECH SYSTEM

VOT.....395.00.....NOW..****
255 PROGRAMMABLE FREQUENCIES FOR SOUND EFFECTS / 16 AMPLITUDES / SIMULTANEOUS SPEECH AND EITHER MUSIC OR SOUND EFFECTS / 8-OCTAVE 3-VOICE MUSIC / SERIAL AND PARALLEL INTFCS. INCLUDED / BUILT-IN PROGRAMMABLE CLOCK / EXCEPTION TABLES / PROGRAMMABLE RATE AND INFLECTION / 3500 CHAR. BUFFER / REAL TIME CLOCK WITH 8 USER-DEFINED ALARMS / BAUDS FROM 75 TO 9600 / MORE!

AIR-1

MIL.....199.00.....NA..NA
CARTRIDGE CONVERTS SHORTWAVE RADIO MORSE CODE OUTPUT TO PRINTED TEXT ON SCREEN / INCLUDES ON-SCREEN TUNING FEATURE.

===== USER INPUT DEVICES =====

CIRCUS (GRAPHICS TABLET)

VID.....499.00.....NA..NA
JERRY PIERSON, THE MASTER WIZARD AT VIDEOBOOK CORPORATION, SEATTLE WA, IS OUT TO "BLOW YOUR SOCKS OFF" WITH THIS AWESOME SOUNDING GRAPHICS TABLET. SOME FEATURES THAT CAN BE BRIEFLY DESCRIBED; .005 DISCRIMINATION/ PRODUCES SMOOTH LINES / USES 200 COLORS X 200 TEXTURES TO CREATE VIRTUALLY UNLIMITED TONES, HUES, AND COLORS- THIS ON A 1701 MONITOR / HAS IT'S OWN MEMORY AND AN INTERACTIVE MODULE WHICH, IT IS HINTED, WILL, AT SOME FUTURE DATE, ALLOW SOME KIND OF USER INTERACTION WITH SATELLITE COMMUNICATIONS FACILITIES.

DATAWAfer

DIC.....NA.....NA..NA
UNIQUE PACKAGE IS SAID TO REPLACE JOYSTICKS, LIGHT PENS, TRACKBALLS, AND CONVENTIONAL 'MICE'. WIRELESS MOUSE WORKS ON SENSITIVE TABLET (UP TO 20" X 20" AVAILABLE).

KOALA MICRO ILLUSTRATOR

KOA.....99.00.....FALL.NA

MED.- SIZED TOUCH-PAD WITH ON-SCREEN DRAWING SOFTWARE. EARLY REPORTS SUGGEST THAT RESOLUTION MAY BE LIMITED.

JOYSENSOR

SUN.....34.95.....NA..NA

STICK-LESS JOYSTICK. TOUCH-SENSITIVE FLAT-PANELS ACCOMPLISH BOTH MOVEMENT AND 'FIRE-BUTTON' TASKS. ACCOMMODATES RIGHT OR LEFT HANDED PLAYERS.

KRAFT JOYSTICK

KSC.....14.95.....NA..NA

QUICKSHOT JOYSTICK (SUCTION-CUP BASE / DUAL FIRE BUTTONS)

SVI.....12.95.....NOW..****

ENJOYSTICK (RIGHT OR LEFT- HAND JOYSTICK)

TGP.....NA.....NA..NA

ZIRCON TRACKBALL

ZIR.....29.95.....AUG..NA

CARDKEY/1

CAR.....39.95.....FALL.NA

16 KEYS / CAN BE PLUGGED INTO JOYSTICK PORT OR PIGGY-BACKED WITH KEYBOARD CONNECTOR ELIMINATING THE NEED FOR DRIVER SOFTWARE, AND AVOIDING SOFTWARE COMPATIBILITY PROBLEMS.

FLEXIKEY SYSTEM

GSS.....69.95.....NA..NA

20-KEY NUMERIC PAD. EACH KEY MAY BE DEFINED TO HAVE 3 VALUES/ DRIVER IN BASIC

10-KEY PAD

QUA.....69.95.....NA..NA

NUMERIC KEYPAD

COP.....89.95.....NA..NA

HES STICK 1

HES.....7.95.....NA..NA

EDUMATE LIGHT PEN

PROGRAMMER'S INSTITUTE.....29.95.....NOW..NA

THIS PEN IS COMPATIBLE WITH P.I.'s CHILDREN'S EDUCATIONAL SOFTWARE.

TOUCH-N-LIGHT PEN

SUNSHINE PERIPHERALS.....59.95.....NOW..NA

CONNECTS TO USER PORT.

===== CABLES, GADGETS, & MISCELLANEOUS =====

SOUND BOX

HES.....14.95.....NOW..NA

PROVIDES STANDARD RCA PHONO CONNECTIONS FOR EASY HOOK UP TO STEREO ETC.

VIDEO CABLE (5-PIN TYPE)

DAT.....12.95.....NOW..NA

AUDIO/VIDEO CABLE (5-PIN TYPE)

QUA.....9.95.....NA..NA

MONITOR CABLE (5-PIN/ CHROMA, LUMA, AUDIO, AUDIO RETURN)

MSD.....29.95.....NOW..****

UNIVERSAL TAPE INTERFACE & DUPLICATOR

MWD.....49.50.....NA..NA

FREEDOM (5" REMOTE KEYBOARD KIT)

PRS.....39.95.....NA..NA

POWERMASTER (RUN YOUR 64 OFF YOUR CIGARETTE LIGHTER)

RAN.....NA.....NA..NA

SOFTWARE PROTECTION DEVICES

SOF.....5.98 TO 18.60.....NA..NA

LINE OF SECURITY 'DONGLES' WHICH USE THE SECOND JOYSTICK PORT.

THE SIGNAL

ZAX.....29.95.....NA..NA

CONVENIENCE DEVICE GIVES AUDIO SIGNAL WHEN VARIOUS CASSETTE OPERATIONS ARE COMPLETED/ ALLOWING UNATTENDED CASSETTE USE.

===== FURNITURE & ENCLOSURES =====

CS1632 STORAGE CABINET
 HYT.....89.95.....NOW..NA
 LOCKING CABINET WITH ROOM FOR YOUR KEYBOARD AND DISK-DRIVE.
 DESKTOPPER
 MAD.....49.95.....NOW..NA
 OAK STAND HOLDS TWO DRIVES ABOVE KEYBOARD. TV OR MONITOR GOES ON TOP.
 CT130 COMPUTER DESK
 BUS.....169.95.....NOW..****
 CTA131 HUTCH (GOES ON TOP OF CT130)
 BUS.....99.95.....NOW..****
 CT120 ROLL-ABOUT TABLE
 BUS.....79.95.....NOW..****
 THIS WILL HOLD EITHER A 64 AND DISK DRIVE (MONITOR RAISED OVER KEYBOARD) OR A VERY LARGE PRINTER.
 CTA132 MONITOR/PRINTER PLATFORM
 BUS.....17.95.....NOW..****
 SYSTEM ORGANIZER
 CPI.....79.95.....NA..NA
 (ADD \$20 FOR MONITOR TURNTABLE) THIS UNIT HOLDS MONITOR AND DISK DRIVES ABOVE KEYBOARD WITH EXTRA CUBBY-HOLES FOR OTHER GOODIES. OAK VENEER.
 PRINTER STAND (OAK VENEER / MATCHES ORGANIZER)
 CPI.....44.95.....NA..NA
 DISK-DEX (MATCHING OAK VENEER- HOLDS 50 DISKETTES)
 CPI.....29.95.....NA..NA
 COMPUMATE 101 (OVER-KEYBOARD ACRYLIC MONITOR STAND)
 PCT.....39.95.....NA..NA
 SOUND TRAP
 TRC.....129.00.....NOW..****
 WELL-DESIGNED AND ATTRACTIVE SOUND REDUCTION ENCLOSURE FOR WIDE RANGE OF PRINTERS. FITS EPSON & GEMINI. SOUND ATTENUATION IS GOOD. CAN BE POSITIONED TO DO DOUBLE DUTY AS A COPY HOLDER.
 TRAVELMASTER
 SDC.....59.00.....NOW..****
 LOCKING ABS PLASTIC CASE SIZED EXACTLY FOR ONE 64 AND DRIVE / FOAM LINED.
 CM703 CASE (HOLDS 64 AND DISK DRIVE)
 CCC.....129.00.....NA..NA
 DISKBANK
 AMA.....7.95.....NOW..****
 HANDY INTERLOCKING DISK- STORAGE MODULES.

===== DOT MATRIX & THERMAL PRINTERS =====

PRODUCT NAME
 VENDOR CODE PRICE AVAIL RTG.

GEMINI 10-X
 SMI.....399.00.....NOW..****
 120 CPS / DOWNLOADABLE CHARACTER SETS / FRICTION, TRACTOR, & ROLL FEEDS / USER- REPLACEABLE PRINT-HEAD / STANDARD RIBBONS / WIDE VARIETY OF FONTS & CHAR. SIZES / EPSON FX-80 CODE COMPATIBLE.
 GEMINI DELTA 10
 SMI.....649.00.....SEPT..NA
 160 CPS / SERIAL & PARALLEL INTFCs. INCLUDED.
 GEMINI STX-80
 SMI.....199.00.....NOW..NA
 THERMAL / 80-COLUMN / GRAPHICS CAPABLE.
 CARDPRINTER/DM1
 CAR.....149.05.....SEPT.NA
 DOT MATRIX IMPACT / 40 COLUMN / 50 CPS / STANDARD ADDING MACHINE (NOT THERMAL) PAPER / 2-COLOR PRINTING / BUILT-IN 64 INTERFACE / FULL CBM GRAPHICS CHARACTER SET INCLUDING REVERSED / HI-RES GRAPHICS / EXPANDED PRINT / UTILITY SOFTWARE INCLUDED.
 TRANSTAR 315 COLOR
 TRA.....599.00.....NA..NA
 30 SHADES OF COLOR IN A SINGLE (IF SOMEWHAT SLOW (50 CPS)) PASS.
 MT 160
 MAN.....799.00.....NOW..****
 VP42 THERMAL PRINTER
 ALP.....209.95.....NOW..****
 IMP
 ICD.....129.95.....NA..NA
 30 CPS / 64 INTERFACE BUILT-IN / 24 COLUMN / PRINTS ENTIRE CBM GRAPHICS SET / GRAPHICS CAPABLE.
 PRINTELEX
 CPE.....145.00.....NA..NA
 COMPACT 40-COLUMN, 160 CPS THERMAL PRINTER. SERIAL-PARALLEL BUILT-IN / DOT GRAPHICS.

===== LETTER QUALITY PRINTERS =====

TRANSTAR 130
 TRA.....895.00.....NOW..NA
 16 CPS / BI-DIRECTIONAL / DIABLO CODE COMPATIBLE / WORDPRO-3 FEATURES COMPLETELY SUPPORTED / FRICTION FEED
 TRANSTAR 120
 TRA.....NA.....NA..NA
 14 CPS / DIABLO CODE COMPATIBLE / WORDPRO-3 FEATURES COMPLETELY SUPPORTED / FRICTION FEED
 CARDPRINTER/LQ1
 CAR.....599.95.....FALL.NA
 14 CPS DAISY WHEEL / COMES FULLY INTERFACED FOR 64 AS WELL AS STANDARD PARALLEL / SUPPORTS UNDERLINING, BOLD & SHADOW PRINT / TRUE PROPORTIONAL CHARACTER SPACING. SOFTWARE SUPPLIED FOR TYPEWRITER EMULATION / CAN ALSO BE USED AS A TWO COLOR DOT GRAPHIC PRINTER FOR CUSTOM LETTER HEADS AND LOGOS.
 TTX-1014
 TTX.....649.00.....NA..NA
 COMPACT DAISYWHEEL / 140 WPM / SERIAL & PARALLEL INTERFACES BUILT-IN

The OPTIMIZER 64 expands upon the remarkable capabilities of the COMMODORE 64 with regular columns such as the ANSWER PAGE, the SNEAKY PREVIEWS DEPT., our machine language column OPTIM/L, the GREAT ONE LINER CONTEST, ETCH-A-SKETCHER, a hi-res joystick routine, information on MUSIC & SOUND, a MORSE CODE TRAINER, and a variety of hardware, software and services in COMPUTER CONSUMER. The author of SYSRES presents 64 SEMINAR. Vol.1/Issue 1 also has an educational look at USER FRIENDLIES.

As well, in this issue is a HI-RES DUMP routine for GEMINI printers that enables you to print out those hi-resolution pictures, and the DEFINITIVE answer for those 64 owners who have earlier versions of the KERNAL, and want all the features of the new (REV.3A) operating system. If you hadn't heard about the change, OR are a REV.3A owner who wants the option of EITHER kernal, we provide the answers here. so KEEP OPTIMIZING!

For further information, SUBSCRIBE TO:

THE ULTIMATE 64 USER'S MAGAZINE

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 Canada V5N 4C8

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64

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===== DISPLAYS =====

PRODUCT NAME VENDOR CODE	PRICE	AVAIL	RTG.
1701 COLOR MONITOR CBM.....	299.00.....	NOW..	****
THIS IS ONE OF THE NICEST THINGS COMMODORE HAS DONE SINCE INTRODUCING THE 64. MAKE SURE YOU TAKE ADVANTAGE OF THE HI-PERFORMANCE BACK-PANEL INPUTS (SEE ILLUSTRATION & INSTRUCTIONS ELSEWHERE THIS ISSUE.)			
PANASONIC CT-160 (10" COLOR MONITOR) PAN.....	350.00.....	NOW..	***+
AMDEK COLOR-1 (12" COLOR MONITOR) AMD.....	399.00.....	NOW..	***
PANASONIC CT-1112 (10" COLOR MONITOR/ T.V.) PAN.....	399.00.....	NOW..	***+
AMDEK VIDEO 300 (12" 80-COL. GREEN MONITOR) AMD.....	199.00.....	NOW..	***+
AMDEK VIDEO 300A (12" 80-COL. AMBER MONITOR) AMD.....	215.00.....	NOW..	***+
GORILLA MONITOR (12" 80-COL. GREEN SCREEN) LEP.....	99.00.....	NA..	NA
TRANSTAR 20 (12" 80-COL. GREEN SCREEN) TRA.....	170.00.....	NA..	NA

===== INFORMATION SERVICES =====

PRODUCT NAME VENDOR CODE	HOOK-UP	PRICE/HR(EVES.)	RTG.
COMPUSERVE CSV.....	30.00.....	5.00.....	***
SOURCE SRC.....	100.00.....	7.75.....	***
DELPHI INFORMATION SERVICE DEL.....	49.95.....	5.00.....	NA

===== MAGAZINES =====

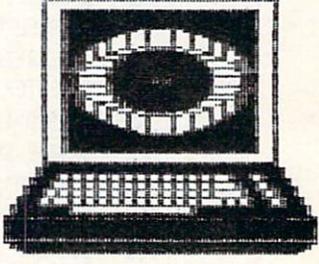
PRODUCT NAME VENDOR CODE	PRICE/ISSUE	TIMES/YR.	RTG.
COMPUTE! (COVERS MANY MICROS, 64 GETS PRETTY GOOD COVERAGE) CPU.....	2.50.....	12.....	***+
COMPUTE!'S GAZETTE (VIC & 64 MAG) CPU.....	2.00.....	12.....	***+
COMMANDER (COMMODORE ONLY) MSS.....	2.95.....	12.....	***+
OPTIMIZER 64 PAL.....	2.50.....	12.....	NA
TOO SOON TO JUDGE THIS CANADIAN 64-ONLY PUBLICATION. THE FIRST ISSUE IS FULL OF USEFUL INFORMATION, LISTINGS, & ARTICLES. BLACK & WHITE MATTE. INTERESTING FORMAT IDEA: EACH ISSUE COMES IN A PLASTIC COVER WITH ONE OF THOSE PLASTIC RIB-CLAMPS WHICH MAY BE REMOVED SO THE ISSUES MAY BE KEPT IN ONE LARGE 3-RING BINDER. THE PEOPLE INVOLVED SEEM VERY KNOWLEDGEABLE, SINCERE, & ENERGETIC. GOOD LUCK GUYS!			
TRANSACTOR (COMMODORE ONLY) TRX.....	NA.....	24.....	***
VERY PROFESSIONAL WITHOUT FEELING OVER-COMMERCIAL. SOME TOP-NOTCH PEOPLE BEHIND THIS MAG!			

===== BOOKS & MISC. REFERENCE =====

PRODUCT NAME VENDOR CODE	PRICE	AVAIL	RTG.
PROGRAMMER'S REFERENCE GUIDE CBM.....	19.95.....		****
THE ELEMENTARY 64 DMO.....	14.95.....		***
THE MASTER MEMORY MAP EDU.....	NA.....	NA	NA
GUIDE TO 64'S MEMORY, AND HOW TO CONTROL IT WITH PEEKS AND POKES.			
INSIDE THE COMMODORE 64 FRE.....	FREE (\$)	NA	NA
(\$*) FREE WITH PURCHASE OF DEVELOP-64 SOFTWARE. GUIDE TO MACHINE LANGUAGE, ASSEMBLY LANGUAGE, MACHINE ARCHITECTURE / SAMPLE PROGRAMS WITH EXPLANATIONS.			
HOW TO MAKE MONEY WITH YOUR CBM 64 PRA.....	4.95.....	NA	NA
PRINTER PROGRAMMING MANUALS REH.....	15.00.....	NA	NA
MANUAL FOR GETTING THE MOST OUT OF YOUR EPSON PRINTER AND 64. (WOULD PROBABLY APPLY TO GEMINI TOO)/ SCREEN DUMPS / SIDEWAYS PRINTING, ETC.			
PAL PMP.....	9.95.....		***
YOU REALLY GET YOUR MONEY'S WORTH WITH THIS PAD OF PRINTED AIDS. KEYBOARD TEMPLATES / SCREEN LAYOUT GRIDS / LOG SHEETS / BASE CONVERSION CHARTS / SPRITE GRIDS / SOUND AND BASIC LANGUAGE REFERENCES.			
KEYBOARD OVERLAY (PLASTIC WITH BASIC REFERENCES.) ROT.....	8.95.....	NA	NA
PC-DOCUMATE (BASIC REFERENCE OVERLAY) SYS.....	12.95.....	NA	NA
THE PROMPTER (PLASTIC FUNCTION KEY OVERLAYS) TRN.....	3.95 (PKG OF 4)		***

===== SOFTWARE DEVELOPMENT AND MARKETING =====

NAME	CODE
ENGLISH SOFTWARE	/ ENG
PALACE SOFTWARE	/ PAS
TIMWORKS	/ TMW
THE SOFTWARE GUILD	/ TSG



===== TOTALLY MISCELLANEOUS =====

PRODUCT NAME VENDOR CODE	PRICE	AVAIL	RTG.
DATA LOSS INSURANCE ACU.....	NA.....	NA..	NA
DISK DOUBLER LIN.....	9.95.....	NA..	NA
CUTS A JUST-RIGHT NOTCH IN YOUR DOUBLE SIDED DISKETTES SO YOU CAN FLIP THEM OVER AND USE THE OTHER SIDE.			
SOFTWARE TRADING GROUP TSE.....	9.95.....	NA..	NA
YOU SEND IN A TAPE WITH A PROGRAM YOU WROTE, THEY COPY IT AND ADD 5 PROGRAMS TO YOUR TAPE AND RETURN IT TO YOU.			

VENDOR ROUND-UP:

LISTED ALPHABETICALLY BY VENDOR CODES USED IN PRODUCT ROUND-UP.

CODE	COMPANY	CITY	STATE	PHONE #
ZGC-	3G COMPANY INC.	GASTON	OR	(503)357-9889
AAR-	AARDVARK	WALLED LAKE	MI	313-669-3110
ABA-	ABACUS SOFTWARE	GRAND RAPIDS	MI	616-241-5510
ABC-	A B COMPUTERS	COLMAR	PA	215-822-7727
ACA-	ACADEMY SOFTWARE	SAN RAFAEL	CA	414-499-0850
ACC-	ACCESS SOFTWARE	SALT LAKE CITY	UT	801-532-1134
ACS-	A-1 COMPUTER SERVICES	KENNEWICK	WA	509-783-4980
ACU	ASSOCIATION OF COMPUTER USERS	BOULDER	CO	
ADA-	ADVANCED ARCADEWARE	THOMASVILLE	NC	919-431-3231
ADI	ADVENTURES INC.	ALEXANDRIA	VA	800 835 2222
AHG-	AVALON HILL GAME CO.	BALTIMORE	MD	301-254-5300
ALP-	ALPHACOM	CAMPBELL	CA	
AMA-	AMARAY CORPORATION	LOS ALTOS	CA	415 968 2840
AMD-	AMDEK CORP.	ELK GROVE VILLAGE	IL	312-364-1180
AME-	AMERICAN DATA CABLE INC.	PLACERVILLE	CA	916-622-3465
ARB-	ARBUTUS TOTAL SOFT INC.	BELLINGHAM	WA	206-733-0404
ARI-	ARIES MARKETING CO.	BALTIMORE	MD	
AVC-	AVCOR	TORONTO	ON CA	416 864 9240
BAB-	BASIC BYTE INC.	SOUTHFIELD	MI	800-835-2246
BAT-	BATTERIES INCLUDED	TORONTO	ONTAR	416-596-1405
BAZ-	BAZ ELECTRONICS	FEDERAL WAY	WA	206 874 3029
BFD-	INFO-64	AUBURN	WA	206 939 0582
BIL-	BILLY SOFT	BARTLETT	TN	
BMT-	BYTESIZE MICRO TECHNOLOGY	SEATTLE	WA	206 236 BYTE
BOS-	BOSTON EDUCATIONAL COMPUTING INC.	BOSTON	MA	617-536-5116
BRI-	BRILEY SOFTWARE	LIVERMORE	CA	
BRO-	BRODERBUND SOFTWARE	SAN RAFAEL	CA	
BUS	BUSH FURNITURE	LITTLE VALLEY	NY	716 938 9101
BYR	BYTE-RYTE	MONTREAL	PQ /	
CAC-	COMPUTER ACCESSORIES	BAKERSFIELD	CA	805 872 4488
CAR-	CARDCO INC.	WICHITA	KS	316-267-6525
CAS	CASTLE SOFTWARE	NEW CASTLE	DE	302 429 8565
CBM-	COMMODORE BUSINESS MACHINES	CONSHOHOCKEN	PA	
CBM-	COMMODORE BUSINESS MACHINES	WESTCHESTER	PA	215 431 9100
CBS-	CBS SOFTWARE			
CCC-	COMPUTER CASE COMPANY	COLUMBUS	OH	614 868 9464
CCI-	CLOCKWORK COMPUTERS	ROCKVILLE	MD	301 924 4157
CDC-	COMM*DATA COMPUTER HOUSE	MILFORD	MI	313-685-0113
CDS-	COMMERCIAL DATA SYSTEMS LTD.	REGINA	CANAD	306 525 3386
CGR-	CGRS MICROTECH	LANGHORNE	PA	215-757-0284
CIG	COMAL USERS GROUP	MADISON	WI	608 222 4432
CIM-	CIMARRON CORP.	SANTA ANA	CA	714-662-2801
CIS-	CITY SOFTWARE			414-277-1230
CMC-	CONNECTICUT MICROCOMPUTER	BROOKFIELD	CT	203-775-4595
CMS-	COMPUTER MARKETING SERVICES INC.	CHERRY HILL	NJ	609-795-9480
COA-	COMPUTER ALLIANCE	CHATSWORTH	CA	213-368-4089
COC-	COMPUTER CENTER	SACRAMENTO	CA	916 366 3609
COM-	COMPUTERMAT	LAKE HAVASU CITY	AZ	602-855-3357
CON-	CONTINENTAL SOFTWARE CO.	LOS ANGELES	CA	213-417-3003
COP-	COMPUTER PLACE	TORRANCE	CA	213-325-4745
COU	COUNTERPOINT SOFTWARE INC.	MINNEAPOLIS	MN	

CODE	COMPANY	CITY	STATE	PHONE #
CPE-	COMPUTER PERIPHERALS	LOS ANGELES	CA	213 298 1297
CPI-	COMPUTER POWER INT'L	HEMET	CA	800-258-7862
CPU	COMPUTE! PUBLICATIONS INC.	GREENSBORO	NC	919 275 9809
CRE-	CREATIVE SOFTWARE	SUNNYVALE	CA	408-745-1655
CRO-	CROSSTECH GRAPHICS	CHICAGO	IL	312-871-3555
CSV-	COMPUSERVE	COLUMBUS	OH	800-848-8199
CTC-	COMPUTECH	REDONDO BEACH	CA	
CUG-	COMMODORE 64 USERS GROUP	LISLE	IL	312 369 6525
CUR-	CURSOR 64	SANTA BARBARA	CA	805-683-1585
CYB-	CYBERIA INC.	AMES	IA	800 247 3900
DAS	DATASOFT INC.	CHATSWORTH	CA	213 701 5161
DAT-	DATA 20 CORP.	LAGUNA HILLS	CA	714 770 2366
DEE	DOUBLE E ELECTRONICS INC.	OMAHA	NE	
DEL-	GENERAL VIDEOTEX CORP.	CAMBRIDGE	MA	617-491-3393
DES-	DATA EQUIPMENT SUPPLY CORP.	DOWNEY	CA	213-923-9361
DIC-	DISPLAY INTERFACE CORP.	MILFORD	CT	203 877 7661
DIG-	DIGITAL ARTS CORP.	CINCINNATI	OH	513-891-1217
DMI-	DMI SOFTWARE INC.	SAN DIEGO	CA	619-223-4496
DMD-	DATAMOST INC.	CHATSWORTH	CA	213-709-1202
DON-	DON'T ASK COMPUTER SOFTWARE	LOS ANGELES	CA	213-477-4514
DTB	DATABAR CORPORATION	EDEN PRAIRIE	MN	612 944 5700
DUN	DUNGENESS SOFTWARE	SEQUIM	WA	
EAS-	EASTERN HOUSE	WINSTON-SALEM	NC	919-924-2889
ECC	EASTERN COMPUTER CONSULTING ASSOC.	WORCESTER	MA	617 757 3131
ECI-	EDUCATION CIRCUIT INC.	LANDING	NJ	201-398-6185
ECP-	EMBASSY COMPUTER PRODUCTS	LITTLE NECK	NY	
ECX-	ECX COMPUTER COMPANY	WALNUT CREEK	CA	415-944-9277
EDU-	EDUCATIONAL SOFTWARE INC	SOQUEL	CA	800 692 9520
EHS-	EVENT HORIZON SOFTWARE	NEW YORK	NY	212-535-0697
ELI-	ELECTRONIC LAB INDUSTRIES	BALTIMORE	MD	301 366 8138
EME-	EMERALD SOFTWARE	LINDENHURST	NY	516-226-5849
ENG-	ENGLISH SOFTWARE	REDONDO BEACH	CA	213 372 3440
ENT-	EN-TECH SOFTWARE	SUN VALLEY	CA	213-764-6833
EPD-	ELECTRONIC PROTECTION DEVICES INC.	WALTHAM	MA	617-891-6602
EPY-	EPYX/ AUTOMATED SIMULATIONS INC.	SUNNYVALE	CA	
EXA-	EXATRON	SUNNYVALE	CA	408-737-7111
FAB-	FABTRONICS	BROCKPORT	NY	
FAN-	FANTASY COMUTERWARE	SIOUX FALLS	SD	605-335-7684
FOV-	FOXVILLE COMMUNICATIONS CORP.	SCOTTSDALE	AZ	602 948 9817
FOX-	FOXSOFT (DIVISION OF FOXFIRE SYSTEMS)	DEER PARK	TX	713-473-6723
FRE-	FRENCH SILK SMOOTHWARE	CANNON FALLS	MN	507-263-4821
GAL-	GALACTIC SOFTWARE	SAN JOSE	CA	408-247-4434
GAM	GAMESTAR INC.	SANTA BARBARA	CA	805 963 3487
GAT-	GATOS INTERNATIONAL	SAN FRANCISCO	CA	
GEM-	GEMTECH LABORATORIES	RURAL HALL	NC	
GEN-	GENESIS COMPUTER CORP.	BETHLEHEM	PA	215-861-0850
GLO	GLOUCESTER COMPUTER	GLOUCESTER	MA	
GOS-	GOSUB INTERNATIONAL INC.	WICHITA	KA	316 265 9992
GPM-	GP MICROSYSTEMS	GLENDALE	NY	
SSS-	GOSUB OF SLIDELL	SLIDELL	LA	316-265-9858
GTC-	GENEVA TECHNOLOGIES CORP.	CRANFORD	NJ	201 276 1144
GTR	GATOR SOFTWARE	LAKWOOD	CA	
HES-	HUMAN ENGINEERED SOFTWARE	BRISBANE	CA	415-468-4110
HTE-	HIGH TECH ENTERPRISES	NEWPORT BEACH	CA	
HUT-	HUTCHCRAFT ASSOCIATES	ITHACA	NY	607-347-4782
HYT-	HYTEC SYSTEMS	WEST LINN	OR	503-636-6888

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INP-	INPUT SYSTEMS INC.	HOMESTEAD	FL	305 245 3141
INS	INTELLIGENT STATEMENTS			800 334 5470
INT-	INTERESTING SOFTWARE	TORRANCE	CA	213-328-9422
ISI-	ISIS HATHOR DIGITAL PRODUCTIONS	GOLETA	CA	805-964-6335
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JUS-	JUST ANOTHER SOFTWARE CO.	PALO ALTO	CA	
KAT-	KATTWINKEL KOMPUTING	INDIAN HARBOUR BEACH	FL	
KOA-	KOALA TECHNOLOGIES CORP.	LOS ALTOS	CA	800-227-6703
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SYN-	SYNAPSE SOFTWARE	RICHMOND	CA	415-527-7751
SYS-	SYSTEMS MANAGEMENT ASSOCIATES	RALEIGH	NC	919-787-7703
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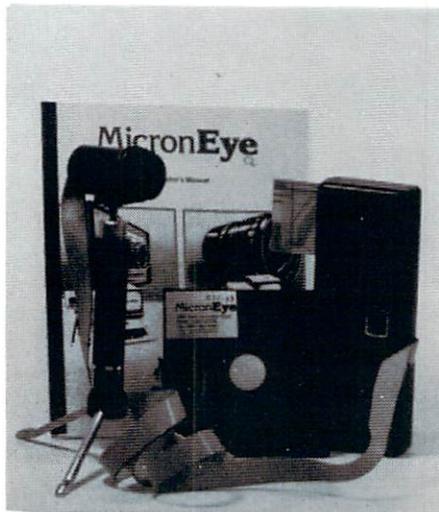
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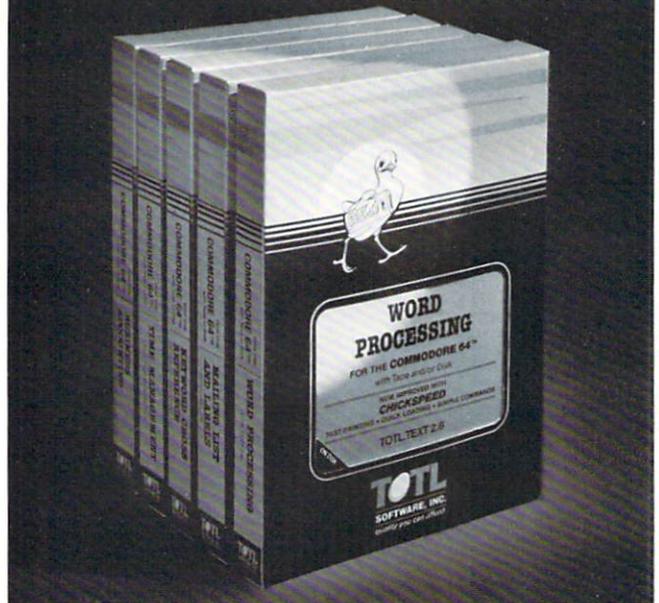


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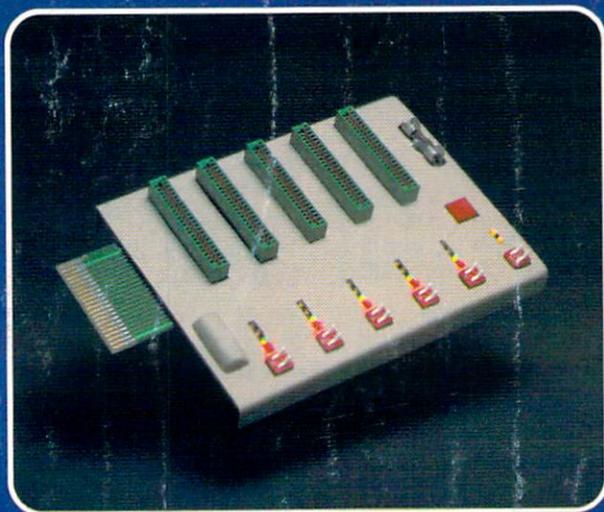
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