MINUTE MANUAL

FOR

APPLE

WRITER //e

JIM PIRISINO

an easy user's guide to
APPLE WRITER //e
and
word processing
MINUTE MANUAL
FOR
APPLE WRITER //e

BY
JIM PIRISINO
Other Minute Manuals:
Minute Manual for DB Master, David Einhorn, 1983

Disclaimer of All Warranties and Liability

Apple Computer, Inc. may make improvements in their program called "Apple Writer // for //e only" at any time and without notice, as they have stated in their manual. This Minute Manual describes the use of the Apple Writer //e program in distribution as of September 1, 1983. Jim Pirisino and MinuteWare make no warranties whatsoever, either express or implied, with respect to the Apple Writer //e program, its merchantability, or its fitness for any ordinary or particular purpose.

Jim Pirisino and MinuteWare make no warranties whatsoever, either express or implied, with respect to this manual, its merchantability, or its fitness for any ordinary or particular purpose. Every precaution has been taken to eliminate errors and omissions. In no event will Jim Pirisino or MinuteWare be liable for direct, indirect, incidental, or consequential damages resulting from the use or misuse of the software or instructions described in this manual.

Copyright © , 1983 by Jim Pirisino and MinuteWare, P.O. Box 2392 Columbia, MD 21045 (301) 995–1166. All rights reserved.

Minute Manual is a trademark of Jim Pirisino and MinuteWare. Apple is a registered trademark of Apple Computer, Inc.

Composition by Mid Atlantic Photocomposition

Cover by Paul Demmitt

ISBN 0–913131–01–6
To Debbie
Acknowledgements

To George and Becki Szeless, who have made the Logical Choice much more than a microcomputer store—they have made it a Learning Experience.

To the Logical Choice and Jerry Johnson and Mark Wheeler of the Comm Center for hardware support in the writing of this book.
Preface

What are Minute Manuals?

To use a microcomputer as a word processor you must read and understand

1. The microcomputer manuals
2. The word processing software manuals
3. The printer manuals.

To quickly learn and use a word processor using a microcomputer and printer, as a beginner, without help, can be a difficult and frustrating task.

As a beginner you may often end up staring at computer, printer and word processor manuals saying "I'll never learn all this". In fact, many software programs are prematurely retired to the bookshelf and never adequately utilized at all.

Minute Manuals are the intelligent interface between the beginner and the computer. Minute Manuals are written with the understanding that as a beginner you want to quickly begin working with your software. As you gain experience you can broaden skills and increase in complexity. The important thing is to put the software in the computer, turn on the computer, open the manual and begin working immediately.

The Minute Manual for Apple Writer //e lets you start word processing in a minute. Follow the seven easy operating procedures to begin word processing NOW. No need to leaf through the entire manual to find how to perform the most basic of operations. The seven basic operations described step by step are:
1. Turning on the computer
2. Initializing disks
3. Typing at the computer
4. Editing text
5. Saving text on disk
6. Loading text from disk
7. Printing text

The Minute Manual takes over where the regular manual leaves off in providing you with additional and valuable information. Having this information compiled for you is like having a PRIVATE CONSULTANT advise you on how to get the most out of your system and your software.

Who needs a Minute Manual?
* Any beginner who is using or trying to use Apple Writer //e.
* Anyone who wants to get started immediately using Apple Writer //e.
* Anyone who has a spouse, friend, employee, or child, who is using your Apple Writer //e and is constantly relying on you to show them how.
* Anyone who wants to use their Epson, Gemini, Apple, NEC, Pro-writer or Okidata dot matrix printer with Apple Writer //e.
* Anyone who has trouble formatting and printing text with Apple Writer //e.

Minute Manuals are designed to help you attain the highest possible skill level in the shortest amount of time. Your comments are important in helping us attain that goal. Feel free to write with comments, suggestions, and problems. Is there another software program that you need a Minute Manual for?
# TABLE OF CONTENTS

**INTRODUCTION** .............................................................................................................. 1

**CHAPTER ONE—The Seven Basic Operating Procedures** ........................................... 3

I. Turning on the Computer ............................................................................................ 4
II. Initializing a Blank Disk .............................................................................................. 5
III. Typing Text Using Apple Writer //e ........................................................................ 6
IV. Editing Text .................................................................................................................. 7
    A. Moving the cursor ...................................................................................................... 8
    B. Deleting text ............................................................................................................ 8
    C. Inserting or adding text ......................................................................................... 10
    D. Moving text ........................................................................................................... 10
    E. Replacing text ........................................................................................................ 12
V. Saving Text on an Initialized Disk ............................................................................. 13
VI. Loading Text From Disk to Computer .................................................................... 15
VII. Printing Text ............................................................................................................. 16
    A. How to print your text ........................................................................................... 16
    B. How to change the way your text is printed ....................................................... 19
    C. How to alter the format at any point in the text .................................................. 20

**CHAPTER TWO—Quick Guide to the Seven Basic Operating Procedures** ................. 21

I. Turning on the Computer ............................................................................................ 21
II. Initializing a Blank Disk .............................................................................................. 21
III. Typing Text Using Apple Writer //e ........................................................................ 22
IV. Editing Text .................................................................................................................. 22
V. Saving Text on an Initialized Disk ............................................................................. 25
VI. Loading Text from Disk to Computer .................................................................... 25
VII. Printing Text ............................................................................................................. 26
CHAPTER THREE—Other Procedures

Data Line

Lock in Upper Case

Case Change Mode

Utility Disk

Glossary

   How to create a temporary glossary
   How to use the glossary
   Saving a glossary on disk
   Loading a glossary from disk
   Creating an entire glossary file

Find and Replace

   To search or find
   To find and replace
   To find and delete

DOS Commands

   To catalog a disk
   To rename a file
   To verify that a file is on a disk
   To lock a file
   To unlock a file
   To delete a file

Tabs

   How to use the TAB key
   To clear tabs
   To set tabs
   To save a tab file
   To load a tab file

Apple Writer/e and Corvus Hard Disk

WPL

   How to write a WPL program
   How to save a WPL program
   How to use a WPL program

CHAPTER FOUR—Formatting and Printing Procedures

The Standard Page Format

Changing the Format Settings on the Apple Writer/e Program Disk

Continuous Printing Format—Mailing Labels
Page Headers and Page Footers ........................................ 47
  To set page headers or footers ................................... 47
  To delete page headers or footers ................................ 47
  Problems associated with top line and bottom line .......... 48
Page Numbering ............................................................. 49
  Set the starting page number ...................................... 49
  Set the position for page numbering .............................. 49
Special Formats ............................................................. 50
  Embedding format settings ........................................ 51
  Creating a special format for one particular file .......... 52
  Creating special formats for types of files ................... 53
How to Stop the Printer .................................................. 53
How to Temporarily Halt Printing .................................... 54
How to Automatically Halt Printing With an Embedded
  Command ................................................................. 54
How to Force a Page Break .............................................. 54
How to Print Only Part of a File ..................................... 55
Print Preview ............................................................... 55
How to Print Files Consecutively .................................... 56
Using the Paragraph Margin Setting ................................. 57
How to Use Footnotes .................................................... 58
  How to enter footnotes in the text ............................... 59
  How to format a footnote less than 63 characters long .... 60
  How to format footnotes longer than 63 characters long ... 60
How to Print the File Names in the Catalog ...................... 61
How to Print Directly on the Printer from the Keyboard ...... 62

CHAPTER FIVE—Dot Matrix Printer Procedures .................... 65
INTRODUCTION ............................................................... 65
General Instructions ....................................................... 67
Epson MX 80/100, Epson FX 80, Gemini 10/10X/15 ............... 67
  Epson FX 80 .......................................................... 72
  Epson MX 80/100 ...................................................... 79
  Gemini 10/15/10X .................................................... 81
  Gemini 10X .......................................................... 83
  Comments on the Epson printing commands .................... 85
Apple, Prowriter, NEC ..................................................... 87
Okidata 92 ................................................................. 91
Epson FX Summary of Commands ..................................... 96
Glossary File of Print Commands ........................................ 98
To create an Epson FX printing glossary ...................... 99
To load the glossary file ............................................. 102
To use the glossary .................................................... 102
Reference chart .......................................................... 102

CHAPTER SIX—First User’s Guide to Word Processing ... 107
Visualizing Word Processing Concepts ..................... 107
What does the word processing software do and how does it work? ........................................ 109
How do you issue commands to the computer—CONTROL and ESC ........................................ 110
Typing at the computer ................................................ 110
Understanding memory ................................................. 111
Disks ........................................................................ 111
Take care of your disks ................................................. 112
Preparing your disks before you can use them .......... 112
How do I save my text on a disk .......................... 113
How much can I save on one disk ......................... 115
How do I load a file from a disk back into the computer .... 115

CHAPTER SEVEN—Using Apple Writer || for the || Plus on the Apple //e Computer ................... 117
How to Start ............................................................. 117
Apple //e Features That You Can Use ..................... 118
Apple //e Features That You Cannot Use ................ 118
Underlining and Superscripts on the Epson MX Printer ......................... 119
How to get underlining and superscripts on the Epson MX when using Apple Writer//e ................ 119
WPL program to replace gag character in Apple Writer//e files with underlining and superscripts printer control codes ........................................ 119

APPENDIX 1—Two Disk Drives ........................................ 121

INDEX .................................................................... 122
INTRODUCTION

This Minute Manual was designed to provide you with a set of easy instructions covering most of the word processing operations available in Apple Writer //e. This manual does not replace your Apple Writer //e operating manual. The Minute Manual and the Apple Writer //e operating manual are complementary and support each other.

The Minute Manual contains many helpful suggestions, instructions, and procedures not found in the Apple Writer //e operating manual. The Minute Manual explains how to use Apple Writer //e with an Epson MX or FX, Gemini 10/10X/15, Apple, NEC, Prowriter, or Okidata 92 dot matrix printer; how to create and use a glossary of printer control codes; how to create and use a standard page format; how to avoid page formatting problems due to an idiosyncrasy in the program; how to create an Apple Writer //e utility disk; how to use Apple Writer //e with a Corvus hard disk; how to format footnotes; how to create special formats. Also included is a first user's guide to word processing and several useful WPL programs. Also explained is how to use Apple Writer ][ for the ][ Plus on the Apple //e computer AND one method of getting Apple Writer //e to do underlining and superscripts on the Epson MX printer.

Each chapter is independent of the others and can be used as a reference and as a guide to improve your understanding of your entire system and how each component interacts, the computer, the software, and the printer.

IF YOU WANT TO GET STARTED IMMEDIATELY—

Go to Chapter One, put the Apple Writer //e program disk in the disk drive, turn on the monitor and computer and start word processing immediately.
IF YOU WANT TO LEARN HOW TO PRINT WITH YOUR DOT MATRIX PRINTER—

Go to Chapter Five, and you will find the codes for the Epson FX and MX, Gemini 10, 10X, and 15, Apple, NEC, Prowriter, and Okidata 92 dot matrix printers, and creating and using glossaries for printing codes.

IF YOU WANT TO READ AN INTRODUCTION TO WORD PROCESSING CONCEPTS—

Go to Chapter Six, and you will find out about the concepts relevant to using the Apple //e computer to do word processing.

IF YOU WANT TO LEARN THE OTHER WORD PROCESSING PROCEDURES—

Go to Chapter Three, and many of the important word processing techniques and procedures are explained in a step by step fashion.

IF YOU WANT TO LEARN HOW TO PRINT AND FORMAT YOUR TEXT—

Go to Chapter Four, to find all of the formatting and printing procedures from the standard page format to special formats explained in a step by step fashion.

IF YOU WANT TO USE APPLE WRITER /// ON THE APPLE //e

Go to Chapter Seven, and learn how to use Apple Writer /// on the Apple //e, and learn how to use underlining and superscripts with Apple Writer /// on the Epson MX printer.
The seven basic operating procedures presented here are fully annotated for the beginner. Once you are comfortable with these procedures, you can use the condensed version in the next chapter as a quick reference guide.

You can start using Apple Writer /e right now without having to read computer, software, and printer manuals. Simply follow the operating procedures described below in the following order.

1. Turning on the computer.
2. Initializing blank disks.
3. Typing text on the keyboard.
4. Editing text.
5. Saving text on an initialized disk.
6. Loading text from disk to the computer.
7. Printing text.

Knowing these seven operating procedures will allow you to do useful word processing immediately since these are the tasks that you will be performing during greater than 95% of your word processing time.

Apple Writer /e is a powerful word processor and has many time saving and fancy features. You don't have to learn all of its features at once. Let your needs dictate which ones you have to know now and discover the rest as you gain experience and sophistication.
I. TURNING ON THE COMPUTER

1. Put a write protect tab on the small cut out section of your Apple Writer //e program disk. Write protect tabs are special self sticking tabs that usually are provided on a sheet in boxes of blank disks that you buy. The write protect tab will prevent you from accidentally erasing your Apple Writer //e program. **You don't HAVE TO put one on**, it is only suggested as a precaution.

2. Put the Apple Writer //e program disk into the disk drive and turn on the monitor and computer.

3. **Computer:** Press RETURN  
   **You:** Press RETURN

4. The computer displays the data line at the top of the screen and a cursor or blinking box. The cursor marks your present position on the screen and the place where text will be entered or erased.

   If you have an 80 column text card in the auxiliary slot inside the Apple, 80 characters per line of text will be displayed. Otherwise only 40 characters will be displayed per line. (**It will be assumed in this book that you have an 80 column display.**)

   You can now use the Apple keyboard exactly like a typewriter to enter text. What you type will be displayed on the monitor.
II. INITIALIZING A BLANK DISK

A blank disk must first be initialized before it is capable of being used to save the text that you type into the computer. Therefore you should initialize several blank disks before you even begin to type.

1. Take the Apple Writer //e program disk out and put a blank disk into the disk drive. If you have two disk drives, see Appendix 1.

** When you initialize a disk, the computer will erase any information presently on that disk. Be sure the disk is a blank one. If you accidentally leave the Apple Writer //e program disk in the drive, without a write protect tab on it, and proceed with the initialization procedure, IT WILL BE ERASED!  

2. ** You: ** Press CONTROL O (This means press and hold the key marked CONTROL and press the letter O)

3. ** Computer: ** DOS COMMANDS
You: ** Press G (to select Initialize disk)

4. ** Computer: ** Enter Slot, Drive (Example S6,D1):
You: ** Type S6,D1 and Press RETURN

5. ** Computer: ** Enter your selection (A–G):
You: ** Press RETURN

The disk is now initialized. Fill out a label, for example “Apple Writer //e Data”, and put the label on the disk. You can leave the data disk in the disk drive while you are doing word processing.

To initialize another blank disk, repeat steps 1 to 5.

You can initialize a blank disk at any time while you are doing word processing, even if you presently have text in the memory of the computer. To initialize a blank disk, simply follow steps 1 to 5.
III. TYPING TEXT USING APPLE WRITER

With the blinking cursor at the top left of a blank screen, you can begin typing, using the keyboard like an ordinary typewriter.

There is no need to press a carriage return, RETURN key, except at the end of a paragraph or any partial line. You format how you want the text that you have typed to be printed at the time you print it. You have complete control over how your text is printed including such things as left and right margins, and single or double spacing.

As you type, the lines are scrolled off the top of the screen. The lines that disappear off the screen are still in the computer's memory. You can move the cursor backward and forward through the text as described in the next section on editing and the text will reappear on the screen.

While you are typing, if you ACCIDENTALLY press a CONTROL key sequence and the computer displays a message on the screen for you like [L]oad, [S]ave, [P]rint/Program, [N]ew, or [G]lossary; you can return to the text by pressing the RETURN key.
IV. EDITING TEXT

The instructions for editing your text are presented in the following order:

A. How to move the cursor forward and backward through the text.
B. Deleting text
C. Inserting or adding text
D. Moving text.
E. Replacing text

You will spend most of your word processing time either entering or editing text. Apple Writer //e is at least 10 times easier than the Apple Writer ][ Version because editing has been simplified. To edit with Apple Writer //e you simply move the cursor to the place in the text that you want to edit by using the arrow keys and you make the necessary change by adding, inserting, moving or deleting text. With the old Apple Writer ][ program to make a single change required that you go into the cursor movement mode, move the cursor, return to the text entry mode, make the change, return to the cursor movement mode and move the cursor to the next change. With Apple Writer //e there is no need to switch back and forth from text entry mode to cursor movement mode for every change that has to be made; you are simultaneously in both the cursor movement mode and the text entry mode at the same time.
A. Moving the Cursor

To move the cursor through the text

<table>
<thead>
<tr>
<th>Press</th>
<th>To Move The Cursor</th>
</tr>
</thead>
<tbody>
<tr>
<td>left arrow</td>
<td>left one letter</td>
</tr>
<tr>
<td>right arrow</td>
<td>right one letter</td>
</tr>
<tr>
<td>up arrow</td>
<td>up one line</td>
</tr>
<tr>
<td>down arrow</td>
<td>down one line</td>
</tr>
<tr>
<td>Closed Apple &amp; left arrow</td>
<td>left one word</td>
</tr>
<tr>
<td>Closed Apple &amp; right arrow</td>
<td>right one word</td>
</tr>
<tr>
<td>Closed Apple &amp; up arrow</td>
<td>up 12 lines</td>
</tr>
<tr>
<td>Closed Apple &amp; down arrow</td>
<td>down 12 lines</td>
</tr>
</tbody>
</table>

CONTROL B  to the beginning of the text
CONTROL E  to the end of the text

B. Deleting Text

To delete text, move the cursor as described above to the space to the RIGHT of the text that you want to delete. If you want to delete a letter or word, move the cursor to the space directly to the right of that letter or word. If you want to delete a whole paragraph, move the cursor to the end of the paragraph.

Delete a Letter

1. Press the DELETE key to delete the letter directly to the left of the cursor. Press the DELETE key continuously to delete as many characters as you want. Holding the DELETE key depressed will continuously delete characters until you release the key.

Delete a Word

1. To delete a word, the first symbol on the data line at the top of the screen must be pointing to the left, <. If the symbol is pointing the other way, >, change it by pressing CONTROL D.
2. **You:** Press **CONTROL W**

to delete the word directly to the left of the cursor. Holding the **CONTROL W** keys depressed will continuously delete words until you release them.

**Delete a Paragraph**

1. To delete a paragraph, the first symbol on the data line must be pointing to the left, `<`. If the symbol is pointing the other way, `>`, change it by pressing **CONTROL D**.

2. **You:** Press **CONTROL X**

to delete the paragraph directly to the left of the cursor. When you press **CONTROL X** all of the text to the left of the cursor will be erased until the last time you pressed **RETURN**. This could be as little as one line, up to a maximum of 1024 characters at a time. 1024 characters is about one half of a screen full of characters. You will know exactly how many characters will be deleted each time you press **CONTROL X** by looking at the number next to the word Tab on the data line at the top of the screen. Tab counts how many characters have been pressed since the last time you pressed **RETURN**. If there are more than 1024 characters in the paragraph, only 1024 of them will be erased each time you press **CONTROL X**.

**Delete All Text In The Memory of the Computer**

When you are finished working on one file and save it on a disk, you must erase everything before beginning another one.

1. **You:** Press **CONTROL N**

2. **Computer:** [N]ew (Erase Memory) Yes/No ?

   **You:** Press **Y** and Press **RETURN**

All of the text in the memory of the computer will be deleted.
C. Inserting or Adding Text

1. Move the cursor to the place in the text where you want to either insert or add text. Text that is typed will be inserted or added to the left of the cursor.

2. Type the text that you want to insert or add.

If you wanted to insert the letter e that was omitted from the word "nxt", you would move the cursor until it was on the x and then type the letter e to complete the word "next".

D. Moving Text

When you press the DELETE key, the CONTROL W, or the CONTROL X keys to delete text, the text is irretrievably deleted. There is another way to delete text so that it is saved as you delete it. You can then move the cursor to another part of the text and reinsert the text that you deleted.

Moving Letters

This command is capable of moving up to 128 characters at a time which is a little more than one and a half lines. Only the last 128 characters deleted this way will be remembered by the computer. You can delete as many characters as you want using this command, however, when you start to reenter them, only the last 128 that were deleted will be reentered.

For example, if you delete a sentence that is three lines long using this method and then move the cursor to another part of the text and then reinsert the sentence, only the first half of the sentence will be inserted. The other half of the sentence was really deleted since this method can only "remember" the last 128 characters deleted. If you continue to try to insert letters, the same 128 characters will be inserted over and over again.

1. Move the cursor to the right of the letters to be moved.

2. Hold the Open Apple key down while pressing the left arrow key and letters will be deleted, but the computer will remember only the last 128 that are deleted.
3. Move the cursor to the place in the text where you want to reinsert the deleted letters.

4. Hold the **Open Apple** key down while pressing the **right arrow** key and the last 128 characters that were deleted will be reinserted.

As the 129th character is deleted, the 1st character deleted is no longer remembered by the computer. To visualize this, consider a tennis ball can laying on its side that can hold 128 tennis balls and is open at both ends. As the 129th tennis ball is put into one end, the first tennis ball falls out the other end. The place in the computers memory that stores these 128 characters is called a buffer.

**Moving Words and Paragraphs**

You can move up to 1024 characters at a time using these procedures. To move more than 1024 characters (about ½ screen full of text), repeat these procedures as many times as is necessary.

1. The first symbol on the data line must be pointing to the left, <. If the symbol is pointing the other way, >, change it by pressing **CONTROL D**.

2. **You:** Press and Hold both the **CONTROL** key and the **Open Apple** key with your left hand and Press
   
   W to delete a word or
   
   X to delete a paragraph

   Keeping W or X depressed will automatically continue to delete words or paragraphs.

   If the computer **BEEPS** when you press X, this means that the amount of text exceeds 1024 characters. The computer deleted 1024 characters and stopped. You will have to come back and move the rest of the paragraph. If you press X again, you will irretrievably delete the end of the paragraph.

3. Move the cursor to the place in the text where you want to reinsert the deleted text.
4. **You:** Press **CONTROL D** (to change < to > on the data line)

5. **You:** Press and Hold the **CONTROL** key and the **Open Apple** key with your left hand and Press

   W to reinsert one word at a time or
   X to reinsert one paragraph at a time until all of the text to be moved has been reentered.

**Copying text with Closed Apple instead of Open Apple**

To make an exact copy of words or paragraphs, use the same instructions in the previous section on moving text except use the **Closed Apple** instead of the **Open Apple**. When you use the **Closed Apple** key, text is not deleted as you backspace across it. But when you move elsewhere in the text, the text that you backspaced across can be reinserted all the same. When you use the **Closed Apple** the text is stored in the computer's memory but is not deleted from its present position in the text.

**E. Replacing Text**

There is a way to type right over top of existing text without first deleting it.

1. Move the cursor directly on top of the first character to be changed.

2. **You:** Press **CONTROL R**

3. Type the new text. What you type will replace the characters presently on the screen.

4. **You:** Press **CONTROL R** again to return to normal entry mode.
V. SAVING TEXT ON AN INITIALIZED DISK.

After you have typed your material into the computer, you will want to save it on a disk. These are the basic instructions for saving text on a disk.

1. Put an initialized data disk in the disk drive. If you do not have one, you can always initialize one by following the directions in procedure II.

2. **You:** Press **CONTROL S**

3. **Computer:** [S]ave:
   **You:** Type a name for your file and Press **RETURN**.

   The name that you give your file must be a unique name, one that has not been used for any other file on the disk. If you try to save a file using a name already used on the disk, the computer will save the file in its place — literally wiping out the original file by that name. Read the first user's guide in Chapter 5 for tips on naming files.

   If you don't remember all of the names of the files on this particular disk, you can ask the computer to display all of the names by
   **You:** Press `?` and Press **RETURN**.

   A list of all the names of the files on that disk will be displayed. Press **RETURN** until you again are prompted with [S]ave:

   If you change your mind at this time and do not want to save the file, just Press **RETURN** and you will be returned to the text.

4. If you typed a name and pressed **RETURN**, the disk drive will activate and your text will be stored on the disk under the name that you typed.
Making duplicates and updating your files on disk as you type.

One of the most useful shortcuts is the = command. You can use the = command when saving files. To make a duplicate of your file on another disk, save it on one disk using the above instructions, take out the first disk and put another initialized disk in the drive, Press CONTROL S, and instead of retyping the name of the file, Press = and Press RETURN. This is especially useful if you are using a long file name. When you use the command =, the computer will assume the name of the file that is presently displayed on the data line at the top of the screen.

Every 15 or 30 minutes when you are typing, you should save what you have typed. To quickly save what is in the memory of the computer, Press CONTROL S and Press = and Press RETURN. The old version of the file will be replaced with the new up to date version under the same name.
VI. LOADING TEXT FROM DISK TO COMPUTER

You will retrieve or load a file from a disk back into the computer's memory for one of the following purposes:

1. to print it
2. to edit it
3. add more to it.

To load a file from a disk back into the computer's memory:

1. Put the data disk in the drive that contains the file that you want to load.

2. **You:** Press **CONTROL L**

3. **Computer:** [L]oad:
   - **You:** Press ? and Press **RETURN**

A list of all of the names of the files that are stored on the disk is displayed on the screen.

   - **You:** Press **RETURN** until you get the [L]oad prompt again

If the file that you wanted to load is not on this disk, simply Press **RETURN**, and put a different disk in the drive and repeat #3 above. If the file is on the disk –

4. **You:** Type the name **EXACTLY** as it appears in the list of names and Press **RETURN**

The file will now be loaded into the computer. The cursor will be at the end of the file. If you want to go to the beginning of the file, Press **CONTROL B**.

POSSIBLE ERRORS—

If you make a mistake and misspell the name, the computer will beep and display the message "**DOS :FILE NOT FOUND**". If this happens, Press **RETURN** and start over.
VII. Printing Text

Printing what you have typed into the computer and formatting it the way you would like it to appear on paper is the most complicated and troublesome part of using the word processor. In this section you will learn the basic operating procedures involved in printing your text. In this section you will learn the basic procedures for printing a file and formatting its appearance when printed on a printer. There are two more chapters in this book that further explain how to print your text. One explains how to utilize the full capabilities of a dot matrix printer and the other explains other printing procedures.

In this section you will learn:

A. How to print your text

B. How to change the way your text is printed.

C. How to alter the format at any point in the text.

A. How to Print Your Text

1. You: Press CONTROL P

2. Computer: [P]rint/Program:
   You: Type NP and Press RETURN

The entire text that is in the memory of the computer will be printed. The text will be printed in the standard format that was preset when you loaded the Apple Writer //e program.

To See the Standard Printing Format Parameters

1. You: Press CONTROL P

2. Computer: [P]rint/Program:
   You: Press ? and Press RETURN

3. After you are finished looking at these printing settings
   You: Press RETURN

   This will return you to the text.
A list of all the formatting parameters that you can change are listed on the screen. The values that are displayed are the values that the Apple Writer //e program automatically assigns when the program is loaded into the computer.

(LM) = 9 Left margin is set to 9 spaces. A normal dot matrix printer prints 80 characters per line. 9 spaces is about a one inch left margin.

(PM) = 0 Paragraph margin is set to 0. When you press RETURN the next line printed will be indented the number of spaces indicated here.

(RM) = 79 Right margin is set to 79. A normal dot matrix printer prints 80 characters per line. Since the first character is 0, then 79 is the last character on a line. A setting of 71 is a right margin of one inch.

(TM) = 1 Top margin is set to 1. The top margin is the number of lines to be skipped between the page header line and the first printed line of text on each page. See Chapter Four for full explanation.

(BM) = 1 Bottom margin is set to 1. The bottom margin is the number of lines to be skipped between the last printed line on the page and the page footer line. The page footer line is reserved for things like page numbers. See Chapter Four for full explanation.

(PN) = 1 Page number is set to 1. If you use page numbering by assigning the correct code into (TL) or (BL) below, page numbering will begin with page 1 and each page will be numbered sequentially.

(PL) = 58 Printed lines per page is set to 58. The total number of printed lines per page includes the page header line, the top margin, the lines of text, the bottom margin, and the page footer line.

(PI) = 66 Page interval is set to 66. There are 66 lines on a normal 8 ½ x 11” page.
(LI) = 0 Line interval is set to 0.
   0 is the setting for single space.
   1 is the setting for double space.
   2 is the setting for triple space.

(SP) = 0 Single page setting is 0.
   0 is the setting for computer paper.
   1 is the setting for single sheets.

When the setting is 0, the computer will print page
after page without stopping. When the setting is 1,
the computer will pause after printing each page so
that you can insert another sheet.

(PD) = 1 Printer destination is slot #1.
   Set PD to 1 if the printer card is in slot #1.
   2 if the printer card is in slot #2.
   0 if you want to see the text printed on the
screen instead of the printer. (Print pre-
view)

(CR) = 0 Carriage return is set to 0. If your printer prints
everything on the same line then set CR to 1. If your
printer is double spacing even though LI is set to 0
for single spacing, then set CR to 0.

(UT) = Underline token is set for \. Everything between two
\ will be underlined. You can set the underline token
to a different character on the keyboard by assigning
it to UT. Whenever the character assigned to UT is
used in the text, it will initiate underlining.

Justification

   LJ = Left justified
   FJ = Fill justified (straight margins on the left and on the
       right)
   CJ = Center justified
   RJ = Right justified
B. How to change the way your text is printed

1. **You:** Press **CONTROL P**

2. **Computer:** [P]rint/Program:
   **You:** Press ? and Press **RETURN**

3. To change any parameter listed on the screen, simply type the two letter code for the parameter that you want to change, followed immediately by the new setting and press **RETURN**. The new setting will replace the old setting on the screen. You can change as many settings as you want by entering the two letter codes and new settings and pressing **RETURN**. When you are finished, Press **RETURN** again to return to the text.

   To change from single spaced printing to double spaced

   **You:** Type **LI1** and Press **RETURN**

   When you print the text now, the entire document will be double spaced. How do you change one of the printing parameters halfway through the document. What if you only wanted one section double spaced?
C. How to alter the format at any point in the text.

1. Move the cursor to the point in the text where you want to change one of the printing parameters.

2. You: Press RETURN (the next command must be on a line by itself)

3. You: Type a period, the two letter code, and the new setting.

4. You: Press RETURN

For example, to change to double spacing, Press RETURN, Type .LI1, and Press RETURN again. All of the text following this command will be double spaced. To return to single spacing, you have enter a .LI0 on a line all by itself right before the text that you want single spaced.

These new format settings are recognized as commands that control how the text is printed and they are not printed themselves. These are called embedded commands.

Other techniques helpful in printing your text are presented in Chapters Four and Five.
CHAPTER TWO
Quick Guide to
The Seven Basic Operating Procedures

You can use these condensed step by step instructions as your
desktop reference guide for the basic operating procedures when
using Apple Writer //e.

I. TURNING ON THE COMPUTER

1. Put a write protect tab on the Apple Writer //e program disk.

2. Put the program disk into the disk drive and turn on the
   computer and monitor.

3. Press RETURN

II. INITIALIZING A BLANK DISK

1. ** IMPORTANT **
   Take the Apple Writer //e program disk out and put a blank
disk in the disk drive.

2. Press CONTROL O (letter O)

3. Press G

4. Type S6, D1 and Press RETURN

5. Press RETURN

21
III. TYPING TEXT USING APPLE WRITER

At this point you can type on the keyboard just like typing on a typewriter.

Press the RETURN key only when beginning a new paragraph or new line.

IV. EDITING TEXT

A. Moving the Cursor

1. To move the cursor through the text

<table>
<thead>
<tr>
<th>Press</th>
<th>To Move the Cursor</th>
</tr>
</thead>
<tbody>
<tr>
<td>left arrow</td>
<td>left one letter</td>
</tr>
<tr>
<td>right arrow</td>
<td>right one letter</td>
</tr>
<tr>
<td>up arrow</td>
<td>up one line</td>
</tr>
<tr>
<td>down arrow</td>
<td>down one line</td>
</tr>
<tr>
<td>Closed Apple and</td>
<td></td>
</tr>
<tr>
<td>left arrow</td>
<td>left one word</td>
</tr>
<tr>
<td>right arrow</td>
<td>right one word</td>
</tr>
<tr>
<td>up arrow</td>
<td>up 12 lines</td>
</tr>
<tr>
<td>down arrow</td>
<td>down 12 lines</td>
</tr>
<tr>
<td>CONTROL B</td>
<td>to the beginning of the text</td>
</tr>
<tr>
<td>CONTROL E</td>
<td>to the end of the text</td>
</tr>
</tbody>
</table>
B. Deleting Text

Deleting a letter

1. Press the DELETE key

Delete a word

1. If symbol on data line is >, then Press CONTROL D to change it to <.

2. Press CONTROL W

Delete a paragraph

1. If symbol on data line is >, then Press CONTROL D to change it to <.

2. Press CONTROL X

Delete all text

1. Press CONTROL N

2. Press Y and Press RETURN

C. Inserting or Adding Text

1. Move the cursor to where you want to insert or add text.

2. Type the new text.

D. Moving Text

Moving letters (limit, 128 at a time)

1. Hold the Open Apple key and Press the left arrow key to delete letters

2. Move the cursor to the place where you want to reinsert them.

3. Hold the Open Apple key and Press the right arrow key to reinsert the letters.
Moving words or paragraphs (limit, 1024 characters at a time)

1. If symbol on data line is >, then Press **CONTROL D** to change it to <.

2. Hold both the **Open Apple** and **CONTROL** keys down and Press **W** to delete as many words as you want to move or Press **X** to delete as many paragraphs as you want to move.

3. Move the cursor to where you want to place the deleted text.

4. Press **CONTROL D** to change < to >.

5. Hold both the **Open Apple** and **CONTROL** keys down and Press **W** to reinsert words or Press **X** to reinsert paragraphs.

**Copying words or paragraphs**

To make an exact copy of text, use the same instructions for moving words or paragraphs except use the **Closed Apple** instead of the **Open Apple**.

**Replacing Text**

1. Move the cursor to the first letter to be typed over.

2. Press **CONTROL R**

3. Type the new text

4. Press **CONTROL R**
V. SAVING TEXT ON AN INITIALIZED DISK.

1. Put an initialized disk into the disk drive.

2. Press **CONTROL S**
   
   To see the names of the files already on the disk Press `?` and Press **RETURN** until you get the **[S]ave** prompt again.

3. Type a name for the file and Press **RETURN**

VI. LOADING TEXT FROM DISK TO COMPUTER

1. Put the disk in the drive containing the file to be loaded.

2. Press **CONTROL L**
   
   To see the names of the files on the disk Press `?` and Press **RETURN** until you get the **[L]oad** prompt again.

3. Type the name of the file and Press **RETURN**
VII. PRINTING TEXT

To print the text,

1. Press CONTROL P
2. Type NP and Press RETURN

To change how text is formatted when printed,

1. Press CONTROL P
2. Press ? and Press RETURN
3. Type the two letter code and the new setting and Press RETURN
4. Press RETURN

To change how part of the text is formatted as it is being printed,
(Embedded formatting commands)

1. Move the cursor to where you want to change formatting
2. Press RETURN
3. Type a period, the two letter code, and the new setting
4. Press RETURN
CHAPTER THREE
Other Procedures

Data Line
The data line at the top of the screen can be changed or deleted from the screen.

1. Press ESC and the data line changes to a number line. On the number line the present positions of tab settings are indicated by inverse display boxes.

2. Press ESC again and the data line disappears from the display.

3. Press ESC again to bring back the original data line.

Lock in Upper Case
You can lock in upper case by simply pressing the CAPS LOCK key.

Case Change Mode

1. Press CONTROL C
   The first letter on the data line becomes a U or L

To change from lower case to upper case

1. Press CONTROL C until the first letter on the data line is the letter U

2. Press the right or left arrow to change letters to upper case.

3. Press any key to return to normal mode
To change from upper case to lower case

1. Press **CONTROL C** until the first letter on the data line is the letter **L**

2. Press the **right** or **left arrow** to change letters to lower case

3. Press any key to return to normal mode.

**Utility Disk**

You can create print formatting files, tab files and glossary files. With a print formatting file you can set all of the printing parameters for a particular file simply by loading a print formatting file (Chapter Four, Special Formats #2 and #3). You can also save a tab file and load it from a disk instead of resetting the tabs every time. An unlimited number of glossary files can also be saved on disk. These files are utility files that help you in writing and printing. It is suggested that you dedicate one of your initialized disks as a utility disk. Save only these kinds of files on the disk. By creating a utility disk, you won’t have to search through all of your data disks just to find a particular glossary or printing glossary.

Another type of file that you can save on your utility disk is your heading. Type your heading and format it on the screen. Save it on the utility disk under the name, heading. When you want to type a letter, simply load the heading from the utility disk. You can set up report headings and all kinds of useful “semi-files” and load them from the utility disk whenever you want to insert them into a file that you are presently working on.
Glossary

This is a powerful word processing feature that you should learn how to use as soon as possible. With the glossary, you can assign any key on the keyboard any sequence of letters, numbers, or symbols up to 128 characters each. A glossary can save time and make a tedious typing task relatively easy. You can assign a whole phrase or sentence to a single keystroke. You could assign the title “Minute Manual For Apple Writer //e” to the letter m and whenever you have to type the title all you have to do is press CONTROL G, and press m and “Minute Manual For Apple Writer //e” is inserted into the text. The glossary is also great for entering hard to remember as well as tedious CONTROL and ESC code sequences for printer control. A printing glossary and instructions for creating and using one for the Epson FX dot matrix printer is described in Chapter Five.

How many items can be assigned to a glossary file? Each glossary that you create can be assigned all of the lower case letters (26), all of the upper case letters (26), the numbers (10), and all of the symbols (30) on the keyboard except the *, and ?. You can even assign a definition to CONTROL A through CONTROL Z (except for H, M, and U) and CONTROL 6, −, [, ], and backslash. You can therefore assign 120 different keys or keystrokes definitions for each glossary. You can create as many glossaries as you want, but only one glossary can be in the memory of the computer at any one time.

Memory limitations – Although 120 different keys or keystrokes can be assigned glossary entries, there are limitations. Any one glossary cannot have more than 99 separate definitions. A glossary entry can not exceed 128 characters and the entire glossary cannot exceed 2048 characters.

You can create two types of glossaries, a temporary glossary and a glossary file on disk. A temporary glossary is created as you work at the computer. You can continue to add definitions as you go along. If you don’t save it on disk, it will be erased when you turn the computer off.
How to Create a Temporary Glossary

1. **You:** Press **CONTROL G**

2. **Computer:** [G]lossary (? = Define/*/Purge):
   **You:** Press ? (do not press **RETURN**)

3. **Computer:** Enter new definition:
   **You:** Type your glossary definition by typing a letter or other keystroke described above followed immediately by its definition without any intervening spaces, and Press **RETURN**

Example: mMinute Manual For Apple Writer //e

The letter and its definition will be entered into the glossary. The next time that you press **CONTROL G**, and ?, all of the previously defined glossary items will appear on the screen above the computers prompt to “Enter new definition”. If there are more than fifteen definitions, “Enter new definition” does not appear on the screen immediately. Continue to press **RETURN** until it appears.

How to Use the Glossary

1. Press **CONTROL G**

2. Press the letter or other character and its definition will be inserted at the position of the cursor.

   or

1. Press and hold the **Open Apple** key

2. Press the letter or other character and its definition will be inserted at the position of the cursor.
Saving a Glossary on Disk

Any glossary that is presently in the memory of the computer can be saved on disk. If you create a temporary glossary and wish to save it before you turn off the computer, put your Utility Disk in the drive and:

1. You: Press **CONTROL Q**

2. **Computer:** Enter your selection (A–K):
   
   **You:** Press **F**

3. **Computer:** Enter file name:
   
   **You:** Type a name for your glossary and Press **RETURN**

Loading a Glossary From Disk

When you turn on the computer, there are no glossary definitions in the computer. You can load any one of your glossary files from disk by:

1. **You:** Press **CONTROL Q**

2. **Computer:** Enter your selection (A–K):
   
   **You:** Press **E**

3. **Computer:** Enter file name:
   
   **You:** Type the name of the glossary file you wish to load and press **RETURN**. If you don't remember the name, Press ? and Press **RETURN**.

If you wish to change glossaries simply repeat the instructions for loading a glossary. Any time you load a glossary from disk the old glossary in memory is replaced with the new one that is loaded.

If you load a glossary from disk into memory, you can add to that glossary by following the directions in How to Create a Temporary Glossary. You may then save the new glossary by following the directions in Saving a Glossary on Disk. Use the same file name and the file will then contain the new definitions.
Creating an Entire Glossary File

If you are creating an entire glossary at once you can avoid all of the steps involved in How To Create a Temporary Glossary. Starting with a blank screen simply type each definition on a separate line. Type the letter followed immediately by its definition and press RETURN. Enter each one on a separate line. Up to 99 definitions can be entered at once. When you are finished save the file using CONTROL S. This type of glossary file is described in Chapter Five.

1. Clear the screen
   Press CONTROL N

2. Press Y and press RETURN

3. Type one letter and its definition on each line followed by RETURN

4. When finished, Press CONTROL S

5. Type a name for the glossary and Press RETURN

6. To use this glossary it must be loaded into memory. Follow the directions under “Loading a Glossary From Disk”

Find and Replace

The ability to find text anywhere in your documents is a very powerful and useful word processing tool. You should become aware of the capabilities of the Find feature and the Find and Replace feature of Apple Writer //e as soon as you can. If you find a misspelled word, you can search your entire text for any other occurrences of that word almost instantaneously. You can even automatically replace that misspelled word with the correct spelling if an occurrence of the misspelled version is found.
To Search or Find

1. **You:** Press **CONTROL B** (this takes the cursor back to the beginning of the file)

2. If the first symbol on the data line is <, Press **CONTROL D** to change it to >.

3. **You:** Press **CONTROL F**

4. **Computer:** [F]ind:
   **You:** Type /text to find/ and Press **RETURN**

5. If you find this text:
   a. Press **RETURN** to continue searching for the next occurrence or
   b. Press any other key and the search will be terminated leaving the cursor at that place in the text.

To Find and Replace

1. **You:** Press **CONTROL B**

2. If the first symbol on the data line is <, Press **CONTROL D** to change it to >.

3. **You:** Press **CONTROL F**

4. **Computer:** [F]ind:
   **You:** Type /text to find/replace with this/ and Press **RETURN**

5. **Computer:** RETURN = Proceed / Y = Replace
   **You:** Press Y to replace OR
   Press **RETURN** to find the next occurrence without replacing the one presently displayed OR
   Press any other key to stop the search.

In this procedure the computer stops every time it finds an occurrence of the text. To replace it with the new text you have to press **Y**. If you want the text replaced automatically, then type an **A** after the last /, like this /text to find/replace with this /A.
To Find and Delete

1. **You:** Press **CONTROL B**

2. If the first symbol on the data line is <, Press **CONTROL D** to change it to >.

3. **You:** Press **CONTROL F**

4. **Computer:** [F]ind:
   **You:** Type /text to find //A

Every occurrence of the text to be deleted will be deleted automatically. If you only want some of the occurrences deleted, don’t type the last A.

**DOS Commands**

DOS refers to Apple Computer’s Disk Operating System, which consists of the commands that allow you to communicate with the disk drive. Some DOS commands have already been described such as Save and Load. Other DOS commands can be used with Apple Writer //e by first pressing **CONTROL O** (letter O). There are six other DOS commands available – Catalog, Rename, Lock, Unlock, Delete, and Initialize.

**To Catalog a Disk**

To see a list of all of the names of the files on any one of your Apple Writer //e data disks:

1. **You:** Press **CONTROL O** (letter O)

2. **Computer:** Enter your selection (A-G)
   **You:** Press **A**

3. **Computer:** Enter Slot, Drive (Example S6,D1):
   **You:** Type **S6,D1** and Press **RETURN** (Just pressing **RETURN** works too)

4. **You:** Press **RETURN** twice to return to the text screen
To Rename a File

1. **You:** Press **CONTROL O**

2. **Computer:** Enter your selection (A – G):
   **You:** Press **B**

3. **Computer:** Enter file name:
   **You:** Type the old name,new name (include the comma and don’t leave any spaces before or after the comma)

4. **You:** Press **RETURN**

To Verify that a file is on a disk

This is a quick way to check that a particular file is on a disk.

1. **You:** Press **CONTROL O**

2. **Computer:** Enter your selection (A – G):
   **You:** Press **C**

3. **Computer:** Enter file name:
   **You:** Type the name of the file that you are looking for and Press **RETURN**

   If not found **Computer:** DOS: FILE NOT FOUND
   If found **Computer:** lists DOS command file again

4. **You:** Press **RETURN**
To Lock a File

You can protect a file from accidental erasure by locking it. A locked file contains a * in front of its name in the catalog. To edit and update a locked file, it must first be unlocked. You can load and print a locked file, you just can't change it or delete it.

1. **You:** Press **CONTROL O**

2. **Computer:** Enter your selection (A – G):
   **You:** Press **D**

3. **Computer:** Enter file name:
   **You:** Type the name of the file to be locked
   To see the catalog, Press ? and Press **RETURN**

4. **You:** Press **RETURN** to exit DOS command menu screen

To Unlock a File

1. **You:** Press **CONTROL O**

2. **Computer:** Enter your selection (A – G):
   **You:** Press **E**

3. **Computer:** Enter file name:
   **You:** Type the name of the file to be unlocked.

4. **You:** Press **RETURN** to exit DOS command menu screen

To Delete a File

1. **You:** Press **CONTROL O**

2. **Computer:** Enter your selection (A-G):
   **You:** Press **F**

3. **Computer:** Enter file name:
   **You:** Type the name of the file to be deleted

4. **You:** Press **RETURN**
Tabs

When you load Apple Writer the there are nine tabs set automatically, one at every eighth space. To move the cursor to the next tab setting, Press the TAB key.

You can set up to 32 tab stops and once you have set the tabs for a particular file you can save that tab file on disk for recall any time you are doing similar type work. This means that you only have to set up a tab file once.

How to Use the TAB Key

- Pressing the TAB key moves the cursor to the next TAB position. Spaces are inserted as the cursor is tabbed.

- Pressing BOTH the TAB and Closed Apple keys moves the cursor to the next TAB position WITHOUT inserting spaces. Using these two keys tabs the cursor OVER text as it goes.

To Clear Tabs

1. You: Move the cursor to the tab setting you want to clear

2. You: Press CONTROL T

3. Computer: [T]ab (Set/Clear/Purge):
   You: Press C to clear that one tab setting OR
   Press P to clear ALL of the tab settings

To Set Tabs

1. You: Move the cursor to the space that you want a tab set

2. You: Press CONTROL T

3. Computer: [T]ab (Set/Clear/Purge):
   You: Press S This will set a tab position
After you take the time to create the tabs the way you want them for a particular document, you can save that tab format on your disk. Whenever you use that file or a similar one you can also load the tab file. Save the tab file on your Utility disk.

To Save a Tab File

Set the tabs and put the Utility disk into the disk drive.

1. **You:** Press **CONTROL Q**

2. **Computer:** Enter your selection (A – K):  
   **You:** Press **B**

3. **Computer:** Enter file name:  
   **You:** Type a name for the file and Press **RETURN**  
   The name of a tab file will appear on the disk catalog starting with **TAB**.

To Load a TAB File

1. **You:** Press **CONTROL Q**

2. **Computer:** Enter your selection: (A – K):  
   **You:** Press **A**

3. **Computer:** Enter file name:  
   **You:** Type the name of the TAB file. If the name of the TAB file is REPORT TABS, it will appear in the catalog as TAB.REPORT TABS. Do not type the TAB at the beginning – just type the name REPORT TABS.
Apple Writer //e and Corvus Hard Disk

Apple Writer //e can be used with the Corvus Hard Disk. The instructions were not printed in the Apple Writer //e manual but were explained in a letter to Byte Magazine (Aug, 1983, Vol. 8, No. 8, p. 32) from Paul Lutus, President of Walden Software, Inc. and author of Apple Writer //e.

To set up the Apple //e system for Apple Writer //e and the Corvus Hard Disk, put the Apple disk controller card in Slot #7, and the Corvus controller card in slot #6. To boot Apple Writer //e on the Corvus:

1. **You:** Put the Apple Writer //e program disk in the drive and turn on the monitor and computer.

2. **You:** Press C while the program is being loaded.

3. **Computer:** Enable Corvus in Slot 6 (Y/N)?
   
   **You:** Press Y and Press RETURN

WPL

WPL stands for Word Processing Language. Using WPL is very much like programming in BASIC. In BASIC programming you write a series of commands for the computer to execute. Each command is preceded by a number and when you instruct the computer to execute the program, the computer executes each program line in numerical order. In BASIC programming you can assign numbers to variables and words and letters to string variables. You can have certain program lines repeatedly executed until a certain condition is met and then the program goes on or stops. In BASIC programming you can have the program request information from the user at the keyboard during execution of the program and then use that information in the program.

WPL can do all of these same things that BASIC can do. The difference is that instead of programming BASIC commands, in WPL you program Apple Writer //e commands. Which Apple Writer //e
commands are programmable? All of the CONTROL key functions can be used in a WPL program line. CONTROL P for print, CONTROL L for load, CONTROL S for save, CONTROL F for find, etc. In WPL you don't have to type the word CONTROL. The first letter in the program line is interpreted by the program as a control character. In WPL there are only three numeric variables (x, y, and z) and there are only four string variables ($A, $B, $C, and $D).

In this section, you will be introduced to WPL. Instructions will be given on how to write, save and use a WPL program, but you will have to refer to Apple's 147 page WPL manual for a thorough explanation of the commands. WPL is fun to work with and use. Experimenting and playing with WPL can make your word processing a lot more interesting. If you are interested in a Minute Manual For WPL or custom WPL programming please write to MinuteWare.

How to Write a WPL Program

First, clear the screen, Press CONTROL N, Press Y and Press RETURN. There is no need to number program lines like in BASIC programming. Type one instruction per line and press RETURN. Consider the following WPL program called REPRINT. This program will print as many copies of a file as you want, automatically.

START    NY
PIN What is name of file to be printed =$A
PIN How many copies =$B
NY
L $A
PSX 1

LOOP
PNP
PAS(X) =$C
PCS/$B/$C/
PAS/ LOOP
QUIT

QUIT
The words START, LOOP, and QUIT are similar to line numbers in BASIC programming. You can use a command like PGO LOOP to have the program go to the line marked by the word LOOP. A PGO command is therefore similar to a GOTO statement in BASIC. There is no need to use a line marker unless you want to branch to that line at some part of the program. When you type a WPL program line, start line markers like START, LOOP, and QUIT at the left margin. Start the actual program lines by TABbing to the first TAB stop.

The first letter in each program line is shorthand for a CONTROL character. The N stands for CONTROL N, the P stands for CONTROL P, and the L stands for CONTROL L. Remember in WPL you are programming using Apple Writer commands.

The first line clears the screen.
The next two lines ask for input from the user and assigns the users responses to the string variables $A, and $B.
The next line clears the screen again.
The next line loads the file from disk that you want to print ($A).
The next line sets a numeric variable (X) the value of 1.

The LOOP part of the program will be executed as many times as was specified by the user in $B. This part of the program will print the file. PNP is the same as if you pressed CONTROL P and typed NP and pressed RETURN. The next five lines determine if the file was printed enough times or not. If it wasn’t then the program returns to LOOP. If it was printed enough, the program goes to QUIT and the programs ends.
How to Save a WPL Program

Once you type a WPL program like the one above with line markers beginning at the left margin of the screen and all program instructions beginning one TAB position over, you can save it on a disk using the normal instructions for saving a program. Press CONTROL S, type a file name and Press RETURN.

How to Use a WPL Program

The WPL program and any files that are used during the execution of the program must be on the same disk. To execute the program:

1. Press CONTROL P

2. Type the word, do, followed by the WPL Program name. (The file above is called REPRINT. To use it, you would type DO REPRINT)
CHAPTER FOUR
Formatting and Printing Procedures

In Chapter One you were shown the basic operating procedures for printing a file. You were shown all of the formatting parameters and how to change them. You can change any of these formatting parameters before you begin printing and you can embed formatting parameter changes in the text to automatically change parameter settings as it is being printed.

In this chapter formatting and printing procedures will be explained along with step by step instructions for each.

The Standard Page Format

A normal 8½" × 11" piece of paper, single sheet or continuous forms, holds exactly 66 lines per page. Therefore as a general rule, the page interval will always be 66 (Pl = 66). The only other parameter left to determine is the number of printed lines (PL) per page. But to determine the number of printed lines per page you have to consider some other parameters. The number of printed lines (PL) on a page is equal to the sum of the top line (TL), top margin (TM), the actual text, the bottom margin (BM), and the bottom line (BL).

The Top Line is a single line that may contain information that you want printed at the top of every page of the file.

The Top Margin is the number of lines between the top line and the first line of text. If there is no top line then the top margin consists of one or more blank lines at the top of the page.

The Bottom Margin likewise is the number of blank lines between the last line of text on the page and the bottom line.
The Bottom Line is a single line that may contain information that you want printed on the bottom line of every page like page numbers.

The number of printed lines includes not only the number of lines of text to be printed on each page but also the TL, TM, BM, BL.

\[ PL = TL + TM + TEXT + BM + BL \]

We are going to define a standard page format here that contains no top line (TL) or bottom line (BL). It is wise to always have the top margin (TM) and bottom margin (BM) set to 1 because if TM is zero then the first line of every printed file will be indented one extra space due to an idiosyncracy in the program (when SP is 0). In the standard page format the number of printed lines is equal to the number of lines of text plus one line for the top margin and one line for the bottom margin. The standard page format will have a one inch margin top and bottom, and left and right.

When you boot up Apple Writer //e it automatically sets the printing parameters to the default values. One of these preset values is a right margin (RM) setting of 79. Leaving this value set to 79 can lead to some very frustrating hours at the computer due to an idiosyncrasy in the program which will be explained later. For now it is suggested that you change the settings to the standard page format below and then change the settings on the Apple Writer //e disk itself. You can use the following values for now. Later you may determine that another page format is more applicable to your work and you can use your own values for what you determine to be your standard page format. Just remember that to avoid future problems, do not set the right margin (RM) to 78 or 79.

44
To Set the Standard Page Format

1. Press **CONTROL P**
2. Press ? and Press **RETURN**
3. Type **TL** and Press **RETURN**
4. Type **BL** and Press **RETURN**
5. Type **TM1** and Press **RETURN**
6. Type **BM1** and Press **RETURN**
7. Type **PL56** and Press **RETURN**
8. Type **PL66** and Press **RETURN**
9. Type **LM8** and Press **RETURN**
10. Type **RM71** and Press **RETURN**
11. Press **RETURN**

Remember that this standard page format contains a one inch margin top and bottom, left and right. Also the page length (PL) is 56 lines which consists of a blank line, 54 printed lines of text followed by another blank line.

You have to insert the paper and manually advance the paper to where you want printing to begin on the page. The standard page format is set up for a one inch margin at the top. Therefore using this format you would advance the paper almost one inch. Now when you print a file, one line will be skipped (top margin of one line), 54 lines of text will be printed, one line will be skipped for the bottom margin, 6 lines will be skipped at the bottom of the page (one inch), and 6 lines will be skipped at the top of the next page (one inch), and this cycle will be repeated for each page printed. If SP (single page) is set to zero which is the setting for continuous forms, then each page will be printed automatically without stopping. If SP is set to 1 which is the setting for single sheets then the computer will stop after printing each page so that you can put a new page in.

What happens when you use page headers or page footers? How does this change the format settings? If you add either a top line or bottom line, to maintain a one inch margin at the top and bottom of the page you will have to set PL to 55 instead of 56. If you add both a top line and a bottom line you will have to set PL to 54 to maintain the one inch margins. See the section on page headers and page footers for a SPECIAL PRECAUTIONARY NOTE on their use.
Changing the Format Settings on the Apple Writer //e Program Disk

When you boot up the Apple Writer //e program disk, it automatically selects printing parameters. If you want to change these to the standard page format or any other format follow these instructions:

1. Remove the write protect tab from the Apple Writer //e program disk and put the disk in the disk drive
2. Change the parameter settings to the standard format or to the format that you will normally use.
3. Press CONTROL Q
4. Press D
5. Type SYS and Press RETURN
6. Put the write protect tab back on the Apple Writer //e program disk

Continuous Printing–Mailing Labels

How do you format printing so that no lines are skipped between pages? An example of the need to perform continuous printing would be the printing of mailing labels. To format for mailing labels or any continuous printing procedure, set TM and BM to 0 (zero), and set BOTH PL and PI to 66. This would be an exception to the rule of having TM and BM set to 1. The only inconvenience in this format setting is that the first character of the first line printed will be indented one space. Mailing labels will be discussed further later.
Page Headers and Page Footers
How To Use TL (Top Line) and BL (Bottom Line)

Apple Writer //e reserves one line at the top of the page and one line at the bottom of the page for you to use to enter page headers and page footers. Page headers and page footers contain information that you want printed on EACH page. Page numbering is a special case of page headers and footers.

Apple Writer //e's headers and footers consist of a line at the top and a line at the bottom of the page. Each of these two lines is divided into three equal portions. You can therefore have three distinct page headers and three page footers.

To enter a page footer or header, type the two letter command (either TL or BL) followed by four slashes ////. Whatever you enter between these slashes will be printed in the first, second, or third portion of the line. As an example, to print the Title on the far right third of the top line of every page, use the command TL//Title/. The Title is entered between the third and fourth slash. To delete the top line, simply type TL or TL/// with nothing between the slashes.

To Set Page Headers or Footers

1. Press CONTROL P
2. Press ? and Press RETURN
3. Type TL/1/2/3/ and Press RETURN (whatever you type in positions 1, 2, or 3 will be printed in that position on the top line. If you don't want anything in any of the three positions, leave that one blank. Use BL/1/2/3/ for page footers.)

To Delete Page Headers or Footers

1. Press CONTROL P
2. Press ? and Press RETURN
3. Type TL or BL and Press RETURN
SPECIAL PRECAUTIONARY NOTE

Problems Associated With Top Line and Bottom Line

There is an idiosyncrasy in the Apple Writer program that may cause you countless hours of frustration because of its tendency to appear and disappear. This problem is only relevant when using computer or continuous forms, when SP is set to 0 (zero).

1. If there is no top line (TL) and the top margin is set to 0 (zero), then each file printed will be indented one space.

   Solution—Always use the standard top margin setting of 1.

2. If you have a top line (TL) and the right margin is set to 79, two things will go wrong.

   If you have a page header in the right portion of the top line, in position 3 of TL/1/2/3/, then the last letter will not be printed on the top line but will instead be printed on the next line by itself. For example, if the top line was TL/lefteentered/ri ght/, it will be printed like this

   left       center       right
   t

   Also, one extra blank line will be printed per page which will mess up the page interval setting of 66 (PI66). Even though the page interval is set to 66, 67 lines will be printed. This problem only occurs if the right margin is set to 78 or 79.

   Solution—DO NOT use a right margin setting of 78 or 79.

   (if you possessively HAVE to use a right margin of 79 then

   1. Leave one space at the end of any top line entries in position 3, before the last slash. For example, TL/lefteentered/right/.

   2. If you use a top line or bottom line, set PI to 65 instead of 66 and

      if you use both a top line and a bottom line, set PI to 64 instead of 66.)
Page Numbering

Automatic page numbering is a special case of entering page footers and headers. By placing a # in between one of the three slashes, you are turning on automatic page numbering. Page numbers will begin with the number identified next to PN in the format list.

To perform automatic page numbering, you have to:

A. Set the starting page number and
B. Set the position in the top or bottom line where page numbers will be printed.

A. Set The Starting Page Number

1. Press CONTROL P
2. Press ? and Press RETURN
3. To set the starting page at 1, Type PN1 and Press RETURN

B. Set The Position For Page Numbering

1. Press CONTROL P
2. Press ? and Press RETURN
3. To print the page number in the standard position—in the middle of the bottom line, Type BL///#/ and Press RETURN

To print page numbers in other positions, use these commands in Step 3 above.

BL///#/ prints numbers at the bottom right
BL/#/// prints numbers at the bottom left
TL///#/ prints numbers at the top right
TL/#/// prints numbers at the top in the middle
TL/#/// prints numbers at the top left
Remember *** End all files that you print using page numbering with .ff on the last line all by itself. Otherwise the page number will not be printed on the last page.

You can have the word “Page” printed on each page along with the number by typing it in along with the numbering symbol. For example, Typing BL/Page – #/ will result in “Page – 1” being printed at the bottom of the page. If you are using chapter relative page numbering, for chapter one use the page footer BL/Page 1–#/ and so forth.

If you are printing several files and want them numbered consecutively, you can do this two ways, manually or automatically. Manually you would print the first file starting at page 1 (set PN to 1). When this is finished, set PN to the next consecutive number and print out the next file. Continue this strategy until all of your files are printed. To do this automatically, end each file with .ff and instead of using the command NP to print all of the files after the first one, use CP.

Special Formats

There are times when you develop a special format for one particular file or a particular type of file that you are printing. For example, you are printing out a file in the condensed printing mode where you have the right margin set to 125 (RM125). All of the other printing parameters are the same except for this one setting. It is difficult or impossible to remember the special format settings for all of your files. What you want to do is

1. Embed the special format settings directly into that particular file.

2. Create a special format for one particular file that you can save on a disk and load into the computer whenever you want to print it, or

3. Create a special format for a particular kind of file, for example, a format for letters, or lists, or reports, or mailing labels. You can save this format on disk and use it every time you print a file that fits this format.
1. Embedding Format Settings

This is a fool proof method. Whenever you load a file from a disk and print it, you are assured that it will be formatted correctly – regardless of the present format settings. How?

When you embed a printer parameter change directly into the text by typing a period, the two letter code and the new setting (example .RM125) on a line by itself, the computer does not print that line. It recognizes it as a command and executes the parameter change. The line that the embedded command is on is not counted as a line and will not mess up the number of printed lines per page.

In this method you simply embed the correct format setting at the beginning of the file. Every time you print the file, the format settings will automatically be set correctly. If you are changing one setting from your normal or standard page format, you can embed the change right into the beginning of the text. To change the right margin to 125 before anything is printed, type .RM125 on the first line and press RETURN. There is another type of printer command that tells the printer to switch from printing 10 characters per inch (pica) to printing 17 characters per inch (condensed). You can also embed that command at the beginning of the file. You will learn these dot matrix printing commands in the next chapter. You can also end the file with another right margin command which would reset the right margin to its normal setting. Enter .RM71 on the last line of the file.

You can embed as many printing parameter changes as necessary at the beginning of a file. For example, at the beginning of a mailing label file you can enter

```
.TM0
.BM0
.PL66
.PI66
.TL
.BL
.LM0
.RM75
.SP0
```
And on the very next line begin the file. You never have to worry about formatting this file again. Every time you load and print this file, it will be formatted correctly.

2. Creating a Special Format For One Particular File

If you spend a lot of time formatting a file called “Quarterly Report”, you can save that particular format on the same disk as the file itself. Once you set all of the format parameters:

1. Put the disk in the drive that contains the file “Quarterly Report”
2. Press CONTROL Q
3. Press D
4. Type a name for this format. HINT: Use the name of the file followed by the word “format”.

The format settings are saved on the disk under the name “PRT. Quarterly Report Format”. When you want to print this file, you have to first set the correct parameters for this file by loading this file. To load this file:

1. Put the disk in the drive that contains both the file and the format file
2. Press CONTROL Q
3. Press C
4. Type the name of the format file that you want to load, in this case “Quarterly Report Format” (DO NOT TYPE THE PRT. PREFIX THAT APPEARS ON THE DISK CATALOG) and press RETURN

The file is now ready to be loaded and printed.
3. Creating Special Formats For Types of Files

Instead of creating a format for one particular file you can create formats for **TYPES** of files. In section 2 above you created a format file for one particular file and saved the format file on the same disk as the file itself. Another suggestion is to create a format for a particular type of file, like mailing labels. Instead of embedding the settings at the beginning of each mailing label file as in section 1, or creating a format file for each particular mailing label file as in section 2, here you will create a format file for ANY mailing label file. Once you set the parameter settings, save the format on a special utility disk that contains only glossary files and print format files and other kinds of helpful files other than text.

In this case save the mailing label file exactly as you did in section 2, except simply call it “mailing label format”. Then when you print any mailing label file you can load this format from your utility disk.

All three of these approaches to formatting produce the same results. Experiment with all three and find the one that you are most comfortable with. It is likely that you may use all three for your various types of files.

How To Stop the Printer

1. Press **ESC**

Pressing the **ESC** key will stop the printer. When you stop the printer this way, there is no way to resume where you left off. Pressing **ESC** stops printing and returns you to the text with the cursor at the beginning of the file.
How to Temporarily Halt Printing

1. Press the ON LINE/OFF LINE button on the printer until printing stops.

2. To resume printing, Press the ON LINE button again.

You can use this procedure to temporarily stop the printer when you want to do something like realign the paper or answer the phone. You can resume the printing at the same point by pressing the button again.

How to Automatically Halt Printing With an Embedded Command

1. Move the cursor to the place in the text where you want printing to halt.

2. Press RETURN (the next command must be on a line by itself).

3. Type .IN and a message if you want one to appear on the screen when printing is halted. Neither the .IN or the message will be printed.

4. Press RETURN.

You can use this command in a document where you want to put in letterhead paper or put in mailing labels or put in another disk and then continue printing.

To Force a Page Break

You can force the printer to stop printing on one page and begin the next line on the next page by embedding the following command directly in the text. The command is called a form feed.

1. Press RETURN.

2. Type .ff and Press RETURN.
To Print Only Part of a File

The following commands are embedded formatting commands and when they are used, each must be entered on a line by themselves.

When you type .EP0 on a line by itself, none of the text after it will be printed until a .EP1 is encountered.

Here is an example of how to print only the middle of a file:

1. Type .EP0 at the beginning of the file. (Nothing will be printed until a .EP1 is encountered in the text.)
2. Press RETURN (.EP0 should be on a line by itself)
3. Move the cursor to the exact place in the text where you want to begin printing, and Press RETURN
4. Type .ff and press RETURN. This will assure that the text that follows will begin at the top of the page.
5. Type .EP1 and Press RETURN
6. Move the cursor to the exact place in the text where you want to stop printing, and Press RETURN
7. Type .EP0 and Press RETURN
8. To print the text use the normal printing command, Press CONTROL P, type NP, and Press RETURN.

Print Preview

This feature is described in the Apple Writer //e manual as “Printing to the Display”. Print preview means that you can display each page on the screen as it is presently formatted, including margins and page breaks. Before you print a long file on paper you can preview it on the screen to see how it is going to look. If a chart on the second page is split between the second page and third page, you can go back to the text and insert a form feed (.ff) on the line before the chart. This will have the chart begin on the next page so that it won’t be split between two pages. To further beautify printing you can make sure that single lines of paragraphs don’t begin on the last line of a page or finish on the first line of a page. To print preview:
1. Press **CONTROL P**
2. Press `?` and Press **RETURN**
3. Type **PD0** (zero) and Press **RETURN**
4. Type **SP1** and Press **RETURN**
5. Type **NP** and Press **RETURN**

The text will now appear on the screen, one page at a time. You will be requested to Press **RETURN** after each page is displayed. Press **ESC** to stop this procedure at any time.

To return to the normal print mode:

1. Press **CONTROL P**
2. Press `?` and Press **RETURN**
3. Type **PD1** and Press **RETURN**
4. Type **SP0** and Press **RETURN**
5. Press **RETURN**

**How To Print Files Consecutively**

Apple Writer //e can print more than one file as one continuous document, keeping track of page numbering and lines per page. To do this, you will load the first file into the memory of the computer; print it using the normal command (NP); then clear the screen and memory; load the next file; and print it using the command, CP. Continue this procedure, using CP to print each additional file until you are finished.

Each file will begin on the next line following the last printed line, and the program will keep track of the number of printed lines on the page and page numbers. Top lines and bottom lines will be entered in their correct places, as long as the right margin is not set to 78 or 79. The first character of each additional file; however, will be indented one space, unless the first line of each additional file is a blank line. Footnotes appearing on the last page of any file will most likely NOT be printed unless that file ends in a forced page break (.ff). If you are not using footnotes, there is no need to end files in .ff.
To Print Files Consecutively

1. Load the first file—
   Press CONTROL L

2. Type the name of the first file and Press RETURN

3. Press CONTROL P

4. Type NP and Press RETURN

5. Press CONTROL N

6. Press Y and Press RETURN

7. Press CONTROL L

8. Type the name of the next file and Press RETURN

9. Press CONTROL P

10. Type CP and Press RETURN

(Repeat steps 5 – 10 for each additional file to be printed)

Using the Paragraph Margin Setting

The normal paragraph margin setting is 0 (zero). Setting the paragraph margin to 5 will result in a 5 space indentation on the printed line following a carriage return; that is, any time you press the RETURN key the text on the next line will be indented 5 spaces. If you have the paragraph margin set to 5 and you want to override it because you want to type a numbered list down the left margin, you will have to enter a .PM0 on a line by itself to turn the paragraph margin off.

To outdent a numbered list like the one shown here where the numbers are lined up but the left margin is maintained within each number:

1. This is a numbered list that has the numbers outdented from the text entered within each number.
2. This is the second entry.

3. This is the third entry. Notice that the margin is maintained and the numbers are outdented four spaces.

**Follow these instructions**

1. Embed the new left margin setting to the space where the text within each number will be printed, not where the numbers are to be printed.
   For example, type `.LM15` and Press RETURN

2. Embed the new paragraph margin setting so that numbers will be outdented four spaces. Type `.PM - 4` and Press RETURN

3. Now type your numbered lines of text starting at the left margin of the screen, not worrying about formatting because the computer will format it correctly according to the commands you already entered in 1. and 2. above.

4. After typing the numbered list, return to your normal margins by
   
   Type `.LM8` and Press RETURN
   
   Type `.PM0` and Press RETURN

**How to Use Footnotes**

Footnotes are automatically placed at the bottom of the page that the footnote appears on and the space that the footnotes take up is automatically counted into the number of printed lines per page. You will have to learn how to enter footnotes in the text and how to format them. Although the program takes care of placing them at the bottom of the page for you, the program cannot keep the footnotes within the margins that you have set. You have to account for the margins of footnotes manually.
How to Enter Footnotes in the Text

This is the way that you enter footnotes in the text. At the place in the text where you want something footnoted, type the footnote reference number, Press (< and type the footnote, then Press >) and press the space bar once. In other words you will type the footnote directly in the text following its reference number. Whatever you type between (< and >) will not be printed in the text but will be considered a footnote by Apple Writer //e and will be printed at the bottom of that page. The instructions are:

1. Right after the footnote reference number Press (  
2. Press <  
3. Type the footnote.  
4. Press >  
5. Press )  
6. Press space bar once

Since footnotes have to be formatted manually, you must first calculate how many characters you are printing per line. The standard page format has (RM)71 — (LM)8 or 63 characters per line. Remember, do not use a right margin of 78 or 79. Therefore a footnote cannot be longer than 63 characters to maintain the correct margins. If you follow these step by step instructions, you will have correctly formatted footnotes.
How to Format a Footnote Less Than 63 Characters Long

1. Immediately after typing the footnote reference number in the text
   Press (
2. Press <
3. Type the footnote.
4. Press RETURN
5. Press >
6. Press )

The key step here is step 4. Press RETURN. It doesn’t matter how this looks on the screen—IT WORKS. If you don’t press RETURN at the end of the footnote, the next footnote will be printed on the same line as the one preceding it.

How to Format Footnotes Longer Than 63 Characters

1. Press (
2. Press <
3. Type the first 63 characters of the footnote (do not exceed 63 characters)
4. Press RETURN
5. Press >
6. Press )
7. Press the Space Bar
8. Press (
9. Press <
10. Type the next 63 characters of the footnote.
11. Press RETURN
12. Press >
13. Press )

14. Press the Space Bar

Repeat Steps 8–14 as many times as necessary – Remember, 16 lines of footnotes maximum (1024 characters) per page. If you type more than 16 lines, when you go to print, you will get this message on the screen "WPL Error: Footnote overflow (Press RETURN)."

How to Print the File Names in the Catalog

Apple Writer //e allows you to load the catalog into the memory of the computer so that you can print a copy of it. It won't take long before you have quite a few disks full of files. Trying to locate one particular file may take some time. Using this procedure described here, you can get a print out of the names of the files on your disks, cut them out and store them along with your disks or make a file of all of your disks.

1. Clear the screen
   You: Press CONTROL N, Press Y and Press RETURN

2. You: Press CONTROL O (letter O)

   You: Press A

4. Computer: Enter Slot,Drive (Example S6,D1):
   You: Press # and Press RETURN

5. Computer: Press RETURN to exit:
   You: Press RETURN twice
The catalog of all of the names of the files on that disk is now in memory and is displayed on the screen. To print them:

6. You: Press CONTROL P

7. Computer: [P]rint/Program:

You: Type NP and Press RETURN

A copy of the catalog has now been printed. Cut it out and store it with your disk.

How to Print Directly on the Printer from the Keyboard

Having what you type printed directly on the printer is described in the Apple Writer //e manual under the heading “Connecting the Keyboard to Your Printer” on p. 138. This feature is useful for printing a single envelop or a particular space on a form.

To Activate Direct Printing

1. Press CONTROL Q

2. Press I

What you type will now be printed. To return to the normal Apple Writer //e text screen, press CONTROL Q.

How to Use Direct Printing

(These directions pertain to using an Epson MX printer. Others should be similar but may not be exactly like this.)

Begin typing. What you type is not immediately printed. Anything that you type will be printed when you exceed one line on the screen, or when you press RETURN.

BE CAREFUL—I have not found a way to correct any typing errors while working in this mode.

Pressing the back arrow will print the present line but will leave you on the same line. This allows you to print several things on the same line, one at a time.
The back arrow is also important when entering printer CONTROL codes in this mode.

How to Enter Printer CONTROL Codes While in the Direct Print Mode

1. Press the space bar
2. Press the back arrow key
3. Enter the printer CONTROL code (only one can be entered at a time)
   (For example, ESC SHIFT E to turn on Emphasized printing)
4. Press the space bar

Begin typing. Whatever is printed now will be printed in the emphasized mode.

How to Enter More Than One Printer Control Code

1. Press the space bar
2. Press back arrow
3. Press first printer CONTROL codes
4. Press the space bar
5. Press back arrow
6. Press second printer CONTROL codes
7. Press space bar

Formatting and printing your files exactly the way you want is the most difficult part of word processing. I hope that this chapter has made this task a little easier.
CHAPTER FIVE
Dot Matrix Printer Procedures
Epson, Gemini, Apple, Prowriter, NEC, Okidata

Introduction
Dot matrix printers are the most versatile, best priced ($300–$700) and fastest (80–160 characters per second) printers available for microcomputers. Dot matrix printers are impact printers that deliver correspondence quality print. This print is good enough for most writing tasks and is accepted by many publishers and universities.

The dot matrix print head contains a series of pins. The pins are selectively activated and strike a normal inked type printer ribbon to form the various characters.

The dot matrix printer can print in many styles, widths, and densities. Many of these printers have an entire set of italics characters in memory. You can italicize a single letter or an entire document. Other styles available on many of these printers include special correspondence quality characters and proportionally spaced characters. Dot matrix printers offer a tremendous variety of character widths to choose from. The normal character set has a width of 10 characters per inch which is known as pica. Many of these printers can also generate widths of 9, 12 (Elite), 15, and 17 (Condensed) characters per inch. You can also select double width or elongated character widths which effectively double the width of the character. In the double width printing mode, character widths include 4.5, 5.0, 6.0, 7.5, and 8.5 characters per inch. Not only can the style and size of the characters be changed at any time, but also the density of the
character can also be changed. By selecting the emphasized, or double strike mode the printer will print each character twice. This doubles the number of dots which make up each character making them more readable and presentable.

The dot matrix printers have many capabilities but the instructions for their use with Apple Writer //e will not be found in either the Apple Writer //e manual or the dot matrix printer manuals. Step by step instructions for invoking these dot matrix printer codes into your text are presented in this chapter for the following printers: Epson FX and MX, Gemini 10/10 ×/15, Apple, NEC, Prowriter and Okidata 92.

One of the most useful commands in Apple Writer //e is the glossary command which allows you to assign a single keyboard character an entire word, group of words, or any sequence of characters. The glossary is especially useful for assigning single characters to represent the various print commands of Apple Writer //e. Step by step instructions are provided in this chapter which explain how to create your own print command glossary file:

1. How to enter it into the computer.
2. How to save it on disk.
3. How to load it into the computer.
4. How to use it.

For those who want to avoid creating a glossary file, MinuteWare can provide you with a Glossary File Disk containing glossary files for all of the printers described in this book for both the Apple ][ Plus and Apple //e, along with a desktop reference chart for $9.95. Send check plus $1 shipping to MinuteWare, P.O. Box 2392 Columbia, MD 21045.
General Instructions

All printer command codes are entered directly into the text using the CONTROL V command. When you press CONTROL V, you are notifying the computer that the next entries are not to be considered text but are to be interpreted as commands. These commands will not be printed when the text is printed, they will be recognized by the printer as printer codes. When you press CONTROL V again, you are telling the computer to resume normal text entry mode. Therefore, printer commands are always entered between two CONTROL V commands in the text.

When you turn on a particular printing style by entering its command codes into the text, the new printing style will remain in effect until you turn it off by entering the command code which turns it off. To print one word in italics using the Epson printer, you would turn on italics using the ESC 4 command, type the word to be italicized, then turn italics off by entering the ESC 5 command. Remember that the ESC 4 and ESC 5 commands are preceded and followed by CONTROL V.

EPSON AND GEMINI CODES

The following codes are the same for these printers – the Epson MX 80 and 100, the Epson FX 80 and Gemini 10, 15, and 10X. Additional codes for these printers are also included in a section for each following this one.

Condensed Mode (132 characters per line)

<table>
<thead>
<tr>
<th>To Turn On The Condensed Mode</th>
<th>To Turn Off The Condensed Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
<tr>
<td>2. Press CONTROL O (letter O)</td>
<td>2. Press CONTROL R</td>
</tr>
<tr>
<td>3. Press CONTROL V</td>
<td>3. Press CONTROL V</td>
</tr>
</tbody>
</table>
Double Width Mode (40 characters per line)

This type of print style is good for displaying titles, headings, or other text that you want to stand out. Unlike all of the other printing widths and styles, double width turns itself off at the end of the printed line. It is only good for one line. Use the command to turn off double width printing only when you want to change from double width to another style in the middle of a line. There is a way to lock on the double width mode. These commands are presented in the section for each individual printer.

<table>
<thead>
<tr>
<th>To Turn On</th>
<th>To Turn Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double Width</td>
<td>Double Width</td>
</tr>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
<tr>
<td>2. Press CONTROL N</td>
<td>2. Press CONTROL T</td>
</tr>
<tr>
<td>3. Press CONTROL V</td>
<td>3. Press CONTROL V</td>
</tr>
</tbody>
</table>

Condensed/Double Width (66 cpl)

Turning on both condensed and double width modes produces a print width of 66 characters per line. The double width portion automatically turns itself off after printing one line, leaving you in the condensed mode. This style is also good for headings.

<table>
<thead>
<tr>
<th>To Turn On The Condensed/Double Width Mode</th>
<th>To Turn Off The Condensed/Double Width Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
<tr>
<td>2. Press CONTROL O (letter O)</td>
<td>2. Press CONTROL R</td>
</tr>
<tr>
<td>3. Press CONTROL N</td>
<td>3. Press CONTROL T</td>
</tr>
</tbody>
</table>
Double Strike Mode

Double strike is a denser correspondence quality print style and is 50% slower since each line is printed twice. Move the cursor to the place in the text where you want to either begin or stop double strike printing and enter these commands.

<table>
<thead>
<tr>
<th>To Turn On Double Strike</th>
<th>To Turn Off Double Strike</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
<tr>
<td>2. Press ESC</td>
<td>2. Press ESC</td>
</tr>
</tbody>
</table>

Emphasized Mode

Emphasized mode is a darker print style which is the best mode for correspondence. Move the cursor to the place in the text where you want to either begin or stop emphasized printing.

<table>
<thead>
<tr>
<th>To Turn On Emphasized</th>
<th>To Turn Off Emphasized</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
<tr>
<td>2. Press ESC</td>
<td>2. Press ESC</td>
</tr>
<tr>
<td>3. Press SHIFT E</td>
<td>3. Press SHIFT F</td>
</tr>
</tbody>
</table>

Italics

There is an entire set of upper and lower case italics characters in memory and the italics mode is easily turned on. When printing in the italics mode, all numbers and symbols will also be italicized. Italics mode works with condensed, double width, emphasized, and double strike modes as well. (Epson MX must have Graftrax)

<table>
<thead>
<tr>
<th>To Turn Italics On</th>
<th>To Turn Italics Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
<tr>
<td>2. Press ESC</td>
<td>2. Press ESC</td>
</tr>
</tbody>
</table>
Backspace and Overstrike

You can perform a true backspace and overstrike any letter or number. For example, you can print the following mathematical symbols: \(\pm, \leq, \geq,\) and \(\div\).

**To Backspace And Overstrike**

1. Type the character that you will overstrike
2. Press `CONTROL V`
3. Press `CONTROL H`
4. Press `CONTROL V`
5. Type the overstrike character.

Subscripts

When you do subscripts, there are different command sequences depending on whether you are presently printing in the normal mode, emphasized mode, or the double strike mode. All three command sequences are presented here. (Epson MX must have Graftrax Plus)

<table>
<thead>
<tr>
<th>Subscripts In the Normal Mode</th>
<th>Subscripts In the Emphasized Mode</th>
<th>Subscripts In the Double Strike Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press <code>CONTROL V</code></td>
<td>1. Press <code>CONTROL V</code></td>
<td>1. Press <code>CONTROL V</code></td>
</tr>
<tr>
<td>6. Type the material</td>
<td>6. Press <code>CONTROL A</code></td>
<td>6. Type the material</td>
</tr>
<tr>
<td>to be subscripted</td>
<td>7. Press <code>CONTROL V</code></td>
<td>to be subscripted</td>
</tr>
<tr>
<td>7. Press <code>CONTROL V</code></td>
<td>8. Type the material</td>
<td>7. Press <code>CONTROL V</code></td>
</tr>
<tr>
<td>8. Press <code>ESC</code></td>
<td>to be subscripted</td>
<td>8. Press <code>ESC</code></td>
</tr>
<tr>
<td>11. Press <code>SHIFT T</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Press <code>CONTROL V</code></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Note: The CONTROL A code in the above sequence works with all of the Epson and Gemini Printers. For the Epson MX series any number or letter will work and for the Epson FX a number one will also work. The Gemini must use the CONTROL A code.

### Line Spacing

- **To Print 8 Lines/Inch**
  1. Press **CONTROL V**
  2. Press **ESC**
  3. Press **0** (zero)
  4. Press **CONTROL V**

- **To Print The Normal 6 Lines/Inch**
  1. Press **CONTROL V**
  2. Press **ESC**
  3. Press **2**
  4. Press **CONTROL V**

### Altering Spacing Between Lines

You have complete control over the spacing between lines. The normal spacing between lines is 12/72 inch or 6 lines per inch (66 lines per page). You can change the spacing between lines in increments of 1/72 inch, using the following printer control sequence:

1. Press **CONTROL V**
2. Press **ESC**
3. Press **SHIFT A**
4. Press **CONTROL A**
5. Press **CONTROL V**

In the above sequence CONTROL A turns on spacing of 1/72, CONTROL B turns on spacing of 2/72 .... CONTROL Z turns on spacing of 26/72. You can use any letter between A and Z. Note that

CONTROL L = normal spacing of 12/72 or 6 lines per inch
Small Character Set

You can use the subscript mode to create a small character set by turning on subscripts, leaving it on and reducing the spacing between lines. (Epson MX must have Graftrax Plus) The ESC 1 code changes the line spacing to 7/72 inch. This is an example of the benefits of altering line spacing.

<table>
<thead>
<tr>
<th>To Use The Small Character Set</th>
<th>To Return To Normal Printing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Turn on subscripts</td>
<td>1. Turn off subscripts</td>
</tr>
<tr>
<td>(as described above)</td>
<td>(as described above)</td>
</tr>
<tr>
<td>2. Press CONTROL V</td>
<td>2. Press CONTROL V</td>
</tr>
<tr>
<td>3. Press ESC</td>
<td>3. Press ESC</td>
</tr>
<tr>
<td>4. Press 1</td>
<td>4. Press 2</td>
</tr>
<tr>
<td>5. Press CONTROL V</td>
<td>5. Press CONTROL V</td>
</tr>
</tbody>
</table>

EPSON FX 80

In addition to the features described in the first section pertaining to condensed, double width, condensed/double width, double strike, emphasized, italics, backspace/overstrike, subscripts, altering line spacing and small character set, this section explains other features and codes specific to the Epson FX 80 when used with Apple Writer //e.

Although the Epson MX cannot effectively do superscripts and underlining with Apple Writer //e, the Epson FX can.
**Superscripts**

As with subscripts, there are three different command sequences for superscripts depending on whether you are presently printing in the normal mode, emphasized mode, or the double strike mode. All three are presented here.

<table>
<thead>
<tr>
<th>Supercripts</th>
<th>Supercripts</th>
<th>Super Scripts</th>
</tr>
</thead>
<tbody>
<tr>
<td>When Printing In The Normal Mode</td>
<td>When Printing In The Emphasized Mode</td>
<td>When Printing In The Double Strike Mode</td>
</tr>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
<tr>
<td>4. Press 0 (zero)</td>
<td>4. Press ESC</td>
<td>4. Press 0 (zero)</td>
</tr>
<tr>
<td>6. Type the material to be superscripted</td>
<td>6. Type the material to be superscripted</td>
<td>6. Type the material to be superscripted</td>
</tr>
<tr>
<td>11. Press 0 (zero)</td>
<td>11. Press 0 (zero)</td>
<td>11. Press 0 (zero)</td>
</tr>
</tbody>
</table>

**Underlining**

<table>
<thead>
<tr>
<th>To Turn On Underlining</th>
<th>To Turn Off Underlining</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
<tr>
<td>2. Press ESC</td>
<td>2. Press ESC</td>
</tr>
<tr>
<td>4. Press 1</td>
<td>4. Press 0 (zero)</td>
</tr>
<tr>
<td>5. Press CONTROL V</td>
<td>5. Press CONTROL V</td>
</tr>
</tbody>
</table>
How To Lock On Any Double Width Mode

There is a way to turn on double width mode so that it will not be turned off after one line.

To Turn On The Double Width Mode And Lock It On
1. Press CONTROL V
2. Press ESC
3. Press SHIFT W
4. Press 1
5. Press CONTROL V

To Turn Off The Locked On Double Width Mode
1. Press CONTROL V
2. Press ESC
3. Press SHIFT W
4. Press 0
5. Press CONTROL V

Elite (12 characters per inch)

In the elite mode, the character width is set to 12 cpi or 96 characters per line.

To Turn On Elite
1. Press CONTROL V
2. Press ESC
3. Press SHIFT M
4. Press CONTROL V

To Turn Off Elite
1. Press CONTROL V
2. Press ESC
3. Press SHIFT P
4. Press CONTROL V

Unidirectional Print

The Epson FX prints bidirectionally, which contributes to its speed. If you are printing long columns of numbers, you may or may not notice that the decimal points don’t line up exactly in a line. If there is a slight misalignment, printing unidirectionally should correct the alignment.

To Turn On Unidirectional Print
1. Press CONTROL V
2. Press ESC
3. Press SHIFT U
4. Press 1
5. Press CONTROL V

To Turn Off Unidirectional Print
1. Press CONTROL V
2. Press ESC
3. Press SHIFT U
4. Press 0 (zero)
5. Press CONTROL V
Proportional Mode

There is another set of characters defined in the Epson FX that allows you to print using proportional spacing. This gives your printed text a more professional look. Proportional print is automatically printed in the emphasized mode for the best correspondence quality.

To Turn On Proportional Printing
1. Press CONTROL V
2. Press ESC
3. Press p (lower case)
4. Press 1
5. Press CONTROL V

To Turn Off Proportional Printing
1. Press CONTROL V
2. Press ESC
3. Press p (lower case)
4. Press 0 (zero)
5. Press CONTROL V

Foreign Characters

The Epson FX can print the following foreign characters and they can be accessed within Apple Writer //e. The USA set of characters are the normal characters that appear on the Apple //e keyboard. Only one language character set can be active at one time. When the normal USA character set is in memory, pressing the character, #, will generate a # on the screen and it will print as #. However, when the English or U.K. character set is selected and you press the # character, a # appears on the screen but the corresponding foreign character is printed, a £ is printed in this case. To print one of the foreign characters you have to

1. Type the printer code to switch to the foreign character set. Once a foreign character set is selected it remains in effect until another set is selected or until the printer is turned off or initialized (an ESC @ initializes the printer).

2. Press the USA character on the keyboard that corresponds to the one that you want to print.
These are the Epson FX foreign characters (the backslash and its corresponding foreign characters are not shown. The backslash turns on character underscoring and is an unprintable character).

<table>
<thead>
<tr>
<th>Country</th>
<th>Characters</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A.</td>
<td># $ @ [ ] ` : ~</td>
</tr>
<tr>
<td>France</td>
<td># $ â ° s ê é û è `</td>
</tr>
<tr>
<td>Germany</td>
<td># $ § Ä Ü á ö ü ß</td>
</tr>
<tr>
<td>U.K.</td>
<td>£ $ @ [ ] ` : ~</td>
</tr>
<tr>
<td>Denmark</td>
<td># $ @ € F A ê » f ç a `</td>
</tr>
<tr>
<td>Sweden</td>
<td># æ è Ä À ü é ä ö à ü</td>
</tr>
<tr>
<td>Italy</td>
<td># $ @ ° é ^ û à ö è i</td>
</tr>
<tr>
<td>Spain</td>
<td># $ @ í ñ ` : ~</td>
</tr>
<tr>
<td>Japan</td>
<td># $ @ [ ] ` : ~</td>
</tr>
</tbody>
</table>

To switch to the following foreign character sets:

<table>
<thead>
<tr>
<th>Country</th>
<th>Action 1</th>
<th>Action 2</th>
<th>Action 3</th>
<th>Action 4</th>
<th>Action 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>Press CONTROL V</td>
<td>Press ESC</td>
<td>Press SHIFT R</td>
<td>Press CONTROL A</td>
<td>Press CONTROL V</td>
</tr>
<tr>
<td>Germany</td>
<td>Press CONTROL V</td>
<td>Press ESC</td>
<td>Press SHIFT R</td>
<td>Press CONTROL B</td>
<td>Press CONTROL V</td>
</tr>
<tr>
<td>Denmark</td>
<td>Press CONTROL V</td>
<td>Press ESC</td>
<td>Press SHIFT R</td>
<td>Press CONTROL D</td>
<td>Press CONTROL V</td>
</tr>
<tr>
<td>Italy</td>
<td>Press CONTROL V</td>
<td>Press ESC</td>
<td>Press SHIFT R</td>
<td>Press CONTROL F</td>
<td>Press CONTROL V</td>
</tr>
<tr>
<td>Japan</td>
<td>Press CONTROL V</td>
<td>Press ESC</td>
<td>Press @</td>
<td>Press CONTROL H</td>
<td>Press CONTROL V</td>
</tr>
<tr>
<td>USA</td>
<td>Press CONTROL V</td>
<td>Press ESC</td>
<td>Press SHIFT R</td>
<td>Press CONTROL V</td>
<td>Press CONTROL V</td>
</tr>
</tbody>
</table>

76
Mixed Printing Codes or ESC ! Codes

On page 3–33 of the Epson FX manual are listed 64 mixed print modes. However only 15 of them determine a uniquely different print mode. What is the purpose of these codes? With a single code you can select the enlarged, double strike, emphasized print mode. Instead of typing (CONTROL N, ESC, E, ESC, G), you can use the mixed print mode and simply type (ESC, !, 8) to turn on the same print mode. Another benefit of the mixed print mode is that you do not have to turn off the existing print mode before selecting another print mode. If you are presently printing in the double strike, emphasized mode and you want to switch to the condensed mode, you would normally have to turn off both double strike and emphasized and then turn on condensed. But using the mixed print mode, all you have to do is turn on the mode you want, all previously selected modes are automatically turned off.
To Select Any of the Following Print Modes

1. Press **CONTROL V**
2. Press **ESC**
3. Press **!**
4. Press the command listed below to select the corresponding mode.
5. Press **CONTROL V**

<table>
<thead>
<tr>
<th>Press</th>
<th>To Turn On</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL, SHIFT A</td>
<td>Elite</td>
</tr>
<tr>
<td>CONTROL, SHIFT D</td>
<td>Condensed</td>
</tr>
<tr>
<td>CONTROL, SHIFT H</td>
<td>Emphasized</td>
</tr>
<tr>
<td>CONTROL, SHIFT P</td>
<td>Double Strike</td>
</tr>
<tr>
<td>CONTROL, SHIFT Q</td>
<td>Double Strike, Elite</td>
</tr>
<tr>
<td>CONTROL, SHIFT T</td>
<td>Double Strike, Condensed</td>
</tr>
<tr>
<td>CONTROL, SHIFT X</td>
<td>Double Strike, Emphasized</td>
</tr>
<tr>
<td>&quot;</td>
<td>Enlarged</td>
</tr>
<tr>
<td>#</td>
<td>Enlarged, Elite</td>
</tr>
<tr>
<td>$</td>
<td>Enlarged, Condensed</td>
</tr>
<tr>
<td>,</td>
<td>Enlarged, Emphasized</td>
</tr>
<tr>
<td>2</td>
<td>Enlarged, Double Strike</td>
</tr>
<tr>
<td>1</td>
<td>Enlarged, Double Strike, Elite</td>
</tr>
<tr>
<td>4</td>
<td>Enlarged, Double Strike, Condensed</td>
</tr>
<tr>
<td>8</td>
<td>Enlarged, Double Strike, Emphasized</td>
</tr>
</tbody>
</table>
EPSON MX 80 AND 100

In addition to the features described in the first section pertaining to condensed, double width, condensed/double width, double strike, emphasized, italics, backspace/overstrike, subscripts, altering line spacing and small character set, this section explains other features and codes specific to the MX 80 and 100 when used with Apple Writer //e.

Apple Writer //e cannot utilize all of the features normally available on the Epson MX printers. The Epson MX printers use the control code, CONTROL @, to perform some important functions like turning off superscript mode and underlining mode. Apple Writer //e cannot generate the CONTROL @ code from the keyboard which means that although the Epson MX printers are capable of generating superscripts and underlining, these functions are basically not available to the user of Apple Writer //e.

However, there is one solution to this problem that is described in Chapter Seven. For those people who have the Epson MX printer, you can do your word processing using Apple Writer //e and print your files using Apple Writer ]] to use underlining and superscripts. This is possible because Apple Writer //e and Apple Writer ]] files are interchangable. The procedure is described in Chapter Seven.

How to Lock on any Double Width Mode

There is a way to turn on the double width mode so that it will not be turned off after one line.

To Turn On The Double Width Mode And Lock It On

1. Press CONTROL V
2. Press ESC
3. Press SHIFT W
4. Press CONTROL A
5. Press CONTROL V

To Turn Off The Locked On Double Width Mode

1. Press RETURN (this command should be on a line by itself)
2. Press CONTROL V
3. Press ESC
4. Press @
5. Press CONTROL V
Special Characters

There are a few special characters that the Epson MX printers can print that you can use in Apple Writer /e. These characters are the £, §, ä and ū.

<table>
<thead>
<tr>
<th>To use the English symbol £</th>
<th>To use the § sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press <strong>CONTROL V</strong></td>
<td>1. Press <strong>CONTROL V</strong></td>
</tr>
<tr>
<td>2. Press <strong>ESC</strong></td>
<td>2. Press <strong>ESC</strong></td>
</tr>
<tr>
<td>4. Press <strong>CONTROL A</strong></td>
<td>4. Press <strong>CONTROL E</strong></td>
</tr>
<tr>
<td>5. Press <strong>ESC</strong></td>
<td>5. Press <strong>ESC</strong></td>
</tr>
<tr>
<td>7. Press <strong>CONTROL V</strong></td>
<td>7. Press <strong>CONTROL V</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To use the ä sign</th>
<th>To use the ū sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Type the letter a</td>
<td>1. Type the letter u</td>
</tr>
<tr>
<td>2. Press <strong>CONTROL V</strong></td>
<td>2. Press <strong>CONTROL V</strong></td>
</tr>
<tr>
<td>3. Press <strong>CONTROL H</strong></td>
<td>3. Press <strong>CONTROL H</strong></td>
</tr>
<tr>
<td>4. Press <strong>ESC</strong></td>
<td>4. Press <strong>ESC</strong></td>
</tr>
<tr>
<td>5. Press &gt;</td>
<td>5. Press &gt;</td>
</tr>
<tr>
<td>6. Press <strong>CONTROL B</strong></td>
<td>6. Press <strong>CONTROL D</strong></td>
</tr>
<tr>
<td>7. Press <strong>ESC</strong></td>
<td>7. Press <strong>ESC</strong></td>
</tr>
</tbody>
</table>
GEMINI 10, 15, AND 10X

These are the extra codes that apply to the Gemini series of printers.

Elite (96 character/line or 12 characters/inch)

To Turn On Elite
1. Press CONTROL V
2. Press ESC
3. Press SHIFT B
4. Press CONTROL B
5. Press CONTROL V

To Turn Off Elite
1. Press CONTROL V
2. Press ESC
3. Press SHIFT B
4. Press CONTROL A
5. Press CONTROL V

How To Lock On The Double Width Mode

There is a way to turn on double width mode so that it will not be turned off after one line.

To Turn On The Double Width Mode And Lock It On
1. Press CONTROL V
2. Press ESC
3. Press SHIFT W
4. Press CONTROL A
5. Press CONTROL V

To Turn Off The Locked On Double Width Mode
1. Press RETURN (The next command should be on a line by itself)
2. Press CONTROL V
3. Press ESC
4. Press @
5. Press CONTROL V

Special Characters and Symbols

There is an entire set of special characters in the Gemini-10X that you can use in Apple Writer //e. These special characters and symbols are pictured here, below their corresponding characters from the Apple keyboard. To use any one of these special characters, you enter the special character mode, then type the key on the Apple keyboard corresponding to the special character that you want to type. The normal Apple character appears on the screen but when
you print it the special character is printed in its place. For example, to print a □ you would enter the special character mode and press the corresponding Apple keyboard character which is /.

Press this – !"#$%&'()*+,-./0123456789:;<>@ABCDEFGHIJKLMNOPQRSTUVWXYZ\[\]^_\`{|}~

To get this – ！"#$%&’( )*+,./0123456789:;’<>@ABCDEFGHIJKLMNOPQRSTUVWXYZ\[\]^_\`{|}~

Press this – 0123456789:;<>@ABCDEFGHIJKLMNOPQRSTUVWXYZ\[\]^_\`{|}~

To get this – ！"#$%&’( )*+,./0123456789:;’<>@ABCDEFGHIJKLMNOPQRSTUVWXYZ\[\]^_\`{|}~

To use any of these special characters:

1. Press CONTROL V
2. Press ESC
3. Press >
4. Press CONTROL V
5. Press the key on the Apple keyboard corresponding to the symbol that you want to use. The normal Apple keyboard character will appear on the screen, but when it is printed, the special symbol will be printed instead.
6. Press CONTROL V
7. Press ESC
8. Press =
9. Press CONTROL V and continue normal typing
GEMINI 10X

These are the extra codes that apply to the Gemini-10X only.

Foreign Characters

The Gemini-10X can print the following foreign characters, and they can be accessed using Apple Writer //e. The USA set of characters are the normal characters that appear on the Apple //e keyboard.

USA Characters

<table>
<thead>
<tr>
<th>Characters</th>
</tr>
</thead>
<tbody>
<tr>
<td># @ [ ] ^ ` { ! }</td>
</tr>
</tbody>
</table>

English Characters

<table>
<thead>
<tr>
<th>Characters</th>
</tr>
</thead>
<tbody>
<tr>
<td>£ @ [ ] ^ ` { ! }</td>
</tr>
</tbody>
</table>

German Characters

<table>
<thead>
<tr>
<th>Characters</th>
</tr>
</thead>
<tbody>
<tr>
<td># $ Ä Ü ^ ` ä ö ü ß</td>
</tr>
</tbody>
</table>

Danish Characters

<table>
<thead>
<tr>
<th>Characters</th>
</tr>
</thead>
<tbody>
<tr>
<td># @ æ A Æ æ ø å</td>
</tr>
</tbody>
</table>

French Characters

<table>
<thead>
<tr>
<th>Characters</th>
</tr>
</thead>
<tbody>
<tr>
<td>£ à ° § ë ê é ò è</td>
</tr>
</tbody>
</table>

Swedish Characters

<table>
<thead>
<tr>
<th>Characters</th>
</tr>
</thead>
<tbody>
<tr>
<td># é A Ä ü é ä ö å ü</td>
</tr>
</tbody>
</table>

Italian Characters

<table>
<thead>
<tr>
<th>Characters</th>
</tr>
</thead>
<tbody>
<tr>
<td># 5 · é ^ á a ò è i</td>
</tr>
</tbody>
</table>

Spanish Characters

<table>
<thead>
<tr>
<th>Characters</th>
</tr>
</thead>
<tbody>
<tr>
<td># @ i ñ ^ ç · ñ í</td>
</tr>
</tbody>
</table>

Only one language character set can be active at any one time. To switch to the English character set

1. Press CONTROL V
2. Press ESC
3. Press 7
4. Press CONTROL A
5. Press CONTROL V

Now when you press the # symbol on the keyboard, the # appears on the screen but when it is printed, a £ will be printed instead. When you activate any of these foreign character sets, enter the corresponding USA or Apple keyboard character in your text and the foreign character in the language selected will be printed.
<table>
<thead>
<tr>
<th>Germany</th>
<th>Denmark</th>
<th>France</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sweden</th>
<th>Italy</th>
<th>Spain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
</tbody>
</table>

If you switch to one of the foreign character sets and you want to switch back to the standard USA keyboard characters, you would have to

1. Press CONTROL V
2. Press ESC
3. Press 7
4. Press CONTROL @
5. Press CONTROL V

But, Apple Writer //e will not allow the CONTROL @, or NUL, character to be accessed. Therefore, once you switch to a foreign character set, you can’t switch back. There are two alternatives.

1. You can switch to the English character set which is identical to the standard USA set except that # will print as £.

2. Whenever you get to the end of a paragraph, press RETURN and enter this on a line by itself:

1. Press CONTROL V
2. Press ESC
3. Press @
4. Press CONTROL V
This will reset the printer. Resetting turns off any codes that may have been in force and resets the USA character set. If you had any printer codes in force such as emphasized printing, you will have to reenter the codes here also. This command automatically does a carriage return and a line feed, so don't skip a line before typing the next paragraph. A line will be skipped when it is printed out.

Comments on the Epson printing commands

Condensed Mode

When you switch to condensed printing mode from the normal print mode you will have to reset your margins. Reset the right margin to 132 for full page printing or to 120 to leave a 1 inch margin. If your left margin is anything except zero, the left margins will not line up. You will have to reset the left margin for the condensed print mode to compensate for the smaller character size. Here are some examples of left margin settings.

<table>
<thead>
<tr>
<th>normal left margin</th>
<th>condensed left margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0 (no change required)</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>17</td>
</tr>
</tbody>
</table>

If your normal left margin is set to 10 and you change to condensed printing, change the left margin to 17 by entering .lm17 all by itself on the line preceding condensed printing. When you want to return to normal width printing change the left margin back to 10 by entering .lm10 on a line all by itself.

You can't use condensed and emphasized printing modes at the same time. When you do, the condensed printing command is ignored.
Double Width Mode

Double width is good for titles, but automatically centering a double width title is kind of tricky.

To Center A Double Width Title

1. Press **CONTROL V**
2. Press **ESC**
3. Press **SHIFT W**
4. Press **CONTROL A**
5. Press **CONTROL V** and Press **RETURN**
6. Press .lm0 and Press **RETURN**
7. Press .rm39 and Press **RETURN**
8. Press .cj and Press **RETURN**
9. Type the title to be centered and Press **RETURN**
10. Press **CONTROL V**
11. Press **ESC**
12. Press @
13. Press **CONTROL V**
14. Press .lm8 (your original left margin) and Press **RETURN**
15. Press .rm71 (your original right margin) and Press **RETURN**
16. Press .lj and Press **RETURN**

These instructions are easily entered into a glossary file. When creating a glossary, use the symbol, ], wherever the instruction press **RETURN** appears. The ] is understood by the computer to mean Press **RETURN**.
The printer control codes for these three printers are the same.

To Turn On Bold To Turn Off Bold
1. Press CONTROL V 1. Press CONTROL V
2. Press ESC 2. Press ESC

Smaller Than Normal Characters
The normal size character is pica or 10 characters per inch (cpi). The Apple DMP can create a wide variety of character widths

To Turn On Elite (12cpi) To Turn Off Elite
1. Press CONTROL V 1. Press CONTROL V
2. Press ESC 2. Press ESC
3. Press SHIFT E 3. Press SHIFT N

To Turn On 15 cpi To Turn Off 15 cpi
1. Press CONTROL V 1. Press CONTROL V
2. Press ESC 2. Press ESC
3. Press q 3. Press SHIFT N

To Turn On Condensed (17cpi) To Turn Off Condensed (17cpi)
1. Press CONTROL V 1. Press CONTROL V
2. Press ESC 2. Press ESC
3. Press SHIFT Q 3. Press SHIFT N
Larger Than Normal Size Characters

To Turn On 9 cpi
1. Press CONTROL V
2. Press ESC
3. Press n
4. Press CONTROL V

To Turn Off 9 cpi
1. Press CONTROL V
2. Press ESC
3. Press SHIFT N
4. Press CONTROL V

Elongated (Double Width)

The Apple DMP can produce five more sizes of larger than normal characters.

By turning on the elongated or double width mode along with one of the other five character sizes (9, 10, 12, 15, 17 cpi) you can produce double width characters 4.5, 5, 6, 7.5 or 8.5 cpi.

To Turn On Elongated
1. Press CONTROL V
2. Press CONTROL N
3. Press CONTROL V

To Turn Off Elongated
1. Press CONTROL V
2. Press CONTROL 0 (letter 0)
3. Press CONTROL V

To Turn On Underlining
1. Press CONTROL V
2. Press ESC
3. Press SHIFT X
4. Press CONTROL V

To Turn Off Underlining
1. Press CONTROL V
2. Press ESC
3. Press SHIFT Y
4. Press CONTROL V

Proportional Spacing

The Apple DMP has two complete sets of proportionally spaced character sets. Proportional–1 is a very tightly spaced set which allows a maximum number of characters per line. Proportional–2 is moderately close proportional spacing which is good for correspondence quality printing.
<table>
<thead>
<tr>
<th>To Turn On Proportional-1</th>
<th>To Turn Off Proportional-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
<tr>
<td>2. Press ESC</td>
<td>2. Press ESC</td>
</tr>
<tr>
<td>3. Press SHIFT P</td>
<td>3. Press SHIFT N</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To Turn On Proportional-2</th>
<th>To Turn Off Proportional-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
<tr>
<td>2. Press ESC</td>
<td>2. Press ESC</td>
</tr>
<tr>
<td>3. Press p</td>
<td>3. Press SHIFT N</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To Turn On Unidirectional Printing</th>
<th>To Turn Off Unidirectional Printing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
<tr>
<td>2. Press ESC</td>
<td>2. Press ESC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To Print 8 Lines/Inch</th>
<th>To Print The Normal 6 Lines/Inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
<tr>
<td>2. Press ESC</td>
<td>2. Press ESC</td>
</tr>
<tr>
<td>3. Press SHIFT B</td>
<td>3. Press SHIFT A</td>
</tr>
</tbody>
</table>
Subscripts and superscripts

There is an easy solution to the problem of using subscripts and superscripts with Apple Writer //e and the Apple/NEC/Prowriter printers. You can load a subscript/superscript alternate character set into the printer before booting the Apple Writer program itself. After loading this character set you can access both subscripts and superscripts with a single printer command. To find out about obtaining this disk, call or write MinuteWare at (301) 995–1166. To use this disk, follow these instructions:

1. Before booting the Apple Writer //e program, put the preboot disk into the drive and turn on the monitor and computer.

2. Turn on the printer and Press L to Load the program.

3. Press E to exit the program.

4. Take out the preboot disk and put in the Apple Writer //e program disk.

5. Type PR#6 to boot the Apple Writer //e program.

Now, anytime that you want to use a subscript or superscript:

1. Press CONTROL V
2. Press ESC
3. Press ‘
4. Type the material to be subscripted or superscripted.

For subscripts use the numbers 0–9 and lowercase letters a–z.

For superscripts use SHIFT 0–9 and UPPERCASE letters A–Z.

(For example, to get a superscript 3, Press SHIFT 3.)

5. Press ESC
6. Press $
7. Press CONTROL V
OKIDATA MICROLINE 92

Enhanced Mode (Double Strike)

To Turn On Enhanced
1. Press CONTROL V
2. Press ESC
3. Press SHIFT H
4. Press CONTROL V

To Turn Off Enhanced
1. Press CONTROL V
2. Press ESC
3. Press SHIFT I
4. Press CONTROL V

Emphasized Mode

To Turn On Emphasized
1. Press CONTROL V
2. Press ESC
3. Press SHIFT T
4. Press CONTROL V

To Turn Off Emphasized
1. Press CONTROL V
2. Press ESC
3. Press SHIFT I
4. Press CONTROL V

Correspondence Mode

To Turn On Correspondence
1. Press CONTROL V
2. Press ESC
3. Press 1
4. Press CONTROL V

To Turn Off Correspondence
1. Press CONTROL V
2. Press ESC
3. Press 0 (zero)
4. Press CONTROL V

Elite (96 characters/line) (12 characters/inch)

To Turn On Elite
1. Press CONTROL V
2. Press CONTROL \ (Press and hold both CONTROL and SHIFT)
3. Press CONTROL V

To Turn Off Elite
1. Press CONTROL V
2. Press CONTROL \ (Press and hold both CONTROL and SHIFT)
3. Press CONTROL V
Condensed Mode (136 characters/line) (17 characters/inch)

To Turn On Condensed
1. Press CONTROL V
2. Press CONTROL ]
3. Press CONTROL V

To Turn Off Condensed
1. Press CONTROL V
2. Press CONTROL ^
3. Press CONTROL V

Double Width

Double width effectively doubles the width of whatever width mode that you are presently working in. Therefore there are three kinds of double width available on the Okidata 92. If you are in the normal mode, double width is 5 cpi. If you are in the elite mode, double width is 6 cpi. If you are in the condensed mode, double width is 8.5 cpi.

To Turn On Double Width 5 CPI
1. Press CONTROL V
2. Press CONTROL ^
3. Press CONTROL __
4. Press CONTROL V

To Turn On Double Width 6 CPI
1. Press CONTROL V
2. Press CONTROL \ 
3. Press CONTROL __
4. Press CONTROL V

To Turn On Double Width 8.5 CPI
1. Press CONTROL V
2. Press CONTROL ]
3. Press CONTROL __
4. Press CONTROL V
Underlining

This form of underlining is continuous. When you turn on underlining, everything is underlined including spaces.

<table>
<thead>
<tr>
<th>To Turn On Underlining</th>
<th>To Turn Off Underlining</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
<tr>
<td>2. Press ESC</td>
<td>2. Press ESC</td>
</tr>
<tr>
<td>3. Press SHIFT C</td>
<td>3. Press SHIFT D</td>
</tr>
</tbody>
</table>

Subscripts

<table>
<thead>
<tr>
<th>To Turn On Subscripts</th>
<th>To Turn Off Subscripts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
<tr>
<td>2. Press ESC</td>
<td>2. Press ESC</td>
</tr>
<tr>
<td>3. Press SHIFT L</td>
<td>3. Press SHIFT M</td>
</tr>
</tbody>
</table>

Superscripts

<table>
<thead>
<tr>
<th>To Turn On Superscripts</th>
<th>To Turn Off Superscripts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press CONTROL V</td>
<td>1. Press CONTROL V</td>
</tr>
<tr>
<td>2. Press ESC</td>
<td>2. Press ESC</td>
</tr>
</tbody>
</table>
Line Spacing

To Print 8 Lines/Inch

1. Press CONTROL V
2. Press ESC
3. Press 8
4. Press CONTROL V

To Print The Normal 6 Lines/Inch

1. Press CONTROL V
2. Press ESC
3. Press 6
4. Press CONTROL V

To Reset or Reinitialize the Printer

1. Press CONTROL V
2. Press CONTROL X
3. Press CONTROL V

Comments on the Correspondence Mode of the Okidata

This is the best correspondence quality print of all the printers described in this book. Correspondence mode can be used together with double width, elite, and elite/double width but not with condensed, enhanced or emphasized.

You can increase the spacing between letters only in the correspondence mode.
TO ALTER THE SPACING OF LETTERS
IN THE CORRESPONDENCE MODE

1. Press **CONTROL V**
2. Press **ESC**
3. Press **SHIFT N**
4. Press **CONTROL A**
5. Press **CONTROL V**

The **CONTROL A** in the above sequence decreases the number of characters per inch from 10 to 9.5. If the A is replaced by the following letters, other spacings result.

<table>
<thead>
<tr>
<th>Letter</th>
<th>Character Per Inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>9.5</td>
</tr>
<tr>
<td>B</td>
<td>9.0</td>
</tr>
<tr>
<td>C</td>
<td>8.5</td>
</tr>
<tr>
<td>D</td>
<td>8.0</td>
</tr>
<tr>
<td>E</td>
<td>7.5</td>
</tr>
<tr>
<td>F</td>
<td>7.0</td>
</tr>
<tr>
<td>G</td>
<td>6.5</td>
</tr>
<tr>
<td>H</td>
<td>6.0</td>
</tr>
</tbody>
</table>
EPSON FX–80
SUMMARY OF COMMANDS

Presented here is a summary of all the commands for the Epson FX–80. EACH COMMAND MUST BE PRECEDED BY A CONTROL V AND FOLLOWED BY A CONTROL V.

Double Width on CONTROL N
off CONTROL T

Backspace on CONTROL H

Condensed on CONTROL O
off CONTROL R

Double Strike on ESC, SHIFT G
off ESC, SHIFT H

Emphasized on ESC, SHIFT E
off ESC, SHIFT F

Double Width Lock on ESC, SHIFT W, 1
off ESC, SHIFT W, 0

Condensed, Double Width on CONTROL O, CONTROL N
off CONTROL R, CONTROL T

Unidirectional on ESC, SHIFT U, 1
off ESC, SHIFT U, 0

Italics on ESC 4
off ESC 5

Line Spacing 8 lines/inch ESC 0
6 lines/inch ESC 2

Small Character Set
Turn on subscripts, then ESC 1
Turn off subscripts, then ESC 2

Elite on ESC, SHIFT M
off ESC, SHIFT P

96
Superscripts

in the normal mode on ESC, SHIFT S, 0 (zero)
off ESC, SHIFT H, ESC, SHIFT T

in the emphasized mode on ESC, SHIFT F, ESC, SHIFT S, 0 (zero)
off ESC, SHIFT H, ESC, SHIFT T, ESC, SHIFT E

in the double strike mode on ESC, SHIFT S, 0 (zero)
off ESC, SHIFT T

Proportional on ESC, p, 1
off ESC, p, 0

Subscripts

in the double strike mode on ESC, SHIFT S, CONTROL A
off ESC, SHIFT T

in the emphasized mode on ESC, SHIFT F, ESC, SHIFT S, CONTROL A
off ESC, SHIFT H, ESC, SHIFT T, ESC, SHIFT E

in the normal mode on ESC, SHIFT S, CONTROL A
off ESC, SHIFT H, ESC, SHIFT T

Underlining on ESC, −, 1
off ESC, −, 0

Mixed Print Modes

Condensed ESC, !, CONTROL D
Emphasized ESC, !, CONTROL H
Double Strike ESC, !, CONTROL P
Double Strike, Elite ESC, !, CONTROL Q
Double Strike, Condensed ESC, !, CONTROL T
Double Strike, Emphasized ESC, !, CONTROL X
Enlarged ESC, !, “
Enlarged, Elite ESC, !, #
Enlarged, Condensed ESC, !, $
Enlarged, Emphasized ESC, !, ,

97
Enlarged, Double Strike          ESC, !, 2
Enlarged, Double Strike, Elite    ESC, !, 1
Enlarged, Dbl Stk, Condensed     ESC, !, 4
Enlarged, Dbl Stk, Emphasized    ESC, !, 8

Foreign Character Sets

<table>
<thead>
<tr>
<th>Country</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>ESC, SHIFT R, CONTROL A</td>
</tr>
<tr>
<td>Germany</td>
<td>ESC, SHIFT R, CONTROL B</td>
</tr>
<tr>
<td>England (U.K.)</td>
<td>ESC, SHIFT R, CONTROL C</td>
</tr>
<tr>
<td>Denmark</td>
<td>ESC, SHIFT R, CONTROL D</td>
</tr>
<tr>
<td>Sweden</td>
<td>ESC, SHIFT R, CONTROL E</td>
</tr>
<tr>
<td>Italy</td>
<td>ESC, SHIFT R, CONTROL F</td>
</tr>
<tr>
<td>Spain</td>
<td>ESC, SHIFT R, CONTROL G</td>
</tr>
<tr>
<td>Japan</td>
<td>ESC, SHIFT R, CONTROL H</td>
</tr>
<tr>
<td>USA</td>
<td>ESC, @</td>
</tr>
</tbody>
</table>

Glossary File of Print Commands

With Apple Writer //e's glossary command you can access any print command with a single keystroke.

A summary of the Epson FX-80 print commands was presented for your reference. Typing all of the CONTROL's and ESC's involved in accessing the various print styles can be both time consuming and irritating. There is an easier way to access your dot matrix printer's commands. By creating a glossary file that contains all of the commands for your printer, you can embed the commands in the text for any print style WITH A SINGLE KEYSTROKE following the glossary command, CONTROL G.

In this chapter you will be given step by step instructions for creating and using an Epson FX-80 glossary file. If you have one of the other dot matrix printers, substitute its commands given in this chapter for the Epson FX-80's that are shown below.

To create a glossary file, you will type a new text file on the screen. Each line of this text file will contain a single character followed by the print command that it will represent. You will then save this text file on a disk and call it Epson FX Glossary.
To use the glossary file, it will have to be loaded into the computer's memory every time you boot Apple Writer //e. After loading the glossary file into memory you can enter any print command by typing the glossary command, CONTROL G, followed by the single character that represents the print style that you want to use. When you type this character, the correct CONTROL and/or ESC codes will be automatically entered into the text. Remember, you can use the Open Apple key instead of pressing CONTROL G.

To Create An Epson FX–80 Printing Glossary

1. Start with a clear screen by booting Apple Writer //e or by clearing the screen by pressing CONTROL N and press Y and press RETURN.

2. Put the Apple Writer //e program disk into the disk drive. Please put a write protect tab on it to prevent accidents with the program disk.

   NOTE: You must perform the following steps twice on EACH line. Once before the first (CONTROL V) and again after the second (CONTROL V). You will have to press CONTROL V in addition to performing steps a and b.

   a) Press CONTROL L
   b) Type controlv and press RETURN

      An inverse V will appear on the screen every time.

   This is a tedious procedure. See the "Insert V" WPL program at the end of this chapter. This WPL program will automatically perform steps a and b twice on each line of your glossary file for you.

3. Type each line shown below on a separate line WITHOUT ANY INTERVENING SPACES BETWEEN ANY LETTERS OR COMMANDS

(Do not use the space bar at all in creating this glossary file)

4. After typing all of the lines, take out the Apple Writer //e program disk, and put a data disk into the drive and Press CONTROL S to save this file.
5. Type a descriptive name for this file like Epson FX Glossary, and press RETURN.

A (CONTROL V)(CONTROL N)(CONTROL V)
a (CONTROL V)(CONTROL T)(CONTROL V)
B (CONTROL V)(CONTROL H)(CONTROL V)
C (CONTROL V)(CONTROL O)(CONTROL V)
c (CONTROL V)(CONTROL R)(CONTROL V)
D (CONTROL V)(ESC)(SHIFT G)(CONTROL V)
d (CONTROL V)(ESC)(SHIFT H)(CONTROL V)
E (CONTROL V)(ESC)(SHIFT E)(CONTROL V)
e (CONTROL V)(ESC)(SHIFT F)(CONTROL V)
F (CONTROL V)(ESC)(SHIFT W)(1)(CONTROL V)
f (CONTROL V)(ESC)(SHIFT W)(0)(CONTROL V)
G (CONTROL V)(CONTROL O)(CONTROL N)(CONTROL V)
g (CONTROL V)(CONTROL R)(CONTROL T)(CONTROL V)
H (CONTROL V)(ESC)(SHIFT U)(1)(CONTROL V)
h (CONTROL V)(ESC)(SHIFT U)(0)(CONTROL V)
I (CONTROL V)(ESC)(4)(CONTROL V)
i (CONTROL V)(ESC)(5)(CONTROL V)
J (CONTROL V)(ESC)(0)(CONTROL V)
j (CONTROL V)(ESC)(2)(CONTROL V)
K (CONTROL V)(ESC)(1)(CONTROL V)
k (CONTROL V)(ESC)(2)(CONTROL V)
L (CONTROL V)(ESC)(SHIFT M)(CONTROL V)
I (CONTROL V)(ESC)(SHIFT P)(CONTROL V)
M (CONTROL V)(ESC)(SHIFT S)(0)(CONTROL V)
m (CONTROL V)(ESC)(SHIFT H)(ESC)(SHIFT T)(CONTROL V)
N (CONTROL V)(ESC)(SHIFT F)(ESC)(SHIFT S)(0)(CONTROL V)
n (CONTROL V)(ESC)(SHIFT H)(ESC)(SHIFT T)(ESC)(SHIFT E)(CONTROL V)
O (CONTROL V)(ESC)(SHIFT S)(0)(CONTROL V)
o (CONTROL V)(ESC)(SHIFT T)(CONTROL V)
P (CONTROL V)(ESC)(p)(1)(CONTROL V)
p (CONTROL V)(ESC)(p)(0)(CONTROL V)
Q (CONTROL V)(ESC)(SHIFT S)(CONTROL A)(CONTROL V)
q (CONTROL V)(ESC)(SHIFT T)(CONTROL V)

100
You now have a glossary file on a disk where every Epson FX-80 print command has been assigned a single character. Every time that you work with Apple Writer //e, you will have to load the glossary file into the computers memory before you can use it.
To Load The Glossary File:

1. Put the disk that contains the glossary file in the disk drive.
2. Press `CONTROL Q`
3. Press `E`
4. Type the name of your glossary file (Epson FX Glossary)

As long as you keep the computer on, the Epson FX Glossary will be available for you to use.

To Use The Glossary:

1. Position the cursor at the place in the text where you want to turn on or off a print style.
2. Press `CONTROL G` or Press and Hold Open Apple key
3. Type the letter corresponding to the print command that you want to enter into the text.

Reference Chart

The glossary that you have just created for the Epson FX–80 consists of the following letter or character codes. You can use this chart as reference.
<table>
<thead>
<tr>
<th>Feature</th>
<th>ON</th>
<th>OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double Width (Enlarged)</td>
<td>A</td>
<td>a</td>
</tr>
<tr>
<td>Backspace</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>Condensed</td>
<td>C</td>
<td>c</td>
</tr>
<tr>
<td>Double Strike</td>
<td>D</td>
<td>d</td>
</tr>
<tr>
<td>Emphasized</td>
<td>E</td>
<td>e</td>
</tr>
<tr>
<td>Double Width (Lock on)</td>
<td>F</td>
<td>f</td>
</tr>
<tr>
<td>Condensed/</td>
<td>G</td>
<td>g</td>
</tr>
<tr>
<td>Unidirectional</td>
<td>H</td>
<td>h</td>
</tr>
<tr>
<td>Italics</td>
<td>I</td>
<td>i</td>
</tr>
<tr>
<td>Line Spacing</td>
<td>J</td>
<td>j</td>
</tr>
<tr>
<td>8 Lines/inch</td>
<td>K</td>
<td>k</td>
</tr>
<tr>
<td>Small character set</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Mixed Print Modes**

- Condensed: 1
- Emphasized: 2
- Double Strike: 3
- Double Strike/Elite: 4
- Dbl Stk/Condensed: 5
- Dbl Stk/Emp: 6
- Enlarged: 7
- Enlarged/Elite: 8
- Enl/Condensed: 9
- Enl/Emphasized: 0
- Enl/Double Strike: –
- Enl/Dbl Stk/Elite: =
- Enl/Dbl Stk/Cond: ;
- Enl/Dbl Stk/Emp: :

**Foreign Character Sets**

- Condensed: 1 - France
- Emphasized: 2 - Germany
- Double Strike: 3 - England (U.K.)
- Double Strike/Elite: 4 - Denmark
- Dbl Stk/Condensed: 5 - Sweden
- Dbl Stk/Emp: 6 - Italy
- Enlarged: 7 - Spain
- Enlarged/Elite: 8 - Japan
- Enl/Condensed: 9 - USA
- Enl/Emphasized: 0
- Enl/Double Strike: –
- Enl/Dbl Stk/Elite: =
- Enl/Dbl Stk/Cond: ;
- Enl/Dbl Stk/Emp: :
The "Insert V" WPL Program

Instead of performing steps a and b above twice on each line of a printing glossary file, you can use the Insert V WPL program.

The first thing that you should do is to copy the CONTROLV file from the Apple Writer //e program disk to your glossary disk.

1. Put the Apple Writer //e program disk into the drive
2. Press CONTROL L
3. Type CONTROLV and Press RETURN
   (An inverse V will appear on the screen.)
4. Take out the Apple Writer //e program disk and put your glossary disk into the drive.
5. Press CONTROL S
6. Type CONTROLV and Press RETURN

The CONTROLV file is now on your glossary disk. Now you won't wear out your Apple Writer //e program disk entering all those CONTROL V's.

You can see that if you are creating a printing glossary containing 25 commands, then you will have to do steps a and b 50 times. The "Insert V" WPL program will automatically perform steps a and b twice on each line for you. All you have to do is enter an ! character before Pressing CONTROL V the first time and after Pressing CONTROL V the second time on each line. After you have typed in the entire glossary file, you can change all of the !'s to inverse V's (CONTROL V's) by executing the "Insert V" WPL program.
To create the WPL Insert V program


2. Type the following WPL program exactly

```
LOOP    B
        F/!//
        Y?
        PGO NEXT
        PGO QUIT
NEXT    L CONTROLV
        PGO LOOP
QUIT    PQT
```

3. Put your disk containing the glossary file into the drive

4. Press CONTROL S

5. Type Insert V and Press RETURN

When you want to use the WPL Insert V program to replace all of the ! characters in your glossary file to Inverse V's (CONTROL V's):

1. Display the glossary file on the screen with all of the !'s in the places where you want Inverse V's to appear.

2. Put the glossary disk containing the CONTROL V program in the drive.

3. Press CONTROL P

4. Type do insert v and Press RETURN

All of the !'s will be replaced with Inverse V's!
CHAPTER SIX
First User's Guide To Word Processing

VISUALIZING WORD PROCESSING CONCEPTS

Before describing word processing using Apple Writer II/e on the Apple II/e computer, try to visualize the steps involved in doing word processing.

1. Put the Apple Writer II/e word processing program into the disk drive, and turn on the monitor and computer.

2. Type at the keyboard.

3. What you type appears on the screen.

4. What you type is also stored automatically in the memory of the computer.

5. When you type you do not have to worry about margins, lines per page, justification, single or double spacing, paragraph indentation, etc.
6. For permanent storage, give the command and what is currently stored in the memory of the computer is transferred and saved on a data disk in the disk drive.

7. When you are ready to print, you can assign values for all of the printing parameters: margins, lines per page, etc.

8. Type the command on the keyboard and what is currently stored in the memory of the computer is printed on the printer. It will be printed according to the format that you specified.

9. When you are finished and turn off the computer, everything that is in the memory of the computer is erased from memory, but you still retain a permanent copy on the data disk.

10. At another time, put the word processing program disk back in the disk drive and turn on the monitor and computer.

11. Put the data disk into the disk drive and give the command to load your text that was saved, back into the memory of the computer.

12. Edit the text right on the screen and/or add more text.

13. Save the new version of the text onto the disk.

14. Print the new version.

These are the kinds of things that you will do when you are doing word processing.

**Hardware** – is the actual equipment – computer, keyboard, monitor, cables, cards, printer, etc.

**Software** – is the program that is stored on the disk that allows you to do word processing on a microcomputer. The software allows you to do editing, printing, saving text, etc. The Apple Writer is the program is the software.
What does the word processing software do and how does it work?

The word processing program defines for the computer which word processing functions it understands and is capable of performing and it also defines what the keyboard commands are for each function. A sophisticated word processor will define more functions than a simple word processor. For example, one word processing program may allow you to automatically print page numbers, and another may not be programmed to include automatic page numbering while printing. The ability to do these functions is defined by the software program. Each word processing program also defines HOW these functions are performed. One word processor may allow you to retype directly over text displayed on the screen by first typing the keyboard command CONTROL C (for change) and another word processor like Apple Writer /e uses the command CONTROL R (for replace). Even though both word processing programs allow the user to type directly over text, the commands to do it are different.

To fully appreciate the significance that the software program contributes to word processing here is another example. Just because two word processing programs allow the user to perform identical editing procedures like deleting, inserting, adding, and moving text, does not mean that they are equally easy to perform. Apple Writer || for the Apple || Plus and Apple Writer /e for the Apple /e both allow you to delete, insert, add, and move text. However, the Apple /e version is about 10 times easier to use than the Apple || Plus version. With the Apple /e version, you can simply move the cursor through the text by pressing the arrow keys and edit as you go. With the Apple || Plus version, every time you want to move the cursor, you have to issue a command to go into the editing mode, then move the cursor, return to the text entry mode, make the necessary change, go back to the editing mode and move the cursor again. Although both word processors can do the same thing, one is very much easier than the other.

In this chapter, word processing will be explained as it applies to the tasks outlined at the beginning of the chapter specifically referencing Apple Writer /e and the Apple /e computer. When you turn on the computer, the computer automatically finds the software program on
the Apple Writer //e program disk and transfers a copy of the program into its memory. The software program transforms the computer into a word processor. You can now type on the keyboard and what you type is simultaneously displayed on the screen and stored into the memory of the computer. Whenever you type a command, the computer will perform the word processing function designated by that command.

How do you issue commands to the computer?
CONTROL and ESC

There are two important keys on the keyboard that are used for issuing word processing commands, the CONTROL key and the ESC (escape) key. The word processing program uses these two keys to give extra functions to the other keyboard keys. To save text that you have typed and is in the memory of the computer onto a disk, you have to press CONTROL S. The CONTROL key is used as you would the SHIFT key, press and hold the CONTROL key and press S. You will find that most of the CONTROL key commands are easy to remember because they have been conveniently associated with the function that they perform

CONTROL S to save
CONTROL L to load
CONTROL T for tabs
CONTROL P for print
CONTROL F for find etc

The ESC key is used in Chapter Five extensively for issuing printer control commands. The ESC key does not have to be held down while pressing another key as the SHIFT and CONTROL keys are. When ESC appears in a command, simply press the ESC key and go onto the next keystrokes.

Typing at the Computer

When you turn on the computer, a flashing or blinking box appears at the top left corner of a blank screen. The flashing box is called the cursor. What you type on the keyboard appears on the screen at the position of the cursor. As you type text is displayed on the screen.
The screen can display 24 lines and 80 characters per line. As you fill the screen with text, the text already on the screen is scrolled off the top of the screen. The text is still in the memory of the computer. To edit text, you must position the cursor at the exact spot where you want to delete, insert, add, or move text. As you move the cursor backwards through the text, the text that scrolled off the top of the screen, reappears.

Understanding Memory

The Apple //e computer has 64K or 64K bytes of memory. 64K is equivalent to approximately 64000 characters. The Apple //e can store approximately 64000 characters of information. When you turn on the computer, the Apple Writer //e word processing software program in the disk drive is automatically loaded into the memory of the computer and occupies a large segment of this 64K of memory. There is only about 27K left in memory for you to store the text that you type. The data line at the top of the screen tells you how much memory is left in the computer. Next to Mem: is the number 27645 indicating that there is exactly room in memory for 27645 bytes or characters. Every time you press a key on the keyboard, whether a number, letter, symbol, or space, the amount of memory is reduced by 1.

The 27645K of memory can hold a minimum of 8 single spaced pages or 16 double spaced pages of text when using the standard page format consisting of 63 characters per line and 54 lines of text per page. A more realistic number of pages accounting for spacing would be 10 single spaced pages or 20 double spaced pages. When you fill up memory (Mem: 0) the computer simply beeps when you try to enter another character. If you fill up memory but still need to enter more text, save the file in memory, erase what is in memory and start again.

Disks

The 5½” disks that you use on the Apple //e computer consist of magnetic recording tape in the shape of a record, sealed inside a cardboard like jacket. When you insert the disk into the drive and
close the door, the drive mechanism is engaged and the mechanism spins the disk at a particular RPM. The read/write head of the disk drive accesses the disk through the oval window in the disk jacket.

**Take care of your disks**

- Don’t touch the exposed magnetic surfaces
- Don’t write directly on your disks – the pressure of the pen or pencil may destroy the disk surface
- Don’t set them on a TV or monitor or around any other sources of magnetic interference
- Don’t bend them, or paper clip anything to them
- Don’t leave them in the sun or in a car where the sun can destroy them
- Don’t let the dog or kids chew on them
- To store them properly, keep them upright, in their jackets, in a case, file or folder

**Preparing your disks before you can use them**

You will use blank 5¼” disks for the permanent storage of the material that you type. Blank disks that you buy are truly blank and contain no magnetic data at all. Unfortunately the computer cannot store anything on a truly blank disk. To use disks to store your text you first have to INITIALIZE them. The initialization process is something that has to be done before you can store any information or program from the Apple computer onto any disk.

One of the first tasks that you should do with Apple Writer //e is initialize some disks. This is described in Chapter One, procedure #2. This is not a task that you will have to do often, that is why it is good to have step by step instructions. You don’t have to memorize how to perform the tasks that are only performed occasionnally. The recommended procedure is to initialize 3 or 4 disks (for the occasional word processor) and 10 disks (for the heavy word processor).
Initialize your Apple Writer //e disks and keep them separate from your other disks.

The initialization or formatting process is a standard computer operation and each computer initializes their disks differently—one reason why you can't run Apple program disks on another computer. When the computer initializes a disk, it prepares the disk so that it is ready to receive data and the computer will know where to put information on the disk when you want to save it and where to retrieve it when you want to use it again.

When you initialize a disk, the computer, among other things,

1. Marks 35 tracks on the disk where it can store data
2. Creates space for a catalog on a specific track. The catalog will contain the names of all of the files that you store on that disk, so that you can access them by name.

Blank disks can be initialized two ways for use with Apple Writer //e. Regular initialized disks for the Apple //e computer can be used to store Apple Writer //e files. This is the regular DOS 3.3 method using the command INIT HELLO. The second way is to use Apple Writer //e's method as described in Chapter One, procedure #2. This is the preferred method since these initialized disks can hold over 8K of data more than the DOS 3.3 initialized disk.

How do I save my text on a disk?

When you are finished typing or you are running out of memory in the computer, you save it on an initialized disk in the disk drive. Saving the text in the memory of the computer is very simple. Press the command CONTROL S and give the file a unique name, press RETURN and the text is saved on the disk. This procedure is described as basic operating procedure #5 in Chapter One. When you save a file from the memory of the computer to a disk, the file in memory is not erased; rather, a COPY of the file is saved on the disk.

When you are typing a long document and you have filled up the memory of the computer, you give the text a descriptive and unique name and save it on a disk. Then you erase or delete the entire file from the memory of the computer and start over again with a clear or
new workspace. You just continue typing right where you left off. When you run out of room again, you give it a name and save it on the same disk. Your actual document can be as long as you want, the only problem is that you have to stop every so often and save your document in 10 page (single spaced) increments. When you want to print the entire document, you simply print out each file consecutively as described in Chapter Four. The word processing program has a printing command that allows you to start printing one file exactly where the preceding one left off, keeping track of page numbers and page length.

Each time that you save text on a disk, you have to give it a UNIQUE name, so you can't name three files the same name even though they are all part of the same document. The suggested way of doing this is to name your files using a descriptive name and consecutive numbers. A file called Thesis would be saved under the names thesis 1, thesis 2, thesis 3, etc. As long as the names are not exactly the same, the computer doesn't mind how similar they are.

A very important concept to begin immediately when you start saving text is to make back up copies of your files. Disks are not dangerously fragile, however once in a while accidents happen and the following precautions can save you from losing valuable information. All of your files should be backed up. When you save text on a disk, it is as easy as pressing CONTROL S and assigning it a name. It only takes a minute to take out that disk, put in another disk and save it again on the second disk. You don't even have to type the name again. Simply pressing CONTROL S and pressing = will save the file using the same name that appears on the data line. You can save the file in memory as many times as you want, the computer doesn't mind. Some people keep three copies of their important files and store them in different places. It wouldn't do much good if all three copies were kept in the same box and you misplaced that box. Disk prices have come down making the cost of backing up disks not a factor.

Each disk that you use to store text has its own catalog containing all of the names of the files on the disk. No disk can have two files with the same name. This is both beneficial and a potential hazard. For example, you have a file named Letter on a disk. You load it from the disk into the computer to edit it. You make several changes in the text.
and want to save it again on the disk. When you save the file using the name Letter, the old version of the file is erased and replaced with the new version. This is beneficial because it is an easy way of updating files on your disks. You don’t want a lot of old versions of a file cluttering up your disks. Save a file using a name already on the disk will result in it being replaced by the new file. This can be a potential hazard too because if you type a new Letter and save it using the name Letter, the first file called Letter, which you didn’t want to erase, will be erased and replaced with the new file called Letter. This is the most common way of accidentally erasing files on a disk.

To protect yourself from accidentally erasing an important file, you can Lock your files. Step by step instructions are given in Chapter Three for locking files. When you lock a file a “*” will appear next to its name in the catalog and it cannot be updated or erased. A locked file can be loaded, it just cannot be changed on the disk until it is first unlocked.

How much can I save on one disk?

A normal Apple disk can hold a total of about 143K or 143,000 characters of information. The amount of usable space on a disk is equal to 128K to 136K or about 40 single spaced pages or 80 double spaced pages of text. When you run out of room on a disk and attempt to save a file, the computer simply beeps and displays the message, DOS :DISK FULL. Put another disk in the drive and save the file again.

How do I load a file from a disk back into the computer?

Loading a file from a disk back into the memory of the computer is just as easy as saving it onto the disk. Simply press CONTROL L, type the name of the file, press RETURN and if the file is on the disk it will be loaded or copied into the memory of the computer (described in Chapter One, procedure #6). The file can now be edited, printed, or added to.

When you load a file from a disk it will be inserted into memory at the position of the cursor. To load one file at the end of another, position the cursor at the end of the first file on the screen and load the next file. It will be inserted at the end of the first file.
CHAPTER SEVEN

Using Apple Writer [[ for the ]][ Plus on the Apple //e Computer

You can still use the Apple [[ Plus program on the Apple //e computer and you can take advantage of some of the new features of the computer but not all of them.

How to Start

1. Put the Apple Writer ]][ program disk into the disk drive and turn on the computer and monitor.

2. Computer: Do you have lowercase display (Y/N):
   You: Press SHIFT Y (upper case Y) and press RETURN

3. Computer: Press RETURN to begin:
   You: Press RETURN

4. Computer: Enter your selection or RETURN:
   You: Press RETURN

5. To install the use of upper/lower case and use of the shift key,
   You: Press CTRL K

This changes the second letter on the data line display from S to U. This allows you to use the SHIFT key to capitalize. CAUTION—the up arrow key also changes S to U. If you ever accidentally press the up arrow key, be sure to press it again to reset S to U.
You can now use the Minute Manual for Apple Writer II (II Plus Version) using the instructions pertaining to a system having upper/lower case and a shift key mod.

**Apple //e features that you can use—**

1. There is no **REPT** key. With the Apple //e holding any key depressed will cause that key to be automatically repeated.

2. The **TAB** key works. You can use the **TAB** key instead of the command **CTRL I**.

3. You can generate the following characters directly from the keyboard which were not available on the Apple II Plus keyboard: _, [], ^, @, }, {, ~, `", and \.

4. If you want to Lock in Upper Case as described on page 3-7, do not use **CTRL K**, press the **CAPS LOCK** key instead.

5. You can get an 80 column display by inserting an 80 column board such as the Videx Videoterm into slot #3 inside the Apple //e. This will work as long as there is no card in the auxiliary slot of the Apple //e.

**Apple //e features that you cannot use:**

1. I have not been able to use the 80 column text card in the auxiliary slot. If you have found a way, please let me know.

2. The **DELETE** key does not work.

To use the glossary to enter printer control commands, you will have to perform the glossary instructions found in the Minute Manual for Apple Writer //e not the directions found in the Minute Manual for Apple Writer II. When using the //e computer you can not simply press **CONTROL V** to enter it into a glossary. To get **CONTROL V** into a glossary with the //e, you have to Load it from the Apple Writer //e program disk each time.
Underlining and Superscripts on the Epson MX Printer

With Apple Writer //e you cannot generate the NUL or CONTROL @ character which is the code to turn off underlining and superscripts. Using Apple Writer ][ for the ][ Plus on the Apple //e computer, you CAN generate the NUL or CONTROL @ character and can get both underlining and superscripts.

*** When creating a printing glossary for Apple Writer ][ for the ][ Plus on the Apple //e use the command CONTROL SHIFT 2 instead of CONTROL SHIFT P. This will generate a flashing @ character on the screen.***

How To Get Underlining and Superscripts on the Epson MX When Using Apple Writer //e.

By taking advantage of the compatibility between Apple Writer ][ and Apple Writer //e files you can generate underlining and superscripts on the Epson MX when using Apple Writer //e. How? Perform all of your word processing using Apple Writer //e and every place you want to use underlining or superscripts, use the gag character ##. Then when you want to print out your files boot up Apple Writer ][ on the Apple //e. Use the WPL program that follows to find and replace all occurrences of the gag character, ##, with the NUL character, . Then print the file.

First you have to create the WPL program:

1. Boot the Apple Writer ][ program on the Apple //e computer.
2. With a clear screen, type the following WPL program:

   B
   F/##/(Press CTRL V) (Press ESC) (Press –) (Press CTRL SHIFT 2) (Press CTRL V) /A

3. Put your utility disk in the drive
4. Press CONTROL S
5. Type REPLACE

119
You now have the WPL program on your utility disk that will "replace" all of the ## characters in your Apple Writer /e files with the correct code to turn off superscripts and underlining on the Epson MX printer.

TO USE this WPL program:

1. Create your text using Apple Writer /e in the normal fashion except that every place where you want to turn on superscripts or turn off underlining enter the gag character, ##. Then save your text on any of your data disks.

2. To print any of these files, boot Apple Writer ][

3. Load the file that you want printed.

4. Put the utility disk in the drive that contains the WPL program called REPLACE.

5. Press CONTROL P

6. Type do replace and Press RETURN (all of the ##'s should be replaced by the correct code)

7. To print the file Press CONTROL P

8. Type NP and Press RETURN
Appendix 1 Two Disk Drives

This book was written with the assumption that the user has one disk drive. Apple Writer //e only requires one disk drive. After you boot or load the Apple Writer //e program, you can put the program disk away. Whereas some computer programs require constant access to the program disk while you are operating the program, Apple Writer does not.

There are times when having two disk drives is convenient. If you want to use any of the files on the Apple Writer //e program disk, it must be in the disk drive. Examples of files on the Apple Writer //e program disk are the HELP screens. To use the Help screens you must have the program disk in the drive. If you have two disk drives you can access files from more than one disk without swapping disks in the drive.

Procedure For Using Two Disk Drives

When you turn on the computer, it will automatically access Drive 1. To access a file on a disk in Drive 2, you must tell the computer to GO TO Drive 2 by ending the Load, Save or other command with ,D2. Once you switch to Drive 2, the computer will continue directing all disk commands to Drive 2 until you switch to Drive 1 again by using a ,D1 command.

Example

To Load a file named “Letter To The Editor” from a disk in Drive 2:

1. Press CONTROL L

2. Type Letter To The Editor,D2 and Press RETURN
INDEX

-A-
alternate character set ........................................... 90
Apple Writer [ ................................................. 7, 109, 117

-B-
backslash .................................................................... 76
backspace ................................................................... 70
bold ............................................................................ 87
bottom line ............................................................... 19, 44, 47
bottom margin ......................................................... 17, 43
buffer ......................................................................... 11
byte ............................................................................ 111

-C-
CAPS LOCK key ......................................................... 27
carriage return ......................................................... 6, 18
case change ................................................................... 27
catalog ....................................................................... 34, 61, 62, 113
Closed Apple ............................................................ 8, 12, 22, 37
computer paper .......................................................... 18
condensed .................................................................. 67, 85, 87, 92
continuous forms .......................................................... 46
CONTROL ................................................................... 110
copy text ................................................................... 12
correspondence quality .............................................. 69, 75, 88, 91, 94
Corvus Hard Disk ....................................................... 39
cursor ........................................................................... 4, 110

-D-
Danish .......................................................................... 83
data disk .................................................................... 5
data line ....................................................................... 4, 27
default .................................................. 44
delete .................................................... 8, 9, 23, 34, 36
Denmark ................................................... 76
direct printing ........................................... 62
disk drive .................................................. 5
disk operating system ................................. 34
disks .......................................................... 111
display ....................................................... 4
DOS commands ......................................... 5, 34
double strike ............................................. 69, 91
double width ............................................. 68, 74, 79, 81, 86, 88, 92
down arrow ............................................... 8, 22
duplicate ..................................................... 14

-E-
eighty column ............................................. 4
Elite ......................................................... 74, 78, 81, 87, 91
elongated ................................................... 88
embedded commands .................................... 20, 26, 51
emphasized ............................................. 69, 78, 91
England .................................................. 76, 83
enhanced ................................................... 91
enlarged ..................................................... 78
Epson MX .................................................. 67, 79, 119
Epson FX .................................................. 67, 72, 96
ESC .......................................................... 27, 53, 110

-F-
file names ................................................ 15
find .......................................................... 32
find and replace ........................................ 33
footers ...................................................... 47
footnotes ................................................... 58
foreign characters ...................................... 75, 76, 83
formatting ............................................... 17, 26, 43, 50–53
form feed ................................................... 54
France ......................................................... 76, 83
Gemini .................................................. 67, 81
Gemini-10X .................................................. 83
Germany .................................................. 76, 83
glossary .................................................. 29, 98

halt printing .................................................. 54
hard disk .................................................. 39
headers .................................................. 47

initializing disks ........................................... 5, 112
insert text ............................................... 10
insert v ................................................... 104, 105
italics ..................................................... 69
Italy ....................................................... 76, 83

Japan ....................................................... 76
justification ............................................... 18

left arrow .................................................. 8, 10, 22, 27
left margin ............................................... 17
line interval ............................................. 18
line spacing .............................................. 71, 89, 94
lines per inch ............................................ 71
load ........................................................ 15
lock ......................................................... 36, 115

mailing labels format .................................... 46, 53
margin .................................................... 17
memory .................................................. 111
mixed printing codes ............................. 77
move text .......................................................... 10, 23

- O -

Open Apple ........................................ 10, 11, 23, 24
outdent numbers ........................................... 57, 58
overstrike ......................................................... 70

- P -

page format ................................................... 43
page interval ............................................. 17, 48
page number ................................................ 17, 49
paragraph margin ........................................ 17, 57
print catalog .................................................. 61
print preview ................................................ 55
printed lines per page .................................. 44
printer destination ....................................... 18
printing part of a file .................................... 55
printing text .................................................... 16, 26
proportional spacing .................................... 75, 89

- R -

reference chart ............................................. 102
rename .......................................................... 35
replace ......................................................... 12, 24
RETURN ............................................................ 6
right arrow .................................................... 8, 11, 22, 27
right margin .................................................. 17, 48

- S -

save .......................................................... 13, 25, 113-115
search ............................................................ 33
single page ..................................................... 18
small character set ........................................ 72
Spain .................................................. 76, 83
special characters .................................... 81, 82
special formats ....................................... 50
standard page format ................................. 43–45
stop printer ........................................... 53
subscripts ............................................. 70, 90, 93
summary of commands (Epson FX) .................. 96
superscripts .......................................... 73, 90, 93
Sweden ............................................... 76, 83

-T-

TAB ..................................................... 4, 37
titles ................................................. 86
top line ............................................... 19, 43, 47–49
top margin ............................................ 17, 43, 48

-U-

underline ............................................... 18, 73, 88, 93
unidirectional printing ............................... 74, 89
unlock .................................................. 36
up arrow ................................................ 8
USA ..................................................... 76, 83
utility disk .......................................... 28, 38

-V-

verify .................................................... 35

-W-

word processing ...................................... 107
WPL ................................................... 39, 104–105
write protect tab .................................... 4
## CONTROL CHARACTERS

<table>
<thead>
<tr>
<th>Character</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL B</td>
<td>8, 22</td>
</tr>
<tr>
<td>CONTROL C</td>
<td>27</td>
</tr>
<tr>
<td>CONTROL D</td>
<td>8, 9, 11, 12, 23, 24</td>
</tr>
<tr>
<td>CONTROL E</td>
<td>8, 22</td>
</tr>
<tr>
<td>CONTROL F</td>
<td>33</td>
</tr>
<tr>
<td>CONTROL G</td>
<td>29, 30, 98, 102</td>
</tr>
<tr>
<td>CONTROL L</td>
<td>15, 25, 115</td>
</tr>
<tr>
<td>CONTROL N</td>
<td>9, 23</td>
</tr>
<tr>
<td>CONTROL O</td>
<td>5, 21, 34–36, 61</td>
</tr>
<tr>
<td>CONTROL P</td>
<td>16, 26</td>
</tr>
<tr>
<td>CONTROL Q</td>
<td>31, 38, 46, 52, 62, 102</td>
</tr>
<tr>
<td>CONTROL R</td>
<td>12, 24</td>
</tr>
<tr>
<td>CONTROL S</td>
<td>13, 25, 113</td>
</tr>
<tr>
<td>CONTROL T</td>
<td>37</td>
</tr>
<tr>
<td>CONTROL W</td>
<td>9, 11, 23, 24</td>
</tr>
<tr>
<td>CONTROL X</td>
<td>9, 11, 23, 24</td>
</tr>
</tbody>
</table>

## Symbols & Other Characters

<table>
<thead>
<tr>
<th>Character</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>=</td>
<td>'14, 114</td>
</tr>
<tr>
<td>&lt;</td>
<td>8, 9, 11, 12, 23, 24, 59, 60</td>
</tr>
<tr>
<td>&gt;</td>
<td>8, 9, 11, 12, 23, 24, 59, 60</td>
</tr>
<tr>
<td>?</td>
<td>13, 15, 25, 26, 30</td>
</tr>
<tr>
<td>*</td>
<td>20, 26, 51</td>
</tr>
<tr>
<td>#</td>
<td>36</td>
</tr>
<tr>
<td>@</td>
<td>49, 50, 61</td>
</tr>
<tr>
<td>!</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>77</td>
</tr>
</tbody>
</table>
Minute Manuals are the intelligent interface between you, your computer system, and your software.

Minute Manuals have step-by-step instructions for the basic operating procedures that get you started using your software fast.

The Minute Manual for Apple Writer IIe contains:

1. Step-by-step instructions for the seven basic operating procedures, advanced procedures, and printing and formatting procedures.

2. Step-by-step instructions for using the printing codes for
   - Epson FX and MX
   - Gemini 10/10X/15
   - Apple
   - NEC
   - Prowriter
   - Okidata

3. First user’s guide to word processing.

MinuteWare

$7.95

ISBN 0-913131-01-6