

A powerful word processing system for the Commodore 128.





FONTMASTER 128 Word Processing System

Fontmaster 128 programs and manual written by Marty Flickinger



2804 Arnold Rd. Salina, KS 67401 (913) 827-0685

Table of Contents

Chapter 1.		Getting Started	1
•	2	Equipment Required	
	2	Making Backup Disks	
	3	Using This Manual	
	4	Installing the Key	
	5	Loading Fontmaster 128	
Chapter 2.		Preparing the Program Disk	7
•	8	Making a System Setup	
	9	Testing Your Setup	
	9	Saving Your Setup on Disk	
	10	Multiple Setup Files	
	10	Getting Your First Printout	
Chapter 3.		Simple Editing	11
•	12	The Cursor	
	13	Help Screens	
	13	Typing Text	
	14	Correcting Mistakes	
	15	Inserting/Deleting Lines	
	15	Error Messages	
	16	Screen Protection	
	16	Aborting Commands	
	16	Quitting	
Chapter 4.		Advanced Editing	17
•	18	The Status Display	
	19	More on Text Entry	
	19	More Cursor Movement	
	21	Other Editing Features	
	21	Case of Text	
	22	Tabs	
	22	Block Manipulation	
	24	Finding and Replacing Text	
Chapter 5.		Disk Input and Output	27
-	28	The Disk Command Menu	
	32	Loading Speeds	
Chapter 6.		Text Modifiers	33
-	34	What is a Modifier?	
	35	Editing Modifiers	
	35	Modifier Descriptions	
Chapter 7.		Formatters [']	41
-	42	What is a Formatter	
	42	Formatter Syntax	
	43	Formatter Descriptions	

	52	Hyphenation	
	53	Hard Spaces	
	53	Tabs	
	54	Columnar Printing	
	55	Form Letters	
Chapter 8.		Outputting	59
	60	Printing Text to the Printer	
	60	Printing Blocks	
	61	Sequencing	
	61	Video Preview	
	62	Quick View	
	62	Dot Matrix Printing	
Chapter 9.		Miscellaneous	63
	64	Foreign Languages	
	65	Reverse Languages	
	65	Macros	
	66	Tailoring Fontmaster	
Chapter 10.		Fontmaster Graphics	67
	68	Introduction	
	68	Graphics Converter	
	69	Inserting Graphics	
Chapter 11.		Creating Fonts and Sets	71
	72	Font Creator	
	73	Editing characters	
	74	Advanced Editing	
	75	Character Set Creator	
Chapter 12.		Translating Text Files	77
Appendices			
	79	A — Troubleshooting	
	81	B — Fontmaster Messages	
	84	C — Disk Drive Error Messages	
	85	D — Disk Drive Commands	
	86	E — Custom Setup Files	
	92	F — Sample Test Printout	
	93	G — Fontmaster 128 Disk Contents	
	94	H — Font Grids	
	95	Font Lookup Tables	
	98	J — Summary of Commands	
	100	K — Summary of Modifiers	
	101	L — Summary of FormattersM — Glossary	
	103	IVI — GIOSSARY	
landa	105	N — Fonts	400
Index			108
SpellMaster	128 U	User Manual	112

INTRODUCTION

Congratulations for purchasing the Xetec Fontmaster 128 system. Now in its third generation, the Fontmaster concept has blossomed into one of the most flexible, most capable word processors for small computers. With the advent of the Commodore 128^{TM} computer, more features have been added than ever dreamed possible.

How is Fontmaster 128 different?

Dozens of word processors are available for small computers. What makes Fontmaster special? While other companies are spending their energy thinking of new ways to edit text, we spend our time dreaming of new ways to print text. The foundation for the Fontmaster system is a unique process that produces near-letter-quality fonts on many low cost dot-matrix printers.

Here are some of the many things that you can do with Fontmaster 128:

- Write and edit text quickly
- Rearrange text with easy to use commands
- Format your printed output anyway you want (over 70 instructions to control format)
- Check output with video preview
- Insert graphics of any size into your text
- Change the print font as often as you want, anywhere in your text
- Control over 15 text special effects with the press of a key
- Create and print form letters
- Print text in columns (up to four)
- Use files created with other popular word processors
- Create your own fonts (or modify ones on the disk)
- Write in foreign languages using bilingual feature
- Write using "right-to-left" languages such as hebrew

"Word processing will never be better"

Fontmaster 128 Errata

Errata for Fontmaster 128 and Spellmaster 128 versions 1.4:

- 1) A new formatter has been added. 'lk' allows you to link text files together, much like the chain text formatter, but without the "Load fonts and sets?" question. This makes possible the unattended printing of many linked text files (as long as they are all on the same disk).
- 2) The "user codes" available when printing in the dot-matrix mode now work properly. Specialized codes can be entered using the Setup customizer to access special features of your printer (such as changing color).
- **3)** The program's Okimate 20 printer driver now handles 24-bit graphics, allowing font printing on this printer.
- **4)** The word-wrap feature now handles the characters (), .'"/; and: better than before. It will not use any of these as breakpoints when word-wrapping.
- **5)** Fontmaster 128 can now be BOOTed from any drive device number. For example, type BOOT U9 to boot from device 9.
- 6) A new utility has been added to the Spellmaster disk. "EDIT USER" allows you to remove unwanted words from your user dictionary. To run it, type BOOT "EDIT USER" and follow the instructions on screen.

Remember, do not try to use Fontmaster v1.4 with Spellmaster v1.3 or vice versa. All data files (text, fonts, and dictionaries) are still compatible.

Chapter 1 Getting Started

- Equipment required
- Making backup disks
- Using this manual
- Installing the key
- Loading Fontmaster 128

Equipment Required for Fontmaster 128

You will need at least the following equipment to use the Fontmaster 128 system:

- Commodore 128
- Disk drive (1541, 1571, or equiv.)
- Printer hardware connected to the computer's serial bus or user port (Serial printer, or parallel printer with interface)
- 80 column monitor (RGB) or a 40 column with RGB adaptor cable

NOTE: Nearly all printers can be used with Fontmaster 128. Not all, however, will be capable of printing all of the special features designed into the word processor.

Making Backup Disks

Before doing anything at all with your Fontmaster disks, you would be very wise to make a set of backup copies. The disks themselves are not copy protected, so just about any disk copier will do.

If you own a 1571 disk drive, you might want to file copy all the files from the Program and Font Supplement disks onto one double sided disk. For those of you not quite so fortunate, don't tremble. The Program Disk contains the most popular of all the fonts included, so you shouldn't find yourself "disk-swapping" too much. To make this double sided disk, RUN the program called **COPY 128** on the Supplement disk and follow all directions. The resulting disk will auto-boot just like the original program disk.

One word of caution when making backup or working copies of Fontmaster 128: For the system to function properly, all the "diamond" files (those whose names begin with •) must be present, as well as the file named "V.NORMAL."

In order to prevent your disks from becoming damaged and unusable:

NEVER turn your disk drive on or off with the disk inside.

NEVER open the door or remove the disk while the green light is on (the red light on a 1541).

Using This Manual

The chapters in this manual are basically arranged in a sequential fashion. That is, the information is presented in an order of priority that suits the average user. You would be wise, therefore, to avoid skipping around too much (except for users with prior word processing experience).

Throughout this manual, several terms are used to describe certain types of user input.

PRESS: This means to push and release a certain key

HOLD: Used to indicate a key or keys which must be held while

pressing another.

For example: **PRESS:** c

means to just press "c" once, while

HOLD: SHIFT CTRL

PRESS: c

means to hold the CTRL and SHIFT keys while you press and

release the "c" key.

TYPE: This indicates you can type several characters, words, etc.

Mistakes can be corrected with the **DEL** key.

This refers to the key in the lower-left corner of your keyboard with the Commodore logo on top. This key will be used with

numerous font commands.

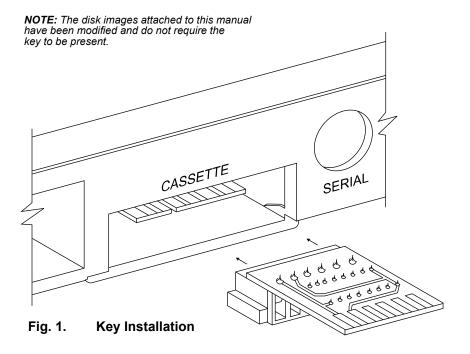
↑ ↓ ← → These arrows refer to the cursor keys near the lower right of your keyboard (remember that you must hold the SHIFT key to get ↑ and ←). The four arrow keys near the top of the keyboard do the same thing; choose the set that you prefer to use. To make things even more complicated, there is another up arrow and left arrow on the keyboard. Since the latter two keys are seldom used, assume that we mean the cursor arrow

keys when you see \uparrow or \leftarrow .

Installing the Key

Before you can attempt to use the Fontmaster 128 word processor, you must install the key. (The key is the small circuit board with a black chip on it. See figure 1.) The key plugs into the cassette port at the back of your computer. Don't yell and scream and holler if you already have an interface "doohickey" there—they can be friends. Here's how:

- Unplug anything that might be plugged into the cassette port
- Plug the Fontmaster 128 key on first (see figure 1). Make sure you
 insert the white plastic end of the key into the computer, and that the
 shiny side of the key faces upward
- If you have an interface that requires a power plug on the cassette port, plug it onto the key which now resides in the cassette port (follow the instructions in your interface's manual)



Loading Fontmaster 128

- 1. Put the Fontmaster 128 **program disk** in the drive and close the door
- Turn your computer on. If it's already on, just type: BOOT and press RETURN

In a few seconds, the screen should go to black and the Fontmaster 128 **system menu** should appear:

FONTMASTER 128

Word Processing System

W — Word processor

S — System setup

F — Font creator

C — Character set creator

T — Text translator

G — Graphics converter

B — Back to BASIC

Rev x.x © 1987 Xetec Written by Marty Flickinger

This menu will hereafter be referred to as the **system menu** — commit it to memory.

You can access any of the programs listed in the menu by simply pushing the letter which is in front of your choice.

NOTES

Chapter 2 Preparing the Program Disk

- Making a system setup
- Testing your setup
- Saving your setup on disk
- Multiple setup files
- Getting your first printout

Making a System Setup

Before using Fontmaster 128, you need to tell it what kind of equipment you have. You do this with the program in the menu called **System Setup**. This program also lets you pick your preferences for options such as screen colors and sound. Boot the Fontmaster system menu and

PRESS: s

In a moment the setup screen should appear. Let's take a quick look at the information now in front of you. In the upper-left box are several actions that you can perform. The box below it contains your preferences of screen colors, device numbers, operating mode, and sound switch. The two upper-right-hand boxes hold information about your printer interface and printer, respectively. The last box gives you an overview of the capabilities of your system as specified in the other boxes.

Your Fontmaster 128 program disk comes with two setup files that were picked to fit the most common systems. You need to use this setup program if your preferences or system deviates from those displayed in front of you now.

All information in the setup display is altered by pointing to it with the arrow (use the \uparrow and \downarrow keys) and typing " + " and " – " to increase or decrease the value. Try something easy first — change the colors if you like.

Next, adjust the **device numbers** for your system. If you have only one disk drive, set all three devices to "AUTO." If more than one, you can tell Fontmaster which drive to use for fonts, text, and character sets. For each, a setting of "AUTO" means to use the drive that was used to boot the program. Setting a specific number (such as 8 or 9) means to always use the specified drive.

Now pick the word processor's **default mode**. This can be set to "fonts" or "dot matrix." This operating mode can be changed once in the word processor, but it will come up in the mode you set here for convenience. "Dot matrix" mode is similar to most word processors — you output standard text to the printer with a possible control code here or there to expand, underline, etc. The quality and flexibility of the printout depends on what your printer can do. "Fonts" mode is the one that outputs text in various fonts, sizes, and arrangements. As you might have guessed, most of Fontmaster's most powerful printing features will be usable only in the "fonts" mode.

The **Sound** switch lets you defeat the beep that occurs when you make an error in the word processor. If you set the sound switch to "off," the screen will flash to alert you of an error.

Now it's time to tell Fontmaster about the printer **interface** you have (if any). Point in the interface box and scan through the listed interfaces with + and – until you see yours listed. If you cannot find yours, pick Xetec Supergraphix. (Of course, if your printer plugs into your computer without an interface, pick "none.") If anything appears next to the word "switches," then you need to set the switches on your interface as listed. The rest of the info in the interface box can be ignored by most users.

Finally, move to the **printer** box and choose yours from those available. Once again, if switch settings appear, set the switches on your printer accordingly. Any switches not listed can be set to your preference. Don't panic if you can't find your exact printer in the list. Chances are very high that yours works just like one of those listed. Either ask around or just experiment. One of the Epson settings would be a good guess. As a last resort, you can use the built-in customizer to fill in the data about your printer by hand. See Appendix E.

Testing Your Setup

If you are unsure if the setup displayed is going to work on your computer system, you can print a test pattern. Move the arrow to "Test this setup" and press RETURN. Compare the printout you get with the sample one in Appendix F (p. 92). If nothing prints at all or the screen just flashes, then you have a problem with your computer/interface/printer connection. Depending on the printer selected in the setup, some of the lines in the sample printout might not appear on yours—this is normal for some printers. Junk in the test print is not normal and indicates a difference between what you've setup and the system you actually have. Also, measure the space between points A and B. If it's anything but 1 inch, you have a problem with your setup. Refer to Appendix A if you need help diagnosing your problems.

Saving Your Setup on Disk

When you are satisfied with the setup displayed on the screen, you save it to your program disk by pointing the arrow to "Save this setup" and pressing **RETURN**. Now this information will be used by all programs in the Fontmaster system automatically. When finished saving, you can exit back to the system menu by pointing to "QUIT" and pressing **RETURN**. (If you try to quit without saving your setup, you will be asked if you really want to exit yet.) Now that you have saved your setup on the program disk, it is advised that you protect your disk from accidental writes by placing a

write protect tab over the notch-out in your disk. Keeping a copy of the disk stored away is also smart.

Multiple Setup Files

The setup file you have created is called **#1**. This information is used whenever you use any part of the Fontmaster system. You can, however, create a second setup (if you have a second computer system—at work, for example). All of the Fontmaster programs, when first loaded, use the information from setup #1. If you are using your second system, you must tell the program to use setup #2 (see sections for each program to find the exact command).

To work on a second setup file, move the arrow to **Setup number** and push + before you begin adjusting the data in each box.

Getting Your First Printout

Your Fontmaster 128 program disk should be ready now to do printing on your system. Before we dig into editing and commands and such, let's do something a little more fun. Follow the directions in the box below (if you have a printer that cannot do fonts, do what's in the right half of the box. Otherwise, use the left side.)

Printing	font	demo	file
----------	------	------	------

Printing dot matrix demo file

Load word	l processor	Load word	l processor
HOLD:	CTRL	HOLD:	CTRL
PRESS:	L	PRESS:	L
TYPE:	demo (RETURN)	TYPE:	dmdemo (RETURN)
Wait for "L	oad fonts & sets?"	Wait for "L	oad fonts & sets?"
PRESS:	Υ	PRESS:	N
HOLD:	ALT	PRESS:	ALT d
PRESS:	р	HOLD:	ALT
PRESS:	RETURN	PRESS:	р
PRESS:	RETURN	PRESS:	RETURN
		PRESS:	RETURN

Chapter 3Simple Editing

- The cursor
- Help screens
- Typing text
- Correcting mistakes
- Inserting/deleting lines
- Error messages
- Screen protection
- Aborting commands
- Quitting

The Cursor

Load the Fontmaster 128 word processor by pressing **W** when the system menu is displayed (in case you forgot, **BOOT** to get the system menu). When Fontmaster has finished loading, the top few lines of the screen are filled with information, and the rest is blank except for a blinking box. This box is called the **cursor**. Type the following like you would on a typewriter.

TYPE: This is not too hard

PRESS: RETURN

TYPE: Now a second line

Notice that as you type, the cursor follows, always pointing to where the next letter will go. Now, move the cursor back to the upper-left corner:

PRESS: **HOME** (Top of file)

This corner is called the "home" position.

TYPE: That

Notice that you wrote "That" over "This." One of the nice things about a word processor is that you can correct an error or change your mind without any problems. You can move the cursor to different places without writing anything by using the **cursor control keys:**

Cursor up HOLD: SHIFT

PRESS: **CRSR**↑

Cursor down PRESS: CRSR ↓

Cursor left HOLD: SHIFT

PRESS: **CRSR** ←

Cursor right PRESS: $CRSR \rightarrow$

Remember that the four cursor keys at the top of your keyboard do the same thing. Try using the cursor keys to move the cursor to various places and typing text. Notice that if you just press and release one of the CRSR keys, the cursor moves one space. If you hold it down, though, the cursor will move rapidly until you let up on the key. All Fontmaster letters and commands will repeat like this if you hold the keys down long enough.

You may have noticed that the cursor will only go down so far and then stop. This is because you have reached the bottom of your text. If you try to go lower, the cursor will be placed at the left of the line just below the last one. Now you can add another line by just typing.

You can move the cursor to this spot from anywhere instantly with one command:

HOLD: CTRL
PRESS: b (Bottom of text)

Help Screens

You may have noticed something odd. While you were holding down the CTRL key, the top of the screen changed. Push it again to see it. This part of the screen is not only used for information (which will be explained later), but is also a **help screen** area. There are four different help screens which can appear, depending on what keys you are holding down. The information in the help screens reminds you of some of the important commands and the keys you must press to use them. For example, the information that appears when you hold down CTRL shows what additional keys to push (along with CTRL) to perform various functions. Keep in mind that not all possible commands are listed in the help screens, but the most important ones are.

Typing Text

Unlike some typewriters, your Fontmaster screen is only 80 characters wide. So how do you type lines longer than this? It's simple. You just keep typing as if the screen goes on forever. But since it doesn't, when the end of the screen is reached, your text will continue on the next line. Some lines may even end in the middle of a word. Don't worry, when Fontmaster prints the text, everything will come out just the way you typed it. It just can't always be shown on the screen that way (except in the video preview—more on that later).

When typing paragraphs of text in Fontmaster, you only push the **RETURN** key at the end of the paragraph—not after each line as you would on a typewriter. When you end a paragraph with the **RETURN** key, a special mark () is placed on the screen to mark the end of that paragraph. The next line will be considered the start of a new paragraph.

Correcting Mistakes

Move the cursor to the bottom of the text (let's start with a clean line). Now type the following misspelling:

TYPE: Correctiom

To correct the "m", delete it:

PRESS: **DEL** (Delete character to left)

The "m" is gone and the cursor is ready for you to type the correct letter ("n"). What if you goofed on one of the r's? You wouldn't want to use **DEL** to delete your way back to the error, because you would have to type the rest of the word again. The fastest way is to use the cursor control keys to place the cursor on the incorrect letter and type the correct one on top of it.

Now, a common problem when using typewriters: what if you finish a word and find you left a letter out? With Fontmaster, it's simple:

TYPE: forgtten

At this point, you notice the "o" is missing. So you push $CRSR \leftarrow$ until the cursor is on the first "t" and turn the insert "switch" on:

HOLD: CTRL
PRESS: i (Insert switch on/off)

Now type the missing "o" and it should be inserted into the word. You can type as much as you like and it will still be inserted into the word. Push **CTRL i** again to shut this mode off. **CTRL i** is called a switch because it works like a light switch—it turns something on and off. Fontmaster has switches like this for several different functions.

Now suppose you accidentally type an extra letter somewhere in a word, as in:

TYPE: exxtra

All you have to do is move the cursor on top of either "x" and **gobble** it:

HOLD: CTRL
PRESS: g (Gobble character at cursor)

Each press of this set of keys will gobble one character. (Of course, if they are held down characters will be gobbled repeatedly.)

Inserting/Deleting lines

Often, you will want to make room between two lines for additional text. Just position the cursor anywhere on the line below the place you want to make room and

HOLD: SHIFT CTRL
PRESS: INST (Insert Line)

Each press inserts another blank line with an end-of-paragrach marker (λ) on it.

Remember that to delete a character behind the cursor, you typed the **DEL** key? If you do this while holding the **CTRL** key down, the whole line will be erased. Move the cursor to any line and try it:

HOLD: CTRL
PRESS: DEL (Delete line)

Error Messages

When you use a command incorrectly or try something that Fontmaster cannot allow, you will receive an error message. These messages almost always appear near the top of the screen where you usually see the line with marks on it. Also, the screen will flash to call your attention to the error message (or a beep will sound if you have audio connected and the sound switch turned on in your setup file).

Let's do something wrong on purpose just so you will know what to expect:

HOLD: CTRL PRESS: p

You should see the message "There's nothing to paste". You used a valid command, but not under the right conditions. This message will remain visible until you do anything at the keyboard, at which time the ruler reappears. (The ruler is the line with all the little marks on it—you guessed it, to be discussed later).

The ruler line is sometimes used for user input as well as for error messages: If a command requires more information, a question may appear on the ruler line which you must answer.

See appendix B (p. 81) for a complete list and explanation of Fontmaster 128's error messages and prompts (questions).

Screen Protection

The Fontmaster 128 word processor is equipped with a safety device that is designed to protect your monitor's colors. Displaying an unchanging image for extended periods of time can eventually "burn-in" the images into the phosphor of your monitor. You've probably seen this on the screens of automatic teller machines or perhaps even video games. Fontmaster will begin changing screen colors if you leave it sitting idle long enough (5 minutes). Once you begin to use it again, color cycling will quit and the normal screen colors will return.

You can turn the screen protection on or off with this switch:

HOLD: SHIFT CTRL	
PRESS: s	(Screen protect on/off)

Aborting Commands

Most commands will let you back out of them if you change your mind. Almost any time you are asked a question or requested to type something, pushing the **RUN/STOP** key will abort the command and go back to the text screen.

Quitting the Word Processor

Before deciding to quit Fontmaster, make sure you have saved your text to disk if you want to keep it.

HOLD:	SHIFT CTRL	
PRESS:	q	(Quit)
PRESS:	у	(If you are sure)

Chapter 4 Advanced Editing

- The status display
- More on text entry
- More cursor movement
- Other editing features
- Case of text
- Tabs
- Block manipulation
- Finding and replacing text

This section will introduce some of Fontmaster 128's more powerful commands. A thorough understanding of the previous chapter is going to become necessary very quickly. Persons familiar with other word processors might find this chapter to be a good starting place.

The Status Display

Up to now, for the most part we've ignored all of that information at the top of your screen. Don't think it's unimportant—we've just been avoiding explaining it until you were ready. This information, which as a whole is called the **status display**, gives you information useful when editing text and using fonts. Here's the status display with all of its parts visible:



- Title of text file in memory
- B. The cursor's present column position
- C. Macro definition/use indicator
- D. Help screen indicator
- E. Reverse screen indicator
- F. "Push" switch indicator
- G. Pitch selected (Pica, Elite, Alt, Konnect)
- H. Boldface indicator
- I. Text height selected (Normal, Micro, Tall)
- J. Italicize indicator
- K. Underline indicator
- L. Subscript/Superscript indicator
- M. Percentage of text memory currently used
- N. Text density at the cursor (characters per inch)
- O. Visual representation of text's look and size
- P. Line number that cursor is on
- Q. Size remaining in macro definition
- R. Setup file being used (#1 or 2)
- S. Block marking indicator
- T. Inst switch indicator
- U. Caps lock indicator
- V. Sample of font selected at cursor
- W. Font slot selected
- X. Font name selected
- Y. Format of font selected ("normal" or "super")

Notice that the information is divided on either side of the box near the middle of the display. The information on the left is associated with the entry and editing of text, while those on the right pertain to fonts and text special effects.

Everything in the status display describes the status of text **at the cursor** (except for the switch indicators D, E, F, T, and U). In other words, if you move the cursor to a particular place in your text, you can immediately see what font is being used there, as well as the effects used (height, width, boldfacing, etc.). Of course, as you are typing text, these indicators will change whenever you switch effects.

The purpose or function of some parts of the status display may still be unclear. Each part will eventually be explained as needed when you learn more of Fontmaster's features.

More on Text Entry

A few details about text entry must be covered in addition to the information given in the introductory section.

First of all, as you have learned, the **RETURN** key signals the end of a paragraph. This being so, if you move the cursor in the middle of a line of text and press **RETURN**, an end of paragraph mark (2) will be placed, and the rest of the line will be cleared.

If the **insert switch** is on, however, the **RETURN** key has quite a different effect. In this case, an end of paragraph mark is placed and the rest of the paragraph to the right of the cursor is moved down and made into its own paragraph.

One other oddity: if you type text on a line to the right of an end of paragraph mark (λ), the mark will be removed (because you evidently want to extend the paragraph).

More Cursor Movement

In the introductory section, you were shown some of the basic ways to move the cursor. More exist that can, when used properly, greatly reduce the time spent moving the cursor to desired locations.

First, there's more to the **HOME** key than you were first told. One press of the key will "home" the cursor to the upper left corner of the screen. A second press will move the cursor to the beginning of the text. Remember, you can find the bottom of the text with **CTRL b**.

One often-used convenience is the **SHIFT RETURN** key. This sequence, unlike the **RETURN** key alone, does not modify the text in any way, but simply moves the cursor to the start of the next line. The **LINE FEED** key near the top of your keyboard does the same thing.

Two commands have been included to allow rapid up-and-down scrolling through the text:

HOLD: CTRL PRESS: CRSR↑	(Page up)	
HOLD: CTRL PRESS: CRSR↓	(Page down)	

One push of either of these combinations will move the cursor up or down 21 lines (the number of lines in the text screen). Since these are identical to the cursor up/down commands with the addition of the CTRL key, you can use the CTRL key as a "speed-up" key for the cursor up and down functions.

The four **function keys** at the top-right of your keyboard are used for finding four different objects:

f1: Word

f3: Sentence

f5: Format line

f7: Text modifier

Don't worry about **f5** and **f7** for now, we'll get to them later. Each press of **f1** and **f3** finds the next word or sentence, starting at the cursor. Holding the **SHIFT** key while pressing them will search for the first word or sentence to the left of the cursor.

A word is defined as text surrounded by any of the following 10 characters:

?!.,:;	
ے — [space] [d. hyphen]	(Word delimiters)

A sentence is a group of words beginning and ending with any of these 4 characters:

(ړ ? . !	(Sentence delimiters)

Other Editing Features

The Fontmaster contains a few lesser-used editing commands which were not mentioned in the introductory section. First, spaces can be inserted into text at any time:

HOLD: SHIFT
PRESS: INST (Insert space)

This will work without having to turn the insert switch on, so it's perfect for quick insertion of a space or two.

Also, you can erase all text on a line to the right of the cursor:

HOLD: ALT
PRESS: L (Erase rest of line)

To erase the rest of the text file from the cursor on:

HOLD: ALT
PRESS: e (Erase rest of text)

Here's a review of the insert/delete commands:

Insert a space SHIFT INST
Delete a character DEL

Gobble a character CTRL g

Insert a line SHIFT CTRL INST
Delete a line CTRL DEL

Delete a line CTRL
Erase to end of text
Frase to end of line ALT I

Case of Text

Several features have been added to Fontmaster to aid the control of upper and lower-case text. First, there's the SHIFT LOCK key which works the same as its cousin on the typewriter. It basically holds down the SHIFT key for you until you push it again. This is okay, except that if you try to type a command, CTRL s for example, what you will get is a SHIFT CTRL s, a completely different command in Fontmaster 128. The better choice is the CAPS LOCK key at the upper edge of the keyboard. With CAPS LOCK pressed, all letters entered are shifted to upper case for you automatically, but no other keys are affected. When CAPS LOCK is down, the CAPS indicator at the top of your screen will be highlighted.

Tabs

Tab stops with the Fontmaster work just like those on a typewriter. To move the cursor to the next stop, push the **TAB** key. If no more stops are set, you will get an error message telling you so (in which case the cursor will not be moved).

To set a tab stop, move the cursor to the place to set the stop and

HOLD: CTRL	
PRESS: +	(Set tab stop)

A small line should extend above the ruler line above the cursor. This is the marker for your tab stop. To clear a tap stop, position the cursor and

HOLD: CTRL	
PRESS: -	(Clear tab stop)

If a tab stop was set at that point, it will be cleared. You can clear all the stops at once like this:

HOLD: SHIFT CTRL	
PRESS: -	(Clear all tab stops)

You can also automatically set tabs every so-many characters with this command:

HOLD: SHIFT CTRL

PRESS: +

TYPE: number of character between tabs

PRESS: **RETURN** (Set periodic tab stops)

Tab stops are automatically saved and loaded along with the text (using the **Save** and **Load** commands only).

Tab stops are really a hold-over from earlier word processors. When using fonts and special effects, this familiar tabbing feature will rarely satisfy your needs. You will learn some tabbing format controls which are better suited for use with fonts in Chapter 7, **Formatters**.

Block Manipulation

Fontmaster has several commands for removing, duplicating, and moving

blocks of text. They, as well as a few other Fontmaster commands, all require that you specify the endpoints of the block to work with. Here's how you would mark the ends of a block:

- 1. Move cursor to either of the endpoints
- 2. HOLD: CTRL

PRESS: **m** (Mark block)

- 3. Move cursor to the other end
- 4. Press the keys for the block command

The four block editing commands are as follows:

Command	Function	Keys
Erase	Remove block	HOLD: CTRL PRESS: e
Сору	Copy block into	HOLD: CTRL
Cut	buffer Remove block into	PRESS: k HOLD: CTRL
Paste	buffer Insert text from	PRESS: c HOLD: CTRL
1 4310	buffer	PRESS: p

Combining the block commands can be useful. Here are a couple:

Moving a block of text

- 1. Move cursor to one end of block and mark it with CTRL m
- 2. Move cursor to other end and use "cut" command
- 3. Move cursor where you want the block inserted.
- 4. Use the paste command (CTRL p)

Copying a block of text

- 1. Move cursor to one end of block and mark it.
- 2. Move cursor to other end, use "copy" command
- 3. Move cursor to destination of copy and use "paste"

For economy, the area of memory that is used to hold blocks of text (the **paste buffer**) is the same memory used for the font slots. This gives you a potentially large working buffer of over 32,000 bytes (even with 99% of the text memory used. The only drawback is that the size of the paste buffer at any given time is dependent on how many slots have no font loaded in them. If you are trying to **cut** or **copy** a block too large for the available paste buffer, you will see "**No memory to hold copy. Erase some font slots.**" Either work with smaller blocks or clear out the slots:

HOLD: SHIFT CTRL

PRESS: **e** (Erase font slots)

PRESS: y

Finding and Replacing

As a file grows in size, finding a particular word or phrase can become time consuming, if not impossible. For this reason, Fontmaster contains commands to locate any sequence of text you request. It works like this

HOLD: CTRL
PRESS: f (Find text)

At this point, the question **Find what?** will appear on the ruler line. Type the text you want to find and press **RETURN**. The search will start where the cursor is pointing and will stop on the first occurrence of the string that it finds. If it finds none, **Search ended** will appear.

If you want to find the same text again (the next occurrence) use

HOLD: SHIFT CTRL	
PRESS: f	(Find text again)

The addition of the **SHIFT** key to the **Find** command make it **Find again** the same string you asked for last time.

Be aware that case is ignored when searching for text. For example, if you are searching for **Pass** the cursor would stop if it saw the word **impasse**.

Several characters have special meaning when used in a search string:

Character	Meaning
? [Wildcard, will match any character Will match any delimiter
Examples: t?e at?? [th e[h	will match the and tree but not true will match attic and at will match the but not with or slither will match be here but not Beth

The **Replace** command is similar to the **Find** command, but allows you to find occurrences of a string and replace it with a second string of characters. Use it like this:

HOLD: CTRL	
PRESS: r	(Find/replace text)

Supply a search string just like you did for **find** and press **RETURN**. Next you will be asked **Replace with?** Type the text that you want to replace the old string. In this string, upper and lower cases do matter and the characters ? and [have no special meaning.

After you enter the replace string, the question **Ask before replacing?** will come up. If you press the **N** key, all occurrences of the search string will be replaced with the replace string. If, however, you answer by pressing the **Y** key, the following happens: every time an occurrence of the search string is found, the cursor will point to it and you will be asked if it's okay to replace it. Whether you replace it or not, the search will continue for more matches until the end of the text is reached. Remember that at any question, you can abort the replace command by pressing **RUN/STOP**.

NOTES

Chapter 5 Disk Input and Output

- The disk command menu
- Loading speeds

The Disk Command Menu

The ability to edit and print text is hardly useful unless some way of storing and retrieving it is possible. Fontmaster 128 gives you that ability and a handful more. Since commands dealing with disk input and output are so important (and so numerous), they have been put in a menu to help you. To use a disk command, therefore, you should display the **Disk Command Menu**:

HOLD: CTRL
PRESS: d (Disk command menu)

Once the menu is displayed, it's pretty simple to figure out what key to push (**L** for **Load font**, **1** for **Directory**, etc.). So let's discuss each of the commands in the menu one by one. We will assume that you have called up the disk command menu and pushed the key for the command.

NOTE:

It is unadvisable to write files to your Fontmaster 128 program disk or Font supplement disk unless you have backups tucked safely away. Be aware that no disk write is 100% safe.

Load font: Loads a font from disk into memory. When this command is issued, the screen will clear and the contents (if any) of the **font slots** is displayed. Font slots are the 9 possible places into which a font can be loaded. You can use as many or as few of the slots as you want, but to use a font for printing, it must be loaded into one of the slots.

The **font load** command will ask two questions. First, **Name of font?** Type the name of the one you want (see Appendix N or the Quick reference card). Note that all of the supplied fonts have all lower-case names. After typing the name, press **RETURN**.

If you can't remember the name of a font (or you're too lazy to type the name), just press **HELP** when asked for the name. A list of all the fonts on the disk will be displayed. You can then use **CRSR** \uparrow and \downarrow to highlight the correct font. Press **RETURN** to load the highlighted font or **RUN/STOP** to abort.

The second question is **Slot number?** Type the number of the slot to load to. If the slot is holding a font already, the new font will replace the old one. You can, as a convenience, just press **RETURN** for this question and the font will load into the first unused slot.

- **Load character set:** This command will load a character set from disk and use it to display your text on the screen. See the section on bilingual editing on p. 64.
- **Load fonts and sets needed:** This command can be used after a text load to automatically load all the fonts and character sets needed for that file. By "needed" we mean all fonts and sets that were loaded into the system when the file was saved to disk. For example, if you have three fonts loaded and you save a file to disk, when you later load that file and use the **Load fonts and sets needed** command, the same 3 fonts will be reloaded into their original slots.

The **Load text** command will automatically ask you if you want to do this when it has completed loading a file. All you have to do is answer **Y** to have the fonts and sets loaded.

- **Directory:** This command lists to the screen the directory of the disk in your main disk drive (the one you **BOOT**ed Fontmaster in). If you press **2** instead of **1**, the directory will be pulled from your text drive (the one you selected for text files in your system setup file).
- **Display error:** This command will read your disk drive's error channel and display the message on the ruler line.
- **Erase:** This command will ask for the name of the file to erase. Type the name and press **RETURN**. **Caution: this operation cannot be reversed**—once you press **RETURN** the file is gone. If you change your mind about erasing a file, press **RUN/STOP**.
- **Rename:** This command allows you to change the name of a file on a disk. You will be asked to enter the old name and the new name. Follow each with a **RETURN** and Fontmaster will rename the file.
- **Send disk command:** This command allows you to send any command that your 1541 or 1571 recognizes. The screen will be cleared and a > displayed. Type the command you want to send and press **RETURN**.

Example commands:

Format disk: >n0:nameofdisk,a5

Validate disk: >v0

Save text: This is the most-used method of putting text files onto disk. The SAVE command will ask you one question before saving the file—the name to give the file which will be created. If you press RETURN in response, the title of the current document will be used (ideal for saving a modified version of a file over the old version). If a file on the disk already has the name you specified, you will see File exists. Replace it?

PRESS: y to write this one over the old one

or PRESS: **n** to abort the SAVE

Since saving text with this command is so common, there is a quicker version of the same command:

HOLD: CTRL
PRESS: s (Save text)

Your tab stops are saved along with the text, as is information about what fonts are loaded (used for automatically loading the fonts back in later). The file created by a **SAVE** is a **PRG**-type file.

Load text: This command is used to load a file that was previously written to disk with the **Save text** command.

As with most of the disk commands, **Load** will ask you for the name of the file. After typing the name and pressing **RETURN**, Fontmaster will attempt to load your file. If, however, the file cannot be found or cannot be loaded (only files **Save**d can be **Load**ed), you will get an error message. The name of the file you load will become the title of the document (upper-left corner of the status display). You can then use that name with any text input/output command by just pressing **RETURN**.

If you need help remembering the name of the file you want to load, press the **HELP** key when asked for the name. A list of the files on the disk will be displayed. You can then use the **CRSR** \uparrow and \downarrow keys to highlight the file of your choice. Press **RETURN** to load the highlighted file or **RUN/STOP** to abort.

Since the **Load** command is so frequently used, a way has been provided to do it without calling up the disk command menu:

HOLD: CTRL
PRESS: L (Load text)

Merge text: This command reads in a Fontmaster 128 text file, but instead of loading it over whatever used to be there, it inserts the file into the one in memory. The location of the insertion is wherever your cursor is at the time. Your options when asked for the name are to type a filename and press **RETURN**, or to press **HELP** and highlight the desired file (just like the **Load text** command).

Verify text (PRG): This command works just like the **Load** command except that instead of loading the file into memory, the file is compared with the text in memory. You will receive a message telling you the results of the verification. As a convenience, you can verify a file you

just saved by pressing **RETURN** when asked for the name of the file. This command will only verify **PRG** files.

Just like **Load**, you can pick the name from a directory if you press **HELP** when asked for one.

Put text: The put command is very similar to the **Save** command with these differences: the file written is a **SEQ** file and it's content conforms to the standard sequential file format. This means that it can be used with other programs that use sequential files (a spelling checker, for example). Files produced with the **Put** command do not contain information about tab stops or font slot contents. If that's a problem, use the **Save/Load** commands

Get text: Get text is just like **Loading** text but it only works with **SEQ** (sequential) files. This allows you to read text files written by other word processors (as long as they are sequential files).

Put block: This is a useful command which puts a block of text (instead of all of it) to disk in a **SEQ** file. Use this command just like all the other block commands:

- 1. Move the cursor to one end of the block
- 2. Mark it with CTRL m
- 3. Move the cursor to the other end
- 4. Put the block: CTRL d then b

(Put block)

Insert file: This command will take a sequential file from disk and insert it into memory where the cursor is pointed. Its use is straightforward: position the cursor, press the insert file command, enter the name of the file, and press RETURN.

With this command and the Put block command you can transfer passages of text from one file to another. It's done like this:

Moving text between files

- Mark block of text and use Put block to save it to disk under a name such as TEMP.
- 2. Read file into memory which is to receive the text.
- 3. Place the cursor at the spot to insert the text.
- 4. Insert the block: **CTRL d** then **i** (name = **TEMP**)

If, when inserting text with this command, all of the available memory is used up before the whole file is inserted, the insertion will stop and an **Out of text memory** error will be displayed.

Verify text (SEQ): This command works exactly like the verify for **PRG** files except it can only be used with sequential (SEQ) files. Again, to verify the file you just saved, just press **RETURN** when asked for the file's name.

Loading Speeds

Your 128 computer has the ability to load data from the disk drive at very high speeds. Unfortunately, variables such as model of disk drive and commands being used can place limitations on the speed. Here's a list of the three different loading speeds, as well as a guide to when each can be expected:

- **Normal speed** This is the loading speed used if you have a 1541 or compatible disk drive. No other speeds are possible with this drive.
- **High speed** This is the speed used by most of Fontmaster's input commands if you have a 1571 or compatible disk drive. The commands that use this speed include **Load font**, **Load set**, and **Get text**. "High" speed is approximately 5 times as fast as "normal" speed.
- Burst speed This is currently the fastest load speed possible on your computer. It can only be attained if you have a 1571 drive (or compatible) and you are using the commands Load text or Verify text (PRG). "Burst" speed is approximately 10 times as fast as "normal" speed.

Chapter 6 Text Modifiers

(Special Effects)

- What is a modifier?
- Editing modifiers
- Modifier descriptions

What is a Modifier?

A text modifier is a special character which is inserted in your text to produce some type of change at that point. Some typical changes might be to switch to a different font, to turn on underlining, and many others. All of the text modifiers except a couple are inverse lower-case characters (a for example). To produce any of the modifiers, you need to hold down **C**= (lower-left corner of keyboard) and press the key for the modifier ("a" for a). Here are all the modifiers, the keys required to produce them, and what result they produce:

<u>Modifier</u>	Keys	Effect
abce • ikmn dpytuyx/↑↓★♥#12345	C= a C= b C= c C= e C= f C= i C= k C= m C= n C= o C= p C= s C= t C= w C= x C= / C= + C= - C= RETURN C= 1 C= 2 C= 3 C= 4 C= 5	Alt pitch (11 CPI) Boldface on or off Compression on or off Elite pitch (12 CPI) Foreign video character set Inverse on or off Konnect pitch (13 CPI) Micro height Normal height Overlay next 2 characters Pica pitch (10 CPI) Standard (US) video char. set Tall height Underlining on or off Butt this line with the next Expand on or off Italicize on or off Superscript next character Subscript next character Turn superscripts on Turn off sub/superscripts Use font in slot 1 Use font in slot 3 Use font in slot 5

Keep in mind that some printers are not capable of all of the Fontmaster's effects. Compressing and micro height will be the most common incompatibilities on limited printers. The only way to know for sure about your printer's capabilities is to try the effects.

You've probably figured out by now that the text modifiers are not printable characters themselves, but they change how text is printed. With proper use of the modifiers you can make dozens of different printing variations from just one font. Combine that with the fact that you are given over 50 fonts, and you really have hundreds of ways to print your text.

Editing Modifiers

Remember using the function keys **f1** and **f3** to jump through text word by word or sentence by sentence? Well, **f7** does the same thing, except that the cursor looks for the next or previous text modifier:

PRESS: f7	(Look for next modifier)
HOLD: SHIFT	
PRESS: f7	(Look for previous modifier)

The **Find** command (p. 24) will accept modifiers in the search string. That means that you can look for a specific modifier, group of modifiers, or even a modifier/text mixture. You can also use the **Replace** command to search for and replace with modifiers.

Description of Modifiers

Now, let's take a look at the modifiers and explain exactly what each one does. Following each description is an example of how to use that modifier in your text.

This is how you **X**expand **X** text

(Compress on/off)—This works just like the expand modifier except it cuts the width of characters in half when on. Depending on the capabilities of your printer, compressed printing may look rough. If this occurs, avoid using compression on superfonts.

You would Ccompress text like this

P (Pica Pitch)—This is the pitch used if none is ever specified. The occurrence of the p modifier causes text to be spaced so that 10 characters occur per horizontal inch. (Expansion or compression will alter the spacing when turned on.)

Change to ppica pitch

a (Alt pitch)—Selecting the Alternate pitch sets horizontal character spacing to 11 per inch. This is a nice "happy medium" between pica and elite pitches.

Select the apitch called "alternate"

(Elite pitch)—Using the modifier changes the character spacing to 12 characters per horizontal inch.

This is Ethe elite pitch

(Konnect pitch)—Don't laugh! "C" was already taken. This pitch prints text at approximately 13 characters per inch. The reason for its name is that no space is inserted between characters. The **script** font, for example, must be printed using this pitch if the letters are to connect fluidly.

The Konnect pitch Bruns together

(Boldface on/off)—This is another modifier that usually occurs in pairs. The first one causes the following text to stand out in bold print until another modifier shuts it off. Fonts with extremely detailed characters may not look good boldfaced because their features will be "smeared".

you Dmust try boldfacing!

(Italicize on/off)—This modifier effectively doubles the number of fonts you have by turning any font into an italic font. Use this modifier in pairs to turn italicizing on and off. Note that each font still retains its individual style when italicized, but is just "slanted" to the right.

Using Vitalics Andds class

I (Inverse on/off)—Pairs of I modifiers cause text between the two to be inverse (white letters on a black background). To overcome smearing problems on printers, inverse characters are printed in one pass only.

Trying the linverse feature

(Underlining on/off)—This modifier is another that usually occurs in pairs. All text between the two u's will be underlined. This is one modifier that causes a visible result on the screen—all text between successive pairs of u will be underlined. Also, any time the cursor is pointed at a character that is in an "underlined zone," the underline mark in the status display is lit.

See underlining on the screen

1 - 9 (Font slot selectors)—These modifiers are used whenever you want to switch to a different font. You can change at any place you want (even letter by letter). All effects selected stay the same, the font slot used for printing is the only thing that changes. For example, if you loaded manhattan into slot 3 and shadow into slot 5, you could do this:

Sall of a sud den we change fonts

(Tall height)—This modifer causes the following text to be printed at twice the height, in 4 passes. The normal line spacing of 6 lines per inch will make tall text look "crammed together." Later you will learn to modify the line spacing, but for now you can use "tails" by just inserting an extra blank line between lines of text. Superscripts, subscripts, and italicizing do not work on tall characters (although they can produce some interesting results).

Go from normal to tall!

(Micro height)—This modifier does just the opposite of 1. Text following it is squished to half the normal height. On some of the very limited printers, this is completely unreadable. Superscripts and subscripts do work with "micro" characters.

Go from normal to micro

 (Normal height)—This modifier shuts off tall height or micro height, if either is selected.

ttall Inormal Immicro Inormal

(Superscript)—The occurrence of this modifier causes the next printable character to be shifted up a partial line.

Einstein derived E = MC12

(Subscript)—This modifier causes the next printable character to be shifted down a partial line.

Sulfuric acid: HI 2SOI 4

Superscripts on)—This does the same thing as the modifier except it stays on until you shut it off, whereas only stays on for one character.

$$y = x \square (2z+1)$$

(Subscripts on)—This modifier turns subscripts on for the following text until it is shut off.

dist/time = SMAVG

(Sub/Superscripts off)—This modifier turns off either subscripts or superscripts, whichever might be on.

SHuperH and SHubH

(Overlay)—The next two printable characters following this modifer will be combined into 1. This can be used to put punctuation marks on letters or to build diacritics for foreign languages.

A simple overlay: 🖦

Since the two become one, you can use that "one" in another overlay process, and that "one" in another and so on, all of the processes merging into one printed character:

A complex overlay: ⊕0⊕-⊕/+

- ("with" line)—This modifier works differently than most of the others. If it occurs on a printed line, that line and the next will be printed with no space between. This could be useful for languages with vowel marks above or below the main letters or for "stacking" some super tall fonts. Use your imagination for this modifier. Note that a \(\formall must occur on each line that is to be butted against the next. (It's good practice to only use it at the beginning of a line for clarity).
- (Foreign set)—Text following this modifier is displayed on the screen
 in the 2nd (or foreign) character set. See p. 64 to load a foreign set.
 This modifier does nothing to the printed output, but is only for displaying two different languages on the screen at once. If you want your
 text to change languages on the screen and on the printed page, use
 a and a font slot selector (like 2) together.

U_S (Standard US set)—Text following this modifier is displayed on the screen in the main character set (usually English). Use this modifier and ● in your text files to make bilingual files easier to read. Just like ●, this modifier does nothing to the actual printout (use a font slot selector for that).

Chapter 7Formatters

- What is a formatter?
- Formatter syntax
- **■** Formatter descriptions
- Hyphenation
- Hard spaces
- Tabs
- Columnar printing
- Form letters

The form letter The variable file Form letter output

What is a Formatter?

Even the simplest of documents must be arranged into some kind of format. With most word processors, you have a table of values that you can adjust (such as margins, line spacing, etc.) Fontmaster 128, on the other hand, uses *interpreted formatter commands*. Basically what this means is you insert a type of command in your text that will be recognized and performed when the text file is being printed. By inserting formatting commands *in the text file*, you can do some really creative things with the information you're printing.

The best part about formatters is that they can be as simple or complex as you want them to be. Any formatting options you don't try to control are set for you. So if you don't even use any, the text is formatted for you in a standard way. Or, you can go hog-wild and use any of the 70 formatters to do just about anything you are creative enough to dream up. (We don't mean you have 70 different formats to choose from, but 70 commands to control format options, which equates to thousands of combinations!) Here are some examples of things you can control with a formatters: how to break text into separate lines, how to space these lines apart, where to position the printed text on each sheet of paper, and many other options.

Formatter Syntax

Before we jump into the formatters themselves, let's find out where these format controls go and their general form. Then we'll introduce each formatter, one by one.

Format controls are mixed right in with your text, similar to text modifiers, in either of two ways:

Formatter syntax

1. ⇒LM25 . ⁄	(On their own line)
in the mid⇒LM25⇔dle	(Inserted in your actual text)

The first is by far the more common of the two. In fact, until you are very familiar with Fontmaster, you should stay away from the second form. The difference is that the first one is on a line by itself, where the second is wedged right in the midst of a line of text.

Both forms **must** have the ⇒ at the front. This is a special mark that tells Fontmaster that formatters are coming up. You can produce this **Format arrow** from your keyboard like this:

PRESS: ESC

Notice, however, that the two forms of format controls end differently. The first must end with a λ which is made by pressing **RETURN**. The second must end with \leftarrow which is also made by pressing **ESC**. (Fontmaster knows which arrow you want when you press it.)

More than one format control can be used in a group in either of the two mentioned formats. Just separate each formatter with a colon (:). Here's how that would look in both possible forms:

- 1. ⇒LM25:RM57:WW.
- 2. text is⇒LM25:RM57:WW ⇔changing...

The letters **LM**, **RM**, and **WW** in the above example are the format controls. They are two letters long and can be lower-case or capital. Most of the formatters need a number to work with. That's the purpose of the numbers **25** and **57** above. Notice that the third format control has no number above it. Some controls need no numbers, some need one, others more. The specific format of each will be described in their own sections which follow.

Formatter Descriptions

; (Comment) ;Comment goes here
This is the only single-character formatter. The rest of the line
following this character is ignored, so you can put notes to yourself
or any other worthless idiocy here.

Margins

PL (Paper Length) PLn

This tells Fontmaster that your paper is *n* lines high (same as the length in inches times 6). If this number is incorrect, few other formatters will work properly. If you don't use this formatter in your file, a value of 66 (11 inches) is assumed.

- **TM** (**Top margin**) TM*n*Sets the number of lines between the top of the paper and the first line of the body of text to *n* lines. If never set, the top margin is assumed to be 9 lines.
- **BM** (**Bottom margin**) BM*n*Sets the number of lines between the bottom of the paper and the last line of the body of text to *n* lines. If never set, a value of 6 is used.
- **LM** (**Left margin**) LMn, LM+n, LM-n, LM+nT, LM-nT As you can see, there are many forms of this command, although

they all affect the left margin. When just a number follows the LM, the left margin is set to that number. The other forms are used for temporarily moving the margin to the left or right of that. The LM + n form scoots the left margin n places to the right, until you move it back with the LM + 0. Similarly, the LM - n scoots it n places to the left. Only use these + and - forms when the setting is going to be eventually changed back (as when you indent a whole paragraph). The use of the T after the number in the + and - forms causes the margin to automatically go back to its original value after printing one line.

The left margin can be set anywhere from 1 to the width of your printer. If never set, it is assumed to be 10.

RM (**Right margin**) RMn, RM +n, RM -n, RM +nT, RM -nT This works exactly like the left margin, except it determines the right margin, of course. See **LM** for a full explanation of all the forms of **RM**.

If the right margin is never set, it is assumed to be 70.

IN (Indentation) INn, IN + n, IN - n

This formatter automatically indents the first line of every paragraph the number of spaces specified. The first two forms are exactly the same (the + is optional)—they both indent the first line n spaces in. The IN - n form indents the first line n spaces to the left. To shut off indentation, use IN0. If you never use the IN formatter, no indentation is done. Remember, the λ is considered the marker for the end of a paragraph. Therefore, lines which can be indented are those which follow a λ .

Line Formation

JS (Justification) JS

This formatter causes all following lines to line up smoothly on both the left and right edges. If necessary, words will be separated slightly to make the line stretch from margin to margin. If only one word is on the line, its letters will be spread. Fontmaster will only stretch a line so far and then will give up, saying that the line will look unreadable.

It's standard practice for the last line of a paragraph to not be justified in this way, so Fontmaster doesn't do it. Also, if centering is on, the lines will be centered but not justified.

WW (Word Wrap) WW

Word wrap is similar to justification, but the right edge will usually be ragged. Word wrap gets its name because it will wrap a word down to the next line rather than letting it get split between two lines. This mode of printing is assumed unless you specify **JS** or **NO**.

NO (No word intelligence) NO

This formatter causes all following lines to be filled as full as possible, not worrying if it splits words between two lines.

ER (Edge right) ER

This formatter makes all following lines butt up against the right margin. This may leave the left edge looking ragged if justification is not on.

EL (Edge left) EL

This makes all following lines butt up against the left margin, possibly leaving the right edge ragged. This is the normal method, and is assumed unless you specify otherwise (**ER** or **EO**).

EO (Edge outside) EO

This causes all following lines of text to be butted up against the left margin on pages with even page numbers, and against the right margin on odd-numbered pages. This is to allow text to be forced to the outside edge of a book. You will probably find this more useful with page numbers or headers a little later.

CY (Centering on) CY

This formatter immediately turns on the centering feature. Until shut off, every line of text printed will be centered within the margins you have set. All effects such as expansion, compression, and pitches are taken into account when centering the line.

CN (Centering off)

This shuts centering off again.

RY (Reverse on) RY

This format control turns on the reverse output function. When on, this causes every line to be reversed (flipped backwards). The characters aren't flipped backwards, just the line of characters. Here's a line with reverse off and then with reverse on:

Exactly backwards!

!sdrawkcab yltcaxE

This is used for foreign languages that read from right to left. You can print text as if in a mirror by using the **mirror** font with the reverse mode turned on. **NOTE:** If the screen is reversed at the time the printout is made, all lines will be reversed. In this case, **RY** and **RN** have no effect.

RN (Reverse off) RN

This shuts the reverse mode off again.

Text Spacing

PY (Proportional on) PY

This formatter simply turns on the Fontmaster's proportional print

feature. Proportional printing means that a character's width determines how close the next character should be. The result is text which is easier to read. Compare these:

Regular: He I I o Proportioned: Hello

PN (Proportional off) PN

This turns proportional printing off again.

CS (Character spacing) CSn

With this format control, you can directly specify the number of microgaps between letters. For example, pica pitch uses 6 microgaps between. This command acts just like one of the pitch modifiers (k, e, a, or p) because it will override any pitch set with one of the four modifiers, and they will override any character spacing set with this formatter.

LS (Line spacing) LSr

This modifier allows you to change the gap between lines of text. The number following **LS** is the number of lines per inch (vertically) that you request. If never specified, Fontmaster assumes 6 lines per inch. You can specify a number anywhere from 1 to 100 lines per inch.

LI (Line increment)

This formatter is similar to the line spacing (**LS**) control, but is more flexible because it lets you directly specify the number of increments between lines. This formatter is not for beginners, as it requires a knowledge of the size of your printer's increments.

BL (Blank lines) BLn

The purpose of this formatter is to save memory. The number following **BL** is the number of blank lines you want placed at that spot in your text. This is much more memory efficient than typing a bunch of **RETURNs**.

Headers/Footers

Headers and footers are special lines of text that are placed respectively above and below the regular body of text. Their common uses include titles, page numbers, and chapter headings. Fontmaster takes care of working them into each page of print, but you are given power to dictate their use with the following group of format controls.

HP (Header position) HPn

This formatter specifies how many lines above the main body of text the header should appear. **HP1** will put the header on the line directly above the first line of text. The header position cannot be larger than the top margin (set with **TM**). If no header position is set, a value of 4 is assumed.

FP (Footer position) FPn

This control sets the number of lines from the bottom of the main body of text to the footer line. **FP1** will place the footer on the line right after the last line of text on the page. A footer position of 3 is used unless you specify your own.

HL (Head/foot left margin) HLn

This formatter sets the left margin for both headers and footers. In most cases you won't even need to use this because the header and footer margins will "follow" any margin settings for the main body of text. In other words, if you set the left margin for text to 7, the header and footer will also have a left margin of 7.

In some cases, you may want to control the header and footer margins independently of the margins for the body of text. For those cases, use this formatter, and **HR** for the right margin. These two formatters will cause the header/footer margins to become 'locked' (they will no longer follow margin changes made for the body of text).

HR (Head/foot right margin) HRn

This formatter will set the right margin for headers and footers, and will lock them so they no longer follow regular margin settings for the body of text.

UL (Unlock H/F margins) UL

Use of this format control will unlock the header and footer margins so that they will once again follow margin settings made for the main body of text. See **HL** and **HR** above for more info on locked margins.

H= (Define header line) H=This is a header

This control will turn header usage on as well as telling Fontmaster what text to use in the header line. To shut headers back off later, set the header to nothing:

H=

F= (Define footer line) F=Sample footer

Use of this control will start footer usage, with the footer line set to the text following the "=". Set the footer to nothing in order to shut footers off.

Header/Footer Special Codes

Headers and footers normally have the following characteristics:

Centered Proportional off Pica pitch Compress off

Normal height Expand off
Font slot 1 Boldface off
Inverse off Underline off
Italic off

Text modifiers are definitely not recommended for use in headers and footers. Therefore, a special set of codes exists solely for the purpose of selecting text effects in headers and footers only. They may have a different meaning (or none at all) when used in normal text. Any effects set with these codes are internal to headers and footers only—they won't affect your normal text.

Codes Function in headers/footers

/p Proportional printing on /I Edge left /r Edge right Edge outside (alternate even-odd) 0\ Konnect pitch /k Elite pitch /e Alternate pitch /a Compress on/off /c Expand on/off /x /t Tall height /m Micro height Normal height /n /b Boldface on/off /i Italic on/off Underline on/off /u /1 Use font in slot 1 /9 Use font in slot 9 **/**Ph Overlay next 2 characters 11 Produces a slash (/)

Print page numbers here

The last item, \Box , is made by pressing the \leftarrow (no, not CRSR left, but the key near the upper-left of the keyboard).

Notice that the \square in headers and footers is not a variable box, but signals to plug in the page number. For example, - \square - as a header would print the page number between dashes on each page.

P# (Page number) P#n

When you start a printout, the page number of the first page is set to 1, and then automatically increases for each new page. You can

force to start counting from a specific number by listing it after the **P#** formatter. You can do this at the start of the file or anywhere within.

RO (Roman numbering) RO

This format control will switch page numbers to the Roman number system. This is useful for prefaces of books (you know, when the pages are numbered i,ii,iii,iv, etc.).

DC (Decimal numbering) DC

Use of this formatter will switch page numbers back to the decimal system you are used to. Unless you switch to Roman, the decimal system is already selected for you.

Columnar Formatters

See **Columnar Printing** on p. 54 for more information on arranging your text into columns.

C# (Set number of columns) C#n

With this formatter you tell Fontmaster how many columns of text you want the text broken into. You can specify, 1,2,3, or 4 columns. The only other thing you must do is specify the margins for each column. Column 1 always uses the normal left and right margins (set with **LM** and **RM**). Use the following six formatters for the other three columns.

2L (2nd col. left margin) 2Ln

This formatter defines the left edge of the second column. Columns can overlap, but usually set this at least 2 greater than column 1's right margin.

2R (2nd col. right margin) 2Rn

Use this formatter to define the position of the right edge of the second column.

3L (3rd col. left margin) 3Ln

Use this formatter to define the left edge of the third column. Although columns can overlap, for maximum readability, you should set this at least 2 greater than column 2's right margin.

3R (3rd col. right margin) 3Ln

Use this formatter to define the position of the right edge of the third column.

4L (4th col. left margin) 4Ln

Use this formatter to define the left edge of the fourth column. Although columns can overlap, for maximum readability, you should set this at least 2 greater than column 3's right margin.

4R (4th col. right margin) 4Rn

Use this formatter to define the position of the right edge of the fourth column.

Tabs

TA (Tab to column) TAn

This formatter tabs the following text to the *n*th column. If you are already past that column, no tabbing is done.

AT (Auto tab set) ATn

This formatter sets the position of an auto tab to the current position on the paper. The *n* specifies which auto tab to set (1 thru 10). See the Tabs section on p. 53 for more information on auto tabs.

T# (Tab to auto tab) T#n

After setting an auto tab with **AT**, use the **T#** formatter any time you want to tab to that position. Specify the auto tab you want (1 thru 10) following **T#**.

Graphics

CO (Cutout in text) COn,w,d

This formatter will begin a cutout in your text. A cutout is a hole left in the middle of your text. A good use for this feature is if you want to paste a picture in later (or whatever). The cutout begins on the first line of text that follows this formatter. The cutout starts at the *n*th column, is *w* columns wide, and will last for *d* vertical graphics units (VGU's). A VGU is approximately 1/10 of an inch.

AG (Auto graphic Insert) AG:file

Use this formatter anywhere in your text to begin insertion of the graphic called *file*. The graphic must have been made with the graphics converter (see chapter 10). Also, the graphic must be on the disk in the disk drive (if you need to swap disks, use the **HA** formatter just before inserting the graphic). See p. 69 for more info about graphics insertions.

AD (Auto double) AD:file

Begins insertion of the graphic called *file*. The graphic is printed twice it's normal width.

IG (Insert graphic) IGn:file This formatter begins insertion of the graphic called file at column n.

ID (Insert double) IDn:file Works just like IG, except the graphic is printed double-wide.

NY (Negative — yes) NY

Use of this formatter causes all following graphics insertions to be printed in negative (white becomes black, black becomes white). Depending on the source of the graphics imagery, you may need to use this formatter to have the graphics come out looking right.

NN (Negative — no) NN Shuts off the graphics negative option.

SY (Superimpose — yes) SY

Following this formatter, all graphics inserted into the document will be printed right on top of the text, instead of formatting the text around it.

SN (Superimpose — no) SN

Causes text to be formatted around any graphics that are inserted. This is the normal method.

Miscellaneous Formatters

MS (Multiple spacing) MSn

This formatter sets the line spacing to single-spaced, double-spaced, etc. Use a value of 1 for SS, 2 for DS, 3 for TS, and so on.

HA (Halt printing) HA HA:message

When Fontmaster encounters this formatter, printing will stop and you will get a message asking you to press a key when ready to continue. You can put an optional message after the **HA** and it will be displayed when printing halts. Use this formatter if you need to change something in the middle of a printout (daisy wheel, ribbon color, etc.).

CH (Chain to text file) CH:next file

When printing text, if Fontmaster encounters this format control, the file listed after the colon is loaded into memory from disk and printing continues at the start of that file. This is useful when printing large documents that must be split into several smaller files.

LK (Link to text file) LK:next file

Works just like **CH** but without asking the "Load fonts and sets?" question. This makes possible the unattended printing of many linked text files (as long as they are all on the same disk).

EX (External file print) EX:extfile

This formatter causes printing to temporarily stop while the data from the file you listed is dumped to the printer. The file must be a sequential (**SEQ**) type. Since Fontmaster blindly passes all the data in the file to your printer, you must make certain that all the codes conform to your printer's format.

CM (External compensation)CMn

This formatter is for use solely with the **EX** external file print control. Depending on the data in that file, the printer paper may be moved by an uncertain amount. Fontmaster must be informed about this paper shift if it is to keep printing correctly on your paper. Use **CM** followed by the size of the paper shift in printer paper increments. This is a complex task which should not be attempted by those with weak stomachs.

DI (**Direct to printer**) DIx,n,n...

This formatter lets you send any codes you want to your printer. Keep in mind that all font printing is generated by Fontmaster, so this command won't change the look of printed text unless you are printing in the dot matrix mode. The first number following the **DI** is the secondary address to use while sending this data. If you don't know what a secondary address is, consult your printer interface manual. When in doubt, use a 5. The rest of the numbers are the decimal values which will be sent. Send as many as you want, separating them each with a comma. After the last one, press **RETURN**.

NP (Next page) NP NPn

The NP formatter causes printing to immediately jump to the next piece of paper. If a number is included (as in **NP4**), printing jumps to the next page only if not enough room is left on the current sheet to print that number of lines.

SS (Single sheets) SS

Use of this format control will instruct Fontmaster to pause at the end of each page and wait for the insertion of a new piece of paper. If **SS** is not used, continuous paper is assumed to be used.

SO (Sub/superscript offset) SOn

This formatter lets you change how much of a shift occurs with superscripts or subscripts. You can set the shift to any size you want by placing the number of increments after the **SO**. If you don't set this offset size, Fontmaster will pick a value that will look good on your printer (somewhere between 2 and 6 units).

UO (Underlining offset) UOn

This formatter lets you change the gap between underlining and the bottom of the characters. You can set this gap by using **UO** followed by the gap size in printer paper increments. To avoid problems use a gap size no larger than 8. If you don't ever set this gap size, Fontmaster picks a value that will suit your printer (around 2 units).

ED (Eat data) ED

This formatter is used in form letters to "absorb" pieces of data from the variable file without printing them. Each **ED** will use up the data that would normally fill one variable box (\Box) .

Hyphenation

Sometimes after printing your text, you may see that it would have looked better if you had hyphenated a certain word. You could just insert a dash (—) in the word, which would work great. But, what if later you insert or delete a few words above that spot. Then your word broken by a dash will probably appear in the middle of a line, with a dash still stuck in its middle.

The solution is the **discretionary hyphen**. Sounds impressive, doesn't it—well, it is. A discretionary hyphen is always visible on the screen, but is only printed if the word needs to be split. In other words, it's an indicator of where to split the word. If the word happens to fall in the midst of a line, the discretionary hyphen is not printed (because the word is not being split). Here's how to produce one:

HOLD: ALT	
PRESS: -	(Discretionary hyphen)

This type of hyphen is a little shorter on the screen than a regular dash.

Hard Spaces

When Fontmaster attempts to break your paragraphs of text into separate lines, it will break a line at any space it can find (as well as other characters). This can present a problem if you want a space between two things, but don't want them separated. To prevent their separation, use a **hard space** (_) instead of a regular space. The hard space prints just like a space, but cannot be used as a line break point. Here's how you make one:

HOLD: CTRL	
PRESS: SPACE	(Hard space)

Tabs

Remember learning how to use tabs earlier in this manual. Those "type-writer" style tabs are OK, but if you print with any effects like different text sizes or justification, they will fall flat on their face. The tabbing formatters included in Fontmaster don't have this problem, but take a little more knowledge to use. Once understood, however, they can do things that leave the "typewriter" tabs with their mouths hanging open.

The first thing to get straight about the tab formatters is how they must be used in your text. You must always stick them in the middle of your text, right where you want them to take place (they will do nothing on a line of just formatters). Here's the simplest one, **TA** as it might look in use:

Price per gallon: ⇒TA50 ←\$1.13

Notice that **TA50** is inserted right in the text surrounded by format arrows. Both arrows are made by pressing the **ESC** key (Fontmaster knows which one to give you). What this example does is to print the price in the 50th column on the paper. **TA** is the manual tabbing formatter. **HINT:** for your convenience, you can enter ⇒TA in one step by holding SHIFT and pressing **TAB**.

Fontmaster also has two formatters for automatic tabbing. Here's how they work: let's say you have some headings and columns of data to be put under them. Instead of using **TA** and the column number every time (a burden remembering all the column numbers), you can program an auto tab at each column position like this:

This sets auto tab 1 at "cost" and 2 at "total." Now, whenever you want to tab to a certain column, just use the auto tab formatter:

4⇒T#1 ⇔\$3.25 ⇒ T#2 ⇔\$13.00

You don't necessarily have to use the auto tabs in numerical order, nor do you have to use them in the same order you set them (you could, for example, have skipped from the 1st to the 3rd column).

Columnar Printing

One of the unique features of the Fontmaster word processor is its ability to format printed matter into columns, such as you would see in a newspaper. Up to four colums are allowed. Unlike your newspaper, each column does not have to be the same width. In fact, they can even overlap.

Here's how it works. You use a **C#** formatter followed by the number of columns to use (see p. 49). At this same time, you set the left and right margins for each column using these formatters: **LM**, **RM**, **2L**, **2R**, **3L**, **3R**, **4L**, **4R**. When printing text, Fontmaster prints until it runs out of room, at which time if you have set the number of columns to 2 or more, it will try to move the paper back up and start on the second column. Some printers can't do this automatically. If yours can't, Fontmaster, knowing this, will

stop printing and request that you manually roll the paper back up to the previous performation.

Tips on manually backing up paper:

- 1. Always wait until printer stops printing before moving the paper
- Pull gently on paper supply while slowly backing-up paper with knob
- 3. Be consistent in lining up the head with the performation. Position the head the same way you do when starting a printout

You can force Fontmaster to start printing at the top of the next column with the **NP** (next page) formatter. Setting the number of columns back to 1 (**C#1**) will cause Fontmaster to return to single-column printing as soon as it can.

For an example of how to use columnar formatters, load the text file called *column demo*.

Form Letters

Another powerful feature of the Fontmaster word processor is its capability to produce form letters. A form letter is a document that is sent to many people with only a few items changing for each letter. You find good examples of form letters in your mailbox daily:

Dear Mr. Johnson,

Wouldn't you be the envy of all your friends driving around Icre Grove in a brand new 1988 Fiasco GT? Just fill out and mail the attached card within ...

The same letter was used to print a personalized letter to thousands of people. The only information that changed from one letter to another is the name of the recipient and the name of his city. This letter was created with "holes" where the name and city go, which are then filled in with data from a disk with thousands of people's name and address. With this technique anyone can send a large number of seemingly personalized letters with just one common letter.

Here's how you could create the same form letter with the Fontmaster:

Step 1: The Form Letter

Type the form letter just like you would a normal letter (using formatters, modifiers, get as fancy as you want). When you come to the places where the data will vary from letter to letter, type a variable box.

PRESS: ←	(variable box)
----------	----------------

This is one of those "text holes" we were talking about. The letter, in its simplest form, should resemble this:

Dear \square ,

Wouldn't you be the envy of all your friends driving around \square in a brand new 1988 Fiasco GT? Just fill out and mail the attached card within...

Now save the letter on a disk so that you can proceed to the next step.

HOLD: CTRL PRESS: s

TYPE: **junkmail** (Name of this form letter)

PRESS: **RETURN**

Step 2: The Variable File

The variables or "text holes" in a form letter are filled with text from a separate file—the **variable file**. To create data to use with the form letter you just made, clear all text (**SHIFT CLR**) and enter the following:

TYPE: Mr. Johnson
TYPE: Icre Grove
TYPE: Geddy Shaw
TYPE: Moon City
TYPE: Han Tarlyck
TYPE: Condoview
PRESS: RETURN
PRESS: RETURN
PRESS: RETURN
PRESS: RETURN
PRESS: RETURN

Notice that you must press **RETURN** to mark the end of the data to fill each variable box. In this example, we only entered three groups of data. You can enter as few or as many as you want.

Now you must save this data onto disk so that it can be used with the form letter you created. Variable files *must* be sequential types so use the **Put** text command:

HOLD: CTRL PRESS: d

PRESS: **p** (Put text)

TYPE: **people** (name of this variable file)

PRESS: **RETURN**

After this file is put to disk, you are ready for the final step:

Step 3: Form Letter Output

Before you can print your form letter, you must load it back into memory:

HOLD: CTRL PRESS: L

TYPE: **junkmail** (or whatever name you used)

PRESS: RETURN

You can now output your letter, in its final form:

HOLD: ALT PRESS: p

First, you will be asked how many copies to print. You know there's three, so type 3 and press **RETURN**. If you don't know how many copies you want, but you want all the data in the data file used, enter ?.

Next, you will be asked for the **Variable filename**. Type **people** (if that's the name you used) and press **RETURN**. Fontmaster will check to see if the variable file exists on the disk, then will begin to output your letters, one at a time.

When using form letters, you must be sure that the variable file has the correct number of data items for each letter. If the number is greater or less than the number of variable boxes in the form letter, your letters will print with data plugged into the wrong boxes—a mess! It's up to you to ensure a one-to-one correspondence between variable boxes in the form letter and data items in the variable file.

If you already have a data file created, and you need to write a form letter that just uses some of the data for each letter, you can throw away parts of the variable file. Let's say for example, that you have a variable file of many people, their addresses, and phone numbers. You want to write a form letter that prints each person's name and address at the top, but you never need to use their phone number. You can't just ignore the phone number, or it will be read and printed in place of the person's name on the second letter. Somewhere in the form letter, after the "address" variable box, you need to "throw away" the phone number—read it in to use it up, but not print it. You can do just such a thing with an eat data formatter (ED). Each ED will eat one boxworth of data from the variable file (remember to place a format arrow, \Rightarrow , in front).

Also, in variable files, you can combine multiple data items onto the same line. All you have to do is separate each one from the next with a | separator (made with **SHIFT** =). The last item of data on each line should still be followed by a λ . To summarize, every data item that is to fill one variable box must end with a | or a λ .

NOTES

Chapter 8 Outputting

- Printing text to the printer
- Printing blocks
- Sequencing
- Video preview
- Quick view
- Dot matrix printing

Printing Text to the Printer

Your final step after typing and editing text is usually printing a hard copy to your printer. The Fontmaster word processor has only one command for printing, but it can be used in a variety of ways. The simplest form of the printing is as follows:

HOLD: ALT

PRESS: **P** (Print text)

PRESS: **RETURN** PRESS: **RETURN**

The first **RETURN** (in response to "Number of copies") is a shorthand way of answering "1." If you want more than one copy, enter it before you press **RETURN**.

The second **RETURN** means that you have no variable file to be used while printing. Unless you are printing a form letter (data merging), just answer this question with a **RETURN**.

If you want to abort the printout before it's through, hold down the **RUN/STOP** key until you see **Push "Y" to abort, other to continue**. If you press "Y," the printout will be terminated at that spot. Pressing anything else will resume the printing from where it stopped. **NOTE:** If your printer or interface has a buffer, printing may continue for a line or two after you tell Fontmaster to abort.

Fontmaster may give various messages while printing, depending on the formatters used in the file and errors which may be detected. For help understanding these messages, refer to Appendix B (p. 81).

Printing Blocks

You don't always have to print all the text in memory. If you mark a block of text before using the print command, only that block will be printed:

Printing a block of text

- 1. Move cursor to one end of the block of text
- 2. Mark that end with CTRL M
- 3. Move cursor to other end of block
- 4. Print text (ALT P)

Fontmaster may sit and think for a moment before it starts printing your block of text. During this time, it's doing some calculations so that it can print your block just as if you had printed the whole file and kept just the block.

Sequencing

Fontmaster 128 has the ability to print sequential numbers. This can come in handy if you want to print serial numbers, numbered items, etc. All you do to use sequencing is to put a variable box (\Box) in your file wherever you want the next number in sequence. If you just use one box in a file, but print multiple copies of it, each printout will use the next higher number.

You may be confused at this point, because a \square is used to read data in from a variable file. That's right. Let's clear things up: variable boxes will be replaced with **A)** the next number in sequence if no variable file was entered at the start of the print, **B)** data from the variable file if one was specified at the start of the print, or **C)** the current page number if the box appears in a header or footer.

Normally, the first □ is replaced with a "1," the second with a "2," and so on. You can specify the number to start with by entering it when asked for the name of the variable file (when you first start the printout). If you just press **RETURN**, numbering will start at 1.

Video Preview

The video preview is a quick and economical way to proofread or check output formatting. It's like "printing" your text to the screen. All printing features of Fontmaster 128 work in the preview—in other words "what you see is what you get." The only difference between the video preview and the actual print is seen when doing multi-column printing. Due to the "top-to-bottom" nature of the preview, it can't be backed up like your printer paper can. The columns are previewed accurately except that the surrounding columns won't be visible as they will on paper. Another difference in the preview is that paper perforations are shown for reference.

Using the preview is almost like using the print command:

HOLD: ALT
PRESS: v (View)
PRESS: RETURN
PRESS: RETURN

You can pause the video preview at any point by holding down the space bar. Also, you may have noticed that due to the width of the characters in the preview, you can only see about 53 of the columns on your printer (most printers are 80 columns wide). To see the right part of the paper you will need to scroll the preview screen to the right:

HOLD: \rightarrow (Scroll view)

(In this case you **must** use the right arrow at the top of your keyboard).

As soon as you start scrolling to the right, the preview's vertical motion is stopped so that you can inspect the output. Use \leftarrow if you want to scroll back to the left. The \uparrow and \downarrow keys immediately scroll the output to the left and right edge, respectively. When you are ready to continue downward in the preview, press the space bar.

You can abort the video preview at any time:

PRESS: RUN/STOP (Abort preview)
--

When the text in memory has all been displayed, scrolling will stop and Fontmaster will wait for you to press **RUN/STOP** to go back.

When returning from the video preview to the normal editing screen, any character sets that you have loaded will automatically be reloaded (they are lost during preview). Even if you haven't loaded any, the standard one (called "NORMAL") will be loaded. If Fontmaster has trouble finding a file when ending the preview, an error message will appear. Insert the disk that contains the listed character set and press any key.

If an error occurs during the video preview, Fontmaster will immediately go back to the normal editing screen and display the error on the ruler line.

You can preview a block of text by marking the block before starting the preview (just like printing a block).

Quick View

The quick view is a form of the video preview in which just the text displayed on the screen is displayed. Use this command to quickly check the formatting of tables, charts, graphics, or whatever:

HOLD: ALT	
PRESS: Q	(Quick preview)

Dot Matrix Printing

You can use Fontmaster just like a conventional word processor if you change to the **dot matrix mode**:

HOLD: ALT	
PRESS: D	(Dot matrix on/off)

In this mode, you can't use fonts and you can't preview text. Most modifiers, however, should produce expected results. In other words, a should turn on underlining, should boldface, etc. If a modifier doesn't work as expected, your printer won't do that feature, or your printer setup file isn't accurate for your printer. You can change the codes sent in the dot-matrix mode by using the customizer (see p. 91).

Chapter 9 Miscellaneous

- Foreign languages
- Reverse languages
- Macros
- Tailoring Fontmaster

Foreign Languages

Included with Fontmaster 128 are numerous foreign language fonts. These fonts are used just like any others, but they do present one problem. Usually the characters in a foreign language font don't correspond to the English characters we're used to on the keyboard and screen. To edit in a foreign language could therefore be a nightmare. Fontmaster, however, gives you with each foreign font a special set of characters that are used when displaying the file on the screen. This special character set must be loaded into fontmaster before it can be used:

HOLD: CTRL PRESS: D

PRESS: **C** (Load character set)

TYPE: name of foreign language

PRESS: RETURN

PRESS: Y

If you need help finding the set you want, press **HELP** instead of typing the name of the language. You can then pick the one you want by highlighting its name (with ↑ and ↓ keys). Then press **RETURN** to load it.

If you don't like the characters for a foreign language font, or if you make your own font and it needs its own character set, see **Editing Character Sets** on page 75.

You won't see any change on the screen until you give Fontmaster the command you use your foreign character set:

HOLD: **C=**PRESS: **F** (Use foreign set)

This will put a • in your file. If you are working with a completely foreign file, just put one of these at the beginning of your file and forget about it. If your file contains both English and a foreign language, use a • whenever you want to switch back to the foreign language. To switch to English:

HOLD: **C=**PRESS: **S** (Standard US set)

This will produce a ${}^{U}_{S}$ symbol in your file. **NOTE:** The \bullet and ${}^{U}_{S}$ modifiers only affect how text is displayed on the screen. You must also use modifiers to change the font slots (such as 4) if you want the actual font to change when printed.

Fontmaster also has what is called a **With flag**. Some foreign languages might benefit from its use, because it causes two lines of print to be butted up together. This is what the with flag looks like: "You produce it from the keyboard like this:

HOLD: **C=**PRESS: **w** ("with" flag)

Some languages require extra markings above and/or below certain characters. If you butt two lines together, you can put the main characters on one and the special marks on the next so they will line up. Also, doing graphics or very tall fonts would be possible by stacking consecutive lines with the "with" flag vertically butting them together.

Reverse Languages

Some foreign languages are read from right-to-left; these languages present a special problem, but not to Fontmaster 128. Just turn on the **reverse screen** switch:

HOLD: **CTRL**PRESS: → (Reverse screen on/off)

When this switch is on (see the **RVRS** indicator lit in the status display), Fontmaster reverses its thinking so that you can easily type and edit backwards. Remember to load the character set for your foreign language.

Some of these reverse languages read from right-to-left *unless you are typing a number*, in which case they read left-to-right. If this is the case with the language you are using, turn on the **Push** switch:

HOLD: SHIFT CTRL
PRESS: P (Push switch on/off)

As long as the **reverse** and **push** switches are both on, text that you type will be entered from right-to-left, and numbers will enter from left-to-right. The **PUSH** indicator in the status display lights to show that the switch is on.

Macros

A macro is a key which can be "programmed" to represent up to 64 keystrokes. Fontmaster has four of these that you can use to enter words or command sequences that you find yourself typing often. The four macros correspond to the function keys **f1 f3 f5 f7**. To define one, hold **SHIFT CTRL** and press the function key. Now type the text or commands

that you want to be assigned to that macro key. When you are finished, press **SHIFT CTRL RUN/STOP**. Now any time you want to "call up" that macro, just hold **CTRL** and press the correct function key. Notice that when defining or calling a macro, the **MACRO** indicator in the status display flashes. When defining a macro, a number appears below this indicator to show you how many keystrokes you can still enter.

Tailoring Fontmaster

The following Fontmaster commands all let you customize the word processor to your liking.

Repeat speed

By now you have found that you can make just about any Fontmaster command repeat by holding the proper keys down long enough. The commands can be made to repeat at any of four speeds. Change it like this:

HOLD: SHIFT CTRL	
PRESS: r	(Repeat speed adjust)

Each press will change the repeat to the next higher setting and will display that speed on the ruler line. If you try to go past speed **4**, it will be set back to **1**, the slowest.

Help screen switch

Help screens are great for beginners but can be annoying to users who have outgrown the need for them. You can turn help screens on or off by just pressing the **HELP** key.

Color customizers

Even though you were allowed to select the five screen colors in the **System Setup** (p. 8), you may want to experiment with different colors "first-hand", especially when trying to find readable color combinations for the **Video preview** feature. Each color change command will change the associated part of the screen to the next color with each press.

Screen color:
Text color:
Cursor color:
Help screen (foreground):
Help screen (background):
ALT S

Chapter 10 Fontmaster Graphics

- Introduction
- Graphics converter
- Inserting graphics

Introduction

Fontmaster 128 has the ability to insert graphics of practically any size into the text it prints out. Not just any graphics file will do, however, as the graphics must be in a special format that Fontmaster can understand. First, let's talk about how to get graphics into Fontmaster's format, then we'll see just how to insert them.

The Graphics Converter

The graphics converter program accepts a graphic image in one format, displays it on the screen, and allows you to pick the portion of it that you want saved on disk in a Fontmaster 128 graphics format.

The graphics converter is entered by calling up the system menu and selecting **G**. Once the converter is running, you will see a menu of the types of graphics that you can convert. Currently, you can convert a PrintShop™ graphic or any hi-res picture. We'll discuss option 3 (building a picture from graphics) in a moment. To simply convert an image, just press the number for the type you want to convert. You will see **Insert disk containing graphics files and press RETURN**. When you do so, the contents of the disk will be displayed on the screen. Use the CRSR ↑ and ↓ keys to highlight the file that you want to convert and press **RETURN**. **NOTE:** the converter will read whatever file you ask it to—it has no way of knowing if the file you specify is really graphics, if it's a BASIC program, or just what it is. If, when the image is displayed, a portion of the screen looks like "snow" on a television, you probably loaded a file that was not the format you chose.

Once the original graphics file has been read, it will be displayed centered in the screen. A flashing square box will appear with which you can "lasso" the part of the screen you want saved as a Fontmaster graphic. You can move the lasso with either set of cursor movement keys. Here are the keys for changing the size of the lasso:

Vertical: smaller f1 bigger f3 Horizontal: smaller f5 bigger f7

Notice that if you converted a PrintShop graphic, the lasso has already been positioned and sized for you, (you can change it, though). The large jump in horizontal and vertical sizes are a requirement of the Fontmaster graphic. The easiest way to "grab" the desired graphics is to adjust the

size to the closest size you want, then center the lasso on the area you want.

IMPORTANT: When surrounding the graphics image with the lasso, remember that only the graphics *inside* the square is captured. That on the square itself is not picked up. Any border you want to surround your graphics when inserted into text should be picked up at this time. Text will be placed as close to the "lasso" as possible. Think of the lasso, therefore, as the boundary for text approaching the graphic you are capturing with the converter.

As soon as you have the lasso surrounding the graphics you want to save. Press **RETURN**. Next you will be asked **Name of this new graphics file?** Insert the disk to hold the graphic, type the name you want to give it, and press **RETURN**. When it's done saving, you will return to the menu of graphics types.

Building Pictures

The graphics converter not only will convert images from other formats to Fontmaster's, but will also let you construct a composite picture from several smaller graphics (currently PrintShop). To build such a picture, enter the converter from the system menu and choose option 3 (build picture from PrintShop graphics). A second menu will now appear. Your options include placing a graphic in the picture, placing the same graphic as last time (makes multiple placement of a graphic much easier), looking at the picture, saving the picture in a Fontmaster format, clearing the picture, and exiting. All these are pretty self-explanatory; if you've used the graphics converter to convert a single image, you already know how to pick from the filenames on disk, lasso the image, etc. The only difference when building a picture is that after you pick the name of the graphic, the picture is displayed along with the lasso. At this time, move the lasso to the place in the picture where you want the graphic to go and press **RETURN**. You will automatically return to the building menu, at which time you can add more graphics, start over, save it, etc. To exit without saving your creation, pick 6 (Go back to main menu).

Inserting Graphics

Inserting a graphic into a Fontmaster text file is simple. Just insert
⇒**AG**:name in your text where you want the upper-left hand corner of the graphic (where name is the filename of a graphic you made with the **Graphics Converter**). Another formatter of interest is **IG**. With it, you specify the exact column that the graphic should start: ⇒**IG25**:name

□

Both **IG** and **AG** have sister formatters that work the same except that they print the graphic double-width. The formatters are **ID** (Insert Double) and **AD** (Auto Double).

Graphic can be printed negatively by using the **NY** formatter. Use **NN** to return to positive graphics.

In review, here are the four graphics insertion formatters:

Formatter	Function
IGn:graphic	Insert <i>graphic</i> at column <i>n</i>
IDn:graphic	Insert <i>graphic</i> at column <i>n</i> (double width)
AG:graphic	Insert graphic at present position
AD:graphic	Insert <i>graphic</i> at present position (double width)

Load the text file called *grx demo* and print it. Look at the text file itself to see examples of the formatters in use.

NOTES

Chapter 11 Creating Fonts and Sets

- **■** Font creator
- Editing characters
- Advanced editing
- Character set creator

Font Creator

Although over 50 fonts are included on the two Fontmaster disks, you will probably at some time reach a point where you want to try your hand at creating a font. With the **Font Creator** you can alter the fonts included, or make your own. Be warned, it's harder than you think. Every attempt has been made, however, to make creating and editing as simple as it can possibly be.

Big hint: become familiar with the **Font Creator** program before you try to produce a finished font. A mistake while experimenting is a learning process, but a mistake after creating a whole font is a hair-puller.

Let's walk though the use of the **Font Creator** program step-by-step. First of all, you have to get the Fontmaster system menu on the screen (insert the **program disk** and type **BOOT**). Once the system menu is on the screen, select the **Font Creator** by pressing **F**. After a few seconds, you will be in the creator, with the following menu displayed:

- 1. Create or edit a font
- 2. Disk commands
- 3. Exit

To take any of these three actions, simply press 1, 2, or 3. Exit will take you back to the Fontmaster system menu; **Disk commands** is similar to the disk operations menu in the word processor, except the list of things that you can do is shorter.

Selection 1, Create or edit a font is what you're anxious to do, so push 1 and follow along. First, you are asked what type of font you want to work on—normal or superfont.

Characters in a **normal font** are made up of a grid of 9 by 16 dots, whereas **superfont** characters are made up of 18 by 16 dots. This difference explains why superfonts look better than normal fonts—you have twice as many dots to work with in superfonts. Some printers, however, cannot print superfonts very well. If you are in doubt about yours, try printing text using a superfont. (Superfonts all start with **s***I*.) If your system can handle them, *definitely* use superfonts.

Press N to work with a normal font, or S for superfont.

Next, you will be asked by what method you want to enter the font editing screen:

Do you want to

Create a new font Edit a font Re-enter edit mode Choose to **Edit a font** by pressing **E**. You are now asked **Name of font to edit?**

TYPE: **typewriter** (for our example)

PRESS: **RETURN**

If you had chosen to **Create** a font by pressing \mathbf{C} , you would have entered the editing screen with a font-full of blank characters waiting to be made into something. The \mathbf{R} (Re-enter edit mode) choice is exactly the same, except that the characters aren't cleared for you. This option can bail you out of a lot of trouble if you accidentally leave the editing mode without saving what you've created.

Editing Characters

Now that you are in the **font editing screen**, you can begin to define what each character in the font should look like. You do this by displaying each character, one-by-one, in the grid at the upper-left corner of your screen. You can move the cursor (the checkerboard pattern) around on this blown-up version of the character and set individual dots on or off.

The cursor can be moved in several ways: with the **cursor keys** just under the RETURN key, with a joystick plugged into port 1, or a compatible light-pen plugged into port 2 (Flexidraw's, for example).

Define the shape of each character by turning on the correct dots in the grid to achieve the shape you want. You set dots "on" by moving the cursor to them and pressing the $\bf S$ key. Press $\bf C$ to clear a dot. Use the sample character near the bottom-right edge of the grid to see approximately what your character will look like actual size. If you want to see it on paper for real, press $\bf P$ for "print". When you are satisfied with the character, press function key $\bf f1$ to preserve the character in memory. The next character will automatically be put on the grid.

You can go from character to character without working on them by using the + and – keys to go forward and backwards, respectively. Or you can "jump" to any character by pressing **SHIFT J** and then the character.

If you are using a light pen to edit, you can save your character and jump to any other by just pointing to the character you want in the upper-right part of the screen. If you have no light pen, disregard the characters listed there.

When you are done editing, whether you just want to quit or you want to save the font, press **RUN/STOP**. You will see the following question:

Name of this new font (RUN/STOP to exit)

Press **RUN/STOP** to go back to the Font Creator menu without saving the font. If you want to save the font, put the destination disk in the drive, type the name to give the font, and press **RETURN**. If a font on that disk already has that name, you will be told so and asked whether to replace it or not. For your benefit, fonts are automatically verified after they are saved.

It is strongly recommended that you put new fonts or new versions of the included fonts on a separate disk. If you want to put them on your **Program Disk** or **Font Supplement Disk**, you should make backups of the disks before you attempt to write on them.

Advanced Editing

The **Font Creator** has many advanced features that save you time in editing characters. All of the Creator's commands are summarized in the lower part of the font editing screen. In front of each dash, the key is listed that you must press for each command. Pay attention to the keys that are shown as capitals. The **SHIFT** key must be held with those keys or the function will not work.

Here is a brief description of each of the Creator's advanced commands:

- , These two commands move the left-most ↑ at the bottom of the grid to the left and to the right. This arrow should point to the left edge of the character in the grid. This information will be used when the character is printed in the **proportional** mode. In this mode, all the dots to the left of this arrow will be skipped.
- These two commands move the right-most ↑ at the bottom of the grid to the left and to the right. This arrow should point to the right edge of the character in the grid. When printed proportionally, the columns of dots following this arrow will be skipped.
- f5 f7 (Store/Recall image): Pushing function key f5 will store whatever is in the grid into a temporary holding area. You can later "recall" this pattern into the grid by pressing f7. You can use this pair of commands to transfer patterns from one character to another. They can also be used to provide a quick starting base for the creation of similar characters. In other words, you could create the letter o and store it. Then to create the letters bcdopq you could recall the image of the o and modify it, instead of starting from scratch on each character.
- (Dump grid): Causes a picture of the grid to be printed as it is, full size, to the printer. You can use this to make a hard-copy archive of your fonts. If the screen border flashes when you try this command, something is wrong with the interface or printer. Check all connections.

- **G** (Print group): This command will print the entire font to the printer as a group.
- **CLR** (Clear grid): Clears all dots in the grid. Remember, however, that the character is not cleared unless you save this cleared grid to memory with **f1**.
- N (Negative): Each press of this command will make a negative of the grid—all "on" dots are turned "off", and all "off" dots are turned "on".
- **U** (Shift up): Shifts all dots in the grid up one row.
- **D** (Shift down): Shifts all dots in the grid down one row.
- L (Shift left): Shifts all dots in the grid one column to the left.
- **R** (Shift right): Shifts all dots in the grid one column to the right.
- **F** (Flip grid): Flips the image in the grid in the left-right direction.
- I (Invert grid): Inverts the image in the grid in the up-down direction.
- ! " (Choose setup number): These commands are not listed on the screen because they are so rarely used. When the Creator loads, setup file number 1 is retrieved from the disk. You can change to the second setup by pressing SHIFT 2.

Character Set Creator

So that you don't become confused by the use of **fonts** and **character sets**, let's differentiate the two right now:

- Fonts are used when printing to the printer
- Character sets are never used when printing. They are used on the screen in the 80-column mode only

There are only three reasons why you would need to create and use a character set beside the word processor's normal one:

- 1. If you would find a modified version more readable
- 2. When using foreign language fonts
- 3. When using a font with nonstandard characters (such as misc)

Since the **Character set Creator** is nearly identical to the **Font Creator**, we will outline the differences between the two here, and refer you to the instructions for the Font Creator at the top of this chapter.

- There is no such thing as normal sets and supersets. There is only one kind of character set. It's characters are made from an 8 by 8 grid.
- No proportional spacing information is needed for character sets, so the two arrows below the grid are absent.
- Since character sets are never printed, you cannot use P or G to try a print to the printer. You can, however, still dump the enlarged grid to the printer.
- In the Character set Creator, the whole character set you are working on is displayed in the upper-right part of the screen. As you put images into memory with the f1 key, the image should be visible in that list.

Refer to **Foreign Languages** on p.64 for information about loading and using character sets.

Chapter 12 Translating Text Files

■ The Translator

The Translator

On the Fontmaster disk is a program that will convert text files made with other word processors to a format that can be used by the Fontmaster 128 word processor. This program, called the **Translator**, is used by selecting **T** in the **Fontmaster System Menu**.

When the Translator has loaded, a message will appear, listing the types of word processor files that can be converted. Each word processor type is given a number or letter. To choose the type to convert, just push that number or letter. If you press **RUN/STOP** instead, you will be taken back to the Fontmaster System Menu.

Next, the type of word processor file that you chose is displayed, just to doublecheck. If you picked the wrong one, press **RUN/STOP** to start over. At this point you are asked to insert the disk that contains the text file or files that you want converted. Do so and press **RETURN**.

The screen will blank, and then a list of the files on that disk is displayed. You can now use the cursor \uparrow and \downarrow keys to highlight the file you want to convert (you can only do one at a time). You can look at a different disk by inserting it and pressing **SHIFT** \$. When you have highlighted your file, press **RETURN** to begin the conversion.

When the file has been completely read and converted, you will see **Insert disk to hold new file and press RETURN**. If you decide not to save the converted file, just press **RUN/STOP** to start over. To save the converted file, put a destination disk in the drive and press **RETURN**. The name of the new file is the name of the old file with an **8** tacked on the end. When the file is completely written, you will be able to convert another if you like, or you can exit to the System menu.

NOTE: SEQ text files need not be converted because they can be directly loaded into Fontmaster 128 using the **Get text** command. It can then be saved as a **PRG** file. For this reason, some popular word processors are not given as an option in the **Translator**—because they only use **SEQ** files.

Appendix A Troubleshooting

SYMPTOMS	REMEDY
Can't get system menu	Must be in 128 mode Must boot from program disk Check disk drive connection
Can't print text	Key not plugged in
Nothing prints to printer	Incorrect printer in Setup Printer off or off-line Printer not connected Interface not connected properly
Strange symbols printed	Printer switches set wrong Interface switches Wrong printer in Setup
Printed text is distorted	Printer switches set wrong Wrong printer in Setup
Text arranged improperly	Incorrect formatter use Wrong printer in Setup
Printer continues after aborted	Buffer in interface or printer is still emptying
Some text effects not working	Printer incapable of effect Wrong printer in Setup
Screen colors change	Phosphor protect feature Press a cursor key
Upper/lower cases reversed	Wrong printer in Setup Wrong interface in Setup
"Tall" characters print improperly	Wrong printer in Setup

Can't save text to disk

Key not plugged in Disk drive shut off Disk not formatted Bad spots on disk

Appendix BFontmaster Messages

Following are most of the prompts and error messages for the Fontmaster word processor. A short explanation accompanies each.

- "name" character set not found The character set you asked for could not be found.
- "name" font not found The font you asked for could not be found
- "name" isn't a Fontmaster 128 text file The text file you asked for was found, but isn't really a text file. Text files from other word processors can be translated to the correct format using Translate. See chapter 12.
- **All slots in use** Fontmaster doesn't know what slot to load your font to because all the slots are taken. To load over a previous font, you must specify that slot number explicitly.
- **Are you sure (Y/N)?** Fontmaster is doublechecking before it does something potentially dangerous. To proceed with the operation, press **Y**.
- **Ask before replacing?** The find/replace command wants to know if it should doublecheck before replacing each occurrence of the search string.
- **Bad footer** The footer will not work due to improper formatting.
- **Block too large** An attempt has been made to **cut** or **copy** a block of text that is too big for Fontmaster to handle.
- **Buffer overflow error** This error can occur during printing if too many characters appear on the same line on the paper. A common mistake that can cause this error is accidentally leaving out the end-of-paragraph mark (2).
- **Can't find graphic** The graphic image specified by a graphics insertion formatter could not be found on the disk.
- **Can't print fonts** You attempted to print or view text using fonts, but your printer has insufficient graphics to do this. You must use the dot-matrix mode with this printer.
- **Can't proceed without key in place** You tried to print or save a text file but your Fontmaster 128 hardware key was not installed. Insert it and try again.
- **Can't view** You attempted to use the video preview while in the dot matrix mode (impossible, my friend).
- **Checking fonts...** All fonts originally loaded for the text file are being reloaded.
- **Directory error** Fontmaster could not read the complete disk directory.

- **Disk drive not responding** The disk drive is not behaving normally. It is either shut off or confused. Remove the disk and turn the drive off and back on to fix this problem.
- **File already exits. Replace?** A file on the disk has the same name as the file you are trying to save. If you press **Y** this new file will replace the old one. Otherwise, no save will occur.
- **Filename?** Fontmaster is asking for the name of a disk file to work with. **Find what?** Input the string of characters to search for.
- First mark one end of the block You tried to use a command that works with a block of text, but no text is marked yet. Mark one end of the block with CTRL M first.
- **Foreign language?** Is the character set you are loading to be the main set or an alternate set (like for a second language).
- **Halted** This message is generated whenever Fontmaster is printing and hits a "HA" formatter. Pressing any key will resume printing.
- **Illegal value** The value you supplied after a format control is not acceptable. The cursor will be pointing at the bad value.
- **Insert sheet of paper** Use of the **SS** formatter will cause a pause between each page of print, when this message will instruct you to insert the next sheet of paper. Press any key to resume printing.
- **Line will look unreadable** A line of text that was being justified had to be stretched out so far that it will look bad. Fontmaster will point the cursor to that line, give this error, and stop. Hyphenate words or reword the text so that more words can fit on the line.
- **Load fonts and sets?** Do you want the fonts and character sets that were originally loaded with the file to be automatically loaded for you? **Looking for...** Fontmaster is searching for a file on disk.
- **Memory full** All available text memory is being used. Whatever you are trying to do when you get this error, it requires more memory and therefore cannot be done. Free additional memory by shortening your text or removing unnecessary text modifiers.
- Move paper back to previous perforation This message may occur on some printers when printing multi-column documents. Font-master is preparing to print the next column and must request that you manually move the paper back to the previous paper perforation.

 Always wait to do this until the printer has completely stopped printing!
- **No memory to hold copy. Erase some font slots** There is not enough room to copy or cut the block of text you have specified. Either work with smaller blocks or clear out some fonts. (Remember, the paste buffer is made from unused font slots.)
- **No tabs set** The **TAB** key has been pushed, but no more tab stops are set to the right of the cursor.
- Output aborted The Print or View command has been stopped before it was finished.
- **Printer I/O Error** Something went wrong when trying to communicate with the printer or printer interface. Check all connections.

- **Process aborted** Some function was stopped before complete.
- **Push "Y" to abort, other to continue** This message occurs when you try to abort a printout with **RUN/STOP**. If you are sure you want to abort, press **Y**.
- **Replace?** Do you want to replace the text string the cursor is pointing to?
- **Replace with?** What string of characters should be replaced for the search string when found?
- **Search ended** The **Find** or **Replace** command reached the end of the text without finding any more occurrences of the search string.
- **SEQ file** "name" **not found** The sequential file you specified as your variable file could not be found.
- **Slot number?** Into what slot slot do you want this font loaded (1 through 9).
- **Slot selected has no font** You attempted to print using a slot that is empty it contains no font. The cursor will be pointing to where the error occurred.
- (super) This reminder is tacked on when you are loading a superfont.
- **Tabulation interval?** How far apart do you want tab stops placed?
- **Text file** "name" was not found The text file you specified could not be found on the disk.
- **Text in paste buffer will be lost is this OK (Y/N)?** Loading the font requested will wipe out text which is being held in the paste buffer. Before proceeding with the load, be sure you can afford to lose this text!
- **The print block follows a chain command!** It's ridiculous to try to print a block of text that starts after a chain command!
- **There is nothing to paste** You tried to paste text, but no text is in the paste buffer. You must **cut** or **copy** a block of text into the buffer first.
- **Unknown format command** Fontmaster has run across something it doesn't understand in a format line (following a ⇒). Usually this means you misspelled one of the two-letter format commands.
- **Variable filename?** If you have a file that contains data to be used to fill variable boxes (for a form letter), specify its name here.
- **Verify error** The disk file you specified to be verified does not match the text in memory.
- **Verify OK** The disk file is exactly the same as the text in memory.
- What? You specified a wacko slot number.
- Which case (U/L)? Change block of text to all UPPER CASE or lower case?
- **Word won't fit** When printing text, Fontmaster was unable to fit a word in the space provided. The cursor will be pointing to the problem word. Margins, indentations, cutouts, and graphic insertions all affect the space available for the placement of text.

Working... Fontmaster is busy doing something.

You will lose the text in memory - is this OK (Y/N)? - You are about to do something that will severely affect the text in memory. Be sure! By the way, Fontmaster won't bother you with this question if it knows that you have a copy of the text on disk.

Any other error messages you might see are coming from your disk drive. See Appendix C (next) for an explanation of your drive's messages.

Appendix CDisk Drive Error Messages

Here are a few of the most common error messages your disk drive might produce. Fontmaster will pass most disk messages on to you by displaying them on the ruler line. Consult your drive manual for a complete list of all messages.

- Read error The drive could not complete a read operation from the disk
- **Write error** The drive could not complete the write operation to the disk because a bad spot on the disk was encountered. Try a different disk.
- **Write protect on** You attempted to write to a disk that has a write protect tab over the notch on the side of the disk. You must remove the tab before you can write to the disk.
- **File not found** The requested file could not be located on the disk in the drive
- **Disk full** The disk was filled up before the entire file was written. This partial file is no good; save the file on another disk
- **Drive not ready** You tried to access a disk when the drive door was open or no disk was inserted in the drive
- **Syntax error** The command you sent directly to the drive with the disk > command was improper

Appendix D **Disk Drive Commands**

There are some of the more common commands that you can send directly to the disk drive (p. 29). See your disk drive manual for complete details.

FORMAT > n0:diskname,id

> Causes the disk in the drive to be erased and prepared for data storage. "Diskname" is the name you want to give the disk, and "id" is any two-letter identification. This command is irre-

versible!

Example: > n0:invitations,mf

VALIDATE > v0

> This command causes the drive to clean up the contents of the disk, erasing any improper files. Relative files (REL type-not used by Fontmas-

ter) will also be erased by this command.

INITIALIZE > i0

> This command is rarely needed for its intended purpose. It can be used to spin a disk while using a head cleaning kit. Also, if your drive is having trouble reading files successfully from a disk, using this command will sometimes help the situ-

ation

Appendix E Custom Setup Files

What is a setup file?

A setup file is a disk file that contains information that the programs in the Fontmaster 128 system can use when they want to know something about the system they are running on. A simple example of this is that all the modules accessible from the system menu use the colors you request in the Setup program. That's an example of a preference. Most of the data in the setup file, however, is concerned with details about your system. Think of how many differences there might be between your system and someone else's: he has one floppy and you have two; he has a Cardco interface but you have a Xetec; he has a Panasonic printer but you have a Riteman. Many software packages have only a few options to choose from and you're up and running. Why is Fontmaster 128's setup so detailed? The reason is simple; the more demand you place on your equipment, the more you must know about it. Think of how many appliances you have that you know enough about to use them, but you know there are more complex features you aren't using (good examples are microwaves and stereos). Well, in order for Fontmaster to get "every last drop" out of your printer, it has to know just about everything about it. For this reason, 95% of all the data in the setup file describes the printer. The rest is for your printer interface and user selectable options.

The Fontmaster 128 system was designed to accommodate two different setup files. Few people will need a second setup file, but it's necessary if you will be using the same program on different systems (at home/at work, for example). All the programs use the first setup file by default, but they can all be instructed to switch to the 2nd (see instructions for programs to find the exact method for each).

How do I make my setup file?

A program, called "System setup" is provided for you to change the setup file on your disk. This program is accessible from the system menu that appears when you boot the Fontmaster program disk. It will display the information currently selected in the main setup file. See "Preparing the Program Disk" on p. 7 for explicit instructions on how to use this program. The topic of this appendix is what to do if the System setup program won't cut it. A large, but limited number of printers are given to you to pick from. If your printer works significantly different than any of these, you may be thinking of some dirty words (like "incompatible"). DONT PANIC! There is hope...

How do I make a custom setup file?

When you scan through the list of printers in the System setup program and pick one — Gemini 10X, let's say — the program looks up data that is associated with that printer and enters it into the temporary setup file being created in memory. (The options you pick are just held in memory until you select "Save this setup on disk," when it is written on your disk to become a part of the Fontmaster system.) If, however, your printer isn't in this list, all you have to do is what the setup program does — plug data into the file. Sounds simple, but the printer data built in

to the Setup program was compiled by technicians who deal with hundreds of various printers. How, then, are you going to be able to handle it? Simple! With our help...

Construction of a custom setup file

It has come time to quit talking and dig our hands into the setup file. Blow the dust off your printer manual and round up your interface manual if possible.

First, boot the Fontmaster program disk (**BOOT** RETURN). When you see the system menu, press "S" to enter the System setup program. When you are making your file, you will have less work if you have to change only a few items. For that reason, select a printer that you guess might be close to what you want. Now point the arrow to "**Customize this setup**" and press RETURN. Now the screen should clear and you will see the first of many questions:

Interface device number: 4 Number of codes(1)?

This is the general form of every question you will be asked (with just a few exceptions). Here's what it's saying: Let's talk about the device number of your interface? Currently the value 4 is chosen. Enter the number of values you want to enter (you have a limit of '1' for this question). At this point, you can press \downarrow if the current value or values are correct, to skip to the next question. Or, you can type the number of codes to be entered (keep in mind the limit given to you in parenthesis). if your printer cannot perform the function listed, enter "0" for the number of values to be entered.

If you opt to enter some new codes, you will receive a question mark for each code you need to enter (4 times if you asked for 4 codes). Each time, type a decimal value and RETURN. After all the data is input, you will be asked the next question.

Several of the questions require a "yes" or "no" answer. For these, enter a value of 0 for "no" and 255 for "yes."

You can press the cursor up key (↑) at any question to go back to the first one. When the last question has been answered, you automatically return to the System setup screen. (You can quit before then by pressing **RUN/STOP**). Once you return to this screen, you will notice that in the "printer" box beside "option" is the word *customized*. This is to remind you that the setup file is actually a version of the listed printer with your changes added.

CAUTION: if you move the arrow to "printer" and select a different printer from the list, your customized file will be lost and replaced by the pre-programmed data for the printers you are scanning through.

Now that you basically understand how to use the customizer, go ahead and start your own customization. For any question that you don't fully understand, refer to its explanation below.

Customizer Explanations

- Interface device # This number should match the device number your interface uses (check your interface manual). Most interfaces use 4, sometimes 5. For printers that connect with no interface, use 4.
- **Secondary address** Most interfaces recognize secondary addresses a special option number that is sent along with any data printed. Pick one that tells your interface to pass data through transparently (no modifications). On most interfaces, that would be "5." If your interface does not recognize them or needs none, specify 255.
- **Printer driver module** All printers supported are divided into "families" based on their characteristics. Each family has its own printer driver module. Here are the currently active drivers:
 - 0 8 bit graphics, 1 or 2 passes
 - 1 7 bit graphics, rough line feeds
 - 2 7 bit graphics, fine line feeds
 - 3 24 bit graphics
 - Raster graphics
- **Carriage return** Usually 13. Enter the code that moves the head to the left but causes no paper advance.
- **Line feed** Usually 10. Enter the code that advances the printer paper.
- **Carriage width (chars)** Enter the width of printer carriage in columns (most are 80 or 132).
- **Ready printer, Ready printer (more)** These two groups of codes give you a total of 12 codes that you can have sent to your printer at the start of every new document.
- Single density start Enter the code or codes that kick your printer into a single density graphics mode. Single density is defined as roughly 60 dots per horizontal inch (6 dots/char). If the density is close to 60, but not exactly, use the "quad density pixels between characters" value to trim it in.
- **Dual density start** Enter the codes to turn on dual density graphics. Dual density should be about 120 dots/inch.
- **Quad density start** Enter the codes to turn on quad density graphics. Quad density is usually about 240 dots/inch.
- **Graphics end** Enter any codes required to shut off the graphics modes (used for *single*, *dual*, and *quad*).
- **Graphics numbering code** Some printers require a type of number to immediately follow the turning on of a graphics mode. This number represents how many columns of graphics will be sent. Currently the following formats are supported:

Number code Format

- 0 No numbers sent
- 1 No numbers, duplicate all graphic 3's
- 2 Send number in lo-byte, hi-byte format $(number = lo + hi \times 256)$
- 3 Send number as 3 ASCII digits ("002")
- 4 Send number as 4 ASCII digits ("0002")
- 5 Send number in hi-byte, lo-byte format $(number = hi \times 256 + lo)$

- **Special sec. addr. ('same' is 128)** The text secondary address has already been set, but some printers require an alternate secondary address when setting line feed sizes. This value lets you do just that. It's the secondary address used when setting or doing custom line feeds (next). If your printer does not require this, enter 128 and the sec. addr. you specified earlier will always be used for everything.
- **Set custom line feed size** Enter the codes required to change the size of your printers line feeds to a size of *n*. Enter all codes up to just before the *n* is needed.
- **Do a custom-size line feed** Enter the codes required to do a one-time line feed of amount *n*. Enter all codes up to just before the *n* is needed.
- **Set custom reverse line feed size** Enter the codes to set the line feed to a size of *n* in the backwards direction. Enter all codes up to just before the *n* is needed.
- **Do a reverse custom-size line feed** Enter codes that do a backwards line feed of amount *n*. Enter all codes up to just before the *n* is needed.
- **Do a graphics-size line feed, Do a graphics line feed (more)** You have up to 12 codes in which to do a graphics line feed (defined as a line feed that will make two lines of bit graphics just butt up to each other). Remember to include **all** codes.
- **Custom line feed stop char (if needed)** When setting the line feed to a custom amount, this is the normal format: *code sequence, value*. Some printers, however, require this: *code sequence, value, code*. Enter the value of this extra code here. In a few questions, you will be asked whether to send this value or not. In other words, this is the value that will be sent if you answer "yes" to the question of sending it or not.
- **Custom line feed numbering code** This is similar to the graphics line feed numbering code above, except that this one describes the number sent after a programmable line feed code. Acceptable values are: 0 to send the line feed size as just one value (by far the most common), or any other to send the number as that many ASCII digits. In other words 2 would give you "01" where 3 would send "001" and so on.
- # increments in 1 inch Enter the size of the steps used by the custom line feed codes entered above. Common values are 216,144,180, 72, etc.
- # increments in 1/6 inch Just divide the previous number by 6
- **# increments in graphics line feed** Enter the number of increments expended in the "do a graphics-size line feed" codes above.
- Horlz. pixels in 1 char (quad density) This one is a little tricky. First, find the dot density of the highest resolution your printer will do (quad, dual, or single). Scale this density up to quad density equivalent (if it's dual density, double it; it it's single, quadruple it; leave it alone if it's already quad). Then, using this adjusted density, find the number of quad dots in one character. Plug that number in here. Here's an example: your printer will only go up to dual density. In this mode, the density is 120 dots per inch. Double this to 240 to get it to quad, and divide by 10 to get from dots/inch to dots/char. Result: 24.
- # quad density pixels between characters (pica) This number will be 6 for most printers. Technically, it should be equal to the previous value you figured (horiz. pixels in 1 char) minus 18. Don't ask why.

- **Set line feed to 0 during graphics?** This is a curious little option that is needed on only 2 printers that we are aware of the Gemini 10 and 15. Enter 0 for "no" or 255 for "yes." If selected, the line feed size will be set to 0 before every transmission of graphics (and then back to normal). This is needed on the two printers mentioned to overcome a strange bug in the graphics.
- Custom line feeds possible? If you were able to enter a legal code sequence for either "Set custom line feed size" or "Do a custom-size line feed" then answer "yes" (255). If you had to leave them both blank, enter 0 for "no."
- **Use custom line feed stop char?** Answer yes (255) if your printer needs the extra code after the programmable line feed value. Otherwise, enter 0 for "no."
- **Printer has auto line feeds?** Answer "yes" (255) if and only if your printer has an auto line feed that cannot be shut off with switches, codes, or anything. This situation will limit your printing capabilities, so try your hardest to shut the auto line feed off and answer "no." (An auto line feed, by the way, is a line feed code usually 10 that is assumed automatically to be needed after every carriage return. To shut it off means to be able to send a carriage return with no line feed assumed by the printer.)
- **Limit custom line feeds to 99 increments?** When doing custom line feeds or settings line feeds to custom values, some printers cannot accept a value of more than 99 increments. If yours is one of them, answer "yes" (255). All line feeds over 99 will be broken into smaller chunks for your printer to work with.
- **Set bit 7 of all graphics?** If using printer driver module 0 (most common printers), enter 0 for this question. Enter 255 only if using driver module 1 and your printer needs the most significant bit set to a 1 for every column of dots in the graphic mode.
- **Bit 7 at bottom of head?** This question establishes the vertical orientation of your print head. Bit 7, the most significant bit of the graphics column, has got to be at the bottom or the top:

O 128	0 1
O 64	O 2
O 32	O 4
O 16	○ 8
○ 8	○ 16
O 4	○ 32
O 2	O 64
0 1	O 128
Enter value "0"	Enter value "255"

- **Only 7 bit graphics?** Enter 0 for "no" if your printer has the capability to do print graphics columns with all 8 bits. If you answer yes here, you should also select printer driver module 1 (4th question).
- **Standard ASCII?** If your printer uses the standard ASCII set (99% do), enter 255. If you answer "no" (0), Commodore ASCII will be used (PETSCII). A sign that you answered this question wrongly would be text printing strangely in the dot matrix mode (such as upper and lower cases reversed).

All the remaining questions deal with Fontmaster being used in the dot matrix mode (the way most word processors work). If you never plan to use this more limited mode, you can stop here. Of course you can always come back later if you need to add the codes in.

All the following sequences are apparently limited to a length of 2. You can however, specify 3 and get away with it as long as the first code is a 27 (ESC).

Reset printer — Enter the codes that reset all the features of the printer back to their default (often 27 64). This code is sent at the start of every document.

Elite pitch — Enter codes that set your printer in the elite pitch (12 chars per inch). This sequence is assigned to the modifier.

Pica pitch — Enter codes to enter pica pitch (10 cpi). This sequence is assigned to the p modifier.

Compress on — Enter codes to compress or condense text. This sequence and the next are assigned to the modifier.

Compress off — Enter codes to shut off compressed or condensed.

Expand on — Enter codes that turn on expanded text. This sequence and the next are assigned to the **x** modifier.

Expand off — Enter codes that turn off expanded text.

Normal height — Enter any sequence of codes that you want assigned to the Modifier.

Micro height — Enter any codes to be assigned to the **m** modifier.

Tall height — Enter any codes to be assigned to the **1** modifier.

Bold on — Enter codes that turn on boldface, emphasize, or enhanced. This sequence and the next are assigned to the **b** modifier.

Bold off — Enter codes that turn off boldfacing, emphasize, or enhanced.

Italic off — Enter codes to shut off italics or any other feature you choose.

NLQ on — Enter codes to turn on NLQ. If your printer won't do NLQ, substitute any other on/off feature you want assigned to the ■ modifier.

NLQ off — Enter codes to shut off NLQ or any other feature you choose.

Superscripts — Enter codes to turn on superscripts. Will be assigned to the modifier.

Subscripts — Enter codes to turn on subscripts. They will be assigned to the modifier.

Underline on — Enter codes to turn on underlining. This sequence and the next will be assigned to the **u** modifier.

Underline off — Enter codes to turn off underlining.

User 1...User 9 — These 9 sequences are open for you to use if your printer has any features that you would like to access easily. They will be assigned to modifiers ■ through ■

Appendix F Sample Test Printout

Following is the ideal output for the selftest in the **System Setup** program (see p. 9). Remember, not all of the lines shown may appear on your test (depending on your printer).

This should be UPPER and lower case

The next 2 lines should be the same length



Dual density



Quad density

N

A- A & B should be 1 inch apart

E-

END OF TEST

Appendix G Fontmaster 128 Disk Contents

All the Following is a description of all the files on your Fontmaster disk.

♦fm12804 All files on the disk that start with a dia-

mond (◆) are parts of the Fontmaster

system. Ignore them.

n/bauhaus All files starting with "n/" are normal fonts.

The name of the font follows the "/."

s/pierrot All files starting with "s/" are super fonts.

The name of the font follows the "/."

v.normal All files beginning with "v." are video

character sets. The name of the set fol-

lows the "."

setup1 setup2 These two sequential files contain the

information you chose using the **Setup**

program.

COPY 128 This program, on the Supplement disk,

copies both of the Fontmaster 128 disks onto one double-sided disk. Just load the program in the 128 mode and RUN it.

UPDATE.INFOThis is a text file on the Supplement disk

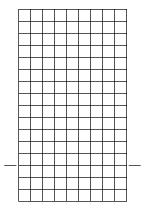
that lists bugs removed and features

added since the last version.

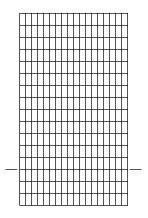
All remaining files on the disk are sample text files that can be loaded using the word processor. Study the content of these files to get a good idea of how to put many of Fontmaster's features to use.

Appendix H Font Grids

If you don't feel comfortable creating font characters with a cursor, you can draw your characters on photocopies of the grids below. The lines separating the bottom three rows indicate a good place to put the bottom of each character (then you can use the bottom rows for descenders).



Normal font grid (9 x 16)



Superfont grid (18 x 16)

Appendix I Font Lookup Tables

Font: misc

Font: math

```
!"#$%&'()*,+.-/0123456789:;<=>?
•"#$%+'()*≠+.-/0123456789"→<=>?
@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^←
@ABIΔ∥∮√∫|]Γ_μ½Ωπ¼∇∠θ]]½XY∞[≦]≧_
`abcdefghijklmnopqrstuvwyxz{/}}_¢
'abcdefghijklmnopqrstuvwyxz{/}}_¢
```

Font: borders

Font: hebrew

Font: russian

```
! "#$%&'()*,+.-/0123456789:;<=>?
! "жы́бю́'()Ё,ý.-ЫечшщъыьЧШЩ:;áéó?
@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^+
ЯАБЦДЕФГХИЖКЛМНОПЯРСТУВЮЭЙЗЪЫЬИ́г
abcdefghijklmnopqrstuvwxyz{|}~¢
'абцдефгхижклмнопярстувюйэз | ~Ф
```

Font: greek

```
!"#$%&'()*,+.-/0123456789:;<=>?
!"#$%&'()*,+.-/0123456789:;<=>?
@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^←
@ABΞΔΕΦΓΗΙΘΚΛΜΝΟΠΨΡΣΤΥΩςΧ_Z[\]^_
`abcdefghijklmnopqrstuvwxyz{|}~¢
'αβξδεφγηιθκλμνοπψρστυω..×ζ(|)~
```

Font: arabic

Font: korean

```
!"#$%&'()*,+.-/0123456789:;<=>?

TT→ サ♀죠고! | 호루구부 - ‡ O1234567891 노수=무보

@ABCDEFGH|JKLMNOPQRSTUVWXYZ[\]^←

@ト보츠드누 [] 조호 「주그르므느으프쿠두소토누부뜨쓰세세[\]죠_

`abcdefghijk|mnopqrstuvwxyz{¦}~¢

고러出えに도ㅋスる_죠ヿ己DLoⅡ 크⊧⋌E用Tㅃㅂㅆㅂ{¦}~
```

Font: inuktitut

Font:

! "#\$%&'()*,+.-/0123456789:;<=>?
@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^
\tau abcdefghijklmnopqrstuvwxyz{!}~\$

Font: danish

\$<>@[\]^`{¦}~¢ \$<>@ÆØÅ^~æøå~

Font: french

\$<>@[\]^`{|}~¢ &<>àîçêûôéùèïë

Font: german

\$<>@[\]^`{¦}~¢ \$**&**\$@ÄÖÜ^~äöüß§

Font: italian

\$<>@[\]^`{¦}~¢ \$<>§°çé^ùàòèì

Font: norwegian

\$<>@[\]^`{|}~¢ \$<>@ÆØA^°æøå~

Font: portuguese

\$<>@[\]^`{¦}~¢ 1<>çáãé&óðõúùÇ

Font: so african

\$<>@[\]^`{;}~¢ &<>ÉÉÖèÜéëöðü

Font: scandinavian

\$<>@[\]^`{;}~¢ \$<>@ÆØA^°æøå~¢

Font: spanish

\$<>@[\]^`{!}~¢ \$<>§;Ñ3á1°ñçóú

Font: swedish

\$<>@[\]^`{|}~¢ D<>£ÄÖAUéäöåü

Font:

\$<>@[\]^`{ | }~¢

Font:

\$<>@[\]^`{|}~¢

Font:

\$<>@[\]^`{{}}~¢

Font:

\$<>@[\]^`{|}~¢

Font:

\$<>@[\]^`{|}~¢

Font:

\$<>@[\]^`{|}~¢

Font:

Font:

\$<>@[\]^`{ | }~¢

Appendix J Summary of Commands

Cursor Movement	
Move	$\cdots \uparrow \downarrow \leftarrow \rightarrow$
Top of Text	ĤOME
Bottom of text	CTRL b
Page down	CTRL
Page up	CTRL ∱
Start of next line	LINE FEED
Previous word	SHIFT f1
Next word	f1
Previous sentence	
Next sentence	f3
Previous formatter	SHIFT f5
Next formatter	f5
Previous text modifier	SHIFT f7
Next text modifier	
Left edge of line	CTRL ,
Right edge of line	CTRL .
Editing	
Delete	DEL
Gobble	
Delete line	CTRL ĎEL
Insert	
Insert line	
Erase to end of line	
Erase to end of text	ALT e
Find text	
Find text again	SHIFT CTRL f
Find/replace text	CTRL r
Block Manipulation	_
Mark block end	CTRL m
Cut	
Paste	
Copy	
Erase	CTRL e
Set case of block	
Tabs	
Tabulate	TAB
Set tab stop	
Clear tab stop	CTRL –
Clear all tab stops	
Set tab stops at an interval	
Output	
Print	ALT p
Preview	
Quick view	
,	1

Switches	
Insert switch	Al T i
Dot matrix switch	
Caps lock switch	
Help screens switch	HELD
Reverse screen switch	CTDI
Push mode	
Screen protect switch	SHIFT CTRL P
	SHIFT CIRLS
Macros	CLUET CTDL 44
Define macro 1	SHIFT CTRL 11
Define macro 2	SHIFT CTRL 13
Define macro 3	SHIFT CTRL 15
Define macro 4	SHIFT CTRL f7
End definition	
Call macro 1	CTRL f1
Call macro 2	CTRL f3
Call macro 3	
Call macro 4	
⇒TA	
Miscellaneous	
Quit word processor	SHIFT CTRL a
Disk input/output menu	CTRLd
Display memory status	CTRL 2
Switch to English video set	C- s
Switch to English video set	
Adjust report apond	
Adjust repeat speed	SHIFT CIRLI
Use system setup 1	ALI I
Use system setup 2	ALI Z
Erase font slots	SHIFT CIRL e
Wipe autofonts	SHIFT CTRL W
Change text color	AL <u>I</u> t
Change screen color	
Change cursor color	ALT c
Change background help screen color	ALT b
Change foreground help screen color	ALT f
Discretionary hyphen	ALT –
Underline character	SHIFT –
Soft space	SPACE
Hard space	CTRL SPACE
⇒	ESC
\(\)	
□	←
{	
}	
<u> </u>	
~	
¢	
ψ	
Γ	_
1	

Appendix K Summary of Modifiers

Modifier	Keys	Effect
р	р	Pica pitch (10 cpi)
a	a	Alternate pitch (11 cpi)
е	е	Elite pitch (12 cpi)
k	k	Konnect pitch (13 cpi)
b	b	Boldfacing on/off
u	u	Underlining on/off
1	1	Italicizing on/off
i	i	Inverse on/off
X	Χ	Expand on/off
С	С	Compress on/off
t	t	Tall characters (16 point)
n	n	Normal characters (8 point)
m	m	Micro characters (4 point)
\uparrow	↑	Superscript next character
↓ ♠	<u> </u>	Subscript next character
lack	+	Superscripts on
¥	_	Subscripts on
X	RETURN	Super/subscripts off
1	1	Select font in slot 1
2	2	Select font in slot 2
3	3 4	Select font in slot 3
4	4	Select font in slot 4
5	5	Select font in slot 5
6 7	6	Select font in slot 6
	7	Select font in slot 7
9	8	Select font in slot 8
	9	Select font in slot 9
臣	0	Overlay next 2 characters
w/	W	Butt this line with next
•	f	Select foreign video set
u _s	S	Select US (English) video set

Appendix L Summary of Formatters

; Comment

AD: file Automatic double-wide graphic

AG: file Automatic graphic

ATn Auto tab set #n (1 – 10) BLn Make n blank lines

BM*n* Set bottom margin to *n* lines

C#*n* Turn on multi-column formatting (making *n* columns)

CH: file Chain printing to file

CMn Compensate for external print (*n* paper increments)

CN Centering – no

COn,w,d Create cutout in text at column n, width w, depth d

CS*n* Set gap between letters to *n* microspaces

CY Centering – yes

DC Use decimal (normal) system of numbering

DIn,x Send data x to printer (with secondary address n)
ED Eat a box-worth of variable data from the variable file

EL Edge left alignment

EO Edge outside alignment (alternating)

ER Edge right alignment

EX:file Dump data from file to printer

F=text Define footer content

FPn Set footer position n lines below body of text

H=text Define header content

HAtext Halt printing, say "Halted - text," wait for keypress

HLn Set header/footer left margin

HPn Set header position n lines above body of text

HRn Set header/footer right margin

IDn:file Insert double-wide graphic called file at column n

IGn:file Insert graphic called file at column n

INn Set indentation of *n* spaces

IN–*n* Set backwards indentation of *n* spaces

JS Turn on justification

LI*n* Set line spacing to *n* paper increments

LK: file Link printing to file LMn Set left margin

LM+*n* Move left margin *n* spaces to the right LM-*n* Move left margin *n* spaces to the left

LM+0 Back to original left margin

LM+*n*t Move left margin *n* spaces to the right for one line only LM-*n*t Move left margin *n* spaces to the left for one line only

LS*n* Set line spacing to *n* lines per inch

MSn Set multiple line spacing to n: 1 for SS, 2 for DS, 3 for TS, etc.

NN Negative graphic image – no

NO No word intelligence NP Move to start of next page

NP*n* Move to next page if *n* more lines will not fit on this one

NY Negative graphic image – yes

P#*n* Set page number to *n*

PL*n* Set paper length (vertically) to *n* lines

PN Proportional – no
PY Proportional – yes
RMn Set right margin

RM+*n* Move right margin *n* spaces to the right RM-*n* Move right margin *n* spaces to the left

RM+0 Back to original right margin

RM+*n*t Move right margin *n* spaces to the right for one line only Move right margin *n* spaces to the left for one line only

RN Reverse output – no

RO Use roman numerals when numbering

RY Reverse output – yes SN Superimpose graphics – no

SOn Set superscript/subscript offset to *n* paper increments

SS Using single sheets of paper SY Superimpose graphics – yes T#n Tab to auto tab #n (1 – 10)

TAn Tab to column n
TMn Set top margin to n

UL Unlock header/footer margins

UOn Set offset for underlining to *n* paper increments

WW Justification off, word wrap on 2Ln Set 2nd column's left margin 3Ln Set 3rd column's left margin 3Rn Set 3rd column's right margin 4Ln Set 4th column's left margin 4Rn Set 4th column's right margin

Appendix M Glossary

Aborting – Stopping a process or command before it finishes naturally

Bilingual – A mode of editing in Fontmaster which allows you to display the text being edited in two different languages

Block – A group of text that can be manipulated as a single unit

Case – Lower case: "small" letters, upper case: capital letters

Character set – A group of characters used to display text on the screen.

Computer - You can't be serious?!?

Cursor – A flashing box on the screen that is used as a "pointer" for typing text or performing editing

Cutout – A rectangular void left in the middle of a body of text that leaves room for pasting in pictures or whatever

Discretionary hyphen – A special type of hyphen that never prints unless the word is split at the hyphenated location. Discretionary hyphens are shorter than normal hyphens on the screen

Disk command menu – A menu of disk operations that can be done in the Fontmaster word processor

Disk directory – A list of all the programs and files on a disk

Dot matrix – The standard print from a printer that resembles many distinct dots rather than smooth lines.

End of paragraph mark − A special mark (∠) that results from pressing the RETURN key. The text following this mark is considered a new paragraph

Font – A set of characters that all share a similar style. Fonts are used to determine the "look" of printed text

Footer – A special line that Fontmaster 128 can automatically print at the bottom of each page

Form letter – A document that has several "holes" in it which can later be filled in with data from another file. A form letter can produce many similar printouts, with only the data in the "holes" changing from one to the next

Formatter – "Instructions" that you can embed within your text to tell Fontmaster 128 exactly how to arrange (format) the text it's printing

Hard space – A special character that prints just like a space, but which doesn't otherwise act like one. You can use a hard space between two words to keep them from being separated (whereas a space would allow them to be). A hard space looks like this: ____

Header – A special line that Fontmaster 128 can automatically print at the top of each page

Help screen – In Fontmaster 128, one of four groups of text that can appear above the ruler line, listing some of the most useful commands

Interface – A device that allows your computer's serial bus to communicate with a parallel printer

Inverse – A printing effect which prints white characters on a black background **Italicizing** – A printing effect that slants all characters slightly to the right

Justification – Printing text so that both left and right edges are always aligned

Key – A special device that must be plugged into the cassette port of the computer in order to use all of Fontmaster 128's features

- Line spacing The vertical distance between lines of text
- **Modifiers** Special marks that are embedded within your text. They are not printed but control special effects that can be used on your text
- Paste buffer Area of memory that holds text that is cut or copied with text block commands
- **Pitch** The spacing of text horizontally (from character to character)
- **Preview** A test "print" to the screen that is used for checking the output before a print is made on paper
- Proportional spacing A type of character spacing in which the actual width of the character determines how much space is alotted to it. The result is text that is easier to read
- **Push mode** A feature that automatically enters text from right to left and numerals from left to right. Used with some foreign languages such as Hebrew
- Search string A sequence of characters to search for
- **Setup file** A disk file containing information chosen in the setup program. This information includes preferences and equipment information
- **Setup program** A selection in the Fontmaster 128 system menu that is used to prepare Fontmaster for use on your particular system
- Slots Nine separate locations that hold loaded fonts. Each slot can hold only one font at a time. When changing fonts in your text file, you refer to the slot, not the actual font
- **Status display** The group of information at the top of the word processor's editing screen that displays various data about Fontmaster and your text
- Subscripts Characters that are printed slightly below the rest of the text on a line (such as H_2SO_4
- **Superfont** A high resolution font that looks superior to normal fonts, but takes up twice as much disk space
- **Superscripts** Characters that are printed slightly above the rest of the text on a line (such as $E = MC^2$)
- Switch A fontmaster mode that can be turned on and off with the same command, therefore resembling a light switch. All switches have indicators in the status display to show their status
- System menu The menu of programs you can use when you boot the Fontmaster 128 Program Disk
- System setup See Setup file
- **Translator** Conversion program to change text files from other word processors into a Fontmaster 128 text file
- Variable box This guy: ☐ It indicates where in a form letter to fill variable data
- Variable file A disk file that contains nothing but data (names, adresses, etc.) that is to be "plugged into" the variables boxes in a form letter
- VGU (Vertical graphics unit) Vertical dimension of one pass of graphics. Approximately 1/10"
- Word wrap Printing text so that words are never split between two lines (unless hyphenated)

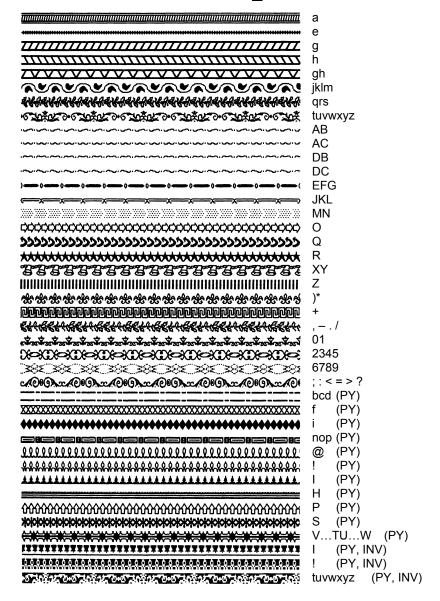
Appendix N Fonts

(Those marked † appear on the Font Supplement Disk.)

arabic [†]	۵-(¦) قعي هر هغسق شجح الناسنت خالب شيلاله ٤
athens†	'ABCDEFGHIJKLMNOPQRSTUVWXYZ()~
bauhaus	<pre>'abcdefghijklmnopqrstuvwxyz(!)~¢</pre>
bauhausbold	'abcdefghijklmnopgrstuvwxyz()~%
block	°abcdefghijkimnopqrstuvmxyz{i}~€
bold	'abcdefghijklmnopqrstuvwxyz(¦)~⊄
borders†	TILL WXZZO CONTRACTORUZO
broadway	'abcdefghijklmnopgrstuvwxyz{ }~c
bubble	<pre>'abcdefghijklmnopqrstuvwxyz{ }~¢</pre>
burgondy	yapcdeleān i אאני וואונים אלור i mnobdrepanawwayx∢; א
busorama	'ABCDEFGHIJKLMNOPQRSTUVWXYZ{!}~¢
celtic	'abcòefghijklmnopqrstuvwxyz
connection	'abcdefghijklmnopqrstuvwxyz(¦)~
crossfire†	'anametani akrubomironaanaki 1}~4
danish [†]	'abcdefghijklmnopqrstuvwxyzæ¢å~
english [†]	'abcdefghijklmnopqrstuvwxyz(¦)~¢
freehand	'abcdefqhijklmnopqrstuvwxyz{\}~m
french [†]	'abcdefghijklmnopqrstuvwxyzéùè¨
futura	'abcdefghijklmnopgrøtuvwxyz
german [†]	'abcdefghijklmnopqrstuvwxyzäöüß§
goodtype	'abcdefghijklmnopqrstuvwxyz{¦}~
greek [†]	'αβξδεφγηιθκλμνοπψρστυω,χ,ζ(¦)~
hairpin†	'abcdetghijk(mnopoprstuuwwyz()~
hebrew [†]	ייחוביטשרקפצנמקכיעהגפידסבאי (¦)~י
inuktitut†	$\lambda^2 = \lambda^2 + \lambda^2 $
italian [†]	'abcdefghijklmnopqrstuvwxyzàòèì
italic	'abcdefghijklmnopqrstuvwxyz{;}~
keys†	

Z-1H≯C5-1X5_&720L○II∃FXETT₩₩4#{¦}~ korean† led POSCODEFGHOUTKLMINOPORSTUVWXYZ[|] 'abcdefghijkimnopgrstuvwxyz(;)~ manhattan math† 'abcdefghijklmnopqrstuvwxyz{/}_¢ (~) | (zyxwvutsrqponmlkjihgfedcba' mirror† misc† 'əbedefgh i jir imnopqrs tuvwxyz (†}~¢ monogram 'abcdefghijklmnopqrstuvwxyz(')~ news 'abcdefghijklmnopgrstuvwxyzæøå~ norwegian† abroefghijklmnopqrstuuwxyz{I}~ old english 'abedefghijkImnopqrsiuvwyyz{:}--e pierrot 'abcdefghijklmnopgrstuvwxyzôõúùÇ portuguese† 'abcdefghijklmnopqrstuvwxyz(;)~ print 'abcdefghijk!mnopqrstuvwxyz(!)~ pudgy russian† 'абцдефгхижклмнопярстувюэйз ¦ ~¢ 'abcdefghijklmnopqrstuvwxyzæøå~¢ scandinavian† 'abcdefghijklmnopgrstuvwxyq{\}~ script ʻabodafghijklmnopqrstuvuxyz(i)~ shadow 'abcdefghijklmnopqrstuvwxyzëöôü so african† 'abcdefghijklmnopqrstuvwxyz°nçóú spanish† *albcdleifighi jikilimnopqiristuvwkyz(1)~ split 'abcdefghijklmnopgrstuvwxyz{\}~ stencil 'abcdeFghijkImnopgrstuvwxyz(1)~ stop stopbold 'abcdefghijklmnopgrstuvuxyz(;)~ swedish[†] 'abcdefghijklmnopqrstuvwxyzäöåü tech 'alocdefohijkimnoporstuvuxyz(!)~ 'abcdefghijklmnopqrstuvwxyz{|}~ typewriter visa 'abcdefghijkImnopgrstuvwsyz{\}~

Below is an example of some of the border patterns possible with the "borders" font. The characters shown at the right of each line comprise the pattern; they should be repeated for the desired length. All patterns must be printed in the knonnect) pitch. The lines marked PY must have proportional printing turned on. Lines marked INV need to be inversed with the modifier.



Index

Aborting 16 Alternate pitch 36,100 Arrows 3 Backing-up paper 55 Back-up disks 2 Bilingual 64,100 Blocks	Disk (cont.) Contents 93 Directory 29 I/O 28 Discretionary hyphen 53 Displaying errors 29 Dot matrix 8 Dot matrix switch 62
copy 23 Cut 23 Duplicating 23 Erase 23 Marking 23 Moving 23 Paste 23 Boldface 37,91,100 Borders 106 Bottom 13 Burst speed 32	Edit font 72 Edit character set 75 Effects (in header/footers) 48 Elite pitch 36,91,100 End of paragraph 19 Equipment 2 Erase to end 21 Erase to end of line 21 Erasing font slots 24 Erasing files 29 Error messages 15
Caps lock 21 Case 21 Cassette port 4	Errors 81,84 Expand 35,91,100
Centering 45 Chain 51 Character sets 75 Clear tab 22 Clear text 16 Colors 8,66 Command summary 98,99 Comments 43 Compress 36,91,100 Contents i Correcting mistakes 14 Cursor 12 Cursor movements 12,19 Custom setup 86 Cutouts 50	Find 24 Find again 24 Finding text 24 Fine print back cover Fonts 72,105 Creating 72 Grids 94 List of 105 Slots 28 Superfonts 72 Footers 47 Foreign languages 39,64,95–97 Form letters 55 Printing 56,57 Eating data 52,57 Format arrow 42
DEL 14 Delete line 15 Delimiters 20 Demo 10 Device # 8 Diacritics 39 Directory 29 Disk Command menu 28	Format disk 85 Formatters 41–52 Description 43–52 List of 101,102 Summary 101 Syntax 42 Formatting disk 85 Formatting output 41

Function keys 20 Margins 43 Marking blocks 23 Get text 31 Menu 5 Glossary 103 Merge text 30 Gobble 14 Messages 81 Graphics 50,68 Micro height 38,91,100 Graphics converter 68 Modifiers 33-40 Graphics insertion 69 Descriptions 35 Grids 94 List of 34,100 Searching for 35 Hard space 53 Summary 100 Headers 46–47 Moving blocks 23 Height of text 38,91,100 Help key 28,30,31 Multiple setup 10 Multi-column 49,54 Help screens 13,66 Help switch 66 **NLQ 91** Home 12.19 Normal height 38,91,100 Hyphenation 53 Overlay 39,100 Indentation 44 Insert file 31 Page scrolling 20 Insert line 15 Page numbering 48 Paragrphs 19 Insert space 21 Paste buffer 23 Insert switch 14,19 Interface 9 Paste block 23 Introduction iii Periodic tabs 22 Inverse 37,91,100 Pica pitch 36,91,100 Pitch 36,91,100 Italicize 37,91,100 I/O 28 Preferences 8 Preview 61 Joystick 73 Printer 9 Justification 44 Printing 60 All text 60 Kev 4 Konnect 36,100 Blocks 60 Dot matrix 10 Light pen 73 Fonts 10 Line formation 44 Problems 70 Load speeds 32 Program disk 7 Loading character sets 29,64 Prompts 81 Loading Fontmaster 5 Proportional 45,74 Loading fonts 28 Push mode 65 Loading fonts needed 27 Push switch 65 Loading text 30 Put text 31 Loading guns 11 Put block 31 Looking for text 24 Quick view 62 Lookup tables 95 Quit 16 Macros 65 Manual use 3 Renaming files 29

Repeat speed 66 Replacing Text 24 RETURN key 13,19 Reverse 45,65 Reverse switch 65

Saving setup files 9
Saving text 29
Screen protection 16
Searching for text 24
Sending disk commands 29
Sentence delimiters 20
Sentence (definition) 20

Sequencing 61 Set tab 22 Setup file 8 Multiple 10 Saving 9 Testing 9

Shift lock 21 Shift return 20

Slot selectors 37,91,100

Slots 28

Sound switch 8
Spacing 45,46
Special effects 34
Status display 18
Subscripts 38,91,100

Summaries

Commands 98 Formatters 101 Modifiers 100

Super font 72

Superimposing 51

Superscripts 38,91,100

Switches 18
Dot matrix 62
Help 66
Insert 14
Reverse 65
System setup 8

System setup 8 System menu 5

Tab formatters 53,54 Tabs 21 Tabs (auto) 50 Tabs (typewriter) 22 Tailoring 66
Tall height 38,91,100
Test pattern 9,92
Testing setup files 9
Translating 78
Troubleshooting 79
Typewriter tabs 22
Typing text 13,19

Underline 37,91,100 Using this manual 3

Validating disks 85 Variable box 55 Variable file 56 Verify text 30,32

Wildcards 24 With flag 39,65,100 Word definition 20 Word delimiters 20 Word wrap 44

Copyright Notice

Copyright © 1986 by Xetec, inc. This publication may not be copied, reproduced, translated, or reduced to machine readable form, in whole or in part, without the prior written permission of Xetec, Inc.

The programs and data included on the Fontmaster 128 disks are copyrighted by Xetec, Inc. The distribution and sale of this product are intended for the use of the original purchaser only and for use only on the computer system specified. Selling or otherwise distributing this product without the written consent of Xetec is a violation of the law.

Updates

Xetec, Inc. reserves the right to correct and/or improve this manual and the related disks at any time without updates to prior purchasers of the program. Updated versions can be obtained for a fee of \$10.

Limited Warranty

Xetec warrants that the Fontmaster 128 disks and key are free from defects in material and workmanship, assuming normal use, for a period of ninety (90) days from date of purchase. If a defect occurs during this period, send your disks or key to Xetec along with a dated proof of purchase where it will be replaced free of charge. After this period, you may obtain a trade-in for a nominal fee.

In no case will Xetec, Inc. be held liable for errors contained herein or for direct, indirect, incidental, or consequential damages connected with the use or application of this manual, disk, or other related items. This statement of limited warranty replaces all other guarantees and warranties, whether expressed or implied, and including, but not limited to, warranties of merchantability and fitness for any purpose. Xetec does not assume any other warranty or liability, nor does it authorize any person or party to assume any other warranty or liability in connection with the sale of its products. So there.

SECOND PRINTING

Copyright © 1986, 1987 by Xetec, Inc. All rights reserved

Commodore 128 is a registered trademark of Commodore Business Machines, Inc.





2804 Arnold Rd. Salina, KS 67401 (913) 827-0685

Spellmaster 128 programs and manual written by Marty Flickinger

Copyright Notice

Copyright © 1987 by Xetec, inc. This publication may not be copied, reproduced, translated, or reduced to machine readable form, in whole or in part, without the prior written permission of Xetec, Inc.

The programs and data included on the Spellmaster 128 disk is copyrighted by Xetec, Inc. The distribution and sale of this product are intended for the use of the original purchaser only and for use only on the computer system specified. Selling or otherwise distributing this product without the written consent of Xetec is a violation of the law.

Updates

Xetec, Inc. reserves the right to correct and/or improve this manual and the related disk at any time without updates to prior purchasers of the program. Updated versions can be obtained for a fee of \$10.

Limited Warranty

Xetec warrants that the Spellmaster 128 disk is free from defects in material and workmanship, assuming normal use, for a period of ninety (90) days from date of purchase. If a defect occurs during this period, send your disk to Xetec along with a dated proof of purchase where it will be replaced free of charge. After this period, you may obtain a trade-in for a nominal fee.

In no case will Xetec, Inc. be held liable for errors contained herein or for direct, indirect, incidental, or consequential damages connected with the use or application of this manual, disk, or other related items. This statement of limited warranty replaces all other guarantees and warranties, whether expressed or implied, and including, but not limited to, warranties of merchantability and fitness for any purpose. Xetec does not assume any other warranty or liability, nor does it authorize any person or party to assume any other warranty or liability in connection with the sale of its products. So there.

FIRST PRINTING

Copyright © 1987 by Xetec, Inc. All rights reserved

Commodore 128 is a registered trademark of Commodore Business Machines, Inc.

Table of Contents

1.	What is Spellmaster 128?	2
2.	What Does a Spell-Checker Do?	2
3.	Spell-Checking Text Files	3
4.	Correcting Mistakes	4
5.	Searching for Words in the Dictionary	5
6.	Word Classes	7
7.	System Configurations	7
8.	Summary of Spellmaster Options	9
9.	Error Messages	9

What is Spellmaster 128?

Spellmaster 128 is a spell-checking program designed to work with Font-master 128. You will quickly find, however, that it has many features not found in most spelling correction programs. The first part of this manual will deal with how to use Spellmaster as an ordinary spell-checker. Later, for those interested, we'll discuss some of the more esoteric features.

On your Spellmaster disk are two dictionaries. One, called the main dictionary, contains over 100,000 of the most commonly used words in the English language today. It is the main source of information used to determine if a word is spelled correctly or not. The other dictionary is called the user dictionary. It contains only a few words presently, but later you will learn how to add words to it to suit your particular needs.

What Does a Spell-Checker Do?

Basically, all a spell-checker does is "read" a file created on a word processor, looking for spelling errors. Beyond that, most different programs differ on features and application. Spellmaster 128 in particular works with files created with Fontmaster 128 (although with the translate program, other files can be indirectly spell-checked). It accomplishes this while Fontmaster 128 is still running (they both work together). Since it checks the file while it's in memory and while Fontmaster is running, the delay between writing text and spell-checking it is practically non-existant!

Since Spellmaster and Fontmaster 128 work as a team, Spellmaster cannot be run on its own. For this same reason, it's vitally important that both programs be the same main revision. For example, Spellmaster rev 1.3 will work with Fontmaster 128 rev 1.3 or 1.36 but not 1.21 or 1.4 (if such a revision is ever released).

Spell-Checking Text Files

IMPORTANT: Before using your Spellmaster disk, be sure to make a copy of it for backup. You may very possibly be adding words to the disk soon, so protect yourself!

The easiest way to learn to use Spellmaster is to use it. So load up Fontmaster 128 in the usual way and get some text in memory. Any text will do, type something in or load the file "demo" off the supplement disk. Now let's say the text in memory is an important letter that you want spell-checked before you print and send it. Insert the Spellmaster disk into the drive you used to boot Fontmaster and press **SHIFT CTRL D**. The drive will spin, the screen will clear, and this will appear:

Spellmaster 128 Rev 1.xx

Spell-check options? ABNV

Don't worry about the options for now, just press RETURN to start. The first thing that Spellmaster does is to sort through the words in your text. As it's doing this, you will see "Sorting: xxxx" with the number showing how many words have been sorted. When complete (usually just a few seconds), Spellmaster displays some statistics that might be of interest to you. Here's how they look:

Number of words: 102 Unique words: 73

Average word length: 4.84 letters Average sentence length: 25.50 words

Checking: a

Number of words refers to the total number of words throughout the entire document. To Spellmaster, a word is one or more letters surrounded by any non-alphabetic character (like punctuation, spaces, numbers, etc.). There are some non-alphabetic characters, however, that can occur in the middle of a word. They are the apostrophe ('), the discretionary hyphen (-), and all modifiers (listed in Appendix K of the Fontmaster 128 manual).

Unique words is the total count of words in your document, not counting repeats. For example, "The cream of the crop" contains 5 words but only 4 unique words. Notice this also implies that upper/lower case is ignored by Spellmaster - a "word" is a "Word" is a "WORD."

Average word length and Average sentence length are both self-explanatory. Mathemeticians know that if there are no sentences, the last stat will be meaningless. In this case, a "- - -" is listed in place of the number.

While you have been looking at the statistics, the actual spell-checking process has already begun. The "Checking: a" message shows you where in the dictionary Spellmaster currently is looking (at words starting with the letter shown). Spellmaster only "reads" as far as it has to in this dictionary, before closing it and opening your user dictionary. When all the way through that dictionary, the process is complete.

NOTE: You can stop Spellmaster whenever you want by pressing the RUN/STOP key. This is, however, considered an abort, so no results will be given.

Correcting Mistakes

After the spell-checking process is complete, one of two things will happen. If no spelling errors were detected, control will return to Fontmaster where you will see the message "No spelling errors." If, however, any errors were found, Spellmaster will automatically go into its editing mode. At the top of the screen will be a message saying how many different misspelled words were found. Your text file will be displayed with the first bad word highlighted and flashing.

At this point you are prompted to do one of four things with the highlighted word: "Ignore, Replace, Add, or Lookup." First of all, if it isn't misspelled but is just an odd word, you can either press "A" if you want to add this word to your user dictionary, or press "I" to just ignore the word.

If the word truly is misspelled, you can replace it with the correct form by pressing "R". The question "Replace with?" will appear, to which you should type in the correct spelling. It's okay if the word you type is longer or shorter than the misspelled form. What do you do, though, if you aren't sure how the word really is spelled? Just press "L" to lookup the word. Spellmaster will look through both dictionaries, looking for any words that are similar to the misspelled word being worked on. Just watch for the intended word to come up and look how it's spelled. When you see it, you can stop the search early by pressing RUN/STOP to return to the "Ignore, Replace, Add, or Lookup" question. Now go ahead and select "R" and enter the word with the spelling you just found. Once you press RETURN, the corrected word will be plugged into your text.

Spellmaster will repeat this process for all words it assumes to be misspelled, working through them in an alphabetical fashion. If a word is misspelled the same way more than once, you will be asked what to do for every single occurrence. If you select "R" for replace, you can just press the **HELP** key to enter the same corrected word as the time before. This makes it easy to correct many occurrences of a misspelled word quickly and accurately.

At any time, you can abort the editing phase and return to Fontmaster by just pressing RUN/STOP. The only exception is when you select "L" to lookup a word. In this case RUN/STOP aborts just the lookup process.

Spellmaster's not fool-proof: Here's something you might not have realized about spell-checkers. They determine if a word is misspelled by determining if it is a "real" word. They can, therefore, be fooled by words that are correct but not what you intended. For example, let's say you meant to type "coal" but accidentally type "cola." Spellmaster won't catch it because "cola" is not misspelled.

Searching for Words in the Dictionary

Spellmaster 128 has a unique feature not found in most spell-checking programs - the ability to electronically look for words. Pretend, for example, that you are writing a paper with Fontmaster, and you begin to type the word "indigenous." The only problem is you are not quite sure how to spell it. Rather than guessing and letting the spell-checker catch it later (especially if you're going to use the word often), you would like to know right now how to spell it. With Spellmaster, you can find a word's spelling in your dictionaries on disk just like you would in a printed dictionary, with two big differences. First, speed - Spellmaster can look **much** faster than you can. Second, power - you have several "commands" that give you the power to find a word even though you only know how certain parts of it are spelled.

Going back to our example, you (incorrectly) think that the word is spelled "indiginous," but you're not sure. Just press **SHIFT CTRL D** (as if you are going to spell-check the text). When asked "Spell-check options?" press "S" for word search. Now you are asked "Pattern for word search? [*? - #]." You're pretty sure it starts with "indig" so you reply "indig*" (without the quotes). The "*" option means "show me any word that starts with these letters." As soon as you hit RETURN, Spellmaster begins looking for words that match the pattern you gave. In our example, 27 words are listed, one of them being "indigenous." Aha, that's how you spell it. You can abort the search when you are satisfied by pressing RUN/STOP, or you can let the search go to completion. Either way, the number of words found is shown at the bottom of the list. If you didn't abort the search, Spellmaster will search the user dictionary as well, showing a separate word count for the main and the user dictionaries.

A general rule to remember: the more specific you are in specifying your word search pattern, the fewer words you will have to look through to find your word. For that reason, there are a few more pattern options you can use to help you pin down your word:

The asterisk (*) basically means "match anything of any length." You've already seen that when you end your pattern with "*", anything following doesn't matter, as long as the specified letters are all matched. You can alternatively put the "*" at the beginning of your pattern. "*cator" would search for all words ending with "cator." Try it to see what words come up. Notice that when you use the "*" at the start of the pattern, Spellmaster has to look through the entire dictionary (just as you would if you had no idea what letter a word started with). If you place a "*" somewhere in the middle of your pattern, the middle of the word doesn't matter, as long as it starts and ends with what is on either side of the "*". For example, you could have found "indigenous" by entering "in*ous" if all you knew was how the word started and how it ended. Regardless of its position, you should never use more than one "*" in your pattern.

This character is just a simple wildcard. You can use it in your pattern to signify "I don't know this character." Again going back to our example, I wasn't sure if it was "indiginous" or "indigenous" so I entered "indig?nous" as my pattern. You can use as many "?" marks as you want in a pattern, just remember that every "?" must match one and only one character. "a?lat??" will find "ablated" and "ablates" but not "ablate" or "ablative." To generalize the ending, "a?lat*" would work.

?

#

This character, if used, signals to skip the main dictionary and search only through the user dictionary. If you use this option, the "-" must appear after all the 'real' pattern characters.

This symbol means that you only want a count of the words that match the pattern, not the actual words themselves. This can save much time when you want to count large groups of words. The "#" must be the last character of your pattern (it must even follow a "—" if used). A good use for this option is to count the words in your dictionaries. Enter "*#" as your pattern and every word will match (but won't be printed - just the final count). You can also learn some interesting statistics by playing with this option. Would you believe that about 4,423 words in the dictionary end in "ness." Or that 10,770 of the words (10.6%) start with the letter "C."

Word Classes

Until now, we have ignored any questions or messages regarding word classes. What is a word class? In Spellmaster's main dictionary are well over 100,000 words. All of them fit into one of five catagories: regular words, abbreviations, British words, proper names, and vulgar words. For convenience, the last four types can be individually included or omitted when using the main dictionary. Normally, they are included, but by disabling them, a little speed is gained as well as a higher spell-checking confidence. For example, with nearly 1,000 abbreviations in the main dictionary, it is conceivable that a misspelled word could happen to look like a valid abbreviation or acronym, and therefore not be caught. For most applications, though, we recommend that at least abbreviations and names be turned on. Here's how you enable or disable them: when asked "Spell-check options?" press the "A", "B", "N", or "V" keys to turn that letter on or off. Each group whose letter is visible when you press RETURN will be used in the spell-check or word search process. Note that the majority of words (the regular ones) can never be disabled. Your selections for word classes used will stay just as you set them until you change them or leave Fontmaster.

System Configurations

Disk Drives

Spellmaster 128 is designed to work with various disk drives. Whenever you attempt to access dictionary information, Spellmaster first determines the type of disk drive you have. The reason for this is that by knowing what drive you have, it can optimize its operation for that drive, making data retrieval as fast as possible. If you have a 1581 disk drive, the program will sense this and act accordingly (total spell-check time for main dictionary: 30 seconds). A 1571 disk drive will automatically be sensed, too (time: 35 seconds). If you don't have either of these drives, Spellmaster assumes you have a 1541 and acts accordingly (time: 109 seconds). If you have a drive that is supposed to act like a 1541, you will have to experiment. Try spell-checking some text; if it acts peculiar or locks up your computer, your drive must not be exactly 1541 compatible. If this is the case, you must enter the "SETUP" program from the Fontmaster 128 main menu, find the question "Special flags [usually 0]" and add 8 to the value found there. Save this setup to disk (in fact, modify #1 and #2). This instructs Spellmaster from now on that your drive is not capable of fully imitating a 1541. Knowing this, it can then properly read the data from the clone drive, although it is the slowest method (read time: 4:26). Don't panic, though. Read on - RAM expansion may rescue you.

Note for 1581 disk drive owners: you may copy your Spellmaster disk to a 3½" disk using the program called "FILECOPY" on the 1581 utility disk. In fact, you can even fit both Fontmaster 128 disks onto this same disk. To make it auto-boot, though, you need to use the program "SECTOR EDITOR" (also on the utility disk) to copy (track 1 sector 0) from the Fontmaster program disk to your disk.

RAM Expansion

Both Fontmaster and Spellmaster 128 support the two models of RAM expanders made by Commodore for the C-128: model 1700 with 128K of extra RAM, and the 1750 with 512K. Either device, when installed, will be detected and used by Spellmaster. When you first call up Spellmaster, if either device is detected, the Spellmaster program and miscellaneous files will be automatically installed in the expansion RAM. Once this occurs, each time you call up the spell-checker, it's immediately ready. For the 1700 (128K), you will still have to swap the Fontmaster disk for the dictionary disk so that the dictionaries can be accessed.

If you have the model 1750 RAM expander (512K), however, you can actually install both dictionaries in the expansion RAM. Since that would mean the Spellmaster program and dictionaries would both be installed in RAM, you would no longer need to swap disks to do a spellcheck. And there's an added bonus - the total time for a spell check will drop to about 15 seconds. That's over 7,000 words a second! Here's how you go about installing the dictionaries: when Spellmaster signs on and asks "Spellcheck options?" press "I" for install. (If you don't have the correct RAM expander, nothing will happen.) Spellmaster will print "[Install]" next to the "Word classes" message and proceed with an otherwise normal spellcheck. The next time you call up Spellmaster, it will say "Spell-check options? [Dictionaries installed]." This is just to remind you that all dictionary data will be retrieved from the RAM expansion module, not disk. If for some reason you want to go back to reading from disk, press "U" for un-install. (The Spellmaster programs that were automatically installed. however, will still remain.)

A few extra things about using RAM-installed dictionaries. First, when you install the dictionaries, all word classes are installed, regardless of which ones are selected. When the dictionaries are actually used, the word class options then function as documented. Second, in the editing phase after a spell check, if you choose to add any words to your user dictionary, make sure that the dictionary disk is in the boot drive before you hit "A" to add. If you do add any words, then just before you return to Fontmaster you will be asked "Install new words in RAM expansion, too?" If you answer "no," the new words will be on your disk, but will not be used in spell-checking until the next time the dictionaries are installed in expansion RAM. If you answer "yes," both the disk and installed dictionaries receive the new words.

Summary of Spellmaster Options

(Press **HELP** when asked for options to see this list)

A Abbreviations on/off

B British on/off
N Names on/off
V Vulgar on/off

S Word Search

I Install dictionaries in REM (RAM Expansion Module)

U Uninstall dictionaries
RETURN Begin spell-check of text
RUN/STOP Return to Fontmaster

Error Messages

Too many words - More than 11,500 unique words exist in the text file being spell-checked. Spellmaster cannot sort this many words. Break the file into two halves.

Dictionary load error - An error occurred in the data read from the dictionary disk. Check disk drive for proper operaton. Also, if drive is a 1541 clone, setup files may need to be customized for a non-standard 1541 disk drive (see section 7. System Configurations/Disk drives)

