YOUR
HOME
LIBRARY

For the Commodore 64*

Productivity and Recreational
Programs for the New User.

TRI MICRO

THE HOME LIBRARY:
Master Key to the C-64

HOME LIBRARY transforms the C-64 into a friendly gateway to five useful and easy to use programs. These are 1) STAR*SCRIPT, a word processor; 2) YOUR PERSONAL ACCOUNTANT, a home finance package; 3) YOUR FILING CABINET, a file manager; 4) TRI GRAPH, the Color Palette, an electronic drawing program; 4) COSMIC SPLIT, an action game.

To operate HOME LIBRARY, you will need to have the Commodore 64 computer, a Commodore 1541 Disk Drive, and a TV or a video monitor. A printer is necessary for use with the STAR*SCRIPT program, and is strongly recommended for PERSONAL ACCOUNTANT and FILING CABINET. A joystick is necessary to operate the the COSMIC SPLIT terrestrial game. You can use the joystick with TRI GRAPH as well although it is not required.

You also need at least four floppy disks to exercise the examples illustrated in the programs. You may use a brand new disk or an old disk which contains data you no longer need. In either case, you do not have to prepare (format) the disks prior to using the program. A menu selection allows you to format disks while in the program.

LOADING THE PROGRAM

Insert the disk labeled HOME LIBRARY into the disk drive. Close the drive door. Type:

LOAD´´*´´,8 (press the RETURN key)

The screen will display a READY prompt. Type RUN. Press the RETURN key.

The program will begin loading, indicated by the stars in the upper left hand corner of the screen. The screen will display a graphics label, ´THE

MASTER KEY´.

When the first program is loaded, the screen will
display a menu as below.

Master Key Menu
(Press illuminated selection key)

1	Star-Script	Word processing
2	Account	Finances
3	Cabinet	File manager
4	Palette	Electronic drawing
5	Cosmic Split	Action game
6	Format Disk	7 Exit Program

(Press 1...7)

Press the number of your choice, and the individual
program will load. Before loading selections
1,2,3,4, select (6) to enable you to format your
blank disks.

When you choose to format a disk, a message will
appear on the screen:

    Insert blank or used disk
      to be formatted.

    Please note that formatting
      erases all old information.

    Should we continue? (press y or n)

To format the disk, press Y. The screen will ask
you for the name of the disk. Following the
question mark, type in any name desired up to
sixteen characters in length. The screen will then
ask you for a 2-digit id number. Enter any two
digit number.

The system now displays the disk name and id number,

and asks 'All set? (y or n)   Press Y to begin the
formatting procedure. Note: if you have left   your
system disk mistakenly, the formatting procedure
will   not   allow   you to format the system disk.   In
this way you cannot format your program disk.

Once the disk has been formatted you will return to
the Master Key Menu and may select the program of
your choice.

STAR*SCRIPT

A Word Processor

by

David W. Johnson

A Product of

INTERNATIONAL TRI MICRO

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STAR*SCRIPT

What is STAR*SRIPT?

STAR*SCRIPT is a word processor for the Commodore 64
or Executive 64 computer. The word processor   lets
you use your computer like a typewriter. With the
word processor, you can:

    o Create and edit up to 77 characters per line
    and 99 lines of text per fifle;
    o Insert and delete characters and lines of
    text;
    o Copy, insert, and delete blocks of text;
    o Search for and replace words;
    o Save, load, delete and merge files;
    o Format and print documents.

Using STAR*SCRIPT, you will need the following
equipment:

    o A Commodore 64 or Executive 64 computer;
    o A Commodore 1541 disk drive;
    o A TV or monitor;
    o A Commodore 1526, 801, DSP 1101, or other
    compatible printer, properly interfaced.

Turn on the disk drive, monitor, and printer. If
you don't have any formatted disks for data storage,
you should format several now. You ALWAYS need   to
format a new disk before it can store files   created
with STAR*SCRIPT.   Once you have chosen selection 1,
the   screen   will   display   a   description of your
selection and ask if the selection is OK?(press y or
n).   To load this selection, press Y. To return to
the menu, press N.

STAR*SCRIPT will begin loading, indicated by the
stars in the upper left hand corner of the   screen.
When loading is complete, the following will   appear
on your screen:

```
----------------------------------------------
(  )
```

```
.............................................
L=  01   C=  01
----------------------------------------------
```

This is the Word Processor.   You now have the
ability to use your 64 keyboard like a   typewriter.
REMOVE   THE   STAR*SCRIPT   DISK   FROM   THE   DRIVE AND
INSERT A FORMATTED DISK.

The white square in the upper left hand corner is
called the ´cursor´.   It is the marker for where
your text will appear when you type. The reverse
video ´L=´ indicates the line (01) and ´C=´ the
column (01) that the cursor is currently positioned
in; whenever you move the cursor, these numbers
change.

The Word Processor has three modes: the Editing
mode, the Command mode, and the Print Formatting
mode. We´ll begin with the Editing mode.

```
------------------- EDITING MODE ---------------------
```
          Press f2 for help list
      Press these keys to control the cursor

<-- Cursor left   Cursor up
CRSR   CRSR
 --> Cursor right   Cursor down

f7   Cursor to right   f8   Cursor to left
      side of page   side of page

CLR   Cursor to   SHIFT CLR   Cursor to bottom
HOME top of file   HOME   of file

INST	Deletes text to	SHIFT INST	Inserts a space
DEL	**left of cursor**	**DEL**	**left of cursor**

C= @ Restores text	RETURN	Carriage return with line feed

CTRL <-- Sets tab position where marked
**   <-- Moves cursor to pre-set tab positions**

CURSOR LEFT and RIGHT

The cursor keys at the lower right hand corner of
your keyboard control the horizontal and vertical
movement of the screen cursor. Press the left/right
CRSR key once. The cursor moves one character to the
right. Now hold down the SHIFT key and press the
left/right CRSR key once again. The cursor moves one
character to the left.
Press and hold down the left/right CRSR key until the
cursor reaches column 77. This ´automatic repeat´
works for all keys. Now hold down the SHIFT and
press the left/right CRSR keys until the cursor moves
back to column 01.

The screen only shows 37 columns of text at one time,
but through a technique called ´scrolling´ you may
enter up to 77 columns of text per line. The text
simply shifts to the left when you pass column 37 and
continues until you reach column 77.

CURSOR UP AND DOWN

With the cursor at line 01, column 01, press **the**
up/down CRSR key once. The cursor moves down one
line. Now hold down the **SHIFT** key and press the
up/down CRSR key once again. The cursor moves up one
line.

Press and hold down the up/down CRSR key until you
reach line 99. This is the last line of your file.
Now hold down the SHIFT and up/down CRSR keys until

the cursor moves back up to line 01.

With the cursor at line 01, column 01, type the
following. Press the SHIFT key to type capital
letters. Press the SHIFT/LOCK key to type all captial
letters. Press the RETURN key (<--'s in reverse
video) to force a carriage return and line feed, just
as you would on an electric typewriter. Single-space
between words and after commas. Double-space after
periods. Type the text EXACTLY; there are intentional
errors.

What is a Word Processor?<--
<--
A word processor is a tool that allows yoo to enter,
edit, print and store text, using a coomputer. A word
processor will save you many hours of typing. Using
the 64 keyboard as a typewriter, you enter characters
electronicaly onto a video screen.<--
<--
<--
<--
A word processor also allows you to change the format
of yout document without having to retype the entire
thing. By inserting a few simple commands in your
texxt you can change margins, page size, line spacing,
and print with bld type.<--

Notice the reverse video arrows where you pressed the
RETURN key. These tell the printer to return to the
next line. They will not show up in your document
when you print it out.

CURSOR TO LEFT AND RIGHT SIDE OF SCREEN

As stated, you can only view 37 characters on the
screen at once. To see the right half of the screen,
press the f7 key. To see the left half of the
screen, press the f8 key (hold down the SHIFT key and
press the f7 key). When you press the f8 key, the
cursor will also advance down one line to help you
read through a document. Using these two keys you can

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scan the entire file quickly and easily.

CURSOR TO TOP AND BOTTOM OF FILE

Press the **CLR/HOME** key to move the cursor to the
tope of file. You are back at line 01, column 01.
Now hold down the SHIFT key and press the **CLR/HOME**
key to move the cursor to the bottom of the file. You
are back to the last line the cursor was positioned
on. Using these two keys you can move from the
beginning to the end of your file instantly.

Got it so far? Good. Now, let´s fix those errors we
created in our sample file.

Using the CRSR keys, move the cursor to line 03,
column 42. To correct the spelling of yoo to you,
simply position the cursor over the second ´o´ and
press the ´u´ key. In this way, you can correct
mistakes without having to retype everything.

DELETING AND INSERTING CHARACTERS

Move the cursor to line 04, column 15. To delete the
extra ´o´ in coomputer, position the cursor over the
second ´o´ and press the **INST/DEL** key. This deletes
the text to the left of the cursor. Now move the
cursor to line 05, column 73. To insert a space so
you can add the missing ´l´ to electronicaly, position
the cursor over the ´y´, hold down the **SHIFT** key
and press the INST/DEL key. This inserts a space to
the right of the cursor. All you have to do now is
type ´l´. In this way, you can delete and insert
characters at the touch of a key.

Let´s try the next paragraph. Move the cursor to line
10, column 61. To correct the spelling of yout to
your, position the cursor over the ´t´ and type´r´.

Move the cursor to line 12, column 07. To delete the
extra ´x´ in texxt, position the cursor over the
second ´x´ and press the INST/DEL key.

Stay in line 12, but move the cursor to column 74. To

insert a space so you can add the missing ´o´ to bld,
position the cursor over the ´l´, hold down the SHIFT
key, and press the INST/DEL key. Now type ´o´ in the
space.

Press the f8 key, then the CLR/HOME key to move the
cursor back to the top of the file, at line 01, column
01.

RESTORING DELETED TEXT

With the cursor positioned over the ´W´ of what, press
the RETURN key. WHOOPS! The entire line is deleted.
NEVER USE THE RETURN KEY TO MOVE THE CURSOR   AROUND.
If you do, you may find yourself deleting some of
your document.

Each time you press the RETURN or INST/DEL key, the
line or character deleted is saved to a ´buffer´.
This means that if you should make a mistake all is
not lost. Simply position the cursor back at line 01,
column 01, hold down the C= key (the Commodore   Logo
key at the lower left hand corner of the keyboard) and
press the @ key. The deleted line will be restored.

Since this line is still in the buffer, you can repeat
it anywhere you position the cursor. To see this,
move the cursor to line 15, column 01. Hold down the
C= key and press the @ key again. You may repeat
this procedure until you press the RETURN key and a
new line is saved to the buffer. This command only
works with the LAST line or character deletion.

SETTING TABS

To set tabs, move the cursor where you want to set the
tab (such as in column 37), hold down the CTRL key
and press the <-- key (the left arrow at the upper
left hand corner of the keyboard). A * will appear at
the bottom of the screen, showing what column the tab
is set in. Experiment with setting tabs in different
columns; you may set as many tabs as you like. A tab

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is automatically set in column 77, so you never   have
to set one there. When finished, move the cursor back
to column 01.

To move the cursor the the set tab position, press the
<--   key.   Each time you press it the cursor   will
advance to the next set tab. When you reach the right
half of the screen, and want to return to column   01,
press the **f8** key or the left/right CRSR key.

Now that you have the Editing mode under control,
let´s move on to the Command mode.

```
------------------ COMMAND MODE --------------------
          Press f2 for help list
     Press fl each time you want to type new command
        Press C= and Q to repeat last command
```

fl   To enter Command Mode   **ca**   Catalog of disk
                                          Press SPACEBAR to
id   Initialize Disk   pause and RETURN to
                                          continue

Editing Commands

il   Insert line   **ib**   Insert block of text

dl   Delete line   **db**   Delete block of text

sp   Set pointer   **sr**   Search for word

ep   Erase pointer   **re**   Search and replace

cp   Clear all pointers   **ct**   Clear all tabs

cb   Copy block of text   **cm**   Clear memory

File Commands

sf   Save file   **df**   Delete file

lf   Load file   **mf**   Merge file

Print Commands

*p   Print screen   **pr**   Print file from disk
```
----------------------------------------------------
```

Normally, when you use the word processor, you
simply type in text, which is displayed on the
screen. However, by pressing the **fl** key, you are
able to give the word processor a special set of
commands. These commands are all two letter
commands that tell the word processor to perform one
definite function. Once the function is completed,

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you may go back to normal typing.

Press the **f1** key at the upper right hand corner of the keyboard. A W> will appear just above the L= at the bottom left hand corner of the screen with the cursor beside it. At this point, the word processor is waiting for you to type in a two letter command, in either upper or lower case.

CATALOG A DISK

Type **ca** and press the RETURN key. A catalog of the disk appears on the screen. The catalog lists the contents of a disk and shows how many blocks remain free. Always have another data disk formatted so you can change disks easily if one becomes full. One block equals 254 characters. When your catalog gets long, you can press the SPACEBAR to pause scrolling through it, and the RETURN key to continue. Follow the instructions on the screen and press the RETURN key.

REPEAT COMMAND

Now hold down the **C= key and press the Q** key. You will get a catalog of the disk once again. This command tells the word processor to repeat the last command. You may repeat the last command as many times as you want until you press another key.

INITIALIZE A DISK

The command **id** is used to initialize a disk. It should only be used when loading a file from one disk and saving the file to a new disk. The **id** should be done just before the saving a file or after changing disks.

EDITING COMMANDS: INSERTING and DELETING LINES

Move the cursor to line 05, column 01. Press the f1 key to enter command mode. Type **il** and press the RETURN key to insert an extra blank line at line 05. Now press the f1 key again. **Type** dl and

press the RETURN key to delete the line. In this
way, you may insert and delete whole lines, instead
of doing it character by character.

SETTING, ERASING and CLEARING POINTERS

Move the cursor back to line 01, column 01. Hold
down the SHIFT key and press the INST/DEL key three
times. The entire document shifts to the right
three spaces. In order to avoid moving text you
don't want to move, you must set a pointer at the
end of the line or paragraph in which you are
deleting or inserting. This will stop all text
movement beyond the pointer, keeping the remainder
of the text as you left it. To see how this works,
let's first move the text back into its original
format. Move the cursor to line 01, column 04 and
position the cursor over the ´W´ of What. Now press
the INST/DEL key three times. The entire document
shifts back three spaces.

To set a pointer at the end of the first paragraph,
first move the cursor to the last line of the first
paragraph, line 06, coclumn 01. Press the fl key,
they type   sp   and press the RETURN key. A ´<´
appears at the right side of the screen, signifying
a pointer has been set. Now move the cursor back to
line 01, column 01, hold down the SHIFT key and
press the INST/DEL key a few times. The only text
the moves is the text before the pointer. REMEMBER
TO ALWAYS SET POINTERS AT THE END OF ANY TEXT IN
WHICH YOU WANT TO INSERT OR DELETE. It is easiest
to get into the habit of setting a pointer at the
end of each paragraph as you are typing. In this
way, you do not have to set the pointers at editing
time.

When you want to erase the pointer, simply position
the cursor on the line the pointer is set, line 06.
Press the fl key, type ep and press the RETURN
key. The ´<´ will disappear, signifying the pointer
has been removed.

After setting many pointers, you may want to clear

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them all without doing it one by one. To do so, press the fl key, **type** cp and press the RETURN key. All of the pointers will be removed.

COPYING, INSERTING AND DELETING BLOCKS OF TEXT

A block of text is a grouping of text and can be up to 15 lines long. Blocks of text may be deleted with a single command instead of having to delete it line by line. Blocks of text may also be moved to other areas of your document with a single command.

The beginning of a block of text is the line on which your cursor is positioned. The end of a block of text is marked by setting a pointer on the last line.

Let´s move the first paragraph to another area of your document. First you have to mark the end of your block by setting a pointer at the last line of the block. Move the cursor to line 06, press the fl key, type sp and press the RETURN key. As before, a ´<´ will appear at the right side of the screen.

Position the cursor on the first line of the block we want to move, line 01, column 01. Press the fl key, type **cb** and press the RETURN key. The entire block has now been copied to a ´buffer´, where it will remain until removed by a command.

To insert the block in another area of the document, you must first position the cursor where you want to move the block. For this tutorial, move the cursor to line 20, column 01. Press the fl key, type **ib** and press the RETURN key. The screen will read WORKING in reverse video and the block will copy to where you have positioned the cursor.

You may also delete blocks of text in the same way. First set a pointer at the end of a block. Move the cursor to line 25, column 01. To delete the block, press the fl key, **type** db and press the RETURN key. The screen reads WORKING in reverse

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video and the block will disappear. This block now replaces the first block in the buffer. As with the **cb** command, you may insert the deleted text elsewhere in the document by using the **ib** command.

When you use either the **cb or db** commands, the text is held in the buffer even when you load new files from disk. This lets you copy a block, switch disks, load a file, and copy the block to another document in the new file.

SEARCHING AND REPLACING TEXT

One of the main advantages of the word processor is the search and replace function. Using this function, you can automatically search for an occurrence of a specific group of characters or words. You can also search for a particular word and replace it with another word. Let's search for the word 'processor' in our sample document.

Press the CLR/HOME key to move the cursor to the top of the file. When the word processor begins to search for a particular character or word, it begins looking at all text FOLLOWING the cursor. If you have the cursor at the end of the file, the search will reveal nothing, since there's nothing to search for.

Press the fl key, **type** sr and press the RETURN key. The screen will read SEARCH:. Type **processor** and press the RETURN key. The word processor in line 03 is immediately highlighted in white. The screen reads CONTINUE Y/N?. Press the Y key (for yes) and the next occurrence of the word is highlighted. The screen reads CONTINUE Y/N? Press the Y key again and the next occurrence of the word is highlighted. Press the Y key once more and you'll be back in the normal editing mode, since every occurrence of processor has been found.

Notice the computer did not find **Processor**. That's because of the capital P. Remember to always type

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the word you are looking for the exact way it appears in your text.

Now let´s search for and replace the word **Processor** with the word Editor . First move the cursor to line 01, column 01. Press the fl key, type **re** and press the RETURN key. The screen will read SEARCH:. Type Processor and press the RETURN key. The screen will read BECOMES:. Type Editor and press the RETURN key. The first occurrence of Processor is highlighted and the screen reads CONTINUE Y/N?.

Press the Y key and the screen reads REPLACE Y/N?. Press the Y key again and the Processor will be changed to Editor. If you don´t want to change the word, press the N key. The next occurrence of Processor will then be highlighted and the screen reads CONTINUE Y/N?. Press the Y key and the screen reads REPLACE Y/N? Press the Y key and again, Processor will be changed to Editor. Since this is the last occurrence of Processor, the computer returns to the normal editing mode.

When replacing text, the word processor will automatically set pointers if the replace word is a different length than the search word. This will keep your document formatted properly.

CLEARING TABS

To clear the tabs you set earlier, press the fl key, type **ct** , and press the RETURN key. All of the asterisks will disappear, and you may now set new tabs.

FILE COMMANDS: SAVING, LOADING, DELETING, AND MERGING FILES

Let´s save the file we have just created. Make sure your blank, formatted data disk is still in the drive. Press the fl key, type sf and press the RETURN key. The screen reads SAVE FILE:. You may now type any name you want to give the file, up to

sixteen characters long. For the sake of this
tutorial type **demo** and press the RETURN key. The
disk drive will then write this new file to the disk
under the name demo.

Save the same file under a different name now.
Press the fl key, **type** sf and press the RETURN
key. When the screen reads SAVE FILE: type **demo**2
and press the RETURN key. The disk drive will then
write this file to the disk under the name demo2.

Note: If you are saving a file already on disk, and
type in the same filename as the file on disk, the
screen will ask you if you want to REPLACE Y/N the
old file with the new one. Type Y for yes and N for
no. This message will also come up if the disk is
full. Use t**he** ca command to catalog the disk,
then check to see how many blocks free are
remaining. When the disk is full, always answer N
(no) to the REPLACE Y/N? prompt. Insert a new,
formatted disk and save the file to this disk
instead.

To load the file you have previously saved to disk,
press the fl key, **type** lf and press the RETURN
key. The screen reads LOAD FILE:. Type **demo** and
press the RETURN key. The disk drive will then read
the filename from the disk, and the file will
appear on the screen. If the filename is not
correct, however, the screen will read NO FILE!:
PRESS RETURN. You should verify your filename by
running a catalog of the disk. If the filename is
not present in the catalog, you did not save the
file. Make sure you type the filename EXACTLY as it
appears in the catalog.

Sometimes you may want to merge two or more files
together on the screen. Press the fl key, type **mf**
and press the RETURN key. The screen reads LOAD
FILE:. Type **demo2** and press the RETURN key. The
file will be added to the bottom of the text of your
current screen file. Remember, the line limitation
per file is 99 lines. If the file you are merging
and the screen file exceed 99 lines, some text will

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be cut off.

To delete a file from the disk, press the fl key,
type   df   and press the RETURN key. The screen
reads DELETE FILE:. Type demo2 and press the RETURN
key.   The disk drive will spin, deleting the   file
demo2 from the disk.

Once you have deleted a file, it cannot be restored!
Make sure that you want to delete the file   before
using this command.

CLEARING MEMORY

Be   careful   when   using   this command, as it erases
everything in the computer's memory. Make sure   you
have already saved your file to disk, or really want
to clear the screen and start over. The only thing
retained by the computer after you give it a   cm
command is the text in the block buffer.

To clear the screen, press the fl key, type   **cm** and
press   the   RETURN key. The screen reads CLEAR   ALL
Y/N?.   This is your chance to reply with an N if you
decide not to clear the screen after all. For   now,
type   Y   and press the RETURN key. The screen   will
immediately clear and you may start fresh.

PRINT COMMANDS

After   you   have   written your letter or report, you
will   probably   want   to print it. Make sure your
printer is properly interfaced with the Commodore
64, and is turned on.

Load the file **demo** from disk.

To print the file currently on the screen, press the
fl key, type   ***p** and press the RETURN key.   The
contents of your C-64's memory will be printed.   To
print a file you have already saved to disk, press
the fl key, type **pr** and press the RETURN key.

When you print a file from the disk, the screen text

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will be automatically saved and the screen will
read SAVING..TW (the TW stands for temporary
workspace). The screen will then read LOAD FILE:.
Type demo and press the RETURN kev. The contents of
the file will be loaded into the computer and
printed.

Notice the printed copy doesn't have any margins.
That's because we haven't set any formatting
commands yet. But, since vou now have the Command
mode under control, let's move on the Print
Formatting mode.

-------------- **PRINT FORMATTING MODE** ----------------
                     Press f2 for help list
                 This mode is in reverse video

CTRL 9   **Enter Print**   **CTRL 0**   **Exit Print**
               Formatting Mode   **Formatting Mode**

TYPE: **(XX=a number)**   **TYPE:**   **(XX=a number)**

                               Margins

lmargXX;   **left margin**   **rmargXX;**   **right margin**

justify   **flush right**   **nojustify** **turns off**
               margin   **justify**

nowrap   **turns off**   **wrapon**   **turns on word**
               word wrap when   **wrap again for**
               printing   **printing**

                                Pages

papersizeXX; **Sets paper**   **pause**   **Stops printer**
                  size to XX;

pagelenXX;   **Sets text**   **#page**   **Prints page**
                  length XX;   **number**

pagepause   **Printer stops set#pgXX; Sets beginning**
                  end of every   **page number**
                  page

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nextpage	Forces new page	lsXX;	Sets line spacing(to 10)
linkfile	Joins files into document	center	Centers text on line typed

Commands for 801 and 1526 Printers

ascl4;	Turns on enhanced print	ascl5;	Turns off enhanced print

Commands for DSP 1101 Printer

asc27;79;	Bold print	asc27;69;	To underscore
asc27;87;	Shadow print	asc27;82;	To turn off underscore
asc27;38;	Turns off bold or shadow print		

You've probably been saying to yourself: 'This is great, but how do I get my printed copy to look the way I want it? What I see on the screen is not what I want to print out.'

The Print Formatting mode is the mode you enter when you what to give the computer certain commands to format a document. These commands control the final appearance of your copy and are only executed when a document is printed. They are typed in lower case and will not show up in your printed copy. Since these commands are entered as text, there has to be some way for the computer to distinguish the format commands from the actual body of text itself. This is done by typing the format commands in reverse video.

It is more convenient to type these format commands at the very beginning of your document, but they may be embedded at any time. Sometimes you may want to change margins to accomplish a block indent, set

bold type, or center lines at different places in your document. You can either type them in as you go or set them later through the use of the INST/DEL key and the insert line command. The format commands must be typed BEFORE the text you wish to affect.

ENTERING and EXITING PRINT FORMATTING MODE

First, let's make some room at the top of your present screen file, demo. Move the cursor to line 01, column 01. Press the f1 key, **type** il and press the RETURN key. Now you have a blank line open to enter format commands in reverse video.

To enter the Print Formatting mode and turn on reverse video, hold down the **CTRL key and press the** 9 key. Type the following in lower case letters: lmarq10;:rmarq70;:justify. Press the RETURN key.

Now move the cursor to line 09, column 01 (the blank line between the two paragraphs) and type: lmarq20;:rmarq60;:nojustify. Press the RETURN key.

To exit the Print Formatting mode and turn off reverse video, hold down the **CTRL key and press the** 0 key.

Notice the letters you have entered are reversed from the normal text. This is what we mean by reverse video. You have just told the computer to set the left margin of the first paragraph at column 10, the right margin at column 70, and to justify, or give the printed copy a flush right margin. With the second format command, you told the computer to set the left margin of the second paragraph at column 20, the right margin at column 60, and to turn off the flush right margin.

Notice the semi-colon and colon placed between commands. THESE ARE VERY IMPORTANT! The semicolon is ALWAYS used after a number (like 10 and 70), and the colon is ALWAYS used to separate multiple instructions on a line.

To see the printed text, press the fl key, type ***p**
and press the RETURN key. Notice the text is
printed exactly as you told the computer to print
it.

Note: Do not attempt to use **the** *p with the
linkfile command. The only file which will print is
the file in memory.

MARGINS

lmargXX;

Typing this sets your left margin at column XX.
Simply substitute the XX with the column number you
want the left margin to begin at (such as 05, 10,
20,etc.).

rmargXX;

Typing this sets your right margin at column XX.
Substitute the XX with the column number you want
the right margin to end at (such as 60, 70,
75,etc.).

justify

Typing this gives your printed copy a flush right
margin with all of the letters lining up in the last
printed column. The words in the line will be
appropriately spaced to achieve this.

Note: A justified right margin is typically used in
formal documents such as term papers or reports;
and an unjustified, or ragged edge, margin for
informal documents such as letters and memos.

nojustify

Typing this turns off the right margin
justification.

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PAGES

papersizeXX;

Typing this tells the computer what size paper you are using. The word processor automatically defaults to an 8.5 X 11 sheet of paper (which contains 66 lines), so you don't have to use this command unless you're using a different size paper. Substitute the XX with the number of vertical lines that make up the paper (such as 66). Assume that for every inch of paper size, there are six (6) lines.

pagelenXX;

Typing this tells the computer how many lines to print before it starts a new page. This allows you to set the margins at the top and bottom of the page. A command of **pagelen55;** would mean that 55 lines of text would be printed, then the printer would line feed 11 lines before beginning to print the next page. When you are ready to print your document, position the first page of paper where you want the printing to start in each page. Substitute the XX with the number of lines you want printed on each page (such as 55).

Note: the page length must always be smaller than page size number.

pagepause

Typing this tells the printer to pause at the end of a page. This allows you to insert paper if you are using single sheets as opposed to continuous feed paper. If you don't use this command, the printer automatically continues to the next page.

nextpage

Typing this forces the printer to advance to the next page. This is useful when you end something in the middle of the page and want to start the

following text on the next page.

linkfile´type filename here´

Typing **linkfile**, followed by the name of the file in
quotation marks, will link separate files into   one
document when you print. Type this at the end of
each file to link the next file to it. There is no
limit to the number of files which can be linked
together. Also, any formatting instructions in the
first file will carry over to the next file, unless
you change the formatting along the way.

You can link files on multiple disks by inserting a
pause command just prior to the linkfile command.
When the pause occurs, simply switch disks, press
RETURN, and continue printing. Use the **pr** command
to print linked files. You cannot link a screen
file.

pause

Typing this causes the printer to pause until you
press the RETURN key to continue. This is useful
with the linkfile command and for changing print
wheels (if you have a daisy wheel printer) in the
middle of printing, or for switching disks when
printing files.   The printer will pause every time
it reads a pause command embedded in the text.   When
the printer pauses, switch disks and press the
RETURN key.

#page

Type this when you want the computer   to
automatically number your pages at the bottom margin
during printing.   The numbering begins at Page 1
and continues to increase the page count by one
throughout the text. If you desire to begin at any
other number but 1, use the following command.

set#pgXX;

Type this when you want to begin numbering at any

page but 1. First turn on paging with **the ‡page**
command.

Then type the **set‡pgXX;** command, substituting the XX
for the number with which you want the paging to
begin (such as 02, 05, 10, etc.).

lsXX;

Type this when you want to set the line spacing at
anything but single spacing. Substitute the XX for
the number of lines you want spaced between printed
text (such as 02 for double spacing, 03 for triple
spacing). The maximum amount of lines you can space
is 10.

center

Type this before any line you want to center on the
printed page. It must be typed on the same line you
want centered.

SPECIAL PRINTER COMMANDS

These commands insert ASCII (American Standard Code
for Information Interchange) characters in your
text. The ability to insert these characters allows
you to take advantage of different printer features
such as enhanced printing, underlining, and
boldface type. They are typed in reverse video just
like all the other formatting commands.

For example, to cause enhanced printing on the
Commodore 801 and 1526 printers, you would:

1. Press **CTRL 9** to enter Print Formatting mode.

2. Type **ascl4;** to turn on enhanced printing.

3. Press **CTRL0** to exit Print Formatting mode.

4. Type **this will be enhanced.**

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5. Press **CTRL 9** to enter Print Formatting mode.

6. Type **asc15;** to turn off enhanced printing.

7. Press **CTRL 0** to exit Print Formatting mode.

8. Type **and this will not.**

Your screen should look something like this:

asc14; This will be enhanced asc15; and this will
not.

These special printer commands, like all other
reverse video commands, will not show up in your
printed copy. Remember to turn the print command ON
before the text you want to affect, and to turn the
print command OFF when you want the text to   return
to normal.

The word processor can only process six ASCII
commands for every 80 character line. Therefore,
you will need to watch the placement of your
commands. Multiple ASCII commands may be necessary
with non-Commodore printers.   Please call if you
have printer interface problems, 714-771-4038.

With the DSP 1101 Letter Quality printer, it is
possible to underline using the ASCII commands.   To
make a blank underline, however, such as after a
name, type **NAME** . Then turn on reverse video.

Type   **asc27;69:** .   Turn off reverse video. Type
some spaces for the length of the desired underline,
then type a period (or any other   printable
character).   This last character is needed to end
the underline when preceded by blanks. To end the
underline, turn on reverse video and type **asc27;82;**
. For example: (R = reverse on: O = reverse off)

   NAMERasc27;69;O .   . Rasc27:82:O

For non-standard Commodore printers, you need to

consult the printer manual to find the ASCII
equivalent to activate bold, shadow, or other
special printing features.

RETURNING TO MASTER KEY MENU

When you have completed working with the word
processor and wish to return to the Master Menu,
press f1. Type **ex** . Your screen will flash for a
second and then the menu will appear on your screen
to allow you to make another selection.

YOUR FILING CABINET

A File Manager

by

David W. Johnson

A Product of

International Tri Micro

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YOUR **FILING CABINET**

YOUR FILING CABINET is an information storage and retrieval system. The purpose of such a system is to allow information to be eeasily accessed, updated and sorted.

Before you can utilize YOUR FILING CABINET effectively, it is helpful to understand the structure of a file manager. The physical form in which information is typically stored may be a filing cabinet, a filing box, or a book. The term for the computer equivalent is a DATA BASE.

Each DATA BASE contains RECORDS . A RECORD is equivalent to the file folder found in a filing cabinet or a page of a book. Each RECORD contains particular pieces of data/information. For example, a file folder may contain bits of information relating to a particular classification. Particular pieces of data, such as the contents of a recipe, may be written on a card. A page of a book may contain a record of the name and addresses of business customers. These pieces of information, all relating to a single item (or RECORD), are known in a DATA BASE as FIELDS.

The FIELDS in a DATA BASE are organized to suit your purposes. The FIELDS are given TITLES for your reference in designing the structure. For instance, a sales file on a customer might contain FIELDS with TITLES of Name, Address, Date of Last Sale, Credit Limit, Year-to-Date Sales Total. A recipe file, on the other hand, would contain FIELDS with TITLES of Type of Meal, Main Ingredient, Other Ingredient, Cooking Time. These classifications are all FIELDS with TITLES for your reference.

YOUR FILING CABINET is limited in the number of RECORDS and the number of fields which can be stored on a disk. These limitations are:

1.   200 RECORDS per DATA BASE.

2.   15 FIELDS per RECORD

3.   38 characters (any combination of letters, numbers, spaces) per FIELD.

EXAMPLES IN CREATING FILES

First, load the program, utilizing the loading instructions in the introduction. After the YOUR FILING CABINET program is loaded, your monitor or TV will display the following screen.

    IF SCREEN BECOMES INVISIBLE
    SELECT ANOTHER COLOR COMBINATION
    C HARACTER COLOR
    S CREEN COLOR
    B ORDER COLOR

    L OAD YOUR FILING CABINET 1.0
    P RINT YOUR FILING CABINET 1.0

The program allows you to change the colors of characters, screens, and borders, so that you can find a combination which is pleasing to you and make adjustments to your specific television or monitor. To change the colors, press the highlighted letter of your choice, such as ´´C´´ to change character color.   Then press the key of the color of your choice.   The colors are indicated on the number keys of your Commodore 64, keys numbered 1 through 8.

To return to the original colors, do the following sequence.

Press C and then Press 2.

Press S and then Press 1.

Press B and then Press 3.

PAGE 2

EXERCISE 1.

To begin this first exercise, press L. The screen
tells you to ''Insert data disk and press return.''
Insert a blank disk in the same manner as you
inserted the program disk and press return.

The screen now presents you with the ´outer menu´,
as shown below.

```
-------------------------------------------
     n ew file          p rinter options
     o ld file          d isk
     r e-start
-------------------------------------------
```

Programs which give you a series of choices in the
English language are said to be menu-driven programs
because you select from a menu in order to tell the
computer what to do. The YOUR FILING CABINET menu
is a neumonic menu, that is, you respond by pressing
the first letter of your desired selection:

Since this is a new file, you will be creating,
press N.

The program will remind you, again, to insert a new
raw data disk. Since you already inserted a new
disk, press Y and then RETURN.

The screen will then ask you to enter the report
title.

Type INVENTORY and press RETURN.

Now you are asked how many fields you want.

Type 8 and press RETURN.

The screen now displays now many characters you will
be allowed as your maximum for the entire record,
and asks you to enter field name for field number
1.

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Type NAME and press RETURN.

You are now asked to enter the length of the field.
The length of the field defines how many characters
you will be allowed to enter in the field.   The
remaining space in your record displayed.

Type 20 and press RETURN.

This sequence is repeated until you have named each
of your fields and defined the length of each field.
You type in your response to each   question,
followed by return.   For this exercise   and
continuing with field number 2, your answers to the
above sequence of prompts should be as follows,

Field Number   Field Name   Field Length

Field Number	Field Name	Field Length
2	Descrption	38
3	Cost	10
4	Purch Date	8
5	Rec Locate	20
6	Type	25
7	Lst Apprs	8
8	$ Apprs	10

After you have pressed your last return, the next
screen will display your data base format for you,
showing you a listing of each of your fields, their
appropriate names, and lengths.   Note   that
´´Descrption´´ has been purposely abbreviated since
the field name cannot be longer than 10 characters.
You are then asked if this format is ´´OK y/n?´´

Press Y and press RETURN.

The disk will now be prepared (formatted) for your
actual operation.   As the screen indicates, this
preparation will take some time, approximately five
minutes.   Relax and review what you have just done

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while you sip your coffee.

When the disk preparation is completed, the screen
will display the ''record update menu''.

```
---------------------------------------------
    a dd record       d irectory = 0
    r ecord recall    n umber to item
    g et next         k runch file
    b lock copy       s earch fields
    e xit
---------------------------------------------
```

To begin adding records, press A.

Type in your responses exactly as they appear on the
following page. When you finish your first record,
you will have typed, 'na' to '$ Apprs.' The
program will then automatically return to the record
update menu. Again, press A.

You are ready to enter information for your second
record, also displayed on the following page.
Continue the sequence until you have completed
entering the information for all five records.

In this exercise, we have created a data base,
titled INVENTORY, used to store the information
pertinent to our home inventory. This information
can be used for filing insurance claims in the event
of a fire or theft.

```
Name        Dining Rm Table
Descrption  Oak Claw Leg in Oval Shape
Cost        259.00
Purch Date  83-09-23
Rec  Locat  Dining Room
Type        Personal Goods
Lst Apprs   na
$ Apprs     na

Name        Chairs
Descrption  Oak Ladderback 4 w/out arms
Cost        89.00 ea
Purch Date  83-09-23
Rec  Locat  Dining Room
Type        Personal Goods
Lst Apprs   na
$ Apprs     na

Name        Chairs
Descrption  Oak Ladderback 2 w/arms
Cost        129.00
Purch Date  83-09-23
Rec  Locat  Dining Room
Type        Personal Goods
Lst Apprs   na
$ Apprs     na

Name        Lithograph
Descrption  Yellowstone print-Jerry Schurr
Cost        350.00
Purch Date  82-09-27
Rec  Locat  Bank Safe Deposit
Type        Art
Lst Apprs   83-05-27
$ Apprs     750.00

Name        Movie
Descrption  VCR Casablanca
Cost        49.95
Purch Date  83-03-12
Rec  Locat  Family Room
Type        Personal Enjoyment
Lst Apprs   na
$ Apprs     na
```

EXERCISE 2.

The file named INVENTORY will need updating from time to time as we obtain appraisals of the items. To update a record, press R.

The program, however, does not know which record to recall, therefore the screen will ask you to type in the name of the item. Type CHAIRS and press RETURN.

Record Number 2 will be displayed for you on the screen. At the bottom of the screen, a prompt will appear, ´´correct y/n or type delete.´´

Since the record is not correct, type N and press RETURN.

The screen now asks you which field number needs to be corrected.

Type 7 and press RETURN.

to obtain the FIELD for Last Appraisal. The screen now displays ´´enter´´.

Respond to the question by typing in the date of the last appraisal.

Type 83-06-24 and press RETURN.

You will then be asked again if the record is ´correct y/n or type delete.´ The record is still not completely updated since we have not yet entered the appraised value of the chairs. Type N and press RETURN.

Again you are prompted for the field number. Type 8 and press RETURN.

Enter the dollar value of the appraisal. Type ?19.00 ea and press RETURN.

You have now changed the record to your satisfaction

and may answer ´yes´ to the ´correct y/n´ question.
Type Y and press RETURN.

The screen will display the record update menu for
you once again. Since we have made our changes,
press E to return to the ´´outer menu.´´

 CAUTION: It is extremely important to exit the
record update menu by pressing ´E´ after creating a
new file or making changes to an old file.
Otherwise, the files will not be properly closed
which will result in the loss of your data.

The process of ´´exiting´´ saves new file data and
record updates.

At the outer menu, we suddenly remember that we had
two records with chairs, but we only updated one
record. In order to access the file, type O.

In accessing our old file, or a file already created
to which we are making changes, we come again to
the record update menu. The screen shows us that
the last record access was to record number 2. We
know the two chair records follow each other,
therefore, type N.

In selecting the ´´number to item´´, you are telling
the program to search the file by record number.
The screen asks you to type the number of the
records you wish found. Type 3 and press RETURN.

The screen now displays record number three which
contains the information on the second chair.
Following the same sequence as you followed for the
previous correction, make the corrections to this
record, changing fields 7 and 8 to reflect the new
appraisal date and appraisal value. Then, in
response to the ´correct y/n´ prompt, type Y and
press RETURN.

Once you are back to the record update menu, press
E to return to the outer menu.

You have now created a data base, called INVENTORY,
having entered information for five records. In
addition, you have changed that information. For
now remove your data disk from the drive and label
it INVENTORY. We will use it again in future
exercises.

REVIEW

In this last section, we showed how to use a menu
driven program, how to organize and format a data
base, and how to update records in that data base.
Several points should be remembered.

1. YOUR FILING CABINET is a menu driven program.
With menus, you are presented a choice of command
selections. The menu in YOUR FILING CABINET in
neumonic. This means that you indicate your menu
selection by typing the first letter of the
selection desired. This letter is highlighted on
the screen in reversed characters.

2. When creating a new file, always use a new data
disk or a disk containing files you no longer
need. If you make a mistake and insert a disk which
already contains a file, you have an opportunity to
remove it and insert the appropriate disk instead.
Simply answer ´n´ to the question. The program
will return you to the outer menu.

3. When updating an old file, the screen displays
for you the name of the data disk which is present
in your drive.

4. Data Base Titles, Report Titles or Field Titles
are limited to ten characters.

5. When formatting your field names and lengths,
pay appropriate attention to the structure. the
remaining characters available for your data base
structure are indicated each time you type in the
length for the FIELD. If you exceed the number of
characters remaining, your entire format will be
ignored and you will have to begin the formatting

procedure from field 1 once again.

6.   A blank report sheet, found on the following
page, is provided for your use in   creating
additional data bases.   As you create data bases,
file these dictionary format sheets.   It   is
important to use these sheets to prevent repetitive
reformatting when you discover that you   have
exceeded the size limitation.   They are also useful
for referencing field numbers and titles when you
format a printed report.

7.   Note that the dates are entered in reverse order
--   YY-MM-DD.   Always enter dates in this   manner.
The reasons for such entry will be explained when we
discuss searching and sorting through your file.

·The following pages also contain one more example of
data bases -- titled SALES HIST.   Working with   the
formats indicated and the printed records, create   a
new data base, on its own disk, labeled SALES HIST.
We will use it in future exercises.

DATA BASE/REPORT TITLE:..................

NUMBER OF FIELDS:......

Field Number	Field Name	Field Length
1	....	.....
2	....	.....
3	....	.....
4	....	.....
5	....	.....
6	....	.....
7	....	.....
8	....	.....
9	....	.....
10	....	.....
11	....	.....
12	....	.....
13	....	.....
14	....	.....
15	....	.....

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DATA BASE/REPORT TITLE: SALES HIST

NUMBER OF FIELDS: 14

Field Number	Field Name	Field Length
1	First Name	15
2	Last Name	20
3	Street	25
4	City State	35
5	Phone	8
6	Lst Sale	8
7	$ Lst Sale	6
8	Lst Bking	8
9	$Lst Bking	6
10	Lst Cont	15
11	Cont Type	15
12	Cont Res	15
13	Prod Pref	38
14	YTD $Tot	7

```
First Name Mary
Last Name  Jones
Street     123 Any Street
City State Mytown CA
Phone      834-3512
Lst Sale   83-03-05
$ Lst Sale 79.35
Lst Bking  83-03-05
$Lst Bking 534.23
Lst Cont   83-04-23
Cont Type  Prod delivery
Cont Res   Account coll
Prod Pref  Skin care/foundation
YTD $Tot   134.56

First Name Betty
Last Name  Smith
Street     4567 Elm Street
City State Mytown CA
Phone      768-5436
Lst Sale   83-04-25
$ Lst Sale 123.12
Lst Bking  83-03-25
$Lst Bking 345.76
Lst Cont   83-05-10
Cont Type  Thank you
Cont Res   Returned Call
Prod Pref  Eye shadow/mascara
YTD $Tot   178.34
```

```
First Name Sue
Last Name  Rice
Street     2341 Las Palmas Street
City State Mytown CA
Phone      921-2453
Lst Sale   83-06-04
$ Lst Sale 34.52
Lst Bking  83-02-01
$Lst Bking 523.78
Lst Cont   83-06-04
Cont Type  Phone
Cont Res   Order
Prod Pref  Skin care/blush
YTD $Tot   231.52
```

EXAMPLES IN WORKING WITH FILES

In this section, we will continue your guided tour
through more extended use of YOUR FILING CABINET.
We will be making references to the data base titled
SALES HIST. If you have not already created this
file disk, review the last chapter and create this
file from the information provided at the end of the
section.

If your program is not already loaded, load the
master key menu with the instructions provided in
the introduction. Choose [C] for ''Cabinet'', and
the first screen will appear. As we did before,
press L. Once the program has loaded, insert the
file disk labeled SALES HIST.

At the outer menu, press O since we will be
working with an already created file.

The screen now displays the ''record update menu''.
To work with an already existing record, press R.

You have chosen to recall a record, however, the
program does not know which record to choose. The
screen will therefore ask you to enter record name.
Type JONES and press RETURN. The screen will
tell you that no record was found, and the program
will return to the menu. WHY?

Jones is the information stored in field two of
record number one. Record recall only searches for
information in field one of any record. Since
'Mary' was the information stored in field one of
the Jones record and since Jones does not appear as
information stored in field one of any other record,
the program could not find the record of Mary
Jones.

Wait, you say. What if I didn't remember her first
name but needed to update her record? In this case,
press S . This will activate the search function.

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The screen asks you to ``enter item to search for´´. Type JONES and press RETURN.

Now the screen asks you ``field number to serach on´´.

You know that the last name in your file is field two. (If you didn't remember which field held the information for last name, you could have referred to your dictionary format sheet introduced in the last section).

Type 2 and press RETURN.

In the upper left hand corner of your screen, you will see a display of the field contents of the records you are searching and the record number being searched. It finds Jones immediately as it is record number one. The message in the upper left hand corner of your screen displays:

---

        match found at record #1
        continue y/n?

Since this is the record we are searching, press N. to return to the record update menu.

Press N to put you into the number to item mode. When asked for record number, type 1 and press RETURN.

The contents of record one, ´Mary Jones´, are now displayed on the screen. Displayed below the contents of the record is:

---

        correct y/n or type ´delete´?

You have recently sold her additional products and you need to update her record, therefore, type N and press RETURN.

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You are now asked for the field number to be changed, type 6 and press RETURN.

The screen asks you to ´´enter´´ the changes. Type 83-06-24 and press RETURN.

The updated record is displayed on the screen, and you are, again, asked if the record is correct? The record is still not completely updated since we have not yet entered the amount of last sale, or the date and type of last contact with Mary Jones, or the YTD sales total, therefore type N and press RETURN.

Enter the remaining changes following the procedure described above and displayed below. Remember to press RETURN after each typed entry.

Type 7

Type 50.00

Press N

Type 10

Type 83-06-24

Press N

Type 11

Type Party

Press N

Type 12

Type Order

Press N

Type 14

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Type 184.56

You have now changed the record to your satisfaction
and may either answer ´yes´ to the ´correct y/n´
question. Type Y and press RETURN.

To view the next record and see if any updates need
to be made, press G . ´´Get next´´ will access
the next record in sequence, and display the record
contents on the screen for you. You realize that
the last time you contacted Betty Smith was when she
asked you to return her call. You make a note of
that, and since all the information is correct, type
Y and press RETURN.

Press G again. Viewing Sue Rice´s record, you
realize that she has moved to another city where you
will not be able to service her   account.
Therefore, you decide to delete her from your sales
file.

Type DELETE and press RETURN.

The record has been deleted and the program returns
to the record update menu. If you want to be sure
the record is deleted, attempt to access the record.
Press N .

Type 3 and press RETURN.

The record displayed for you will have only one
entry in field one, and that record will be
displayed on the screen as ´´xdx´´. This ´xdx´ is
the indicator that the record has been deleted.
However, as you can see, it is still present in the
physical format within the file, therefore, it is
taking space and counts as one record in your
maximum file size of 200 records. To completely
eliminate the record and optimize file space,
opening room for other records, you may press K.

The screen will then ask you ´´krunch y/n?´´. Since
you want to ´krunch´ the record, type Y and press

RETURN.

The screen will show that it is busy by displaying dots on the lower part of the display. Each dot represents a scanned record, as the program executes the 'krunch' instruction. When completed, the program returns to the record update menu.

If you now try to access record number 3, you will receive a 'record not found' message.

To view the customers in your file, press D to display the directory.

The screen will display for you the name of each of your customers and the record number of each. Please note that if the name of your customer was in a field other than field one, you would not get a listing of customer names. The directory displays the contents of field one only.

At the bottom of the screen is displayed:

```
-----------------------------------------------
        enter Q to quit.
        press return to continue.
-----------------------------------------------
```

The screen will display a maximum of 16 records. If you wished to continue viewing more records, assuming you had a file larger than 16 records, you would press return. Since we have only three records, type Q and press RETURN.

Assume that you have another customer whose product preference and contact dates are the same as Sue Rice. Use the ''block copy'' as a shortcut to entering the information. To duplicate the original Sue Rice record, press B. The screen will display:

```
-----------------------------------------------
        enter record number to copy from?
-----------------------------------------------
```

Type 3 and press RETURN. The screen will then display:

```
----------------------------------------------------
        enter number to copy to?
----------------------------------------------------
```

Type 4 and press RETURN. A third display will appear:

```
----------------------------------------------------
        enter last record number
----------------------------------------------------
```

Type 4 and press RETURN.

Dots will appear on the bottom of the screen as the copying is executed. The program will then return to the menu.

In using the ´block copy´ command from the menu, there are several things to note. The ´number to copy from´ is the record number of the record which you wish duplicated. The ´number to copy to´ is the record position of where you wish to begin duplication in´ your file. The ´enter last record number´ is the record number where you wish to end duplication.

WARNING: If you indicate a record number which already contains information, that information will be replaced with the information of the record you´re copying.

REVIEW

We have now exercised all of the commands of the
record update menu. This menu contains the
necessary functions for adding, changing, deleting,
copying, finding and searching records in your file.
Several points should be remembered.

1.   When updating an old file, the screen displays
the name of the data disk which is present in your
drive.   If this file is not the file desired, you
must exit to the outer menu and press re-start.   The
re-start procedure initializes the system to accept
a new data disk.

2.   Because of size limitations, you will grow
creative in abbreviations which indicate your
information and meaning. If you exceed the length
of the field while typing, the program is not
affected in any way. However, the program simply
truncates, or ´cuts off´ everything you have entered
which exceeds the field length maximum.

3.   The search function can be used to find a record
based on any criteria when you do not remember
either the record number or the contents of field
number one of a record.   Rather than scanning a
printout of the records to find your information,
utilize the search function to find the appropriate
record(s).

4.   Record recall finds the record by comparing the
record name which you give it with the contents of
field number one. The contents of field number one
must match the name which you type exactly. If
field one contains the name ´Chili´ and you type
´CHili´, the program will indicate that no record
was found. Your input must match the name in field
one exactly.

5.   As your file grows in size, you may find more
than one match when you are exercising the search
function. For this reason, a prompt, following the
display of a match, will ask if you want to continue

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the search.

6. When you delete a record, the contents of field number one of that record will indicate ´xdx´. The record, however, is still in your file and taking space in your 200 record limitation. To completely eliminate the record and optimize file space, use the krunch selection.

7. The directory will display the number of records in your data base at all times. Selecting the directory from the menu will display a review of the contents of the first field in each of your records with the record number beside it. Only sixteen records will be displayed on the screen at one time, however, you can continue the display by flipping through screens until you are done.

8. The block copy can be used to copy any record to another place in the file. This copying can be a single copy or, if you desire the record duplicated several times, a block copy. If you indicate a starting or ending number of a record which already exists, the old record will be eliminated and replaced with the record being copied.

9. The program assigns each record its own unique record number in sequence as the records are entered. This record number is like the file label which you attach to a file folder -- a means used by the program to identify the record.

PRINTING YOUR FILES

As you generate files, you will want to print them
out for visual reference, for mailing lists, or
labels, or for hard-copy reports. In this section,
we will exercise the printing capabilities of YOUR
FILING CABINET, again utilizing the files which you
have already created -- INVENTORY and SALES HIST.

If the program is not already loaded, do so. If the
program is loaded, press P to load the printing
menu.

The screen will show that the printer menu is
loading. After it is loaded, you will be asked to
insert a data disk. Insert the disk labeled
INVENTORY and press RETURN.

The next display you will see is the printer menu.

```
---------------------------------------------
        p rint          f ormat print
        d isk           r e-start
        e xit
---------------------------------------------
```

Before you can print your file, you must format the
file contents to the page. Press F . The screen
will display ´´format print new page y/n?´´

Since we have not formatted this report before, type
Y and press   RETURN.

The screen will display:

```
---------------------------------------------
        how many fields ´1...maximum´?
---------------------------------------------
```

Type 8 and press RETURN.

To print less fields than the entire record
contains, you must include field one. You are

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allowed to print from the beginning of your record, field one, to any field following. However, you cannot begin with field three and end with another field.

----
how many rows in a page?
max = 60

Type 9 and press RETURN.

The definition of rows in a page will determine what the length of the paper is. For example, if you are printing labels, you will need enough rows for the printed lines and rows to advance the printer to the following label. You might set the row count at 8 for printing one-inch labels which typically have 6 rows.

The format sequence will now begin. You will be asked to enter field title, row position and column position. A row is a horizontal line on a page, and a column is the vertical position of the printed character on a page as shown below:

	1	2	3	4	5	6	7	8	
1	c		c		c		c		row
2	o		o		o		o		row
3	l		l		l		l		row
4	u		u		u		u		row
5	m		m		m		m		row
6	n		n		n		n		row

Sequentially, you will see a screen display and then you will enter the asked for information as outlined below:

----
you may press return for no entry
field 1
title limit 10 letters?

Type NAME and press RETURN.

----
          row position?

Type 1 and press RETURN.

----
          column position?

Type 1 and press RETURN.

----
          field 2
          title limit 10 letters?

Type DESCRPTION and press RETURN.

----
          row position?

Type 2 and press RETURN.

----
          column position?

Type 1 and press RETURN.

You will notice that your column position is ´1´ for
both fields. If your fields start printing all   in
column one, the left margin will be flush on a
straight line down the printed page.

You will notice that your row position is the same
as your field number, and incremented by one. If
your row position is the same as your field number
or if your row position is incremented by one, the

printing will follow one line after another with no
spaces between lines.

Let's continue. The screen will display:

----
          field 3
          title limit 10 letters?

Type COST and press RETURN.

----
          row position?

Type 3 and press RETURN.

----
          column position?

Type 1 and press RETURN.

Continue the input until you have formatted all
eight fields. Use your dictionary format sheet for
referring to title names. the row position will be
the same as your field number, the column position
will be '1' throughout.

After you have finished formatting field 8, the
screen will display a review of your format for you,
indicating field title, row position, and column
position. At the bottom of your display you will be
asked if the format is correct. Let us say that
you decided to indent field 2 on the page. You
would first, type N and press RETURN.

The screen prompts as are as follows:

----
          change page row count y/n?

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Type   N and press RETURN since we don't want to
change the size of the page.

Type 2 and press RETURN.

Type DESCRPTION and press RETURN.

Type 2 and press RETURN.

Type 5 and press RETURN.

You have now formatted your printing so that field 2
will be indented from the left margin when printed.
Field 2 will begin printing 5 spaces in from   the
left margin. In response to the prompt, 'ok y/n?',
type Y and press RETURN.

The program will return to the printer menu. Now we
are ready to print, press P.

You will first be asked, ''sort y/n?''.

Press Y and press RETURN.

You are then asked:

```
-------------------------------------------
           how many fields (1...3)?
-------------------------------------------
```

You respond by telling the program how many fields
you would like sorted. the sorting routine places
the   records in a different sequential order than
that already existing. You can compare sorting to
alphabetizing files or organizing 3x5 cards by
dates. If the field contains numeric contents, that
is, only numbers, then the sorting will place the
records in numeric order from lowest number to
highest number. If the field contains alphanumeric
contents, that is, a combination of numbers and
letters, then the sorting will place the records in,

first, numeric, then alphabetic order. That is,
all the numeric entries will be at the top of the
list in numeric order, then the remaining entries
will be displayed after the numeric entries in
alphabetic order.

Type 2 and press RETURN.

This indicates that you want your fields sorted by
the contents of two fields. A maximum of three
fields is allowed.

You are now asked ''enter 1st field #''. Type 1
and press RETURN.

In response to ''enter 2nd field#'', type 3 and
press RETURN.

These responses tell the program to sort on field
number 1, which is the field containing names.
Having entered '1' for the field number, the list
will first be sorted by names, listing the names in
alphabetical order. Next, the records are sorted by
field number 3, which contains the cost of the
item. Within the alphabetized list, the items will
be listed in ascending order according to their
cost. The screen indicates that the sorting is
occurring.

You are now asked ''sift by threshold y/n?''.

Type Y and press RETURN.

----
          enter threshold item?

Type 75.00 and press RETURN.

Next, the screen will display

----
          will sift be less (1) than
          or greater (2) than?

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Type 2 and press RETURN.

With this routine, you have instructed the program
to 'sift' through your file to isolate all those
records with costs greater than 75.00. The greater
than sift means that the entries will be sifted for
information greater than or equal to the threshold
item. The less than sift means that the entries
will be sifted for information less than the
threshold item. This threshold sifting can be used
to print out records with gross sales greater than a
certain figure, or to view records who have had a
movie or book borrowed a length of time greater than
YY-MM-DD, or athletes with times less than 'x' in a
certain event, etc.

Once the sift display is completed, the screen will
ask whether you want to ''direct output to printer
y/n?''. Before continuing, be sure to turn on your
printer! Type Y and press RETURN.

When printing is finished you will have printed a
sorted report of your home inventory.

You may now quit program operation or continue to
exercise this section with any of the data files
which you have created. The next chapter is a quick
reference section of instructions.

REVIEW

There are a few points to remember in generating
printed copies of your files.

1.   When entering the printer menu section, the
screen will prompt you to remove your data disk and
insert system disk. Then you must remove your
program disk and re-insert your data disk. If no
data disk is present in the drive, the prompt will
not appear.

2.   Before printing your file, you must format the

file contents to the page. this formatting tells
the printer where you want the printing to take
place on the page. You do this by specifying the
row and column position where the printing should
begin. The row position represents the horizontal
rows, or the lines, on a page. The column position
represents the vertical column, or the spaces on the
line across the page.

3. You are also asked to type in field title during
the formatting procedure. The title can be 10
characters long. If you press RETURN only, no title
will be entered.

4. After you are ready to print, two procedures
appear on the screen, sort and sift by threshold.

5. Sorting re-organizes the order of the
information. Compare it to filing file folders by
alphabet, or three by five cards by date, or
invoices in ascending order of amount. You may sort
on up to three fields. If the field contains
alphanumeric content, i.e., letters and numbers, the
sorting will be alphabetic. If the field contains
numbers only, the sorting will be numeric, from
lowest number to highest number. The sorting is
accomplished in the order in which you enter your
fields. The first field entered will be the first
sorting, the second field entered will be the second
sorting, and the third field entered will be the
third sorting.

6. Sifting by threshold searches your entire file
for items greater than or equal to a specified item
and for items less than a specified item. Threshold
refers to the item which acts as the point of
comparison.

7. You will need to exercise the sorting and
sifting routines often to develop a sense of their
uses. Remember that sorting acts on a specified
field with regard to re-organizing the order of the
records or file folders. Sifting acts on the entire
record base to identify items greater than or equal

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to and less than a specified threshold item, and
isolate them from the rest of the file.

QUICK REFERENCE GUIDE TO YOUR FILING CABINET

YOUR FILING CABINET is a menu-driven program. Menus offer you a choice of command selections. Your choices are indicated through keyboard input and then the program executes your instruction. The key which you press to indicate your selection is the first letter of the choice you desire. This key is highlighted in reverse video on the screen. When you press the key of your selection, the screen will prompt you how to continue program operation, ask you a question requesting further input, or present you with the next menu for another selection.

Responses to menu selections require that you type the appropriate letter only. Responses to any other screen prompt or program question are followed by RETURN.

The menus are the outer menu, the record update menu, and the printer menu. These menus 'drive' the program and each menu selection will now be reviewed.

THE OUTER MENU

```
------------------------------------------
      n ew file       p rinter options
      o ld file       d isk
      r e-start
------------------------------------------
```

Press N = new file.

This selection is for creating new data files. You must use a blank disk or an old disk on which you no longer want the data. If you enter a data disk which you wish to keep, the program allows you to answer 'n' in order to return to the outer menu so that the old data disk is not erased. If you answer 'y', the program proceeds to ask you the questions for formatting your data base.

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First question = Report Title

You can now type in the title of your report and then press RETURN

Second question = Number of Fields

Type in your response and then press RETURN. A maximum of 15 fields are allowed.

NOTE: After each of the following entries, the screen will display the maximum numbers of characters you can still add to your data base.

Third question - Name for Field #

Type in the description of the field and press RETURN. A maximum of 10 characters are allowed for each description of field.

Fourth question - Length of Field

Type in the maximum number of characters which you want the field to be and then press RETURN. A maximum of 38 characters are allowed.

Questions three and four will be repeated for each of the remaining fields allocated in question 2.

After these questions are answered, the disk will be formatted and the program will take you to the record update menu.

Press 0 = old file

This is the selection to be used when using a data file which you have already created which you wish to update. The program will take you to the record update   menu.

Press R = re-start

This is the selection to be used if you wish to re-start the program without exiting and loading the program again. It is commonly used when you want to switch to another data file than the one you are using. You must re-start to initialize the program before switching data disks for use.

Press P = printer options

This selection advances the program to the printer menu. You must remove your data disks and insert the program disk as the program directs you. Then re-insert your data disk when instructed.

Press D = disk

This selection initializes your disk. If you remove the disk for any reason during operation or if you have problems with your disk that you think may be corrected by initializing, use this selection.

THE RECORD UPDATE MENU

```
----------------------------------------
     a dd record        d irectory
     r ecord recall     n umber to item
     g et next          k runch file
     b lock copy        s earch fields
     e xit
----------------------------------------
```

Press A = add record

This selection will enable you to enter information into your file. You will be prompted by each field name and should type in your information, taking care not to exceed the field length. Any information which you type in which exceeds field length will be truncated. The program will not allow you to type beyond 38 characters in any case.

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When you have completed each entry, the program
will ask you if the information is correct. A
response of ´y´ for yes returns you to the record
update menu, a response of ´n´ for no asks you which
field number to correct and allows you to make your
corrections.

Press R = record recall

This selection recalls records already created by
YOUR FILING CABINET, allowing you to view, to change
or update, or to delete any or all the records.
The records must be recalled by the contents of
field 1. When prompted for the record name (the
content of field 1), the entry must match field 1
exactly. For example, ´CHili´ will not match
´Chili´, but an entry of ´Chili´ would find the
record. Once you have pressed ´R´, prompts will
guide you through the viewing, corrections, or
deletions.

Press G = get next

This selection recalls the record which sequentially
follows the record which you last accessed. If you
know that a second record you are seeking follows,
in order, you can use the get next command to recall
the next record. This command is also useful to
´scroll´ through the files without knowing the exact
contents of field 1.

Press B = block copy

This selection duplicates a record either once or
multiple times. You can duplicate a record more
than once by entering the record number you wish the
duplication to begin and at which record number you
wish the duplication to end. Since you can
duplicate over an existing record, thereby erasing
the existing record, be careful when you specify the
records numbers for copying.

Press D = directory

This selection displays the record number and the
contents of field 1 for the entire data file.
Whenever the records update menu is displayed, the
current number of records in your file will be shown
on the left side of 'directory'. You should take
notice of this number every so often, keeping in
mind that YOUR FILING CABINET holds no more than 200
records.

Press N = number to item

Each record is assigned a record number when a
record is added, which appears in the printed
reports.   YOUR FILING CABINET can search for a
number more quickly than a string of characters,
thus this selection offers the quickest method of
recalling a record. After pressing 'N', the screen
prompts you to enter the record number of the record
you want to recall.

Press K = krunch file

This 'krunch' selection is used to maximize your
file space on the disk. When a record is deleted
through the record recall menu, the content of field
1 is coded with 'xdx' so that the system knows   not
to include that record in reports or searches.   The
record, however, still exists and uses space on the
disk. If you 'krunch' the files, then those records
that were deleted will be removed from the disk,
allowing that space to be used again for additional
records.

Press N = number to item

This selection allows you to quickly search your
files for a specific item of information. You are
asked for the name of the item for which you are

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searching (again, the typed name must match the
field contents exactly) and in which field number
this item would appear. The upper portion of the
screen will indicate that your data base is being
searched, record by record, and the record will be
displayed if a match is found. A match means that,
in that record and in the field being searched, the
contents of that field contains the same item you
are seeking. In this way, you can view, via the
screen, those records which meet certain parameters.

Press E = exit

This selection allows you to return to the main
outer menu. You must exit the records update menu
by pressing E. If you fail to do this, the files on
your disk will not properly close, thus you may
lose access to your files.

```
-----------------------------------------
        p rint          f ormat print
        d isk           r estart
        e xit
-----------------------------------------
```

Press P = print

This selection directs the output to the printer.
You are asked two questions before printing. The
first is 'sort y/n?'. If you respond by entering
'y' for yes, then your files will be sorted. You
are then offered up to three fields for sorting
concurrently. If the field specified for sorting
contains only numbers, then your files will be
sorted in ascending order, from the lowest to the
highest number. With alphanumeric field contents,
the numbers (if any) will be sorted in ascending
order first, then the remaining records will be
sorted alphabetically. the second question is 'sift
by threshold y/n?'. A response of 'y' for yes will
prompt you for the threshold item - the item to be
used as the basis of comparison. You will also be

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asked if the comparison should be for items less than threshold or for items greater than or equal to the threshold. Although you must use the print selection to accomplish sorting and sifting, you may direct the output to the screen if yu do not want a printed copy.

Press D = disk

This selection initializes your disk. If you remove the disk for any reason during the program operation, or if you have problems with your disk that you think may be corrected by initializing, then you should use this command.

Press F = format print

You must select format print before you can proceed to choose to print your file. After choosing the format command, you are prompted for page length, field title, and for the column and row position of the actual printed reports or labels. A row is a horizontal line on a page, and a column is a vertical position of the printed character on a page.

You can request to print less than the entire contents of your records, but you must always request to print from field 1 to some other field. In other words, you can format the printing for fields 1 through 5, but not for fields 6 through 10.

Press R = re-start

This selection is to be used if you wish to re-start the printing mode without having to exit and begin again. It is commonly used when you want to switch to a data file other than the one you are currently using.

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YOUR PERSONAL ACCOUNTANT

A Home Finance Package

A Product of

International Tri Micro

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YOUR PERSONAL ACCOUNTANT

YOUR PERSONAL ACCOUNTANT is a personal finance
package   capable of   maintaining a cash expenditure
account,   two   checking   accounts,   and up to seven
charge accounts per data disk.   Twenty categories of
expenses   may   be   entered per disk, and a total   of
150   expenditures   and   deposits   may be entered per
month.

After   loading   the   program·as   described   in   the
introduction,   a   main   menu   is   displayed   on   the
screen, as shown.

                    MAIN MENU

 WOULD YOU LIKE:

    0-TO CHANGE THE SCREEN COLOR

    1-THE INITIATION PROGRAM

    2-THE EXPENDITURE PROGRAM

    3-THE LISTING PROGRAM

    4-THE SEARCH ROUTINE PROGRAM

    5-THE RECONCILIATION PROGRAM

    6-TO END YOUR PERSONAL ACCOUNTANT

You will   notice that the menu is shown as black
characters   on   an   orange   screen.   The background
color is blue. You cannot change the black or blue
colors.   If,   however, the orange is unpleasing or
the characters are not clear, then you may press 0.

The   screen   will tell you that ´´You may change the
color of the screen by entering any number from 1 to

15´´. The cursor will flash beside the word
´´COLOR´´. You may enter any number from 1 to 15,
except 6, which is blue (the background color). To
return to the Main Menu, press 0 or press RETURN.

THE INITIATION PROGRAM

This program is the first program you will use.
With it, you enter the names of your accounts, the
year of the expenditures, and the categories with
their beginning balances. This program prepares a
new data disk for you.

By pressing 1 in the Main Menu, you will load this
program. The Initiation Menu will then appear.

_____
INITIATION PROGRAM
_____

   DO YOU WANT TO:

   1. BEGIN INITIATION
   2. REVIEW INITIATION DATA
   3. LOAD INITIATION DATA
   4. CHANGE INITIATION DATA
   5. SAVE INITIATION DATA
   6. RETURN TO MAIN PROGRAM

_____

To begin, press 1 . The program will ask you for
the year of expenditures. Enter the last two digits
of the current year or the year of interest, and
press RETURN.

Now you will be asked to enter your accounts. The
first entry is for the name of your checking
account. Each entry is limited to ten characters
and any character can be entered. Proceed by
entering the name of your checking account. If you
do not want to enter an account, simply press RETURN
which will advance you to the next entry. After
entering the two checking accounts, the program will

PAGE 2

ask you to enter the seven charge accounts. An
example of the screen after the entries have been
made is shown.

```
----------------------------------------------------
                  ENTER YOUR ACCOUNT
----------------------------------------------------
                 CHECKING ACCOUNTS

           ACCOUNT 1  CALIF FED
           ACCOUNT 2  -----------

                  CHARGE ACCOUNTS

           ACCOUNT 1  BOFA VISA
           ACCOUNT 2  CA BK VISA
           ACCOUNT 3  CA BK MCHG
           ACCOUNT 4  J C PENNEY
           ACCOUNT 5  SEARS
           ACCOUNT 6  -----------
           ACCOUNT 7  -----------


----------------------------------------------------
```

A cash account is automatically set up and will be
seen when the LIST OF ACCOUNTS is reviewed.

After entering the seventh charge account, you will
be asked to ´´ENTER THE 19 MOST USED CATEGORIES´´.
The categories are entered in the same manner as
your entered accounts with a maximum of 10
characters per category description. To designate a
tax deductible expendtire, begin your expenditure
description with an asterisk, for example,
´´*INTEREST´´.

During the SEARCH, you can search for ´*´ and pull
out all the tax deductible items for the year. You
may also subdivide the categories to designate
rental properties, for instance, by beginning the
description with ´´*R´´ and searching for only the
´*R´ expenditures.

On the 19th entry, a CASH category is displayed.

PAGE 3

This cash category is used to maintain cash balances. You may designate another category as a cash account as well in the event you want to maintain a cash balance for yourself and a separate cash balance for your spouse. The 20th category is automatically selected to be the CHARGE PMT account and will maintain a running balance on each charge account. A 21st category exists, defined as OTHER, which can be used as a catchall.

Now that you have defined your accounts and categories, you are asked if you want to enter beginning balances. Press Y . The screen will display your LIST OF ACCOUNTS. Press the number of the account with which you will begin entering data. You are then asked to ENTER BALANCE. Enter a numeric entry with either a positive or negative value. After entering the balance, press RETURN.

You are returned to the previous screen, which asks if you want to enter beginning balances. Cycle yourself through the procedure, until you have entered all the beginning information necessary to open your accounts and keep them in balance. After you have completed this process, press RETURN through the screens until you return to the initiation menu.

REVIEW INITIATION DATA

To review the data just created, press 2.

You will be asked which initiation data you wish to see.

INITIATION PROGRAM

DO YOU WISH TO SEE:

1-THE YEAR

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2-LIST OF ACCOUNTS

3-LIST OF CATEGORIES

4-BEGINNING BALANCES

Press the number of your choice to review the information now stored in your data file. Once you finish your review, you may press any key to return to the INITIATION PROGRAM MENU.

CHANGE INITIATION DATA

Once the initiation data has been entered and saved, you probably will not need to use this program except once a year to change the year of expenditures or any categories you may wish to change. If, however, you have made a mistake in entering data or if you later want to add new categories or accounts, you will use this menu selection. To access it, press **4**.

A screen similar to the REVIEW screen will appear, asking if you wish to change the year, an account, a category, or a beginning balance. Press the number of your choice and enter your data. If the entry is limited to one item of information, you can just press RETURN to return to the INITIATION PROGRAM MENU. If, however, multiple items may be required, such as changing multiple accounts, a response of ´´N´´ to the question, ´Do you wish to continue changes?´ will return you to INITIATION PROGRAM MENU.

SAVE INITIATION DATA

Once you have entered and corrected the initiation data, you are ready to save this file. From the INITIATION PROGRAM MENU, press **5** . The screen will ask if your data disk is prepared. If you have already formatted your data disk using the utility provided by HOME LIBRARY, type **Y** and the program

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will bypass the disk preparation and begin saving the initiation data.

If you have not already prepared a data disk, type N to begin the preparation of a new disk. CAUTION: Be very careful in selecting which disk to insert in the drive. All information on the disk you are going to insert as your data disk will be erased during the formatting process. The program allows you to either continue the disk preparation by pressing the Space Bar or to abort the process by pressing any key.

Once you press the Space Bar to format the disk, you are asked to enter the disk name. Type in any name up to sixteen characters and press RETURN. Then you will be asked to enter the ID number of the disk. Type any two digit number and press RETURN.

The screen displays a message saying that the initiation file is scratched. This prompt is supposed to occur so do not worry about the message.

LOAD INITIATION DATA

To load the data you have created, press 3 from the INITIATION PROGRAM MENU. The screen will display INITIATION DATA LOADING. After the data is loaded, the program will return to the INITIATION PROGRAM MENU.

Once you have finished using the Initiation Program, you may return to the main menu by pressing 6 . The screen will clear and you will be asked ´´Ia program disk inserted!!´´. Be sure to insert your program disk and press any key to continue. After a few moments, the MAIN MENU of the program will be displayed.

EXPENDITURE PROGRAM

Using the expenditure program, you enter the monthly
files which you can later manipulate through the
other programs. To enter the expenditure program,
press 2 . The menu will appear as follows.

```
------------------------------------------------------
                  EXPENDITURE MENU
------------------------------------------------------
```


   DO YOU WISH TO:

   1-BEGIN MONTHLY EXPENDITURES
   2-ADD MORE EXPENDITURES FOR MONTH
   3-UPDATE EXPENDITURE FILE
   4-SORT EXPENDITURES BY DATE AND SAVE
   5-RETURN TO MAIN MENU

```
------------------------------------------------------
```

To begin, press 1 . You will then be asked if the
data disk is inserted. Be sure that the data disk
on which the initiation data has been stored is
inserted in the drive and press any key
First the initiation data will be loaded. You will
then be asked to enter the month. You are asked to
use the letter abbreviation for the month. The
accepted abbreviations are JAN, FEB, MAR, APR, MAY,
JUNE, JUL, AUG, SEP, OCT, NOV, and DEC. After
entering the monthly abbreviation, press RETURN.
The program will display the year below the month,
afterwhich the screen will display a LIST OF
ACCOUNTS. You will be asked to select the account
for which you want to enter expenses. Type in an X
, where X is the account number. The name of the
account will be displayed at the top of your screen
so that you may see if you have made the right
choice. You can than select to (1)-Add to Account;
(2)-Add Deposits; (3)-Change Account; (4)-End
Entries.

Add To Account

To add to the account, press 1 . The screen
display is as follows.
```
---------------------------------------------------------
                  ACCOUNT EXPENDITURES
---------------------------------------------------------

          DAY:                    [ ]

          CHECK NUMBER:

          CATEGORY:

          PAYEE:

          AMOUNT:

---------------------------------------------------------
```

You can enter the day as any number 1 through 31.
If you have made a mistake in choosing to add to
account, you can return to the previous menu by
typing 0 and pressing RETURN.

After entering the date, press RETURN. If you have
chosen a checking account, the next entry will be
for a check number. the program will allow the
entry of any four characters. If you make a cash
withdrawal, you may want to enter a code such as WD
instead of the check number. After entering the
check number, press RETURN.

Had you chosen the cash account, the second entry
line on the screen would display CASH and continue
to the third entry line automatically. If you had
chosen a CHARGE account, the second entry line would
display CHARGE and automatically continue to the
third entry line.

On displaying the third entry line, the bottom half
of the screen will display a list of the categories.
Enter any any number from 1 to 21 and press
RETURN. No other entry is possible. The category

corresponding to the number you have typed will appear on the third entry line.

If you enter 21 , the category signifying OTHER, you are allowed to enter any category up to 15 characters long. You may want to maintain a list of the other categories which you reference frequently. After the category is entered, press RETURN.

At the fourth entry line, you are asked to enter the payee. You may enter up to 15 characters for the payee designation. If you had chosen 20, the CHARGE PMT category, the only payee the program will accept is one of the seven charge accounts. The accounts are listed for you on the bottom of the screen. You simply press the number of the account and press RETURN.

The next entry will be for the AMOUNT. You can only enter numbers, decimal periods and a negative sign. No letters are accepted. The program will not accept more than two decimal places and will not accept input beyond 99,999.99. After entering the amount, press RETURN.

Having pressed RETURN, the screen will ask if you want to change any entries. A response of N will return you to the previous menu. A response of Y will change the lower portion of your screen, asking if you wish to change the DATE, NUMBER, CATEGORY, PAYEE, or AMOUNT. As the screen instructs, press the appropriate letter of your choice.

Add Deposits

To add deposits, press 2 . If you had chosen a cash or charge account, the deposit entry is inoperative. After pressing 2, the screen will display the account name as the heading and you will be asked to enter the DAY OF TRANSACTION. The date convention remains the same. You may enter a number between 1 and 31, or enter 0 to abort the process. After you enter the date, press RETURN.

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Now, enter, in your desired order, each individual deposit and the amount of each deposit entry. You can use up to 20 characters to describe the deposit. After entering the deposit, be sure the entry is correct and press RETURN. Once you have completed your entries, type END and press RETURN and you will return to the prior menu.

You can only enter a maximum of 6 individual deposits at any one time. If you should happen to have more than six, you will have to repeat the process a second time.

Change Account

To change an account, press 3 . A list of accounts will be displayed.

Type X where X is the account number to be changed. The screen will return to the prior menu.

End Entries

After you have entered your expenditures for the month, and are ready to end the process, press 4 and you will return to the EXPENDITURE MENU.

ADD MORE EXPENDITURES FOR MONTH

Adding more expenditures for the month is similar to beginning the expenditures. Press 2 . The screen will clear and a display will ask to which month you wish to add expenditures. Enter the abbreviation for the month you want and press RETURN. The program will remind you to insert the data disk. Once the data disk is inserted, press any key to continue. The initiation data will load the expenditures for the month and year desired.

Once the data is loaded, you will be asked what you wish to do, with the same screen used for beginning monthly expenditures. Follow the same procedures as explained in that section.

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SORT EXPENDITURES BY DATE AND SAVE

After beginning or adding expenditures for the month, you will want to save your data. To accomplish this, press 4 from the EXPENDITURE MENU.

This program will sort your data by date and save the data on the disk present in the drive. Be sure that you have inserted your data disk, the same one on which the initiation data is saved. Before the expenditure is saved, the prior data file for the month will be scratched. Therefore, be sure that the protection 'write protect' tab is removed.

As the expenditures are being sorted, the screen will display the transaction entry. After the expenditures are sorted and saved, the number of entries remaining will appear and the screen will display that the file is saved.

There is one precaution if you update a previous month. You must also update all successive months. For example, if the current month is May, and you add a correction and update the expenditure file for March, you must update the files for April and then May. Use the UPDATE selection to update the expenditure files without adding expenses.

After the expenditures are sorted and saved, press the Space Bar to review the balance of each account. Press Space Bar again to return to the prior menu.

LISTING PROGRAM

This program is used to either list your expenditures to the screen or to obtain a hard copy of them if you have a printer. You have the option to list all your expenditures for a selected range of months or to list the expenditures or deposits for any one account.

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Entering Months

To begin, be sure you have returned to the MAIN MENU and press 3 . The screen will ask you to type in the beginning month. Enter the appropriate three letter abbreviation for each month and press RETURN.

You may start at any month. After entering the BEGINNING MONTH, you will be asked to enter the ending month. Enter the last month you wish to list and press RETURN. If you wish to list only one month of expenditures, you do not need to enter ending month. Just press RETURN and the program will enter ending month for you.

If you have made a mistake by entering the LISTING PROGRAM, enter any three characters other than an acceptable monthly abbreviation for the beginning month. For example, type in AAA to return to the MAIN MENU.

Expenditure Selection

The screen will next ask if you want to list all the expenses or just the expenses of a particular account. To list all your expenditures, press 1 . You will be asked if the data disk is inserted. Once it is in the drive, press any key to continue.

To list expenditures from only one account, press 2 . You are now asked if you want to list your income or deposits. To list the income for the month(s), press Y followed by any key to continue.

To list your expenditures, press N followed by any key to continue. A LIST OF ACCOUNTS will appear on the screen. Type X where X is the account number.

Screen Display/Printout Selection

The screen will now ask if you want a screen display only or a printed copy. If you want a screen display only, press S . If you do have a printer and want a printed report, make your selection by pressing P . You will then be guided through the printer options as detailed in the section THE USE OF THE PRINTER.

If you have chosen the screen display only, the screen will clear and the expenditures or deposits will appear. The screen will list the first five entries, a bell will sound and you will be asked to press Space Bar to continue.

After reviewing the final screen, press any key and the program will return to the MAIN MENU. With the printer option, the program will automatically return to the MAIN MENU.

SEARCH ROUTINE PROGRAM

You may need to search for payments or costs under
certain criteria. You may search by date, by check
number, by payee, or by category. You are allowed
to search sub-categories as well. For example, you
can search for *R expenses, and then for *R-garden
and *R-util as well.

To activate the search routine, press 4 from the
MAIN MENU.

Entering Months

As with the listing program, you will be asked to
enter the beginning and ending months. Enter your
months following the same procedure described under
the LISTING PROGRAM.

Screen Display/Printout Routine

After entering the ending month and pressing RETURN,
the screen will clear and ask if you want a screen
display or a printed copy. Follow the same
procedure desribed in the LISTING PROGRAM.

Entering Item of Search

Once you have indicated your choice to screen
display or printed copy, the following screen will
appear.

```
-------------------------------------------------
               SEARCH ROUTINE PROGRAM
-------------------------------------------------

    DO YOU WISH TO SEARCH FOR:

         1-DATES              2-CHECK NUMBERS
         3-PAYEES             4-CATEGORIES
-------------------------------------------------
```

Enter the number of your choice and press RETURN.

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If you press 4 to search by category, the lower
part of the screen will display the categories for
you.. Press the number of the category desired and
press RETURN.

You are next asked for the item you want to search
for. You enter the item you want to search for and
press RETURN. You do not have to enter the entire
item. You may only have to enter the first few
characters of the item.

This is useful if you have forgotten the name of a
payee. If you remember what the payee´s name starts
with, you can search the item out. Of course,
every item beginning with the same letters will also
be found.

This searching technique is also used to establish
sub-categories, as in the rental property example
just discussed. When you enter the item to be
searched, simply type in *R, and the procedure will
find all expenses for rental categories which begin
with *R. Therefore, the summary would display the
detail and totals for the months requested for the
*R-garden and the *R-util categories.

RECONCILIATION PROGRAM

Each month you face the task of balancing your
checkbook with your bank statement. The
reconciliation performs this task for you without
the frustration. To make this selection, press 5
from the MAIN MENU.

Entering Beginning Month

The screen will ask you for the beginning month.
Enter the appriate three letter abbreviation and
press RETURN. You will be reminded to insert your
data disk. Press any key to continue. Now the
screen will ask you if you want to reconcile the
statement from account 1 or account 2.

To reconcicle your first checking account, press 1.
To reconcile your second checking account, press 2.
Immediately after pressing 1 or 2 , the screen
will display the first entry which has not been
previously reconciled. If the first entry is a
check, the screen will look as follows.

```
-----------------------------------------------
                RECONCILIATION PROGRAM
-----------------------------------------------

        DA    CHK.    AMOUNT    BALANCE
        --    ----    --------  --------
        14A   901       5.18    2942.49

     HAS THIS CHECK CLEARED THE BANK?  (Y/N)
-----------------------------------------------
        Press [fl] IF THERE ARE NO MORE ITEMS
           TO ENTER FROM THE BANK STATEMENT
-----------------------------------------------
```

If the screen is displaying a deposit, [DEP] will be
displayed under check number and you will be asked
if the deposit is listed in your statement. If you
find either a check or deposit, press Y .

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If you don't find the check or deposit on your
statement, press   N . AFter pressing Y or N, the
next check or deposit will appear on the screen.
Continue cycling through until the entire month has
been reconciled.   After the entire month has been
reconciled, the screen will clear and you will be
asked if you want to reconcile the followig   month.
Since most bank statements cover a two month period
of time, you will probably press Y to continue the
reconciliation program for the next month. The
reconciled month will be saved and then you will be
cycled through the same procedure as just discussed
for the checks and deposits of the following month.

When you reach the last item shown on your bank
statement, instead of pressing Y, press fl . Be
absolutely sure to press fl when you reach the last
entry in your bank statement.   Otherwise   the
checkbook balance which is automatically entered
into the program will not be correct. Again, the
second month's reconciled file will be saved.

Reconciliation Summary

After saving the reconciled month(s), you will be
asked if you want a screen display or printed copy
of the summary. After pressing S or P , the screen
will display the checkbook balance. Next, you will
be asked to enter the STATEMENT BALANCE. Look up
the ending balance on the bank statement, enter the
balance, and press RETURN.

Next the program will list any deposits which were
listed in the data files but not yet recorded in
your bank statement. Immediately following this is
a display of any outstanding checks, that is, checks
in your data file which have not yet cleared the
bank.

You will be asked to enter any charges shows on your
bank statement which you have not   previously
entered into the EXPENDITURE PROGRAM.   The
description of the charge may be up to 20 characters
long.   Press RETURN and then enter the amount of

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the charge. To end the charge entries, type **END** and press RETURN.

Now you will be asked to enter any interest earned on the account. If you do not have an interest bearing account, just enter 0 and press RETURN.

The screen will appear as shown throughout this procedure.

```
-----------------------------------------------------
                 RECONCILIATION PROGRAM
-----------------------------------------------------
   CHECKBOOK BALANCE                      2385.43

   STATEMENT BALANCE                      2373.09

   DEPOSITS NOT IN STATEMENT

   OUTSTANDING CHECKS
     JAN14 901 GEMCO                         5.18
                                          -------
                 TOTAL                       5.18

   ENTER CHARGES SHOWN ON BANK STATEMENT
     CHARGE     DESCRIPTION               AMOUNT
     ----------------------               -------
     SERVICE CHARGE 2/08                    4.50
     INSUFF. FUNDS 1/30                     5.00
                                          -------
                 TOTAL                       9.50

   ENTER INTEREST EARNED                    2.34
-----------------------------------------------------
```

After entering the interest, the screen will display the balance from the bank statement and the adjusted checkbook balance. If the two balances are the same, the messages ´´CHECKBOOK IS CORRECT´´ will appear. You may press any key to return to the MAIN MENU.

If the two balances do not agree, press any key to display the amount of the imbalance. The

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correction you need to enter into your checkbooks
will be displayed as well as advice to verify all
your deposits and checks, including automatic
withdrawals and deposits.

Change your checkbook balance to accept the
correction. Or you can redo the reconciliation
program to verify that the correction is right or to
enter something you forgot. In either case, after
reviewing the correction, press any key to return
to the MAIN MENU.

To reconcile the months of DEC and JAN, you will
need to change data disks between beginning month
and the following month reconciliation.

USE OF THE PRINTER

Any Commodore printer, or non-Commodore printer with
a parallel interface, can be used with the program.
When asked to press either S or P for the type
of display desired throughout the program, if you
press   P , the program will display the open
statement for the printer and ask if the printer
information is correct.

If the printer open statement is correct for your
needs, press Y.

If you wish to change the open statement, press N .
If you press N, the 1st two numbers of the open
statement will be blanked out. To change the open
statement, enter the appropriate numbers. Consult
your printer or interface manual for instructions.
The statement should be the proper one for most
printers and interfaces.   Once you have corrected
the statement, press Y in response to the question
whether the statement is correct.

If you change the open statement, the change will
remain in memory only so long as the program is
being used. Once the computer or printer is turned
off and then turned back on again, the original open
statement, [4,4,4], will be reactivated.

After you have answered the Y to the correct open
statement, you will be asked

DO YOU WANT TO ENTER SPECIAL
COMMAND CODES? (Y/N)

Special command codes can be added to enhance or
change the type of print in your report. The most
common command codes which are available are listed
below.

CHR$(14) EXPANDED PRINT (5cpi)

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CHR$(15)   CONDENSED PRINT (16.2cpi)

CHR$(20)   NORMAL PRINT (10cpi)

where ´´cpi´´ is ´´characters per inch.´´

Check your printer and interface manuals to be sure
that these commands are the ones appropriate to your
printer.   If   not, substitute these command   codes
with those indicated in your printer manual.   If you
do not want to enter special command codes,   press
N.

To   enter   the   special command codes, press Y   and
the screen will display a cursor next to CHR$.   The
message   will   inform you to enter each command code
as a two digit decimal number or to enter a 0 to end
and   return   to   the   program. After you enter   the
first command code, the screen will display another
CHR$ below the first entry.

This   sequence   continues   until   you enter the last
command code.   You may enter as many as five codes,
although one or two should be sufficient.   When you
are finished entering the command codes, type   0 and
press RETURN.

After pressing RETURN, you return to the program in
progress, either the LISTING, the SEARCH ROUTINE, or
the RECONCILIATION program.

TRI GRAPH

AN ELECTRONIC PAINT BRUSH

by

David W. Johnson

A Product of

INTERNATIONAL   TRI MICRO

TABLE OF CONTENTS

INTRODUCTION

Your Commodore 64 has various color capabilities which make it suitable for drawing pictures and graphs. To access the graphics power of a computer usually requires programming knowledge. TRI GRAPH was designed to allow you to draw and design graphics without this programming knowledge.

TRI GRAPH has a bit-mapped screen, with a full 64,000 dot resolution. In other words, you have 64,000 dots which you can join together to form pictures or graphs. You control these dots from the keyboard with keyboard input to move the lines in the direction you wish drawn, or with a joystick by moving the joystick in the same direction as the direction of the line you wish drawn. If you want to label a particular item, TRI GRAPH also allows entry of text while you are drawing. It is possible to design a screen or shape, and save it for future editing or review.

Additionally, TRI GRAPH contains a simulated animation feature which allows you to use a combination of rapid duplicaton and retracing to move shapes around the screen. A "HELP" function is available to allow you a quick review of your basic functions without having to refer to this manual.

As you become more familiar with TRI GRAPH, you will become expert in manipulating the cursor to achieve desired results. Think of the cursor as a paint brush or pencil, one which is eraseable and easily duplicated. Experiment with the keyboard to become comfortable with cursor movements. Remember, you are drawing with dots; therefore, circles may seem awkward at first try. As with everything, "Experience holds the key!" (In this case, the computer key holds experience.)

SUMMARY OF FEATURES

1. 64,000 dots available for drawing.

2. Eight background and "brush" colors available.

3. A design library can be built by saving screens or shapes for recall.

4. Key stroke tracing can be manipulated for quick design or animation.

5. Text/labeling ability while in program operation.

6. Eight variable brush sizes (to adjust the size of the drawn line).

7. Quick reference "Help" function.

8. Fill/diagonal commands available.

9. Machine language speed.

COSMIC SPLIT

A TERRESTRIAL GAME

by

David Lummis

GETTING STARTED

COSMIC SPLIT is a terrestrial game in which you have to defend yourself and Earth from chain-linked space ships. In addition to flag ships and convoy ships, you must defend yourself from Mutants (valued from 400 to 800 points), Mother Ships (valued at 250 points) and UFOs (valued at 1500 points). The Flagships, the head of the chain-linked space ships are valued at 100 points and the Convoy Ships (trailing the Flagships) are valued at 10 points.

After loading COSMIC SPLIT utilizing the loading instructions found in the MASTER KEY INTRODUCTION, the COSMIC SPLIT title screen will appear. To begin your defense from the terrestrial ships

Press   **FIRE BUTTON**

on your joystick. The directions for COSMIC SPLIT will then appear. Four function keys are utilized in the COSMIC SPLIT program. You may

Press   **F3**   for Auto Firing

Press   **F1**   for Normal Firing

Press   **F7**   to Pause the Game

Press   **F5**   to Continue the Game

To continue,

Press   **FIRE BUTTON**

again. You may then select the difficulty
level of the game, from Level 1 to Level 99.
You also have the choice to change the colors
of the background, foreground, or any of the
space ships, etc. if you

Press   **X**

If you decide to change colors by pressing
[X], then you can

Press   **F7**

to return to the previous screen.   To begin
the actual game,

Press   **FIRE BUTTON**

and you are on the way to one of the most
exciting terrestrial adventure you will ever
encounter.   Good luck in   defending   our
planet.

Before reading the detailed instructions for operation of TRI GRAPH, we recommend that you take a guided tour through the system. In this way, you can familiarize yourself with the interaction of different commands and the system, and see what you actually produce as a result of this interaction. Please follow the step-by-step tour for a better understanding of your program.

THE MAIN MENU

First, load the program, utilizing the loading instructions in the MASTER KEY introduction. After the program is loaded, the following screen will be displayed.

```
-----------------------------------------------
          TRI GRAPH 1.0 from tri-micro
            program by d.w. johnson


          SCREEN

          E dit      L oad      S ave
          H elp      C atalog   A clear
          1 device type
-----------------------------------------------
```

This screen is known as a menu. Programs which give you a series of choices in the English language are said to be menu-driven programs because you select from a menu in order to tell the computer what to do. TRI GRAPH's menu is a neumonic menu, in that you respond by pressing the first letter or number of your desired selections.

BEGINNING TO DRAW

To begin drawing, you must enter the Edit Mode.

Press   E

You are now in the Edit Mode and ready for drawing. Your screen will appear blank with a flashing dot in the center of the screen.

Press   U

(With joystick, push to top or front)

You have created a vertical line in an upward direction.

Press   E

You are now in the erase mode. Having pressed [E] you can erase the lines you previously drew.

Press   D

(With joystick, push to bottom or back)

You will see the vertical line which you just drew being erased. Pressing [D] will move your line in a downward direction. To return to drawing mode, or write mode,

Press   W

You can now "write" lines on the screen.

Perform the following sequence.

Press   U

Press   R

Press   D

Press   L

Your screen should be displaying a square. Instead of pressing the keys, you can also move your joystick to the top, then right, then down, then left. Pressing the keys, [U],[R],[D],[L], will move your lines up, right, down, and left respectively. NOTICE that the command keys are neumonic -- [U] for up, [R] for right, etc.

To return to the Menu

Press   F1

Pressing [F1] during editing operation will always return you to the Menu. To return to your canvas and view your square,

Press   E

to go back to the Edit Mode. You now have your square displayed for you once again. If you want to clear the screen to have a new canvas available for further drawing,

Press   F6

Pressing [F6] means to press [SHIFT] and [F5] together. Your screen will clear except for a flashing dot in the center of your screen.

CHANGING BRUSH SIZE

To change the size of your line or "brush", you should press [V], for vertical, or [H], for horizontal, and then press a numbered key. For example,

Press   V   and then   Press   9

You have just changed the size of your vertical line or "brush." To view the size, sequentially

Press   U

Press   U

Press   H

Press   4

Your upward line was the size indicated with
your vertical brush command. Pressing [H]
and [4], likewise, will change the size of
your horizontal brush. To view the size,

Press   L

The left line should be a smaller size than
the vertical line. To set brush size,
remember that you have two brushes: a
vertical brush and a horizontal brush. To
set the vertical brush,

Press   V

To set the horizontal brush,

Press   H

To set the brush size, you may press any
number from [1] to [9]. The width of your
line increases with the number. To reset
your brush to original condition,

Press   V   and then   Press   1

Press   H   and then   Press   1

CURSOR MOVEMENT

To draw on another part of the screen without
tracking your line,

Press   CRSR

You have moved the flashing dot in the right
direction, but no line is visible. To move
to the left,

Press   SHIFT   and   CRSR

at the same time. To move down,

Press   ⬆CRSR⬇

To move up,

Press   SHIFT   and   ⬆CRSR⬇

at the same time.

Work with the cursor key in moving your dot
around the screen and position it in a place
in which you would like to begin drawing
again.

DIAGONAL LINES

To draw a diagonal line

Press   C=   and   D

together. You will see a diagonal line
moving to the left in a downward direction.
You can also manipulate the joystick to move
in a diagonal direction, however, this
requires some experimentation to obtain the
right feel of the joystick direction.

NOTE: the joystick diagonal will not have the
      same precision as a diagonal drawn with
      the keyboard.

Press   SHIFT   and   D

together. You will see a diagonal line
moving to the right in a downward direction.
Again, you can also manipulate the joystick
in a diagonal direction.

Press   SHIFT   and   U

together and you will see a diagonal line
moving to the right in an upward direction.

Again, you can also manipulate the joystick in a diagonal direction.

Press   C=   and   U

together, and now you will see a diagonal line moving to the left in an upward direction. Again, you can also manipulate the joystick in a diagonal direction.

NOTE: the conventions for creating a diagonal line are:

Press   C=   to move left.

Press   SHIFT   to move right.

Press   D   to move down.

Press   U   to move up.

Using these conventions, you must press either [C=] or [SHIFT] together with either the [D] or [U] key in order to draw a diagonal line.

You have now reviewed some of the basic operations of TRI GRAPH. Practice with these to create drawings and designs to your liking. In the next section, we will discuss the more advanced operations of TRI GRAPH.

Now that we exercised the basic commands of
TRI GRAPH, this next section will review the
more advanced features of TRI GRAPH. These
features require some practice to become
truly familiar with the program, therefore,
don't hesitate to break into the sequence of
commands to practice the current commands as
they are being outlined.

Before beginning these exercises, load the
prgram and enter Edit mode as explained in
the prior section.

COLOR CONTROLS

The appropriate colors appear on the bottom
of your number keys, 1 through 8. There are
only eight colors available as we are
operating in high resolution mode -- the
eight extended set colors cannot be accessed
in high resolution mode.
To change the background color, i.e., the
color of your canvas

Press   CTRL   and   3

together. To set the background color after
pressing the number key, you must next

Press   F7

Your screen is now red. To change your
screen to green

Press   CTRL   and   6

together and then,

Press   F7

Your screen is now green. Experiment with
all your number keys in the same sequence of

keystrokes to view your different color
capabilities.

To change the foreground color, which is the
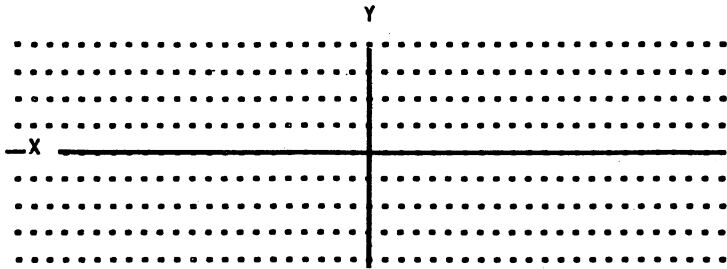color of lines and shapes,

Press   C=   and   3

together.

NOTE: Do not press [F7] in this sequence.
Since [F7] changes the background
color, your background and foreground
would then be the same color and you
would have no visible drawing. BE VERY
CAREFUL. Once you have set background
color with F7, you cannot recover your
character colors and you will then have
lost your drawing, unless the drawing
has previously been saved.

Sequence through the colors keys to view the
different colors available to you in drawing
lines and shapes and to view the combination
of different colors in background and
foreground. Your color can be changed any
time in the middle of a drawing. In other
words, you can draw one shape one color.
Change the foreground color, and proceed to
draw the next shape in that color.

AUTO SIDE PLOT

In bit mapping your screen, the computer
views the 64,000 as a complete matrix with
the dots organized in horizontal rows and
vertical columns. Try to visualize two lines
bisecting the middle of your screen into four
sections. The vertical line is the "Y" axis
while the horizontal line is the "X" axis.

```
                              Y
.......................|.........................
.......................|.........................
.......................|.........................
.......................|.........................
_X _____|_____
.......................|.........................
.......................|.........................
.......................|.........................
.......................|.........................
```

With your   flashing   dot   positioned   in   the
middle of the screen,

Press   X

The line will extend to your right border.

Press   Y

and the line will extend to your top border.

Position your   cursor   to   the   left   of   the
center of your screen and

Press   X

This time, the line will extend to your   left
border.

Position your cursor slightly to   the   bottom
of center.

Press   Y

and the   line   will   extend   to   your   bottom
border.

Experiment   with   different   brush   size,   as
explained   in   the   prior   section,   while
exercizing the Auto Side Plot function.   You
will develop a feel for this function and how
it can be used for different design functions
to avoid repetitive keying.

EXTENDED DIAGONAL COMMAND

It is possible to develop variations on the diagonal command by utilizing a combination of the diagonal command and the brush size command, both covered in the previous chapter.

You can use any of the variable brush sizes, [V] + [1] to [9], for the vertical brush, and [H] + [1] to [9], for horizontal lines, to draw diagonals of varying degrees. You can experiment with this function by performing the following sequence.

Press   H   and then   Press   1

Press   V   and then   Press   1

Press   C=   and   U

together several times.

This will draw your diagonal at a 45 degree angle, one up and one left.

Press   3

This will change your vertical axis since [V] was the last axis used in your command sequence. Again,

Press   C=   and   U

Press   U   together several times.

together several times. This will draw your diagonal line at a 30 degree angle, one up and three left. In general, by holding the horizontal axis at 1, and varying the vertical axis 1-9, you can achieve a varying degree of angles to your diagonal lines. By adjusting the horizontal axis, you can reverse the directions of the diagonal lines.

Experiment with changing your axis settings

and with your diagonal commands to view the
different angle combinations which can occur
through extended diagonal commands.

SIMULATED ANIMATION

You are capable of simulating animation with
TRI GRAPH through a function which traces
your keystrokes in sequence and which may be
recalled in a play mode to view animation. A
combination of drawing, erasing, drawing,
erasing, etc., will result in the same effect
as high speed page flipping which creates
animation in physical terms. To begin this
function,

Press   F3

Draw and/or erase a sketch in any sequence
you want. After you have created a shape and
you want to end the sequence,

Press   F3

Your screen should flash briefly (similar to
a camera flash), giving you an indication
that the computer is memorizing the sequence
of your keystrokes.

NOTE: any animation sequence is a shape --
      this is important when you save the
      shape, as explained in FILE HANDLING
      FUNCTIONS.

To "play" the shape which is in memory,

Press   C=   and   P

together. The shape will begin playing from
the current cursor position. By moving your
cursor around the screen you can use the
animation feature to quickly duplicate a
design on your screen, in sequential
repetition of play. During play, if the
pvspace bar is pressed, the play sequence

will be stopped at that point. Starting the animation mode again, by pressing F3, will enable you to modify your animated shape and play the modified shape once again. Practice with the animation feature extensively. It is a powerful feature and can be used for many different variations. Always REMEMBER to Press F3 to end the sequence -- you must take your picture for the computer to remember the keystrokes.

FILE HANDLING FUNCTIONS

From the main menu,

Press   S

This will display the following prompt on your screen:

```
-----------------------------------------
            screen or shape 1/2?
-----------------------------------------
```

Press   1

to save the entire screen or

Press   2

to save the shape only. REMEMBER that an animation sequence should always be saved as a SHAPE.

After you have responded, the screen display asks:

```
-----------------------------------------
                save y/n?
-----------------------------------------
```

Press   N

if you decided to make changes before saving.

Press   Y

for saving the file. The screen will prompt
you to:

```
------------------------------------------
               enter name
------------------------------------------
```

Respond with any name for the shape or
screen. TRI GRAPH will save your file.

Press   L

The screen will display:

```
------------------------------------------
             screen or shape 1/2?
------------------------------------------
```

Press   1   or   Press   2

for "screen" or "shape", respectively.

```
------------------------------------------
               load y/n?
------------------------------------------
```

To load,

Press   Y

and you will be prompted for name. Enter the
name of your screen or shape and the program
will load your file.

LABELING GRAPHS

It is possible with TRI GRAPH to incorporate
a written text into your drawing or graph
directly in Edit Mode. To do this,

Press   F2

NOTE: Pressing [F2] is done by pressing
      [SHIFT] and [F1] together.

This will activate the Text Command Mode.
First, position the cursor in the area of
the screen you want the text to appear. To
enter the letter "A"

Type   A

The character "A" will appear on your screen
directly to the bottom and the right of the
cursor. Note that only numbers and upper
case letters are available. Continue typing
in your text to get the feel of labeling
graphs.

To exit the drawing mode,

Press   F2

again. You can now begin drawing again.

THE FILL COMMAND

Once you have created a shape, you can fill
in the shape with a foreground color by
activating the fill command. First, position
the cursor in the middle of the shape, and
then

Press   *

Your shape will fill with the foreground
color from left to right and downward. The
"fill color" will not cross lines; therefore,
you will have to manipulate the fill command
to completely fill certain shapes. If a
shape has not been completely filled,
position your cursor to the middle of the
open space and

Press   *

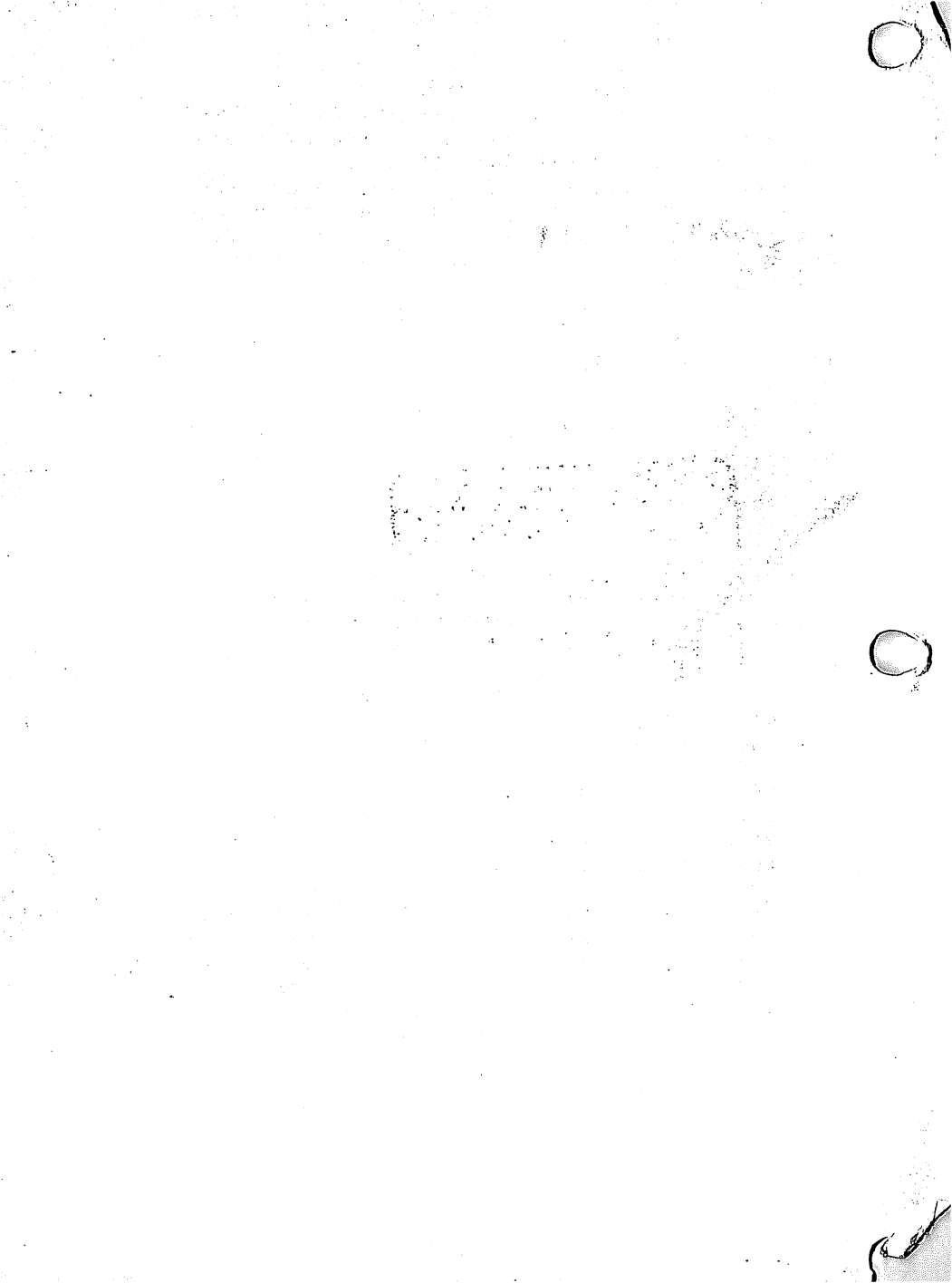again. Repeat the procedure until your shape

is filled with color.

As mentioned above, the fill color is the color of the foreground (see COLOR CONTROLS subsection), thus you can have a multicolored sketch by changing the foreground before filling different shapes. If you do not like a particular fill color, you can erase the color by entering the Erase Command (see BEGINNING TO DRAW subsection) and repeating the FILL COMMAND procedure.

USES OF TRI GRAPH

Now that you have learned the advanced functions of TRI GRAPH, continue to practice drawing and creating graphs. In addition to using TRI GRAPH to draw pictures, you can utilize TRI GRAPH to

1. Draw a floorplan of your house or office and label the floorplans with the dimensions of the rooms and the names of the rooms. This would be particularly useful if you plan to remodel. You can draw in your present floorplan and then change the drawing to suit your intentions in the remodeling.

2. Sketch shapes of furniture, and then arrange the shapes on the screen to visualize how your potential room rearrangement.

3. Draw "templates" of electrical components, and then create electrical circuits on the screen. You may create similar "templates" with any field of interest, such as landscape architecture and instument flow diagrams.

As your comfort increases, you will find hours of enjoyment and productivity from TRI GRAPH.

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