Font master

A word processing system
for the Commodore 64

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xetec

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SYSTEM OVERVIEW

Congratulations on buying the Xetec FONTMASTER system. The system uses a unique process in order to simulate daisy-wheel quality print from a dot-matrix printer. With a Commodore 64, a 1541 disk drive, and the included software and fonts, you can write documents, changing type-style any time you want (even in the middle of a word!). Sixteen fonts are included on the disk, but with the FONTEDITOR program (included), you can change them to your liking or create your own new fonts. Two modules are inluded, both of which allow you to use the fonts with special features like superscripts, subscripts, expansion, compression, pica or elite pitch, boldfacing, underlining, and inversion.

FONTMASTER requires a Xetec printer inter-face (or equivalent) and a printer that is compatible with the Gemini 10X or Epson printers (see Appendix C for details).

Your Fontmaster disk may not be copied (not even for archival purposes). If at any time your disk becomes damaged or unreadable (during normal use), replacements may be obtained from Xetec. We therefore recommend that you put user-created fonts and data files on a separate disk.

FONTS+

The first module, FONTS+, allows you to print in different fonts using BASIC PRINT statements. All channels opened to your printer with a secondary address of 10 (OPEN 4, 4,10) will be printed using FONTS+. All

other secondary addresses are handled by the printer interface.

GETTING STARTED

To activate the FONTS+ module, type:

LOAD "FONTS+",8,1

Eight fonts will be loaded, and then you should see the message **FONTS+ activated.** Now type:

```
OPEN 1,4,7
OPEN 2,4,10
PRINT#1,"Hello"
PRINT#2,"There"
```

Hello should be printed in dot matrix, and **There** in the English font using FONTS+. Now try PRINT#2, "ʔ2There" (The script 'ʔ' stands for the 'font' symbol, generated by holding down the CTRL key and pushing the left arrow key--next to the number **1**). Notice that this time **There** is printed in a different font. That's what ʔ2 means- change to font #2. The eight fonts you saw loading at the beginning are all present and waiting to be used. All you have to do is change to whichever font and print! Now try changing in the middle of a word:

PRINT#2,"ʔ3Tesʔ4ting"

Once you select a font, it remains the current font until you choose another.

COMMANDS

You can do special things by following the '⅂' with other commands besides 1 thru 8:

Command	Function
⅂U	Turn underlining on or off
⅂B	Turn boldfacing on or off
⅂I	Turn inverse on or off
⅂P	Select Pica pitch (10 cpi)
⅂E	Select Elite pitch (12 cpi)
⅂C	Turn compressed mode on or off
⅂X	Turn expanded mode on or off
⅂S	Start sub-scripting
⅂↑	Start super-scripting
⅂N	Stop super/sub-scripting
⅂.	Set to 6 lines/inch
⅂,	Set to 8 lines/inch
⅂>	6 LPI, Epson type printer
⅂<	8 LPI, Epson type printer
⅂1...8	Change to font # 1 thru 8

These commands can be used without even printing any text. For example, to turn on underlining, use PRINT#4,"⅂U" Use ⅂U again to shut it off.

By using CMD (i.e. CMD 2), you can list BASIC programs or disk directories using FONTS+. Also, FONTS+ has a text screen dump which will dump a screen of text in whatever font and modes are currently selected. To dump the screen, use SYS 51000 in the direct mode or in a BASIC program.

If you happen to reset your computer, or FONTS+ somehow becomes deactivated, SYS 49152 will restart it. Also, FONTS+ limits the length of each line it prints to 80 characters. If you have a wider printer, use the following process to expand the limit:

POKE 50942,N1:POKE 50943,N2   where N1+256*N2=
number of columns*24.

FONT SELECTIONS

Since you have 16 fonts to choose from
but you can only have 8 loaded into the
computer at one time, you will probably want
to choose the 8 that you use most often and
set those as the 8 to be loaded when you start
FONTS+.   To do this, LOAD and RUN the program
called **SELECT**.

FONTMASTER

The FONTMASTER word processor is a
'window' oriented processor which has a full
set of powerful text-editing commands, as well
as the ability to print documents using
different fonts and special effects.   Since
FONTMASTER was written with this font
capability in mind, using the fonts and
effects is no more complicated than typing
words.   If you run into difficulty, consult
the troubleshooting guide in appendix B.

LOADING FONTMASTER

To load the FONTMASTER word processor,
type: LOAD "FONTMASTER",8,1 After about 45
seconds, the screen should look like figure
1.   All the data at the top of the screen will
be explained later, but for now, let's try a
simple example to show you how easy FONTMASTER
is to use.

First, we want to move the right margin
from 80 to 40 (this is going to be a small

letter) so push C= ← to display the parameter table. Now push the CRSR DOWN key twice and hold the - key until the 80 has changed to 40. Now push ← to go back to the text screen. Before you start typing, push SHIFT CTRL W to turn word-wrap on. With it on, if you type past the right margin, the last word will be moved to the next line. Go ahead and type a few lines of deeply meaningful text. Notice that the right margin is not lined up. That is the way word-wrap works. Now push SHIFT CTRL J to not only word-wrap but justify, too. Now type some more lines, noticing how the right margins are lining up now.

Now for some special effects. Push the Commodore key and U (abbreviated C= U). Notice the **E** in the box at the top is now underlined. That's because you just turned underlining on. Now type a few words then push C= U again. All the letters between the two inverse U's will be underlined. Boldfacing works the same way. Subscripts and superscripts are a little trickier. Do the following to have Einstein's **E=MC2** printed. Type **E=MC** then C= ↑ to turn superscripts on. Now type a **2** then C= N to go back to normal text.

OK, enough typing, let's get a printout of what we've got in memory. Push the HOME key to go to the beginning of the file and type C= R which will print a rough draft. (If you get a **Device not present** error, you need to hook up your interface correctly.) Your printout probably looks like a bunch of garbage. That's because you are printing using font #1 (see the **1** next to the box) but you dont have a font loaded there. To load one, push C= F1. When you are asked for the font number, type **1** and return. Then type a font

name (such as **Bauhaus**) and hit return.   After it's done loading, try C= R   again.   This time, you should get a print-out   that has everything underlined   properly, etc.   Go ahead and try some of the other special effects listed on the function key overlay. Make sure you try switching to different fonts within your text. To do this, type some text, then C= 2, followed   by   some more text.   The second group of letters   will   be printed using font #2 (remember to load one there).

THE FONTMASTER SCREEN

We will look at each lettered area in figure 1 and explain the function of each. The numbers in the area marked **A** indicate the cursor's page, line, and column, respectively. The page number corresponds to   the   actual pages of paper that will be generated.   Graph **B** is the scroll indicator. Since the screen is only 40 characters wide and you will most likely be editing documents which are wider, the scroll indicator at all times tells you at which fraction of the page you are looking. Go ahead and type some words until the screen starts to scroll (watch the indicator, too). Hit a return and watch it move back to the left.   Area **D**   displays the filename of whatever you are editing (if it has one yet). Flags **G** and **I** are the justification and insertion flags.   They can be turned on and off with simple commands. Flag **H** is the **Block marked** flag which will be useful when you learn the block manipulation commands. Area **E** always shows what percentage of the free RAM you have used for your data.

The rest of the areas at the top of the screen deal with fonts and their usage. Box **C** is a graphic indicator of the special features being used. The '6' indicates 6 lines per inch. It may be changed to '8'. The 'AE' represents text. If, for example, underlining is turned on, the 'E' in the box becomes underlined. If you turn boldfacing on, the 'E' becomes darker. The 'A' serves as a reference when, for example, super-script is turned on (the 'E' is then further up than the 'A').

Letter **J** is the indicator for characters per inch. This value depends on what pitch is selected (pica or elite), and whether the text is compressed, normal, or expanded. **K** shows which font is currently selected (1 thru 8). **L** shows what font is loaded there (if any).

Line **F** is the ruler and message line. Normally, the ruler is displayed. The marks on the top side of the ruler indicate tab stops. Occasionally, this line is used for displaying a message or asking a question. Subsequently, it will change back to the ruler.

COMMAND SUMMARY

Following is a brief explanation of the commands. For a more detailed description, see the next section, **COMMAND EXPLANATIONS**.

Cursor right: Moves the cursor to the right. When the end of a line is reached, it will move to the first of the next line.
Cursor left: Moves the cursor to the left. When it gets to the first of a line, it will move up to the last of the previous line.
Cursor down: Moves the cursor down to the next

line. If the next line isn't that long, the cursor will be put at the last character.

Cursor up: Moves the cursor up to the previous line. If the line isn't long enough to go straight up, the cursor will be put on the last character of the previous line.

CTRL D: Same as cursor right.

CTRL S: Same as cursor left.

CTRL X: Same as cursor down.

CTRL E: Same as cursor up.

CTRL A: Move the cursor to the first letter of the previous word in the text.

CTRL F: Move the cursor to the first letter of the next word in the text.

SHIFT CTRL S: Move the cursor to the first letter of the previous sentence.

SHIFT CTRL D: Move the cursor to the first letter of the next sentence.

CTRL <: Move to beginning of line.

CTRL >: Move to end of line.

CTRL W: Screen up. Moves up 21 lines in the text.

CTRL Z: Screen down. Moves down 21 lines.

SHFT CTRL Z: Move to the bottom of the file.

HOME: Move to the top of the file.

CLR: Clear all text from memory.

RETURN: Put a carriage return in the text.

SHFT RETURN: Move the cursor to the beginning of the next line.

CTRL +: Set tab stop at the cursor position.

CTRL -: Clear tab stop at the cursor position.

SHFT CTRL -: Clear all tab stops.

RUN/STOP: Tab key.

INST: Insert a space.

CTRL I: Turn insert mode on/off.

SHFT CTRL I: Same as CTRL I.

DEL: Delete a character to the left (rubout).

CTRL G: Gobble a character from the right.

CTRL DEL: Delete entire line.

CTRL =: Center current line.
CTRL L: Look for text.
SHFT CTRL L: Look again for same text.
CTRL R: Look for and replace text.
SHFT CTRL R: Look again and replace with same text.
SHFT CTRL W: Turn word-wrap on/off.
SHFT CTRL J: Switch between simple word- wrap and right justification.
CTRL J: Re-justify text from the cursor to the end of the paragraph.
CTRL SPACE: Insert a 'soft' space.
SHFT -: Insert a hyphen.
CTRL B: Mark one end of a text block where cursor is.
CTRL M: Move text block from marker to this point into buffer (limit 2000 chars).
CTRL C: Cut text block from marker to this point out of file and put it in the buffer.
CTRL P: Paste text in buffer at this spot (insert it). Leave buffer unchanged.
CTRL O: Overlay following text with text from buffer. Leave buffer intact.
C= B: (Commodore key and B) Turn boldface on or off.
C= U: Turn underlining on/off.
C= I: Turn inverse mode on/off.
C= E: Elite pitch.
C= P: Pica pitch.
C= C: Turn compressed mode on/off.
C= X: Turn expanded mode on/off.
C= S: Start sub-scripts.
C= ↑: Start super-scripts.
C= N: Stop super/sub scripts.
C= >: 6 lines per inch.
C= <: 8 lines per inch.
C= 1...8: Change to fonts 1 thru 8.
C= D: Turn dot-matrix mode on/off.
C= F: Print final draft. Abort with - key.

C= R: Print rough draft. Abort with ← key.
SHFT CTRL P: Parameter table. End with ← key.
C= ←: Parameter table.
←: Abort command
C= UP/DOWN key: Change text color (down).
SHFT C= UP/DOWN key: Change text color (up).
C= LEFT/RIGHT key: Change screen color (down).
SHFT C= LEFT/RIGHT key: Change screen color (up).
F1: Save text to disk.
F3: Load text from disk.
F5: Append text from disk to text in memory.
F7: Verify text from disk=text in memory.
F2: Erase text file on disk.
F4: Rename text file on disk.
F6: Clean up disk.
F8: List directory of disk.
C= F1: Load a font into memory from disk.
C= F3: Auto load all fonts into memory needed for current text in memory.
C= SHFT Q: Quit FONTMASTER. The next letter typed must be a **T** or the quit will be aborted.

COMMAND EXPLANATIONS

CTRL F: This command (move cursor to next word), is useful for proofreading text word by word (since you usually can't see the full width of your text at the same time).

INSERT MODE: This mode can be turned on or off with the command CTRL I. With this mode on (marked by **INST** at the top of the screen), as text is typed, it is inserted instead of replacing other text.

CENTER: The center text command centers the current line in accordance with the line

length at that time. In other words, if you set the width to 80 characters/line and center something, it will be centered on an 80 character line. If the length is then changed to 70. The position of the previously centered line will remain unchanged. Sometimes this command can take a few seconds when a large file is in memory-be patient.

LOOK: After typing CTRL L, you will be asked what search string to look for. The search will begin at the cursor and will continue to the end of the file if necessary. If one isn't found, the cursor will be placed at the end of the file, and the message **None found** will be displayed. After using this command, you may look for the same text again with SHIFT CTRL L. If you use CTRL L, you will be asked for the new search string.

LOOK AND REPLACE: After typing CTRL R, you will be asked for the search string and what to replace it with. Like the LOOK command, you can look and replace the same words by typing SHIFT CTRL R.

WORD-WRAP MODE: This mode may be turned on and off with the SHIFT CTRL W command. When off, type as you would on a typewriter, ending the line at your discretion with a carriage return. With word-wrap on, when you try to type past the right margin, the last word is brought down to the next line.

JUSTIFICATION MODE: If word-wrap is on, push-ing **CTRL SHIFT J** will turn on the right-justify word-wrap mode. This works just like word-wrap except the right margins will be aligned.

RE- JUSTIFY: When editing a paragraph, the right justification may become disturbed (due to insertions or deletions). To re- justify it, move the cursor to the spot to start at and type CTRL J. All lines from that spot through the end of the paragraph will be right justified. (The end of a paragraph is marked by a carriage return or the end of the file.)

HYPHENATION: Occasionally the justification routines will have a hard time making a line of text line up with the others (long words at the end of the line are the major reason). In these cases the right-justified line may look too 'stretched out'. To improve this, move the cursor to the first word on the next line and hyphenate it. To do so, move the cursor to the spot you want the hyphen inserted and type SHIFT -. Now go up to the previous line and re-justify with CTRL J. The hyphenated word should now be split onto both lines. (The SHIFT - command does the same thing as typing a - in the insert mode).

SOFT SPACES: When you type a space in your text, that is called a 'hard' space because no matter how your text is re-arranged, they will always be present. 'Soft' spaces, however, are the spaces inserted to stretch out a line so that it will be right-justified. They are not permanent, meaning that if the text is changed a little and re-justified, the 'soft' spaces might be removed and new ones may be inserted elsewhere. Sometimes you may want to touch up a line that was justified (if, for example, soft spaces were added in a place that doesn't look right to you). You can

manually delete some soft spaces and put them where you like. When deleting spaces, remember that a gap between two words is made of hard spaces (all on the left of the gap) and then the soft spaces. If you delete the hard spaces and then later re-justify it, you may wind up with no spaces between the two words. To insert a soft spaces, use the CTRL SPACE command.

BLOCK COMMANDS: FONTMASTER has four block manipulation commands: CUT, PASTE, MOVE, and OVERLAY. The CUT and MOVE commands move all text between two specified points into a 2K buffer. (Cut also removes the text between the two points--move just copies it.) The way to specify the end points is with the CTRL B command. Move the cursor to one end of the block and type CTRL B. You should see the letter **B** at the top of the screen, which indicates that one end has been marked. Now move the cursor to the other end and type either CTRL C to cut and move the text or CTRL M to just move it. If you mistakenly mark the incorrect spot with the CTRL B, just move to the correct place and mark it with CTRL B, the first will be forgotten.

Once text has been moved into the buffer with the CUT or MOVE commands it will remain there until something else is CUT or MOVEd. The PASTE command inserts the text in the buffer at the cursor. The OVERLAY command simply replaces the following text at the cursor with the text in the buffer. These two commands are the equivalent of typing the text with the insert mode on (PASTE), and with the insert mode off (OVERLAY). Notice also that these commands leave the text in the buffer intact,

meaning that once you have moved text into the buffer, you can PASTE it or OVERLAY it in many places.

DISK COMMANDS: FONTMASTER has 10 disk commands, all of which are accessed with the function keys. Most of the disk commands will ask you (on the ruler line) for one or two filenames. You may, in response, type a filename of up to 16 letters, or you may type just a return to specify the same filename as last time. In other words, if you save some text as **Forblefarb**, if you verify it, you can just type return for the filename (**forblefarb** will be assumed). Also, any time you are asked for a filename, you can hit the abort key (the left arrow) and the disk command will not take place.

SAVE and LOAD: These two commands work just like their counterparts in BASIC. SAVE saves the whole document, while LOAD erases all old text and loads the specified file.

APPEND: This command is similar to LOAD, except the specified file is 'tacked on' to the end of the existing text. You may append text as many times as you like, providing there is still some free space.

VERIFY: This command compares the text in memory <u>and the parameters</u> (see Parameter table) to the disk file specified. It is a good idea to use this command after a SAVE. If the compare is good, **OK** will be printed. Otherwise, a **Verify error** will be displayed.

ERASE: This command erases the specified file from the data disk. (This is non-reversible

so be careful!)

RENAME: This command will ask you for two filenames, an old and a new. None of the data is changed, just its name.

CLEAN DISK: After saving and deleting many files, wasted space may accumulate on the data disk. Use this command to render this space usable. (Note that, although they are not used by FONTMASTER, any relative files on the disk will be destroyed by this command!)

DISK DIRECTORY: This command will clear the screen and list the directory of the data disk. If it wont all fit on the screen, you will be asked to push a key to advance to the next portion. When complete, the screen will revert to the normal editing screen.

FONT LOAD: The C= F1 command is used to load a single font into memory. First, you will be asked the font number to load to (1 thru 8). Next, you will be asked the name of the font.

AUTO FONT LOAD: This command is used to load all the fonts needed for the present document. If a file was just loaded that used the Bauhaus and English fonts, this command would automatically load those two in the correct font numbers.

FONT COMMANDS: The following commands control fonts and special effects used in printing.

C= U: Turns underlining on or off
C= I: Turns inverse on or off (white on black)
C= E: Selects Elite pitch (12 char/inch)
C= P: Selects Pica pitch (10 char/inch)

C= C: Turns compressed mode on/off
C= X: Turns expanded mode on/off
C= S: Start sub-scripts
C= ↑: Start super-scripts
C= N: Stop super- or sub-scripts
C= >: Select 6 lines/inch
C= <: Select 8 lines/inch
C= 1 thru 8: Select new font for printing

C= D: This command turns the dot-matrix mode on or off. When it's on, the font name at the top of the screen will be replaced with **DOT MATRIX** and any printing done to the printer will be done in dot-matrix. This is for the purpose of getting a rough copy of your text in a short amount of time.

C= R: Print Rough draft. This command starts printing <u>at the cursor</u> and prints the rest of the document line by line. You may abort this command with the left-arrow key.

C= F: Print Final draft. This command starts printing at the <u>beginning of the file</u> and prints the rest of the document, breaking the text into pages and printing titles and page numbers (if selected). This command may also be aborted with the left-arrow key.

PARAMETER TABLE: Most of FONTMASTER's parameters can be viewed or changed by displaying this table. C= ← (or SHIFT C= P) clears the screen and calls up this table. To change a parameter, move the cursor to the correct line (with the up/down keys) and hold down ● or – to select the desired number or option. When done, use the abort key (left arrow) to get back to the text screen.

Data device #: The disk on which you loaded FONTMASTER is the 'System' device. When you load a font, that disk drive will be accessed. By default, this same drive is used for the 'data' device. In this configuration, you will have to switch disks to access fonts or text files. If, however, you have another disk drive, set the 'data' device number to this second drive. Fonts will then be loaded from the first drive, and text files from the second.

Left margin: Specifies how many spaces should precede each line.

Chars/line: Specifies the maximum line length. (Right margin=left margin + chars/line.)

Lines/page: Number of lines of text printed on each page of paper. Must be less than 66 if you want a title or page numbers.

Top border: Number of blank lines to leave at the top of each page before starting lines of text.

Paper length: Length (in inches) of each sheet of paper.

Line feeds: Used for multiple line spacing. Set to 0 for normal spacing.

Pause?: Pause between sheets of paper?

First page?: Print page number on first page?

First page #: Page number to start numbering with.

Page number pos.: These two parameters specify where (if anywhere) to print the page numbers. The first sets the position to the top of the page, the bottom, or off (nowhere). The second specifies to print it at the left margin, the center, the right margin, or alternating. The latter is used for sheets that will be folded into a book (so that all page numbers are on the outer edge of the paper).
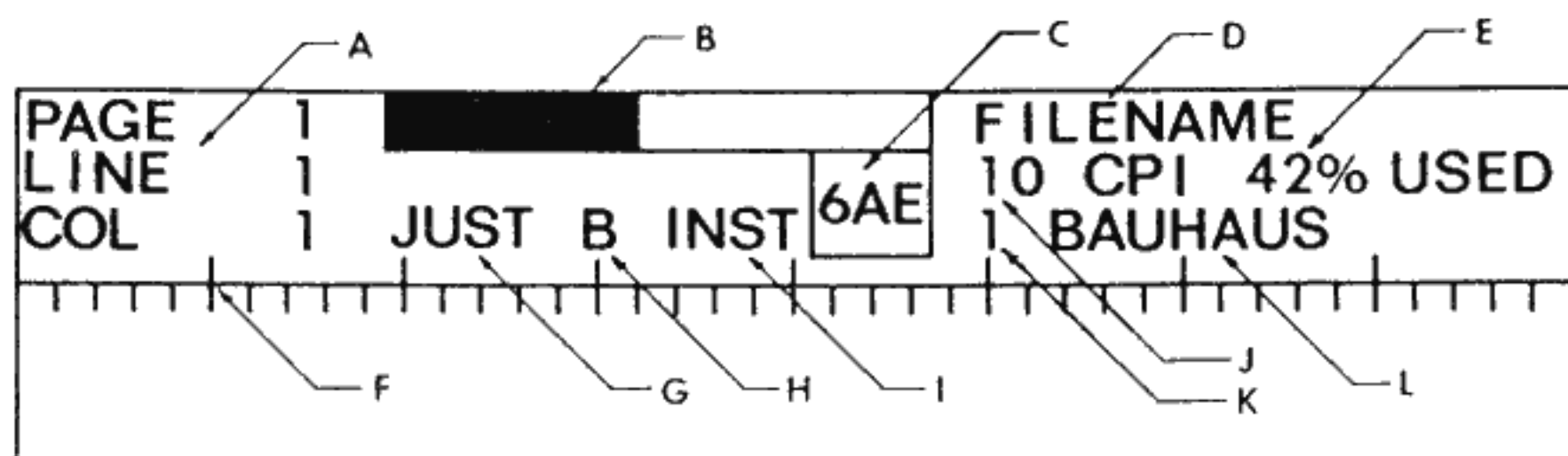
Title position: This works the same as the page position, except that the 'alternate' option puts the title on the inner edge of the page.

Epson type?: If you have a Gemini compatible printer, you should leave it **NO**. Users with Epson compatible printers should change this to **YES**. If this question is answered **YES**, the lines/inch indicator (6 or 8) will be inverse as a reminder.

 # columns, pixels/col: These two parameters establish the maximum number of pixels which your printer can print on one line (in the quad density graphics mode). For most printers, adjust only the # of columns.

Title: This is the title of the document which is to be printed on each page (if 'on'). The maximum length is 32 letters.

TITLE AND PAGE #: The remaining 5 parameters are dedicated to the title and page numbers only. For example, you can select that the title be printed in a different font than the text or that it should be compressed, etc.

```
    ┌─A                    ┌─B            ┌─C    ┌─D              ┌─E
┌──────────────────────────────────────────────────────────────────┐
│PAGE     1    ████████████▒▒▒▒▒      FILENAME                      │
│LINE     1                       ┌──┐ 10 CPI  42% USED             │
│COL      1    JUST  B  INST │6AE│ 1  BAUHAUS                       │
│         └───────┐      ┌──┐ └──┘    │  │                          │
└──────────────────────────────────────────────────────────────────┘
            F          G    H     I       J
                                      K        L
```

A - Cursor location
B - Scroll indicator
C - Print features currently being used
D - Filename of text
E - Percentage of RAM (memory) used
F - Ruler (also message line)
G - Word wrap/justification flag
H - 'Block marked' flag
I - Insert mode flag
J - Characters per inch
K - Number of the current font
L - Name of the current font

Figure 1

FONTEDITOR

FONTEDITOR is a program which allows you to create and modify your own fonts. To start the program, type LOAD "FONTEDITOR",8 and then RUN. After a brief pause, the following menu should appear:

1) CREATE A FONT
2) EDIT A FONT
3) LIST PRESENT FONTS
4) ERASE A FONT
5) CHANGE SELECTION FILE
6) EXIT EDITOR

Changing the selection file: If you type **5** and return, you should see a list of all the available fonts on the right side of the screen, and the eight choices contained in the selection file (the fonts that are loaded automatically when you start FONTS+) on the left. Select the fonts you will use most often and assign those as your choices. If you don't want to have eight loaded, you can set some of them to **-none-**. In fact, doing so will speed the loading of FONTS+.

Note concerning font choice #8: both FONTS+ and FONTMASTER treat font #8 in a special way. It is just like all the others unless you are printing lower case text in the elite pitch, in which case no space is left between consecutive letters. Note that this results in a spacing of about 13 CPI, not 12. The reason for doing this is so that certain fonts (such as SCRIPT) can have their letter joined. Therefore, font 8 is really dedicated to SCRIPT or other 'connected' fonts.

CREATING NEW FONTS

Select choice **1** from the main menu, and you will be guided through the process of transforming an idea into a font.

First of all, you will be asked if you want to start with a blank or another font. Normally, you would type **B** to start with blank characters. Sometimes, however, it is easier to create a font if you take another one and modify it. In this case, type **F**, and then type the name of the font when you are asked.

Next, the edit screen will be displayed. The 9 by 16 grid is a blown-up image of the dots in each character (most dot-matrix text is 5x7 or 7x9). This grid is what you will use to create or modify characters of a font by turning individual dots on or off. Below the grid is a near-actual- size replica of whatever is on the grid above. At the top of the screen are the words ASCII: and CHAR:. Next to these are the ASCII value of the character you are working on, and what the character normally would be, respectively. In other words, if you were in the middle of creating a font, the CHAR: might be displaying P (LC) (meaning a lower case P). If you want to create a standard font, you should create something here that looks like a **P**.

In the middle of the screen is a list of the commands you can use in the edit mode. The cursor keys are used to move a cursor (the checkerboard pattern) around on the grid. Use **S** to turn on a dot and **R** to turn it off. Changing the dots is experimental only. The pattern isn't changed in memory until you push the function key **F1**, at which time whatever is on the grid is stored as the finished product. While you are experimenting, pushing the **P** key

will cause three characters to be printed on the printer just like you have drawn on the grid. When it looks right, store it in memory with the **F1** key. You can use the **F1** key more than once on the same character if you change your mind as to how it should look. Just remember to push it at least once before moving on to the next character or the image you created will be lost. When you hit **F1**, the next character is put on the grid for editing. You can jump to a different character if you don't want to go in sequential order by typing **J** followed by the key whose letter you want to work on. Also, the + and - keys step forward and backward one character at a time.

When you are done editing (or creating), type **Q**. You will be asked what you want to name the font you just created. Enter it, or if you didn't create anything worth saving, just enter **X**. If you choose to save it, it will be verified to make sure it saved OK.

If the name you give to your font is the name of one already on the disk, you will be told so and asked if you want to replace the old font with this one. If you reply **no**, you will again be asked for a name. If you try to over-write a font that was supplied with the disk, you will get an error message because they are protected. Just save your revised version under a different name.

EDITING FONTS

Menu selection #2 (Edit a font), is very similar to creating a font, except you must start with a defined font (not a blank). Also, when you are done modifying it, you will

be asked if you want to re-save it or not. If
not, you will lose what you made. If you do
want to re-save it, the old version will be
erased and replaced (unless it is a supplied,
protected font, in which case you will be
asked for a new name for the new version-- the
old one will remain).

FONT MAINTENANCE

Selecting menu choice #3 will list all
fonts present on the disk currently in the
disk drive. Choice #4 allows you to delete
unwanted fonts to free disk space.   Again,
protected fonts supplied with the disk cannot
be erased.

Menu choice #6 exits the editor and cleans
up the disk.

APPENDIX A
FONTS+ Troubleshooting guide

SYMPTOMS	POSSIBLE CAUSES
?File not found error	LOAD "FONTS+",8,1 typed incorrectly
	One of the 8 font selections does not exist
FONTS+ won't run	,1 left off LOAD statement
	Illegal copies won't run
Device not present error	Interface not correctly connected
Nothing prints on the printer	Ribbon cable not plugged into printer
	Printer not selected (not on-line)
	Printer not turned on
Strange symbols printed (àΩঢ়ఙ⌐≠◊+Σ→Ä)	Printer is incompatible (check Appendix C)
	Printer interface not setup right (Appendix B)

Text is being printed as garbage	Using font # that no font has been loaded to
Lines of font text are double-spaced	Shut off auto line-feed on printer
Lines of text too close or overlapping	Use ?(or ?(command if you have an Epson-type
Lines of text too far apart	Use ?. or ?, if you have a Gemini-type printer
Printing only in dot-matrix	FONTS+ not activated-use SYS 49152
	Not using secondary address 10
? commands not working	Push CTRL ← (not F) to get the font command
SYS 49152 doesn't work or locks up computer	FONTS+ not in memory any more, load again
Screen dump (SYS 51000) doesn't work	FONTS+ altered or erased, load again

APPENDIX B
Troubleshooting FONTMASTER

SYMPTOMS	POSSIBLE CAUSES
FONTMASTER won't load or run	,1 left off LOAD command
	Illegal copies won't run
Device not present error when printing	Interface not correctly connected
Device not present error when using F1-F8	Disk drive disconnected or shut off
	Device # setup in param. table does not exist
Nothing prints on the printer	Ribbon cable not plugged into printer
	Printer not selected (not on-line)
	Printer not turned on
Printing is in dot-matrix	Dot matrix mode on-use C= D
Text is being printed as garbage	Using font # that no font has been loaded to
Lines of font text are double-spaced	Shut off auto line-feed on printer
Lines of text too far apart	Shut off printer auto line-feed
	Wrong printer type ('Epson type?')
Lines of text too close together	Wrong printer type
Strange symbols printed (←⌐◆ĀX÷⍑◼‖†Ē-'Σ)	Printer is incompatible (check Appendix C)
	Printer interface not setup right (Appendix B)
Printed text is distorted (Distortion)	Wrong printer type ('Epson type?')
Text file is only partially printed out	C= R command starts printing at the cursor
Character in font #8 too close together	This is normal for font 8 in the Elite pitch
FONTMASTER commands not working	Release shift lock
Illegal line or page number displayed	First page # or Lines/page changed in param

	table, go to top of file to correct.
Cursor locked up	Some commands (Center, Justify, etc) can take a few seconds if you are near the top of a large data file--be patient
No text can be inserted	No free memory left-look at Xfree indicator
Auto font load key does nothing	All necessary fonts have been loaded already
File only partially appended	Not enough free space to append entire file
Lines cut off short when printed	Check # columns, pixels/col entries in parameter table
'Word too long' error	Word is too wide to be fit within the margins
'Block too large' error	CUT or SAVE block cannot exceed 2000 letters
Abort key doesn't stop printing right away	Text is emptying from printer interface buffer

APPENDIX C
Printer Interfaces

Any printer interface that connects the Commodore serial port (where the disk drive plugs in) to a parallel printer can be used provided that:

1) It has a switch that will lock it into a transparent mode:

    Xetec GPI: Switch 3 off
    Xetec SPI or SPI/B: Switch 4 off
    Cardco B: Switch 3 up
    Cardco +G: Switch 7 off

2) or using secondary address 5 sends codes in the transparent mode.

APPENDIX D
Criteria for compatible printers

The following codes must be supported by any printer that is expected to be used as an output device for the FONTMASTER system. Any codes not supported will result in a loss of some, if not all, of the system's font features.

ESC 3 n (27,51,n): Change the line feed size to n/144 in. (or n/216 if Epson type)

ESC J n (27,74,n): Send a one-time-only line feed of n/144 (or n/216) inches.

ESC L n1 n2... (27 75 n1 n2...): Print double density graphics (n1+n2*256 col)

ESC z n1 n2... (27 76 n1 n2...): Print quad density graphics (n1+n2*256 col) (If this command is not recognized by a printer, the compressed mode can't be used.)

APPENDIX E
Number of printing passes

The number of passes required to print a line depends upon what special features are used in it. To get a rough idea, use the following formula. Start with 2 and add 2 passes for each of the following features used: Super scripts, bold super scripts, sub

scripts, bold sub scripts, and bold text. Add
1 pass for underlining. As you can see, the
number of passes increases quickly as you pile
on the features. You might consider this
tradeoff as you use the features.

APPENDIX F
Standard fonts

Bauhaus   ABCDEFGHIJKLMNOPQRSTUVWXYZ   1234567890+-\^*@[]
abcdefghijklmnopqrstuvwxyz !"#$%&'():;=<>,./?

English   ABCDEFGHIJKLMNOPQRSTUVWXYZ   1234567890+-\^*@[]
abcdefghijklmnopqrstuvwxyz !"#$%&'():;=<>,./?

Manhattan   **ABCDEFGHIJKLMNOPQRSTUVWXYZ   1234567890+-\^*@[]**
abcdefghijklmnopqrstuvwxyz !"#$%&'():;=<>,./?

Script   *ABCDEFGHIJKLMNOPQRSTUVWXYZ   1234567890+-\^*@[]*
abcdefghijklmnopqrstuvwxyz !"#$%&'():;=<>,./?

Italic   *ABCDEFGHIJKLMNOPQRSTUVWXYZ   1234567890+-\^*@[]*
abcdefghijklmnopqrstuvwxyz !"#$%&'():;=<>,./?

Shadow   ABCDEFGHIJKLMNOPQRSTUVWXYZ   1234567890+-\^*@[]
abcdefghijklmnopqrstuvwxyz !"#$%&'():;=<>,./?

Stop   ABCDEFGHIJKLMNOPQRSTUVWXYZ   1234567890+-\^*@[]
abcdefghijklmnopqrstuvwxyz !"#$%&'():;=<>,./?

Bold   **ABCDEFGHIJKLMNOPQRSTUVWXYZ   1234567890+-\^*@[]**
abcdefghijklmnopqrstuvwxyz !"#$%&'():;=<>,./?

Hairpin	ABCDEFGHIJKLMNOPQRSTUVWXYZ	1234567890+-\^*@[]
	abcdefghijklmnopqrstuvwxyz	!"#$%&'():;=<>,./?
Block	**ABCDEFGHIJKLMNOPQRSTUVWXYZ**	**1234567890+-\^o@[]**
	abcdefghijklmnopqrstuvwxyz	**!"#$%&'():;=<>,./?**
Byte	ABCDEFGHIJKLMNOPQRSTUVWXYZ	1234567890+-\^*@[]
	abcdefghijklmnopqrstuvwxyz	!"#$%&'():;=<>,./?
Stopbold	ABCDEFGHIJKLMNOPQRSTUVWXYZ	1234567890+-\^*@[]
	abcdefghijklmnopqrstuvwxyz	!"#$%&'():;=<>,./?
Pudgy	**ABCDEFGHIJKLMNOPQRSTUVWXYZ**	**1234567890+-\^*@[]**
	abcdefghijklmnopqrstuvwxyz	**!"#$%&'():;=<>,./?**
Mirror	ZYXWVUTSRQPONMLKJIHGFEDCBA	][@*^\-+0987654321
	zyxwvutsrqponmlkjihgfedcba	?/.,><=;:)('&%$#"!
Upsidedown	ABCDEFGHIJKLMNOPQRSTUVWXYZ	][@*\^-+0987654321
	abcdefghijklmnopqrstuvwxyz	?/.,><=;:)('&%$#"!
Special		

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NOTES

CURSOR MOVEMENT

⇒ or CTRL D	Right
⇐ or CTRL S	Left
⇑ or CTRL E	Up
⇓ or CTRL X	Down
CTRL ‹	Line beginning
CTRL ›	Line end
CTRL W	Up 1 screen
CTRL Z	Down 1 screen
HOME	Top of file
SHIFT CTRL Z	Bottom of file
CTRL A	Word left
CTRL F	Word right
SHIFT CTRL S	Sentence left
SHIFT CTRL D	Sentence right
SHIFT RETURN	Start of next line

BLOCK COMMANDS

CTRL B	Mark block end
CTRL M	Move text to buffer
CTRL C	Cut text to buffer
CTRL P	Paste text at cursor
CTRL O	Overlay text at cursor

FONT COMMANDS

C= B	Boldface on/off
C= U	Underline on/off
C= I	Inverse on/off
C= E	Elite pitch
C= P	Pica pitch
C= C	Compress on/off
C= X	Expand on/off
C= S	Subscripts
C= ↑	Superscripts
C= N	Normal text
C= ›	6 Lines/inch
C= ‹	8 Lines/inch
C= 1-8	Change font #

SHIFT C= Q (T) QUIT FONTMASTER

EDITING

INST	Insert a space
DEL	Delete (rubout)
CTRL DEL	Delete line
CTRL G	Gobble
RUN/STOP	Tab
CTRL =	Center line
RETURN	Put CR in text
CLR	Erase all text
CTRL SPACE	Insert soft space
CTRL L	Look for text
SHIFT CTRL L	Look again
CTRL R	Look/replace text
SHIFT CTRL R	Look/replace again

MODES

C= or SHIFT CTRL P	Parameter table
CTRL I or SHFT CTRL I	Insert mode on/off
CTRL +	Set tab stop
CTRL -	Clear tab stop
SHFT CTRL -	Clear all tab stops
C= up/down	Change text color
C= left/right	Change screen color

FORMATTING

SHFT CTRL W	Word-wrap on/off
SHFT CTRL J	Wrap/justify mode
CTRL J	Re-format

DISK COMMANDS

F1	Save
F3	Load
F5	Append
F7	Verify
F2	Erase
F4	Rename
F6	Clean-up
F8	Directory
C= F1	Font load
C= F3	Auto font load

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UPDATES

Xetec, Inc. reserves the right to correct and/or improve this manual and the related disk at any time without notice and without the responsibility of providing these updates to prior purchasers of the program. For a nominal fee, Xetec will provide updated versions to prior purchasers in exchange for their copy.

LIMITED WARRANTY

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