KAYPRO

INTRODUCTION TO SOFTWARE

AN INTRODUCTION TO

KAYPRO

SOFTWARE

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USING THE SOFTWARE

The software described here is either included with your KAYPRO or is available as an option from your KAYPRO dealer.

Most of these programs require that you put a program diskette into drive A and a blank, formatted diskette into drive B to receive the information that you will type into the computer.

On the following pages is specific information for starting some of the programs which are included with the KAYPRO. For full information on each program, consult the manual for that program.

Do not cover the write-protect notches on your working diskettes. If these notches are covered, the software WILL NOT OPERATE properly.

WORD PROCESSING WITH PERFECT WRITER

Included with the Perfect software is a LESSONS DISK which introduces you to Perfect Writer commands. We recommend that you go through the lessons programs before using Perfect Writer.

To get started on the Perfect Writer lessons:

1. Turn on your KAYPRO, or, if it's already on, press the reset button on the back panel.

2. Insert your working copy of the EDIT DISK into drive A.

3. Insert your working copy of the LESSONS DISK into drive B.

4. In response to A>, type: MENU
   Press RETURN.

5. When the Perfect Writer menu appears, type: E

6. When asked at the bottom of the screen what file you want to edit, type: B:LESSON0
   Press RETURN.

After about half a minute, Lesson0 will appear on your screen.

During the lessons, you will be told to leave the lesson and then come back. To get back into each lesson from the Perfect Writer main menu:

* Choose Edit by typing: E

* Indicate the lesson number by typing:

  B:LESSON1 (or whatever lesson number)

  Be sure to include B:

  No space between LESSON and the number.

When you are ready to write a document with Perfect Writer:

1. Have your working copy of the Perfect Writer EDIT DISK in drive A and a formatted disk in drive B (for instructions on formatting a disk, see the formatting section of User's Guide.

2. Call up the menu, and type E for edit, as described in the previous steps 4 and 5.

3. When asked at the bottom of the screen what file you wish to edit, type: B:<filename>.MSS

   <filename> is a descriptive name of your document-to-be. It can have no more than eight characters. Do not type the angle brackets, < >.

4. A new file screen will appear, and you can start writing.

There are two essential commands that should be learned immediately.

The Save File Command

After you have written some text, save that text by holding down the CTRL key and pressing the X key (this will be designated as CTRL-X); then hold down the CTRL key and press the S key (CTRL-S). So the Save File command is:

CTRL-X CTRL-S

In the bottom left corner of the screen, you will see the message, Writing..., as the file is being saved. The message, File Written, will appear when the file has been completely saved.

The Close File Command

When you're through writing, first save the file. Then close the file by typing:

CTRL-X CTRL-C

For complete information, consult the Perfect Writer User's Guide.

PERFECT WRITER CONFIGURATION TIPS

If Perfect Writer is not printing properly, you probably need to configure your working copy of the Perfect Writer EDIT DISK for your printer. To do this:

1. Turn on the computer.

2. Put your working copy of the EDIT DISK in drive A.

3. Put your working copy of the Perfect Writer INSTALLATION DISK in drive B.

4. Press the RESET button on the back panel, and after the A> prompt, type: B:PFCONFIG
   Press RETURN.

5. Read the display, and follow the prompts to the master menu.

6. To choose #2 from the menu, type: 2
   Press RETURN.

7. When the printer menu appears, choose #1. If your printer is listed, you will use it in the next step.

8. Choose #5 from the printer definition menu. The current default printer and type for console output will be displayed. If your printer was listed in the last step, enter that name. If your printer wasn't listed, enter: PLAIN

The default printer type, PLAIN, works for most dot matrix printers; the printer type, TELETYPE, works for most letter-quality printers.

9. For the name of the type for console output, enter: CONSOLE

10. Then return to the main menu (choose #6).

11. Lastly, exit the configuration program (choose #6 from the main menu).

One last note: If your printer wasn't listed in step 6, and if the PLAIN, TELETYPE, or VANILLA printer types don't work for your printer, you will either have to define a new printer type (#2 on the printer menu) or update an existing printer definition (#3 on the printer menu), such as PLAIN. You will be asked several detailed questions concerning your printer if you define a new printer type, so either have your printer owner's manual handy or ask your dealer for help.

WORDSTAR

If you are using WordStar, insert your WordStar working copy diskette in drive A, and insert a blank, formatted diskette in drive B.

1. Type: WS
   Press the RETURN key.

2. Commands appear at the top of the screen. Choose to open a document file by typing: D

3. Start a file by typing: B:

4. Then type a filename of no more than eight characters. You may add a period and an extent of no more than three letters. Press RETURN.

5. Start typing on the blank screen.

The main menu displays the keystrokes for all of the basic text editing commands. This menu is displayed whenever you are working in a file.

When you have finished entering and editing your text, save the file and exit by entering CTRL-K X (depress the CTRL key and the K simultaneously, then release both keys and press X).

DATA BASE MANAGEMENT WITH PERFECT FILER

Data base management means that you type in data records such as lists of customers, employees, clients, or merchandise. This data can then be output as sales records, mailing labels, inventory lists, etc.

Perfect Filer is a program which allows you to do this. To use all of the capabilities of Perfect Filer, please read the Perfect Filer manual, and follow the tutorials.

You have the option of creating a custom data base or using either of two predefined data bases. The use of either of the two predefined data bases requires that all files for whichever data base you will use be transfered to another diskette, using the CP/M program titled PIP.

To do this:

1. Turn on or reset the KAYPRO.

2. Put the CP/M diskette into drive A.

3. Place a blank, formatted diskette into drive B. Enter CTRL-C,

4. Type: PIP
   Press RETURN.

5. When the asterisk appears, remove the CP/M diskette from drive A.

6. Put the FILER DISK into drive A.

7. After the asterisk, type the following file names exactly as they appear. Press RETURN after each file name.

```
B:=A: MEMBER.H
B:=A: SS.SAV
B:=A: LFORMDSC.SAV
B:=A: MFORMDSC.SAV
B:=A: LISTFORM.SAV
B:=A: LABEL.TXT
B:=A: DB.TXT
B:=A: DB.DEF
B:=A: SSLIST.SAV
B:=A: SSDESC.SAV
B:=A: MAILFORM.SAV
B:=A: LABEL2.TXT
B:=A: DATABASE
B:=A: HASHTAB
B:=A: MAILTEST.MSS
```

8. Press RETURN again. The A> prompt will appear.

   Now those files which were on the diskette in drive A are also on the diskette in drive B. The diskette in drive B becomes the data base diskette.

9. After the A> prompt, type: FILER
   Press RETURN.

   The prompt will appear:

   Enter disk drive containing data base:

10. Type: b

11. Refer to the tutorial in the Perfect Filer manual for entering and saving data in these preprogrammed data bases. Take your time as you go through it.

RETURN moves the X down a selection menu.

BACKSPACE moves the X up the menu.

Pressing the X key selects that option.

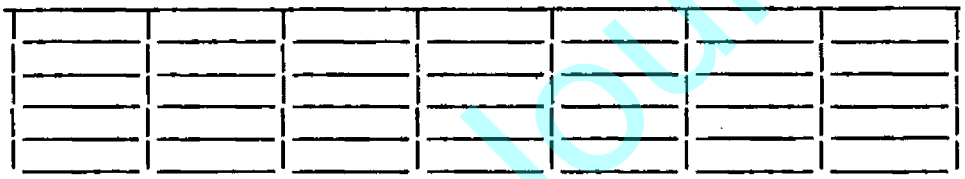
When entering data, do not use RETURN to move from one field to another, as it will add unwanted returns to the printed output.

You can have only one data base on a diskette. If you want to make another data base, you will have to set up another data base diskette.

Getting Started with Perfect Calc

Perfect Calc has some business, professional, and personal applications already set up for you to use, or you can design your own spreadsheet.

A spreadsheet is a ruled type of paper used in business for putting numbers in the form of a table so that calculations can easily be done with them.



Spreadsheet

With Perfect Calc, you use the spreadsheet on the screen instead of on paper. The boxes taken vertically are columns. The boxes taken horizontally are rows.

Using Perfect Calc consists of:

* putting headings over the columns you will use and giving labels to the rows.
* entering the formulas which will tellPerfect Calc which calculations you want done with the data.
* entering data in the boxes.
* watching the calculations being done.

To use Perfect Calc to its fullest, you should read the manual and do the exercises given in the manual. If, for now, you want to take a peek at Perfect Calc:

1. Turn on the computer, or if it's already on, warm boot the computer by entering a CTRL-C.

2. Put the Perfect Calc working diskette in drive A. Put the diskette with the preprogrammed files in drive B.

3. Type: DIR B:
   Press RETURN.

   You will see listed the names of files for Perfect Calc, some of which are applications already set up to use as they are or to modify.

4. Type: PC B:CHECK.PC
   Press RETURN.

   The PC tells the computer that you want to use the Perfect Calc program. CHECK.PC tells the computer that you want to use the check file.

   While the program is loading, a blank spreadsheet will be displayed.

   After the program has loaded, there will be displayed a check register program.

5. Using the arrow keys, move the cursor to the location following: Beginning Balance =

   Note: You can cancel commands by using CTRL--G.

6. Type an amount.

   As you type the amount, it will appear in the status line at the bottom of the screen. If corrections are needed, use the DELete key.

7. Press the RETURN key.

   There will be a pause while the balance is entered.

8. Move the cursor to check number 1.

9. Type the number of the check with which you want to start.

10. Press the RETURN key.

    Watch the numbers automatically change to follow the number you have entered.

    For now, skip the data and description columns.

11. Move the cursor to the Paid column.

12. Type the amount of the check.
    Press RETURN. The register balance is automatically calculated.

13. Press the ESCape key.

14. Simultaneously press the shift key and the period (.) key.

    The cursor will go to the bottom of the spreadsheet, where you will see a register (records) balance and a reconciliation balance.

15. Go to the top of the spreadsheet by simultaneously pressing the shift key and the comma (,) key.

    When your checks are returned from the bank, you can enter a 1 in the Cleared column by each returned check, and your reconciliation balance will be automatically figured!

You can design your own spreadsheets and put in your own formulas for calculations. Read the Perfect Calc manual to learn to use the program to its fullest.

ProfitPlan/MicroPlan
THE MATHEMATICAL SPREADSHEETS

Profitplan and Microplan are similar and share the same command set. Therefore, we have decided to combine them into one introductory section. Refer to the appropriate manual for more details.

Budgeting, forecasting, and financial planning are available with ProfitPlan/MicroPlan. Select a command, and ProfitPlan/MicroPlan will ask you for the necessary data and prompts on the screen.

Getting Started With ProfitPlan/MicroPlan

1. Turn on or reset your KAYPRO.

2. Insert your working copy of Profitplan/Microplan in drive A. The display will show: A>

3. Type: PLAN
   Press RETURN.

   The spreadsheet will appear on the screen.

On the right side of the display are the first 20 commands. Commands 1 through 6 are for groups of command headings; typing one of these numbers gives you access to a group of commands:

FORMAT includes commands 16 through 28. With them you can name rows, name columns, specify width and move columns, set decimals, etc.

DATA includes commands 29 through 39. You can enter data, move the data pointer, fix, nullify, and go to.

MATH includes commands 40 through 58. They provide the means to add, subtract, multiply, divide and perform all four operations with a constant, as well as round off, etc.

PRINT includes commands 80 through 86. These enable you to choose report options, print reports on the printer, save to a disk file, etc.

STATUS includes commands 90 through 102. These display, and allow entry of, range settings, mode selection, and the order in which computations are made.

UTILITY includes commands 105 through 118. These enable you to retrieve your table from a disk, save data on a disk, clear all data, reset, list and erase.

To cancel a command, press the DELete key.

ProfitPlan/MicroPlan comes with tutorial material in the manual. Refer to the ProfitPlan/MicroPlan manual for further details.

A SPELLING CHECKER--THE WORD PLUS

The WORD Plus not only checks the spelling of a document, but it:

* finds rhyming words
* looks up correct spelling
* locates anagrams
* counts the words you have written
* locates homonyms
* lists the frequency of words used
* alphabetizes word lists

Complete instructions are in the WORD Plus manual.

MICROSOFT BASIC-80--THE PROGRAMMING LANGUAGE

M-BASIC is the CP/M version of the high-level language BASIC-80. It is an easy-to-use BASIC interpreter which incorporates features which can be used by the beginner and the experienced programmer alike.

If you are not familiar with the BASIC programming language, read the MicroSoft BASIC manual. Also, there are a variety of books available on the subject. To get you started:

1. Turn on or reset the computer.

2. Put your working copy of the M-BASIC disk in drive A.

3. After the A> prompt, type: MBASIC
   Press RETURN.

4. After you see OK on the screen, accurately type in the following:

```
10 INPUT "PICK A NUMBER";X
20 Y = X * X * X
30 PRINT X;" CUBED EQUALS ";Y
```

5. To run this program, type: RUN
   Press RETURN.

6. To return to CP/M, type: SYSTEM
   Press RETURN.

This is just a short example. The M-BASIC diskette is almost completely full of files. So, if you want to save the programs you write, it would be best to save them on a disk in drive B.

S-BASIC--The Compiler

S-BASIC is a structured programming language. If you are not familiar with programming, the S-BASIC manual provides a good introduction and needed reference material. The first two chapters, however, were written so that you could use any word processing or text editing system to write your S-BASIC programs.

To use S-BASIC in your KAYPRO, you will use two diskettes:

* A WordStar/S-BASIC diskette, which will be the diskette you use to write your programs.

* A blank, formatted diskette, which will be the diskette on which you store your programs in the form of files.

Make the WordStar/S-BASIC diskette by copying files from your CP/M/S-BASIC and WordStar/Word plus disks onto a blank, formatted disk.

1. Turn on the computer, or, if it's already on, reset it.

2. Put the working copy of the CP/M S-BASIC diskette into drive A.

3. Put an empty, formatted diskette into drive B. (To format a diskette, see that section of your User's Guide.)

4. After warm booting the machine and receiving an A> prompt, type in the following. The asterisk (*) appears when the computer is ready for another line. After typing each line, press RETURN.

```
A>PIP
*B:=A:SBASIC.COM[OV]
*B:=A:OVERLAYB.COM[OV]
*B:=A:BASICLIB.REL[OV]
*B:=A:USERLIB.REL[OV]
*B:=A:PIP.COM[OV]
*B:=A:STAT.COM[OV]
*
```

5. After the last asterisk, take the CP/M S-BASIC diskette out of drive A, and put the working copy of the WordStar/Word Plus diskette in its place.

6. Enter the following line in the same manner as in step 4. Do not type the first asterisk.

```
*B:=A:WS*.*[OV]
```

7. When you see the last asterisk, take the WordStar diskette out of drive A, and put the CP/M S-BASIC diskette back into drive A. Now you should see the following on the screen:

```
A>PIP
*B:=A:SBASIC.COM[OV]
*B:=A:OVERLAYB.COM[OV]
*B:=A:BASICLIB.REL[OV]
*B:=A:USERLIB.REL[OV]
*B:=A:PIP.COM[OV]
*B:=A:STAT.COM[OV]
*B:=A:WS*.*[OV]

 COPYING -
 WSMSGS.OVR
 WSOVR1.OVR
 WS.COM

*
```

8. Press RETURN.

9. Type: SYSGEN
   Press RETURN.

10. Wait until the display shows:

```
KAYPRO SYSGEN VER 2.2
SOURCE DRIVE NAME (OR RETURN TO SKIP)
```

    Press: A

11. The message will appear:

    SOURCE ON A, THEN TYPE RETURN

    Press the RETURN key.

12. Wait until you see the message:

```
FUNCTION COMPLETE
DESTINATION DRIVE NAME (OR RETURN TO REBOOT)
```

    Press: B

13. You will see:

    DESTINATION ON B, THEN TYPE RETURN

    Press RETURN.

14. Wait until you see:

```
FUNCTION COMPLETE
DESTINATION DRIVE NAME (OR RETURN TO REBOOT)
```

    Press RETURN.

15. Take the diskette out of drive B, and label it:
    WS/S-BASIC

You now have the diskette you need to begin learning how to program in S-BASIC computer language.

To get you started, let's write a short program in S-BASIC.

1. Turn on your computer, or if it's already on, reset the computer by entering CTRL-C.

2. Put the WS/S-BASIC diskette into drive A.

3. Put a blank, formatted diskette in drive B. Then, to map the disk into memory, enter CTRL-C

4. To create a new file, after the A> prompt, type: WS
   Press RETURN.

5. When the OPENING MENU appears, we will select the non-document mode (the mode for writing program source code).
   Type: N
   Press RETURN.

   WordStar will ask for the file name of the file to edit.
   Type: TRYOUT.BAS
   Press RETURN.

6. Type the following, including PRINT and the quotation marks:

   PRINT "This is my first S-BASIC program."

   Press RETURN.

7. To save this program, enter: CTRL-K X (Press CTRL and, while holding it down, press K, release both keys, then press X.)

The top line on the screen will display a message telling you that you file is being saved.

8. When you see:

```
Warm Boot

A>
```

Type: SBASIC TRYOUT.BBX
Press RETURN.

Entering SBASIC TRYOUT.BBX starts the compiler. Your program will be written on the screen, and the message will appear:

```
****** End of program ******
```

It will take a while to compile your program. When it is done, you will see:

```
Compilation complete

Warm boot

A>
```

For more information on compiling, refer to your S-BASIC User's Guide.

Now you're ready to run your first program.

9. Type: B:TRYOUT
Press the RETURN key.
On the screen you'll see:

```
This is my first S-BASIC program.
```

Congratulations, you have written and run your first S-BASIC program!

That's the procedure to follow every time: create a new file, write your program, save it, and compile it.

To make a listing of a program on your printer, substitute the name of your file for NEWFILE, and type: SBASIC NEWFILE.AZY

or enter: PIP LST:=NEWFILE.BAS

Now that you know the fundamentals of programming in S-BASIC, you will want to read your S-BASIC manual to learn more.

CBASIC--THE OTHER COMPILER

CBASIC is the third BASIC language available for your KAYPRO. CBASIC, like S-BASIC, is a compiled language. This means that a text editor is required to write the source code. Another similarity is that line numbers are required only for lines that are targets for GOTO or GOSUB statements.

Unlike S-BASIC, CBASIC allows a little more flexibility in the use of variables; they do not have to be declared prior to use. Also, in CBASIC the compiler outputs an intermediate code instead of stand-alone programs. The compiled C-BASIC program has a file type of .INT and must be run with the run-time interpreter CRUN238.COM.

CBASIC consists of only four files on your MicroPlan/CBASIC diskette.

* CBAS2.COM - the compiler
* CRUN2.COM - old version of run time interpreter
* CRUN238.COM - the run time interpreter
* XREF.COM - cross reference lister

By this time you should feel comfortable using PIP.COM to transfer files from one diskette to another. In order to start using CBASIC, you will need two diskettes:

* One diskette containing the following files:

WS.COM	
WSOVR1.OVR	
WSMSGS.OVR	(feel free to substitute your favorite editor for these three)
and	
CBAS2.COM	
CRUN238.COM	
XREF.COM	(we will not be using XREF.COM now but put it there for later use)

* One blank diskette for program source files.

Use PIP.COM to transfer the files to your command disk and COPY.COM to create the blank diskette. Should you have any further questions on the use of PIP or COPY. refer to the user's guide for your computer.

Now you have created the two diskettes required. The command diskette, with WordStar and the compiler, is operated from drive A. The program diskette is placed in drive B. Place the diskettes in the appropriate drives, then warm boot the computer by entering CTRL-C. Now we will learn some CBASIC.

1. Start WordStar .If you don't know how to start WordStar, refer to previous sections on WordStar or S-BASIC.

2. From the OPENING MENU open a file under the N option. The N option stands for Non-Document mode and is the method of writing source code with WordStar. In the N mode WordStar doesn't insert page breaks, margin justification, or word wrap. Do not use the D (document) mode, as the compiler will do some weird things.

3. When asked for the file name, enter:
   B:TEST.BAS.
   Press RETURN

4. WordStar will tell you that TEST.BAS is a NEW FILE. Then you will see a blank screen with status line and the MAIN MENU. Type in the test program exactly as it appears below.

```
REM THIS IS A PROGRAM TO TEST THE CBASIC COMPILER
PRINT CHR$(26)
PRINT:PRINT:PRINT
PRINT "Cute trick, huh!"
```

* The first line is a remark statement and allows the programmer to write notes to anyone reading his source code. The compiler ignores them completely.

* The next line, PRINT CHR$(26), sends a code to your KAYPRO that erases the screen and places the cursor on line one, column one.

* Three PRINT statements, separated by colons, illustrate multiple commands on one program line. They simply move the cursor down three lines.

* The last line is a message to indicate that the program functioned properly, or else it would not have reached this point.

5. Now that you have entered the program, save the fiel. Then it will have to be compiled and tested. To save the file, enter CTRL-K X (press the CTRL and K at the same time, then release both keys and press X).

6. You should now see the A> prompt. Next comes compilation of our source code into an .INT file. Enter the following command line (remember to press RETURN).

```
CBAS2 B:TEST
```

The following output should appear on your screen.

```
CBASIC COMPILER VER. 2.08
COPYRIGHT 1981 COMPILER SYSTEMS INC.
```

Following the sign-on message from the compiler, your program is listed on the screen with a line number in front of each line.

If the compiler finds any mistakes in your source code, it will tell you. In the sign-off message a recap of the compiler statistics is printed.

The compiler sign-off should read

```
NO ERRORS DETECTED
CONSTANT AREA:          8
CODE SIZE:             34
DATA STMT AREA:         0
VARIABLE AREA:          0

Followed by

Warm Boot

A>
```

7. To test your program enter the following command line, followed by a carriage return.

```
CRUN238 B:TEST
```

The run time interpreter will sign on.

```
CRUN VER 2.38
COPYRIGHT 1981 COMPILER SYSTEMS INC.
```

At this point, the screen should clear, and your message should print three lines from the top of the screen. Below the message you should see:

```
Warm Boot

A>
```

If all of this occurs as described, your introduction to CBASIC has been a success. If not, recheck the source code, the compiler, and run time command lines.

For programs that you intend to keep permanently, transfer CRUN238.COM and all .INT files to a separate run-time diskette. This way the run-time diskette is all that you need to run your completed programs.

The CRUN2.COM file on your Micro Plan/CBASIC is an older version of the run-time interpreter. It is included so that commercially-available programs which can't use CRUN238.COM may be run on your system. Remember, use CRUN238.COM with programs which you write.

Further advice on CBASIC and instructions on how to use XREF.COM are found in your CBASIC manual.

dBASE II

dBASE II is a user-friendly programming language, and data base management system. dBASE will respond to real-time commands to update a data base, generate reports and sort data base files without spending weeks or months in program development.

dBASE II, when used as an interpreted language, allows people who are not professional programmers to write effective programs. The English-like command structure provides an easily-learned alternative to BASIC for learning the art of programming.

SUPRTERM

SUPRTERM is a communications and terminal emulation program designed for the KAYPRO line of computers. Almost any modem may be used, but SUPRTERM was designed with the Hayes Smartmodem in mind.

With SUPRTERM you can access the major infomation services and bulletin board systems. Your KAYPRO may even be used as the terminal for another conventional system.

Read the SUPRTERM manual which came with your KAYPRO to learn about the many features of SUPRTERM.

B-TREES

B-Trees enables experienced applications development personnel to reduce the number of times a disk is accessed to find a record in a large file that appears on secondary storage, such as floppy diskettes or hard disk. Its features include overflow handling, duplicate keys, node compression, variable-length keys, key insertion and deletion, and multiple keys.

The main program, provided in source form, is composed of many procedures and functions for both the primary operations described below, as well as support operations.

The Procedures and Functions for accessing the tree are as follows:

```
P     CREATE.BTREE <DIR>, P1, P2, P3
P     OPEN.BTREE <DIR>, P1, P2, P3
P     CLOSE.BTREE
F     <VAR> = SEARCH( <KEY> )
F     <VAR> = SEARCH.NEXT
F     <VAR> = SEARCH.LAST
P     INSERT <KEY>, TAG
P     DELETE.KEY <KEY>
```

where:
P and F stand for Prodedure and Function.
DIR is a valid file name.
P1 is the maximum key size.
P2 is the number of keys per node.
P3 is the maximum number of nodes in the tree
<KEY> is a key.

Please note that, as source is provided, the above may be modified as and if necessary for optimizing a specific application.

This program is available as an option from your dealer.

TINKERKIT

Tinkerkit has BIOS, ROM, and utility source listings. It is for the use of experienced systems development personnel.

THE GAMES

There are a variety of games on the M-BASIC diskette which are in the public domain. These games are written in O-BASIC. There are also some copyrighted games included on the M-BASIC diskette. They are listed on the following pages.

To play the O-BASIC games which are listed below:

1. Turn on or reset the computer.

2. Put the games diskette in drive A.

3. Type: OBASIC <game>

   where <game> is the name of the game you want to play. Do not type the angle brackets, < >.

   Press RETURN.

2. To break any game in midplay, enter the command: CTRL--C

3. To return to the CP/M operating system after a game is over or after a CTRL--C (you'll see the word "Ok" on the screen in either case), type: SYSTEM

   Press the RETURN key.

4. Once you have an "Ok" on the screen, you can call up any of these games by typing:
   LOAD "GAME.BAS"

   GAME is the name of the game you want to play, and it should be all in capital letters.

Press the RETURN key.

5. After the next "Ok," type: RUN
   Press RETURN.

   The game should appear.

The following is a list of the games and a short description of each:

STRTRK--This exciting game is suitable for players from the beginner to the expert. It puts you in command of a Federation star ship, with warp drives, phasers, and photon torpedoes at your disposal to combat Klingons.

TRADE--A game for 1 to 4 players. The object is to establish interstellar trade routes and amass vast amounts of money based on stock purchases, mergings, and splits, using the resulting dividends to buy more stocks and increase your holdings in companies such as BETELGEUSE LIMITED. This computerized board game is one of the hottest games going.

CHASE--Caught in a maze of high-voltage fence posts and five security machines, your task is to destroy all of the security machines before they get you.

BLKJK--Play casino blackjack against the computer. You can wager up to $500 with casino rules, including insurance, splits, and doubling down.

WUMP--This is the game of Hunt the Wumpus. Try to catch the Wumpus in a cave of 20 rooms while avoiding bottomless pits and super bats. Each turn you can move to another room or shoot a crooked arrow. The Wumpus is sleeping, and if you wake him, he may eat you. Watch out, I smell a Wumpus.

HORSE--Go to the track, and bet on horses to win, place, and show. Watch SEA BISCUIT, GALLANT FOX, CITATION, and the rest as they come around the bend into the home stretch.

ROCKET--This is a lunar-landing simulation game where you start off at 500 feet above the lunar surface at a downward velocity of 50 ft/sec with 120 units of fuel. You specify how much fuel you want to use for each turn, and down, or up, you go. Good luck, and keep an eye on your fuel.

TAXMAN--This well-named game starts off with the question: "Hi, I'm the taxman. Do you want the regulations?" Sound familiar? Well, you can beat the taxman at his own game. Begin with a list of whole numbers, and play by taking a number from the list. The taxman gets all of the factors of your number that are left. You proceed by choosing numbers until all the numbers are gone. The one with the highest total wins.

BIO--This computerized study of biorhythmic curves plots your biorhythm for a number of days. You input your birthday in a six-number string, with the year first, then the month, and then the day (for example, March 2nd, 1948, would be: 480302); then input the current date in the same manner. The resulting graph indicates whether your physical, mental, and emotional rhythms are high, low, or critical.

* * *

The following three copyrighted games are included with the M-BASIC files. To play any of the three games listed below, at the A> prompt type in the name as shown.

LADDER--A game in which you have lads that you move left, right, up, or down with the blue keypad (4=left, 6=right, 8=up, 2=down, and any other number to stop), and jump over obstacles with the space bar. Avoid the rolling barrels (o), grab the ampersands (&) along the way for bonus points, and climb up the ladders (H) to the highest level to reach the dollar sign and onto a new screen. Watch out for the fifth screen, though, it's a killer. There are five levels of difficulty, which you can choose before the game, that will increase the speed, if you desire. Start off at level one if you know what's good for you.

CATCHUM--This game puts your cats (C) in a maze of dots, which you eat as you go along, avoiding the monster A. There are four energy o's that will transform the A's into m's so that you can eat them for bonus points. Also, you can gain extra points by nabbing the dollar sign when it appears. You move with the blue keypad (4=left, 6=right, 8=up, and 2=down). There are nine levels of difficulty, which can be set before the game starts. The levels of difficulty change the speed of the game. If you're really hot at Catchum, try level 9. It'll cool you down.

ALIENS--Attention, alien invasion in progress! Man the laser base, and fire upward toward the encroaching aliens. Get bonus points for hitting the saucers flying across the top of the screen. Watch it, because every time you shoot and miss, you lose a point, and every time your laser base gets hit, you lose 25 points. This game is actually six games in one. Call up from the menu the game you want to play:

1) (Bloodbath) - For this one, the laser base never stops moving. Fire upward at the aliens, and get them before they crush you.

2) (We come in peace) - You can stop and direct the laser base left or right in this version.

3) (The aliens strike back) - In this version, the aliens have the ability to fire back at you, so watch out.

4) (Invisible alien weasels) - The aliens are invisible here, so keep on your toes. Beeps will let you know when you've got one with your trusty laser beam.

5) (Klinker) - Here the barriers, as well as the aliens, are invisible. So watch where your laser beam goes when you fire it.

6) (The black hole) - Hold onto your senses for this one. Not only are the barriers and aliens invisible, but your laser base is also invisible. This one is definitely not for beginners.

This completes our excursion into the software zone. We now return control of your computer to you.

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