User's Guide
Volume 2

Putting solutions
where the problems are.

Attaché™
Portable Computer by Otrona

USER'S GUIDE
Volume 2

WordStar-Plus Guide

Valet Guide

Charton Guide

Putting solutions
where the problems are.
Attaché ™
Portable Computer by Otrona

How to USE this Guide

Attache documentation consists of six "user's guides" packaged in two separate books called Volume 1 and Volume 2. The contents of these volumes are as follows:

Volume 1

o Operator's Guide

o Software Guide

o CP/M Guide

Volume 2

o WordStar-Plus Guide

o Valet Guide

o Charton Guide

The general contents of each user's guide are described on the following pages. Use these pages as a master reference guide to the entire manual set. Note that each user's guide contains its own comprehensive glossary and index for easy reference.

Note: Instructions for learning and using the Multiplan electronic spreadsheet analysis program are contained in the Multiplan manual.

Additional Attache documentation not described here includes the Attache Technical Manual, Attache CP/M BIOS Listing, and Attache Service Guide.

The Technical Manual and BIOS Listing may be purchased from your dealer. The Service Guide is sent to you free by Otrona when you return your Owner's Warranty and Registration cards.

Volume 1 - Operator's Guide

The Operator's Guide contains basic information for setting up and operating Attache. This manual also contains a summarized programmer's reference section.

The following information is contained in the Operator's Guide:

Volume 1 - Software Guide

The Software Guide contains basic information about Attache
software programs and detailed instructions for using Attache
utility programs (including the Disk Manager program).

The following information is contained in the Software Guide:

Volume 1 - CP/M Guide

The CP/M Guide contains information about the CP/M operating system and detailed instructions for using CP/M utility programs.

The following information is contained in the CP/M Guide:

Volume 2 - WordStar-Plus Guide

The WordStar-Plus Guide contains detailed instructions for learning and using the WordStar-Plus system for word processing.

The following information is contained in the WordStar-Plus Guide:

Volume 2 - Valet Guide

The Valet Guide contains detailed instructions for using the Valet time/resource management system, including alarms, screen dump, printer installation, and RPN calculator.

The following information is contained in the Valet Guide:

Volume 2 - Charton Guide

The Charton Guide contains detailed instructions for learning and
using the Charton business graphics system, including bar charts,
line charts, and pie charts.

The following information is contained in the Charton Guide:

WORDSTAR-PLUS GUIDE

for Attache and Attache S

Portable Computer Systems

Contents

Contents

3. Create a Document

4. Edit A Document

5. Special Effects

Contents

6. Print a Document

7. Maintenance

8. Appendixes

How to USE this Guide

This manual describes WordStar-Plus programs and functions, including commands and processes for creating, editing, and printing a document. Other topics include special effects for document customization and maintenance commands for managing word processing data files on diskettes. Each major word processing function is addressed here in a separate chapter.

The training exercises in the first section are useful as an introduction to the software system and its basic functions. Each topic in the training exercises includes a reference to the appropriate chapter in the manual for additional information.

The appendixes at the back of this guide include a comprehensive glossary, a cross-referenced index, and a command summary reference listing.

WordStar-Plus Guide

Introduction

Introduction

Getting Started

Create

Edit

Effects

Printing

Maintenance

Appendixes

Introduction

WordStar-Plus Overview

Attache uses an enhanced version of MicroPro International's WordStar word processing system. WordStar-Plus enhancements make this system easy to learn.

If you are already familiar with WordStar, you may use the system the same as you would use it on other CP/M systems. Keyboard commands for standard WordStar usage have not been modified in this enhanced version.

The Command Key Function Index on the last pages of this manual is useful for evaluating WordStar-Plus enhancements and the ways you will be using them.

Word Processing Overview

Word Processing is easy to learn on Attache. Using the WordStar-Plus system is much like using a typewriter, but the edit and special effects capabilities make the typewriter seem like a child's toy in comparison.

Text is displayed on the screen as it is entered at the keyboard, and cursor movement keys allow you to move quickly from one part of the text to another. Like a typewriter, margins and tabs may be set or reset at any point within a document.

These features and others are activated or deactivated through keyboard controls that may be specified at any time during text entry or during text editing.

One major distinction with word processing is that you don't have to use the carriage return to begin a new line. A feature called Word Wrap automatically moves the word being keyed at the end of the line to the beginning of the next line.

With Word Wrap activated, the carriage return key is used only when you want to force the end of a line or leave blanks between lines of text, such as the end of a paragraph or in a columnar table.

A feature called Justification redistributes the spacing after Word Wrap has moved the cursor to the next line. This redistribution gives the document a polished look by spacing text so that both the left and right margins are vertically aligned. Justification may be activated or deactivated at any point in your document.

You may also reform paragraphs with a single key stroke to rejustify spacing at any time, such as when text is inserted or deleted, or when you have split a paragraph in two. Functions such as revising or inserting text are achieved through special multi-function keys that are labeled above the keyboard.

The following chapters will step you through the basics of word processing and the use of special techniques and features. When you are familiar with the basics, the index tables at the back of this manual are useful for quick reference to word processing commands and functions.

WordStar-Plus Program Files

The following WordStar-Plus program files are contained on the Attache Software diskette:

WS.COM   WSOVLY1.OVR   WSMSGS.OVR

These files must reside on the logged disk when word processing is initiated or an error while occur.

A fourth word processing file, INSTALL.COM, is contained on the Attache Software diskette but is not required to use word processing. The INSTALL.COM file is used for installing printers to print word processing text files. INSTALL.COM is described in this text in the chapter on Printing a Document.

WordStar-Plus Document Files

Document files (also called data files or text files) are the files you create that contain your word processing text. These files are discussed in detail in the next several chapters of this guide.

Training Exercises

The exercises on the following pages provide an introduction to word processing concepts and WordStar-Plus features. For best results, use the WordStar-Plus manual as a reference while completing these exercises. The chapter for reference is included in the heading for each exercise.

Getting Started (Chapter 2 and 3)

Refer to the instructions in the Getting Started and Create sections of this manual to execute the following:

1. Power up Attache and insert the Attache Software diskette in Drive A. Insert a formatted diskette in Drive B. Boot the system by pressing **RESET** and the right **SHIFT** key at the same time.

2. With the CP/M prompt (A>) on the screen, load the WordStar-Plus Programs by typing **WS** and pressing **RETURN.**

3. With the No-File menu on the screen, select option **L** to change the logged disk drive. Then type **B:** and press **RETURN** to change the logged drive to Drive B.

4. Select option **D** to open a document file, and name the file **TRAINING.**

The Text Entry Display will be on the screen after you have completed these steps. The highlighted rectangle in the first column of the file display area is the cursor. This indicates your position in the document.

Basic Entry and Editing (Chapter 3 and 4)

Type the paragraph in the box on the next page just as you would on a typewriter, but do not use **RETURN** when you reach the end of the line. The Word Wrap feature will automatically move words typed beyond the right margin to the next line.

You just type. If you make a typing error, press **DEL** and the cursor will move back one column and erase that character. Then type the correct character and continue typing the paragraph.

If you make a mistake but do not notice it when the cursor is still at that word, let it go for now and correct it later as a part of the editing process.

Introduction

Type the following paragraph:

==

Word processing is easy to learn on ATTACHE. Using the WordStar-
Plus system is much like using a typewriter, but the edit and
special effects capabilities make the typewriter seem like a
child's toy in comparison. Text is displayed on the screen as it
is entered at the keyboard, and cursor movement keys allow you to
move quickly from one part of the text to another.

==

Finish the paragraph by pressing **RETURN** twice. The first
return signifies the end of the paragraph and moves the
cursor to the next line. The second return creates a blank
line and moves the cursor to the next line, where the second
paragraph will begin.

Observe the paragraph you just typed. As Word Wrap started
new lines, Justification reformed the completed line so that
both margins are aligned.

o The Status Line at the top of the screen shows the logged
   disk and document name, and the exact location of the
   cursor in the document.

o The Ruler line shows the left and right margins and
   default tab stops.

o The Flag Characters in the right-most column (<)
   indicate "hard" returns that you created with the **RETURN**
   key; blanks in this column indicate "soft" returns created
   by Word Wrap during line forming.

Type the following paragraph just as it appears here,
including typo's and grammatical errors.

==

Functions such as insertnig text are achievedd through special
multi-function keys that are labeled keybord. Sinc text editing
id doneright on on the screen, printing the completed document is
almost an afterthought.

==

Press **RETURN** to end the line, and then press **RETURN** again to
create a blank line at the end of the paragraph.

1-4

Cursor Movement (Chapter 3 and 4)

Use the arrow keys to move the cursor to the top of the document and back, and then from left to right and back on a line. Move the cursor a word a time on the line by pressing the **CTRL** or **SHIFT** key at the same time as the arrow key.

Insert and Delete (Chapter 3 and 4)

The paragraph you just typed contains enough typo's and other errors for an introduction to basic insert and delete functions.

1. Begin by moving the cursor to **Functions** at the beginning of the second paragraph.

2. Move the cursor to **n** in **insertnig.** Type **in** over **ni.**

3. Move the cursor to the second **d** in **achievedd.** Press **CTRL** and **DEL** at the same time to delete **d.**

4. Move the cursor to the space between **Sinc** and **text** on the second line of the paragraph.

5. Activate **INSERT MODE** by pressing **CTRL** and **6** at the same time. The Status Line displays "INSERT ON."

6. Type **e** to complete the word **since.**

7. Move the cursor to the **r** in **keybord** and type **a.**

8. Move the cursor to the space between **labeled** and **keyboard.** Press the space bar to create an additional space and then type **above the.**

9. Move the cursor to the third line at the letter **d** in **id.**

10. Deactivate **INSERT MODE** by pressing **CTRL** and **6** again at the same time.

11. Type over **d** with **s** to make **is.**

12. Move the cursor to the **r** in **doneright.**

13. Activate **INSERT MODE** and press the space bar to insert a space between **done** and **right.**

14. Move the cursor to the first **on** in **on on.** Press **CTRL** and **DEL** at the same time to delete **on.**

15. Edit the first paragraph if you made any typing errors there.

Introduction

Paragraph Reform (Chapter 3 and 4)

Paragraphs are usually fairly fragmented after editing. The **REFORM** feature rejustifies the fragmented text and realigns the margins.

1. To activate **REFORM,** position the cursor on the first line of the paragraph to be reformed - in this case, the second paragraph.

2. Then press **CTRL** and **7** at the same time. Text will be reformed from the cursor line to the first hard return encountered.

If you made changes to the first paragraph, reform that paragraph as well.

Saving Text and Re-Editing (Chapter 3)

The paragraphs that you have typed so far are contained in memory and are not on the diskette. If you were to have a power failure, everything that has been done so far would be lost. Because of this, it is a good idea to save the document periodically as you compose and edit.

Activate **SAVE** by pressing **CTRL** and **SHIFT** and **4** at the same time.

When the Save is completed, the document reappears on the screen with the cursor at its previous position in the file.

Merging Paragraphs (Chapter 4)

To merge the two paragraphs you have typed so far:

1. Move the cursor to the right of the word **another.** at the end of the first paragraph.

   When the paragraphs are merged, the second paragraph will begin at the cursor position, so position the cursor where you would like the next sentence to begin on the line.

2. Press **CTRL** and **DEL** at the same time. This will delete the hard return and move the second paragraph up one line on the screen.

3. Press **CTRL DEL** again and the text will move up to the cursor position. Then activate **REFORM** to rejustify the text.

Splitting Paragraphs (Chapter 4)

To split a paragraph, position the cursor at the first character of the first word of the new paragraph.

1. For this exercise, position the cursor at the **T** in **Text** on the fourth line of the paragraph.

2. With **INSERT MODE** activated, press **RETURN.** The text behind the cursor moves to the next line.

3. Press **RETURN** again to create a blank line between the paragraphs.

4. With the cursor on the first line of the new paragraph, activate **REFORM** to rejustify the text.

5. Paragraph reform will stop when it encounters a word that could be hyphenated (see Hyphen Help and Soft Hyphens). In this exercise, REFORM will stop at the word "afterthought" and the letter "t" will appear highlighted. Type a hyphen here and the word will be hyphenated.

Block Operations - Moving Blocks of Text (Chapter 4)

Block operations allow you to identify "blocks" of text and then perform special operations on those blocks, usually in the form of moving that text elsewhere in the document.

For this exercise, move the first paragraph behind the second paragraph with the following block operation:

1. Move the cursor to **W** in **Word Processing** on the first line of text and activate **INSERT MODE.**

2. Activate **START** by pressing **CTRL** and **SHIFT** and **6** at the same time. The indicator <B> will appear on the screen to indicate the beginning of the block.

3. Move the cursor to the right of **comparison.** at the end of the paragraph.

4. Activate **END** by pressing **CTRL** and **SHIFT** and **7** at the same time. The block of text will appear now appear highlighted on the screen.

5. To move the block, position the cursor at the location where the block will be moved to. In this case, move the cursor two lines below the second paragraph.

6. Then activate **MOVE** by pressing **CTRL** and **SHIFT** and **8** at the same time. The marked block will be moved to that location in the document.

Copying or Deleting Blocks of Text (Chapter 4)

Copying or deleting a block of text is similar to the preceding exercise for moving a block of text. The block start and end are marked and then a command is given to copy or delete the block. Blocks may also be copied to different files.

1. Move the cursor to the end of the file by pressing **SHIFT** and **CTRL** and the **Down Arrow** key at the same time. Then press **RETURN** twice to create additional lines at the end of the file.

2. Activate **COPY** by pressing **CTRL** and **SHIFT** and **9** at the same time. The marked block will be copied to the cursor location.

3. Hide the block by returning the screen to normal highlighting. This is done by activating **HIDE** (**CTRL SHIFT 0** on the keyboard template). Repeat this process to redisplay the block highlighting.

4. With the block highlighted on the screen, activate the **PRINTING, CONTROL** menu (**CTRL** and 5 at the same time) and select option **Y** to delete the block. All text that was highlighted on the screen will be deleted from the file.

Scrolling (Chapter 4)

Scrolling "rolls" the document up and down on the screen.

1. Scroll the screen up to display text above the current cursor position by pressing **CTRL** and the **Up Arrow** key at the same time.

2. Scroll the screen down to display text below the current cursor position by pressing **CTRL** and the **Down Arrow** key at the same time.

Margins (Chapter 5)

The paragraphs in this exercise have used standard default margins so far, with the left margin at column-1 and the right margin at column-65.

Change the left and right margins by executing the following:

1. Activate **MARGINS, FORMAT** by pressing **CTRL** and 3 at the same time.

2. Select option **L** from the displayed menu to change the left margin.

3. Change the left margin to column-3 by typing **3,** and then press **RETURN.**

4. Activate **MARGINS, FORMAT** again and select option **R** to change the right margin.

5. Change the right margin to column-62 by typing **62,** and then press **RETURN.** Note that the ruler line reflects the changes you have made.

6. Move the cursor back to the first line of the first paragraph and **REFORM** that paragraph to reflect the new margins. When the **HYPHENATE** message is displayed, activate **REFORM** again to bypass hyphenation. Then press **RETURN** (with **INSERT MODE** activated) to begin a new paragraph.

7. Type the following sentence.

==

Margins and tabs may be changed at any time while you type, and previous text can be reformed to reflect these changes.

==

Tabs (Chapter 5)

Change Tabs with **SET** and **CLEAR.** Move text or the cursor with the **TAB** key.

1. Move the cursor back to **"Margins"** at the beginning of the paragraph you just typed.

2. With **INSERT MODE** deactivated, press the **TAB** key several times. The cursor moves to the columns under the "!" in the Ruler Line.

3. Move the cursor to the beginning of the paragraph again and activate **INSERT MODE.** Now press **TAB** and the text is moved with the cursor to the first tab.

4. Move the cursor back to column-3 and press **CTRL** and **DEL** at the same time. The text moves back to the cursor position.

5. Change tabs from the defaults by activating **CLEAR (CTRL 0)** and specifying the tab to clear. Clear the tab at column-16 and press **RETURN.**

6. Then activate **SET** (**CTRL 9**) and set a tab at column-18. Move the cursor to the end of the paragraph and press **RETURN** twice with **INSERT MODE** activated. This begins a new paragraph.

Type the following, moving the cursor to column-18 with the **TAB** key for the indented lines. At the end of each line, insert a hard return by activating **INSERT MODE** and pressing **RETURN**.

===

There are several options when clearing tabs:
　　　　　1. Clear tab at cursor position with ESC
　　　　　2. Clear all tabs by typing A
　　　　　3. Clear tab at a specified column

===

Find and Replace (Chapter 4)

1. Activate **FIND** by pressing **CTRL** and – at the same time.

2. Type **cursor** in response to the question FIND? Then press **RETURN**.

3. Use the options to search backward, whole words only, and ignore case by typing BWU in response to the question OPTIONS?   Then press **RETURN**.

4. When the word "cursor" has been found, activate **FIND/REPLACE AGAIN** by pressing **CTRL** and **SHIFT** and – at the same time.

5. Repeat this until the cursor is at the beginning of the file and WordStar-Plus says it cannot find the word "cursor" any more. Press **ESC** as prompted at that point to end the search.

6. Then activate **REPLACE** (**CTRL** +) and replace "done" with "finished".   Bypass options by pressing **RETURN** at the question OPTIONS?

7. When the word has been found, type **Y** when WordStar-Plus asks if you want to replace.   **REFORM** the paragraph if necessary.

Screen Formats (Chapter 5)

Screen Formats are discussed in the Special Effects section
of this manual. The sample here is for centering a line of
text.

1. Move the cursor to the first column of the first line of
   the file (status line = Line 1 Col 01), which is a blank
   line.

2. Type **TRAINING EXERCISE.**

3. Activate **MARGINS, FORMAT** and option **C** to center the
   heading on the line.

4. With the cursor right of the word **EXERCISE,** press **RETURN**
   with **INSERT MODE** activated to create a blank line.

Print Control Characters (Chapter 5)

Print Control Characters are useful for special effects and
are described in detail in the Special Effects section of
this manual. A few samples are dealt with here.

Boldface

Characters printed in boldface are actually printed twice,
and the second print is slightly offset from the first.

1. Activate **INSERT MODE** and position the cursor on the
   first line at the **T** in **TRAINING.**

2. Activate **PRINT CODES** and type **B.**   ^B will appear on the
   screen.

3. Position the cursor to the right of **EXERCISE.**

4. Activate **PRINT CODES** and type B again.

5. The screen will display ^BTRAINING EXERCISE^B and the
   words will print in boldface.

Underline

1. Activate **INSERT MODE** and position the cursor on the first
   line at the **T** in **^BTRAINING.**

2. Activate **UNDERLINE (CTRL SHIFT 3)** to start underlining. ^S
   will appear on the screen.

Introduction

3. Position the cursor to the right of **EXERCISE^B.**

4. Activate **UNDERLINE** again to signal the end of underlining.

5. The screen display will be ^B^STRAINING EXERCISE^B^S and the words will now print with both underlining and boldface.

Dot Commands (Chapter 5)

Dot commands are useful for creating special effects in your document. A few samples are dealt with here. Note that dot commands occupy a line on the screen, but the line does not affect the line count nor does it print.

Page Numbers

1. Position the cursor at the first column of the first line of the document. Activate **INSERT MODE** and press **RETURN** to create an additional line.

2. Move the cursor back to the first line and **type a period** in the first column, followed by the letters **PN** to turn page numbering on.

Microjustification Off

Microjustification distributes characters evenly on the line during printing. Microjustification should be turned off for tables or columns of figures or print characters may be slightly out of line in the column.

1. Position the cursor at the line above the paragraph **"There are several options..."**

2. Press **RETURN** with **INSERT MODE** activated to create an additional line.

3. **Type a period** in the first column of the blank line and then type **UJ 0** (zero, not O) to turn microjustification off.

4. Move the cursor to the line after **"3. Clear tab at a..."** and press **RETURN** again. **Type a period** in the first column of the blank line and then type **UJ 1** to turn microjustification back on.

Alternate Character Pitch

1. Position the cursor at the line above **"Margins and tabs may be"**...

2. Activate **PRINT CODES** and then type **A.** ^A will appear on the screen.

3. This activates alternate character pitch, which prints 12 characters per inch instead of the standard 10 characters per inch.

4. Move the cursor to the line following **"...to reflect these changes."**

5. Activate **PRINT CODES** and type **N.** ^N will appear on the screen. This reactivates standard character pitch.

Saving the Document and Returning to the No-File Menu (Chapter 4)

1. Save the document by activating **PRINTING, CONTROL** and option **D.** When the document has been saved, WordStar-Plus will return to the No-File Menu.

2. Note that the File Directory now contains two documents, **TRAINING** and **TRAINING.BAK.** TRAINING is the file you just saved. **TRAINING.BAK** is the version you saved previously.

Printing (Chapter 6)

1. Activate **PRINT** from the multi-function keys or select option **P** from the No-File Menu.

2. Specify the document **TRAINING** to print and press **ESC.** The printout should match the printout on the next page.

TRAINING EXERCISE

Text is displayed on the screen as it is entered at the keyboard, and cursor movement keys allow you to move quickly from one part of the text to another. Functions such as inserting text are achieved through special multi-function keys that are labeled above the keyboard. Since text editing is finished right on the screen, printing the completed document is almost an afterthought.

Margins and tabs may be changed at any time while you type, and previous text can be reformed to reflect these changes.

There are several options when clearing tabs:
1. Clear tab at cursor position with ESC
2. Clear all tabs by typing A
3. Clear tab at a specified column

Word processing is easy to learn on ATTACHE. Using the WordStar-Plus system is much like using a typewriter, but the edit and special effects capabilities make the typewriter seem like a child's toy in comparison.

1

WordStar-Plus Guide

Getting Started

Introduction

Getting Started

Create

Edit

Effects

Printing

Maintenance

Appendixes

Getting Started

Overview

This chapter provides instructions for getting started with WordStar-Plus, including the following:

o   Inserting diskettes and loading programs

o   The No-File menu and No-File commands

o   Changing the Logged Disk Drive

o   Changing Diskettes

o   Keyboard Multifunctions

o   Setting the Help Level

o   Using Help Menus

o   Using WordStar-Plus menu options

Diskettes

Under normal circumstances, you will use two diskettes for word processing. The diskette in Drive A (the upper drive) will contain the WordStar-Plus program files and the diskette in Drive B (the lower drive) will contain your document files.
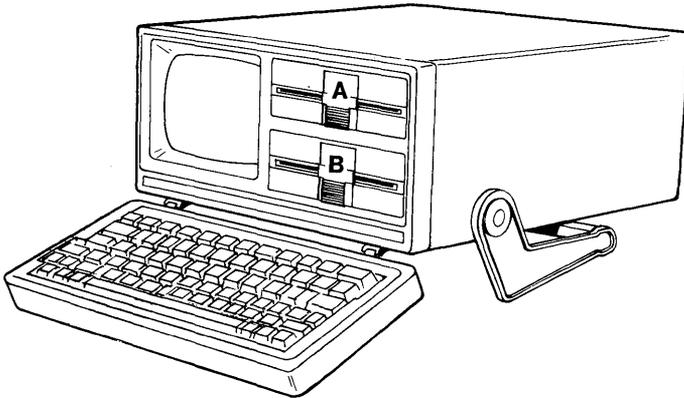
This is convenient for several reasons. There is limited space available on the Attache Software diskette, and using separate diskettes for document files provides an efficient method for keeping your documents organized for later retrieval.

Using Only One Drive

For single drive systems (or to use only one drive), both the WordStar-Plus program files and document files must reside on a single diskette.

The WordStar-Plus programs require approximately 96K of disk space, leaving approximately 264K of disk space on the diskette for document files.

Since disk space on the Attache Software diskette is limited, you might want to copy the WordStar-Plus files to a second diskette if using only one drive.

Loading WordStar-Plus

To load the WordStar-Plus programs, power up the unit and then insert the Attache Software diskette in the upper diskette slot (DRIVE A) and a formatted diskette in the lower diskette slot (DRIVE B) and gently close the drive doors.

Then boot the system by pressing **RESET** and the right **SHIFT** key at the same time. CP/M will be loaded and the CP/M prompt will appear on the display:

    CP/M x.x.x Otrona ATTACHE <56K>
    A>

where x.x.x is CP/M's version.

To activate WordStar-Plus, type **WS** and press **RETURN**.

The "No-File" Menu will then appear on the display. All word processing functions are initiated from this menu.

Directly below the No-File Menu is a file directory listing all program and data files on the diskette in the logged disk drive, in this case Drive A.

The No-File Menu

The No-File Menu is the primary menu for word processing. This menu appears on the screen when WordStar-Plus is loaded and also whenever a function has been completed.

```
------------------------- NO-FILE MENU -------------------------

D - Open a document file    P - Print a File    R - Run a program

N - Open a non-document file                    X - Exit to system

F - File directory          E - Rename a file

H - Set help level          O - Copy a file     M - Run MailMerge

L - Change Logged  Drive    Y - Delete a file   S - Run SpellStar

_____


DIRECTORY of Drive A:
WS.COM      WSOVLY1.OVR      WSMSGS.OVR      INSTALL.COM
```

The No-File menu includes options for creating, editing, and printing a document file, plus additional options for directory maintenance.

To activate a function from the No-File Menu, type the letter shown for that function in either upper or lower case.

No-File Commands

Functions that are activated from the No-File Menu are introduced here and discussed in detail throughout this manual. These functions are activated by typing the appropriate letter in either upper or lower case.

No-File commands are as follows:

D = **OPEN A DOCUMENT FILE** - Command for creating a new document file or retrieving an existing document for editing.

N = **OPEN A NON-DOCUMENT FILE** - Command for creating or editing a "non-document" file with different format and pagination defaults. Non-document files are used for program editing but are not used in the normal word processing environment.

F = FILE DIRECTORY ON OR OFF - Command for activating or deactivating the screen display directory. The directory lists all document files contained on the logged diskette.

H = SET HELP LEVEL - Command for reviewing the help level status and changing to a different help level if desired.

L = CHANGE LOGGED DISK DRIVE - Command for instructing Attache to read or write data to or from a specific disk drive.

P = PRINT A FILE - Command for activating the print function.

E = RENAME A FILE - Command for changing the name of a document.

O = COPY A FILE - Command for making a copy of a document file.

Y = DELETE A FILE - Command for deleting a document file.

R = RUN A PROGRAM - Command for temporarily exiting WordStar-Plus to run a non-word processing program. Attache returns to the No-File Menu when the requested program or programs are completed.

X = EXIT TO SYSTEM - Command for exiting WordStar-Plus to use Attache for other non-word processing functions. Similar to "Run a Program" above except word processing is not automatically reinvoked.

M = RUN MAIL MERGE - Command for printing text using the Merge-Print option, which is an optional software package for preparing mass mailings.

S = RUN SPELLSTAR - Command for invoking the SpellStar option, which is an optional software package for checking spelling.

Changing the Logged Disk Drive

At this point, you have activated WordStar-Plus and the No-File
Menu is on the screen with a directory of the program and data
files on the diskette in Drive A.

To record your document on the diskette in Drive B, you must
change the logged drive to Drive B. Bypass this step if you wish
to record the document file on the diskette in Drive A.

To change the logged drive:

1. With the No-File Menu on the screen, type **L** to select the
    option to change the logged disk drive.

2. You will then be prompted for the name of the drive.

3. Type B: and press **RETURN** to change to Drive B.

The WordStar-Plus files will now be read from the diskette in
Drive A, but your document files will be recorded or retrieved
from the diskette in Drive B. The directory that is displayed
with the No-File menu will be for Drive B.

Changing Diskettes

Change diskettes when the screen is at A> or B> or when
WordStar-Plus is at the No-File menu, but not while a program is
executing.

If the diskette is removed while a program is executing, a disk
error will occur when the program next attempts to access the
diskette and the program will be terminated.

After changing diskettes, you must change the logged disk drive
assignment, even if it is the same drive you were using with the
previous diskette. Changing the logged drive updates the
directory on the screen to display files for the new diskette.

For example, if you edit a file on a diskette in Drive B, and
then save and return to the No-File Menu, the directory that is
displayed is for the diskette in Drive B.

If you then insert a different diskette in Drive B, the directory
that is displayed is still for the first diskette. Changing the
logged drive to Drive B again will display the directory for the
current diskette in that drive.

Keyboard Multifunctions

Keys on the top row of the keyboard are used to perform several
functions in addition to the numeric and special character
typewriter functions. Multifunctions are performed by pressing
two or more keys at the same time, as instructed on the template
above the keyboard.
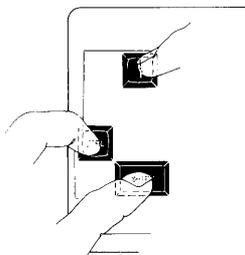
The lowest row of functions are
activated during word processing
by pressing **CTRL** and the
corresponding number key at the
same time.

The second row of functions are
activated during word processing
by pressing **SHIFT** and **CTRL** and
the corresponding number key at
the same time.

Functions on the top row of the keyboard template are for the
Valet Set-up Mode, which is described in the Valet Guide and
in the Operator's Guide.

Keyboard multifunctions are referred to in this text as they
appear on the template, without identifying the keys that
activate the function. For example, if an instruction says
"reform" it is assumed that you will press **CTRL and 7** at the same
time as described on the keyboard template.

Multifunctions on the keyboard template are as follows:

Top of Screen   Moves the cursor to the first line on the
screen.

Help Level   Displays a menu for selecting a Help Level
option.

Underline   Starts or stops underlining for printing.

Save   Saves the file on disk and returns to the
cursor line.

Print   Activates the Print function for printing a
document.

Block Start   Marks the beginning of a block at the cursor.

Block End   Marks the end of a block at the cursor.

Block Move   Moves a marked block to the cursor position.

Block Copy   Copies a marked block to the cursor position.

Block Hide   Deactivates highlighting on the marked block.

Find/Replace Again Executes the previous find command again.

Markers, Repeat   Displays a menu with command options.

Help, Dots   Displays a menu with options to display help
                         menus.

Margins, Format   Displays a menu with command options.

Print Codes   Displays a menu with command options.

Printing, Control Displays a menu with command options.

Insert Mode   Activates or deactivates Insert Mode.

Reform   Reforms the current paragraph from the cursor
                         line down.

Margin Release   Activates or deactivates Margin Release.

Tab Set   Sets tab stops at specified columns.

Tab Clear   Clears tab stops at specified columns.

Find   Activates the Find feature for finding
                         specified text.

Replace   Activates the Find and Replace feature.

Help Levels

The HELP feature provides on-screen assistance during word processing. Four levels of Help are available, each providing a greater level of detail. Help Levels are numbered from zero through three, with Level Three providing the greatest level of detail.

WordStar-Plus defaults to Level Two, which provides adequate assistance for all but the most inexperienced user. Do not use Help Level 0. This help level deactivates all screen prompting and makes the system virtually useless.

Set Help Levels

Activate **HELP LEVEL** with the multi-function keys to view and modify the Help Level setting. The menu displays the current setting and a brief explanation of available Help Levels.

Enter the number for the new Help Level, or press the **Space Bar** to leave Help at its current setting.

Help Levels are as follows:

Help Level 3   Provides the most detail, with all menus and explanations displayed for all command and help menus. This level is not typically used because the main editing menu is always on the screen during word processing and the number of file lines that are displayed at one time is greatly reduced.

Help Level 2   Suppresses the main editing menu, but provides considerable detail for secondary options and other Help Menus that are accessed on command. This level is the WordStar-Plus default.

Help Level 1   Suppresses both the main editing menu and secondary options menus, but provides Help Menus that are accessed on command.

Help Level 0   Suppresses all Help functions, including menus and screen prompts. This level provides too little information and should not be used.

Help Menus

Help menus provide on-screen option listings and brief explanations for WordStar-Plus commands and functions. These menus can be displayed when Help Levels 1,2, or 3 are activated, but are not displayed when Help Level 0 is activated.

Help menus can not be accessed from the No-File menu. After you have created a file (or while editing a file), the Help menu is displayed by activating the **HELP, DOTS** menu (**CTRL 2**). Then select the menu you wish to view, as summarized below:

H = Help Level explained	S = Status Line explained
B = Paragraph Reform explained	R = Ruler Line explained
F = Character Flags explained	M = Margins and Tabs summary
D = Dot Commands, Print Controls	P = Place Markers explained
I = Command Index Summary	V = Block Operations explained

With Help Level 2 or 3, you may also view Print Control Character options by activating the **PRINT CODES** menu, or check on-screen format settings by activating the **MARGINS, FORMAT** menu.

Word Processing Menus and Functions

Most word processing functions are accessed through special keys on the keyboard (such as **DEL** or the cursor movement arrows) or by activating one of the multifunctions described on the template above the keyboard (such as **REFORM** or **REPLACE**). These functions are described throughout this manual as word processing concepts are introduced.

In addition to keyboard and multifunction commands, there are a series of word processing menus that activate various functions during the course of text editing and printing. These menus are are labeled on the template above the numbers one through five on the top row of keys on the keyboard.

Word processing menus can not be activated from the No-File menu. They can only be activated while you are typing or editing a document.

To activate a Word Processing menu, press the **CTRL** key and the appropriate number key at the same time, as described on the template. Then press the letter that corresponds with the menu item you wish to activate. You may exit from the menu without selecting an option by pressing the space bar.

Word processing menus and menu options are listed on the following pages.

"MARKERS, REPEAT" Menu

This menu is activated by pressing **CTRL** and **1** at the same time.

```
-------------------- MARKERS, REPEAT MENU ---------------------
----------- Move Cursor -------------------|----- Scroll ---------
R - Beginning of file    C - End of file  |   W - Continuous down
B - Beginning of block   K - End of block |   Z - Continuous up
V - Last find or block                    |------ Delete --------
P - To previous position                  |  Y - To right of line
0-9 - To place marker 0-9                 | DEL - To left of line
Q - Repeat next command or key until another key is pressed.
------------------ Press Space Bar to Exit Menu ----------------
```

These menu options perform the following functions:

   R - Move the cursor to the beginning of the file.

   C - Move the cursor to the end of the file.

   B - Move the cursor to the beginning of the marked block.

   K - Move the cursor to the end of the marked block.

   V - Move the cursor to the last find or marked block.

   P - Move the cursor to its position prior to the last command.

0-9 - Move the cursor to the specified place marker.

   Q - Repeat the next command or key until a key is pressed.

   W - Scroll the screen down continuously until a key is pressed.

   Z - Scroll the screen up continuously until a key is pressed.

   Y - Delete from the cursor to the right end of the line.

DEL - Delete from the cursor to the left end of the line.

"HELP, DOTS" Menu

This menu is activated by pressing **CTRL** and **2** at the same time.

```
---------------------- HELP, DOTS MENU ------------------------
H - Help levels explained        S - Status line explained

B - Paragraph reform explained   R - Ruler line explained

F - Character flags explained    M - Margins and tab summary

D - Dot command, print control   P - Place markers explained

I - Command index summary        V - Block operations explained
------------------- Press Space Bar to Exit Menu -----------------
```

These menu options perform the following functions:

H - Explains each Help Level option.

B - Explains paragraph reforming procedures.

F - Explains the symbols on the right edge of the screen.

D - Lists dot commands and print control characters.

I - Lists WordStar commands and menus.

S - Explains the Status Line at the top of the screen.

R - Explains the Ruler Line at the top of the screen.

M - Explains margins and tabs and lists commands.

P - Explains place markers and lists commands.

V - Explains block operations and lists commands.

"MARGINS, FORMAT" Menu

This menu is activated by pressing **CTRL** and **3** at the same time.

```
-------------------- MARGINS, FORMAT MENU --------------------
L-Set left margin    C-Center text on line    G-Set paragraph tab

R-Set right margin   F-Set ruler from line    S-Set line spacing

W - WordWrap off (ON)                   H - Hyphen Help off (ON)

J - Justification off (ON)              E - Soft Hyphen on (OFF)

D - Control Character Display off (ON)  T - Ruler Line off (ON)

P - Page Break Display off (ON)         V - Variable Tabs off (ON)
------------------- Press Space Bar to Exit Menu -------------------
```

These menu options perform the following functions:

L - Sets the left margin at a specified position.

R - Sets the right margin at a specified position.

C - Centers text between the left and right margins on the line.

F - Sets the left and right margins the same as the cursor line.

G - Sets a temporary left margin until the paragraph is ended.

S - Sets the number of lines to skip between text lines.

W - Activates or deactivates the Wordwrap feature.

J - Activates or deactivates the Justification feature.

D - Displays or undisplays print control characters.

P - Displays or undisplays the line of dashes between pages.

H - Activates or deactivates the Hyphen Help feature.

E - Activates or deactivates the Soft Hyphen feature.

T - Displays or undisplays the Ruler Line on the screen.

V - Activates or deactivates the Variable Tabbing feature.

"PRINT CODES" Menu

This menu is activated by pressing **CTRL** and **4** at the same time.

```
------------------------ PRINT CODES MENU ------------------------

B - Boldface       X - Strikeout            O - Non-break space

D - Doublestrike   Y - Change ribbon color  C - Printer pause here

V - Subscript      A - Alternate pitch      H - Overprint character

T - Superscript    N - Standard pitch       RETURN - Overprint line

------------------ Press Space Bar to Exit Menu ------------------
```

These menu options perform the following functions:

B - Starts or stops boldface printing.

D - Starts or stops doublestrike printing.

V - Starts or stops subscript printing.

T - Starts or stops superscript printing.

X - Starts or stops strikeout printing.

Y - Starts or stops the alternate print color.

A - Starts or stops alternate character pitch.

N - Starts or stops standard character pitch.

O - Indicates a non-break space between words.

C - Overprints the previous character with the next.

H - Stops the printer until **CTRL C** is pressed.

RETURN - Overprints the previous line.

"PRINTING, CONTROL" Menu

This menu is activated by pressing **CTRL** and **5** at the same time.

```
---------------------- PRINTING,CONTROL MENU ----------------------
Y - Delete block        R - Read file           P - Print file

W - Write block         O - Copy file           E - Rename file

S - Save and re-edit              N - Column Mode On/Off

D - Save and return to No-File Menu  L - Change logged Disk Drive

X - Save and return to CP/M         F - File Directory on (OFF)

Q - Abandon current edit file     0-9 - Set or hide place marker
----------------- Press Space Bar to Exit Menu ------------------
```

These menu options perform the following functions:

Y - Deletes the marked block.

W - Copies a marked block to a disk file.

R - Copies a disk file into the current file.

O - Copies a disk file without leaving the current file.

P - Prints a file without leaving the current file.

E - Renames a file without leaving the current file.

S - Saves the current file on disk and returns to that file.

D - Saves the current file on disk and returns to No-File menu.

X - Saves the current file on disk and returns to CP/M.

Q - Abandons the current file without saving it.

N - Activates or deactivates the Column Mode feature.

L - Changes the logged drive without leaving the current file.

F - Displays or undisplays the File Directory.

0-9 - Sets new place markers or hides existing place markers.

WordStar-Plus Guide
Create

Introduction

Getting Started

Create

Edit

Effects

Printing

Maintenance

Appendixes

Create a Document

Overview

You are now ready to begin word processing. Attache is powered up, the diskettes are inserted, the programs are loaded, and the logged disk drive is the drive that will contain your word processing diskette.

This section of the manual discusses basic word processing concepts and techniques, including the following:

- o   Creating a new Document

- o   Document Naming

- o   Text Entry Screen Display

- o   Default Format Dimensions

- o   Entering Text

- o   Word Wrap

- o   Justification

- o   File Backup and Security

- o   Horizontal Scrolling

- o   Basic Cursor Movement

- o   Basic Text Deletion

- o   Basic Text Insertion

- o   Reforming Text

- o   Saving Text

- o   10-Key Mode

- o   Interrupt a Command

- o   Flag Characters

- o   Word Processing Checklist

These topics provide the framework for using the WordStar-Plus system.

Getting Started

The Create procedure begins with the No-File Menu on the display screen.

```
----------------------- NO-FILE MENU -----------------------

D - Open a document file    P - Print a File   R - Run a program

N - Open a non-document file                   X - Exit to system

F - File directory          E - Rename a file

H - Set help level          O - Copy a file    M - Run MailMerge

L - Change Logged  Drive    Y - Delete a file  S - Run SpellStar

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

DIRECTORY of Disk B:

Type **D** to select the option to open a document file.

Document Naming

You will next be asked to type the name of the file to edit. The name may be any alphanumeric description of eight characters or less in either upper or lower case. It should readily identify the document, as it will be required when retrieving the document for editing and printing.

Type a name and press **RETURN.**

The name you type here will be a name that does not exist on your word processing diskette. WordStar-Plus will assume you are creating a new document file and the message "New File" will appear on the screen.

Text Entry Screen Display

The Entry Screen Display appears after the document file name has been recorded. The cursor is positioned in the first column of the first line of the File Display area.

```
          B:FILE  PAGE 1 LINE 1 COL 1
L----!----!----!----!----!----!----!----!----!----!----!----!----!---R
                                                                     :
    ■                                                                .
                                                                     .
                                                                     .
                                                                     .
                                                                     .
                                                                     .
                                                                     .
_____
```

The Text Entry Screen Display includes the following information:

Status Line   The first line of the display is the Status Line, which identifies the logged disk drive, document file name, and the page/line/column where the cursor is currently located.

Messages are also displayed on the Status Line when special functions are activated (such as INSERT ON).

Help Menu   The next several lines will contain option menus as they are specified from the multi-function keys.

A main editing menu will be displayed at all times if Help Level "3" has been activated, but will be suppressed for all other levels.

Ruler Line   The next line is the Ruler Line, which indicates the left and right margins and the pre-set tab stops. These settings may be changed at any time (see Special Effects in this manual).

Display Area   The remaining lines on the display screen are the File Display Area, where you will type your text. When this area is full, the screen automatically scrolls up another line.

Flag Characters   The right-most column on the screen will
contain a Flag Character for each line on the
screen.

Flag characters identify characteristics for
reforming and are discussed in detail in the
EDIT section of this manual.

Cursor   The cursor is the small solid rectangle
located at the upper left corner of the
display area. The cursor is "you" on the
screen.

Page Format

WordStar-Plus is initially set to perform within the page size
parameters that are listed below. Format dimensions may be
modified at any time. Once changed, the settings remain constant
until reset, or until Attache is powered down or rebooted.

Top Margin = 3 Lines

Left Margin = Column 1   **Right Margin = Column 65**

Page Length = 66 Lines   **Tabs = every 5 Columns**

Bottom Margin = 8 Lines

Instructions for modifying these and other format dimensions are
discussed in the Special Effects section of this manual.

Entering Text

Text entry is similar to typing on a typewriter – you just type.
However, there are a number of other functions and concepts
involved in word processing that you must understand to use and
manipulate the system effectively.

These concepts are introduced on the following pages and
discussed in detail in the sections that follow.

Word Wrap

Text may be entered continuously without using the carriage return at the end of each line when the Word Wrap feature is activated.

The word being typed beyond the right margin is automatically moved to the next line and the cursor is positioned to its right.

Justification

Lines of text are automatically spaced so that both the left and right margin are vertically aligned when the Justification feature is activated.

Justification occurs when the cursor moves to the next line, and when the line is reformed after editing.

Carriage Returns

With Word Wrap activated, **RETURN** is used only when you want to signify the end of a paragraph or leave blank lines between lines of text.

There are two kinds of carriage return in word processing - the "hard" return and the "soft" return.

"Hard" Returns　　When **RETURN** is pressed during text entry or editing, a "hard" return is inserted in the text. Reforming will not justify a line beyond the hard return.

Hard returns are always honored by justification and reforming; WordStar-Plus will not automatically delete a hard return under any circumstances.

"Soft" Returns　　A "soft" return is inserted automatically by Word Wrap at the end of each line of text that is wrapped.

Soft returns are inserted and deleted as required automatically during justification and reforming.

The Space Bar

Use the space bar as you would on a typewriter for spaces between words and for indentation.

Like carriage returns, there are two kinds of spaces in word processing – the "hard" space and the "soft" space.

"Hard" Spaces   Hard spaces are those entered by pressing the space bar. Hard spaces are always honored by justification and reforming. WordStar-Plus will not automatically delete a hard space under any circumstances.

"Soft" Spaces   Like Returns, "soft" spaces are automatically inserted and deleted by WordStar-Plus as required during justification and reforming.

Character Case

Upper and lower case may be controlled with the **SHIFT** keys, just as on a typewriter.

The **CAPS LOCK** key provides an additional level of control by locking the keyboard in upper case for alphabetical keys.

Even with **CAPS LOCK** activated, the numeric and special character keys remain in lower case unless **SHIFT** is pressed at the same time as the key.

Page Breaks

A broken line appears on the screen at the point where a new page will be started by the print job.

The default page length is 66 lines, but this may be changed at any time. You may also specify a new page at any point in the document regardless of the number of lines actually used on the page. These features are discussed in the Special Effects section of this manual.

The BACK SPACE Key

The **BACK SPACE** key moves the cursor back one column on the line. Note: the **DEL** key also moves the cursor back one column, but deletes the character at that column. Use **BACK SPACE** to move the cursor backwards without disturbing text, the same as the left arrow key.

Cursor Movement - The Arrow Keys

The cursor is moved within the text with the four arrow keys. These keys are also used in conjunction with modifier keys to perform a variety of cursor movements. Basic cursor movements are introduced here, with additional movement techniques discussed in the Edit section that follows.

Left Arrow   moves the cursor one character to the left.

Right Arrow   moves the cursor one character to the right.

Up Arrow   moves the cursor up one line.

Down Arrow   moves the cursor down one line.

Deleting Text - The DEL Key

The **DEL** key is used alone or in conjunction with the **CTRL** and/or **SHIFT** keys to provide several levels of text deletion, as outlined below. Basic delete functions are introduced here and the more advanced techniques are discussed in the Edit section that follows.

DEL   deletes the character left of the cursor.

SHIFT DEL   deletes the character at the cursor.

Use the **DEL** key to correct typo's as you make them. Press **DEL** and the cursor moves left and deletes the previous character. Then type the correct character.

Press **SHIFT** and **DEL** at the same time to delete the character at the cursor. Normally you will use the cursor movement arrow keys to position the cursor at the character to delete.

Instructions for deleting entire words, entire lines, and blocks of text are included in the next section of this manual.

Inserting Text - Insert Mode and Strikeovers

Text is inserted in two ways. With **INSERT MODE** activated, existing text advances behind the cursor as you key. The word or words that you key are inserted where you key them and all subsequent text is moved downward appropriately on the screen. When you are finished inserting text, move the cursor back to the first line of the paragraph and activate **REFORM.**

When **INSERT MODE** is deactivated, you may type over text by placing the cursor where you want to key and then typing over the text that is displayed on the screen.

INSERT MODE is activated and deactivated by pressing **CTRL** and **6** at the same time.

NOTE: Techniques for the combinations of cursor movement, insertions, strikeovers, deletions, and reforming that are common in word processing are discussed in the Edit section of this manual.

Indentation and Other Spacing Considerations

Text is indented at the beginning of a paragraph by using the space bar, just as on a typewriter. Similarly, use the space bar for extra spaces at the beginning of a new sentence within a paragraph.

Reforming Text

As revisions are made during text entry and editing, the line justification naturally becomes fragmented with excess spaces and blank or partial lines.

The paragraph may be reformed and rejustified at any time through the **REFORM** feature. Text will be reformed from the cursor line to the first hard carriage return encountered.

To activate **REFORM,** place the cursor on the first line of text to be reformed and press **CTRL** and **7** at the same time.

The LINE FEED Key

The **LINE FEED** key is not used in word processing because line feeds are automatically inserted by **RETURN.**

Hyphens and the Hyphen Help Feature

Hyphens may be entered at any time as either "hard" hyphens or "soft" hyphens. Like hard returns and hard spaces, a hard hyphen will not be removed during additional reforming.

Soft hyphens are entered during the reforming process, and may be eliminated automatically by WordStar-Plus during further reforming.

A feature called Hyphen Help stops **REFORM** when a multisyllable word will not fit entirely on a line being reformed.

Hyphen Help provides several options. You may bypass the hyphen and move the entire word to the next line by activating **REFORM** again, or you can insert a hyphen inside the word at a location of your choice. The rest of the word moves to the next line.

Hyphen Help may be turned on or off by activating the **MARGINS, FORMAT** menu from the multi-function keys and selecting option **H**.

Hyphens entered during **REFORM** when Hyphen Help is on are always soft hyphens. Whether other hyphens are hard hyphens or soft hyphens is dependent on the setting for Soft Hyphen Entry, as described below.

Soft Hyphen Entry may be turned on or off by activating **MARGINS, FORMAT** and selecting option **E**. All hyphens entered with Soft Hyphen Entry On are soft hyphens.

The best combination for most circumstances is to activate Hyphen Help but leave Soft Hyphen Entry off. This combination provides soft hyphens at **REFORM** and hard hyphens at all other times.

To create a hard hyphen with Soft Hyphen Entry On, press **CTRL P** before typing the hyphen.

Soft hyphens that become "inactive" during **REFORM** will be reactivated if the document is reformed again and the hyphen is appropriate. However, soft hyphens that are not currently active display on the screen even though they do not print.

Activate **MARGINS, FORMAT** and option **D** to "undisplay" soft hyphens and other print control characters. The only hyphens displayed when print control characters are undisplayed are hard hyphens.

Activate the **MARGINS, FORMAT** menu and option **D** again to redisplay soft hyphens and print control characters that have been undisplayed.

10-Key Mode

Notice that Attache's 10-Key Mode can be activated during word processing. 10-Key Mode converts certain letter keys to numbers. For example, the letter "k" becomes "2" in 10-Key Mode. This is useful for entering columns of figures.

10-Key Mode is activated or deactivated by pressing the **CTRL** and **CAPS LOCK** keys at the same time. If you inadvertently activate 10-Key Mode while entering text, your entries will contain strange numerals instead of the letters you key ("joking" becomes "1625ng").

Press **CTRL** and **CAPS LOCK** to deactivate 10-Key Mode and return to normal text entry. Complete instructions for using 10-Key Mode are contained in the Operator's Guide.

Interrupting a Command in Progress

Commands in progress may be interrupted under most circumstances by pressing **CTRL** and **U** at the same time. The command in progress is terminated and a prompt to press **ESC** appears. The display then returns to its status prior to the interrupt at the point in the document where the command was interrupted.

Exiting from a Document – Save or Abandon Text

Text is entered from the keyboard to the processing unit, but is not transferred to the diskette until you save it. The Save procedure transfers the file from memory to the diskette. This procedure must be executed when you are finished with the document or your work is lost.

There are several methods for saving text:

o   Save and return directly to your document **(CTRL SHIFT 4)**.

o   Save and return directly to CP/M **(CTRL 5 X)**.

o   Save and return to the No-File menu **(CTRL 5 D)**.

When Save is executed, a new copy of the document file is recorded on the diskette, and the previous copy (if any) is renamed with ".BAK" as its extension (FILENAME.BAK). This gives you two copies of the document on your diskette; the most recently saved copy and the version that preceded it.

Quick Save - Update During a Session

As you enter text in a new file or edit an existing file, you should execute the **SAVE** procedure (**CTRL SHIFT 4**) periodically to update the diskette copy of the file.

A good rule of thumb is to save the file after every two or three pages that you enter as a precaution against power failures and other problems that may occur. Text that you enter and editing changes that you make are not on the diskette until you have executed Save.

Getting Out - Save or Abandon the File

When you are ready to exit from the file, execute **PRINTING, CONTROL D** or **PRINTING, CONTROL X** to save the file and return to the No-File menu or to CP/M.

Execute **PRINTING, CONTROL Q** to return to the No-File menu without saving the current session.

Duplicate Files - Keeping Backup Copies

Since diskettes will occasionally become unusable due to mishandling or mechanical problems, it is important that you copy your files to a second diskette on a regular basis. Information contained on a diskette that cannot be read by the computer is effectively lost.

Several different programs can be used for copying files to a second diskette. The Disk Manager program on the Attache Software diskette contains Backup and File Copy options that copy files on either single or dual drive systems.

Backup copies the entire diskette, while File Copy copies a specified file. The CP/M PIP program can also be used to copy files on dual drive systems. Each of these programs are discussed in detail in the Operator's Guide.

Flag Characters

The flag characters that occupy the right-most column of each line on the display identify the line's characteristics. These flags are used in editing to identify lines containing hard returns, dot commands, and other line forming characteristics.

Flag characters are as follows:

(blank)   Line ends in a soft carriage return, which may be changed by paragraph reform.

   <   Line ends in a hard carriage return, which will not change during paragraph reform.

   +   Line has no return and continues beyond the right end of the screen.

   .   Line is beyond (below) the end of the document. Also appears on the last line of text if there is no return.

   :   Line is before (above) the beginning of the document.

   P   A new page begins with the next line on the screen. Flag appears at the page break display.

   ?   Line contains an unrecognizable dot command. (This flag also appears while the dot command is being typed.)

   J   Line ends in a line feed character without a carriage return. This nonstandard line format is not created in normal WordStar-Plus use.

Create or Edit "Non-Document" Files

A "non-document" file, as created from the No-File Menu, is not used in normal word processing. Non-document files are useful for creating and editing programs. Pagination is disabled, and a different set of format defaults are activated when non-document files are created or edited.

For non-document files, Word Wrap, Justification, Variable Tabbing, and the Ruler Display are off by default. Dynamic pagination is suppressed and the Page Break Display is inoperable. The Status Line displays File Character and File Line rather than Page and Line. Dot commands are not checked during editing. Word Wrap and Reform may cause incompatibility with external programs when used in non-document files.

Iorizontal Scrolling - Lines Longer than the Screen

When a line is longer than the screen display, the line appears to roll off the right side of the screen. If you move the cursor to the right, the entire screen shifts left and displays the hidden text. This is called Horizontal Scrolling.

Horizontal scrolling typically occurs when you type a line beyond Column 80 and the right margin has been set beyond that column, Margin Release has been activated, or WordWrap has been deactivated. This allows you to view the entire line as typed.

Horizontal scrolling also occurs during editing when text is inserted or deleted. This is corrected by executing **REFORM** on the paragraph. The paragraph will be reformed within the existing left and right margins until a hard return is encountered.

The horizontal scroll moves all text on the screen 22 positions to the left. The left and right cursor movement arrow keys may be used to display text that is left or right of the screen when this occurs.

Word Processing Checklist

Word Processing will quickly become routine after you are familiar with the basics and have perfected a few techniques.

The following checklist follows a typical document from inception to completion:

1. CREATE   Open a file and compose a draft.

2. SAVE   Transfer the draft to the diskette.

3. PRINT   Print the file for editing (or edit from the screen).

4. EDIT   Open the file again to enter editing changes.

5. SAVE   Transfer the edited draft to the diskette.

6. PRINT   Print the edited version of the document.

7. COPY   Transfer a copy of the document to a second diskette.

This list is not all inclusive. Some documents will be composed and edited in one session, while others will require many revisions. The point is this: you must save the file or it is lost. Files cannot be printed until they are saved, and its wise to copy the file on a second diskette when you are finished.

WordStar-Plus Guide
Edit

Edit a Document

Overview

Text editing is an ongoing part of word processing. You edit as
you compose, correcting typo's and rearranging sentences and
thoughts as you work. You also edit after the document has been
created by adding, deleting, rearranging, and polishing the
completed text.

Basic editing was introduced in the preceding section for
creating a document file. This chapter explores how basic
editing techniques are used in combination for specific editing
situations, and also introduces advanced techniques such as
moving or replacing text.

Editing techniques discussed here include the following:

o	Edit Initiation	o	Place Markers
o	Cursor Movement	o	Block Operations
o	Scrolling	o	REFORM in Editing
o	Text Deletion	o	Find and Replace

All functions in this section may be initiated at any point in
the course of opening a document file. As in the Create process,
you must Save the document when revisions have been completed,
both to transfer revised text to diskette and to exit the
program. The same Save options are available for editing as for
creating a document.

Edit Initiation

Files may be retrieved for editing at any time:

If you are already "in" WordStar-Plus and the file to edit is on
the logged diskette, select option **D** from the No-File menu and
type the name of the file to edit as prompted.

If the file to edit is on a different diskette, insert that
diskette in the logged drive and change the logged drive (option
L) to the same drive. This reads the directory from the new
diskette and displays it on the screen. Then select option **D**
from the No-File menu and type of the name of the file to edit.

If you are not currently "in" WordStar-Plus, insert the Attache
Software diskette in Drive A and the diskette containing the file
to edit in Drive B. Boot the system (**RESET** and right **SHIFT**) and
then activate WordStar-Plus (**WS**). When the No-File menu is
displayed, change the logged disk (L) to the alternate drive
(B:). The directory will be for the diskette in Drive B. Then
select option **D** and type the name of the file to edit.

With the No-File menu on the screen:

1. Type **D** to open a document file.

2. Type the name of the file to edit and press **RETURN.**

When an existing document name has been recorded, the document is retrieved for editing. The cursor is positioned at the first column of the first line of the document.

NOTE: If you inadvertently key a document name that does not exist in the file directory, WordStar-Plus will assume you are creating a new document file. You may return to the No-File Menu by activating the **Printing, Control** menu and selecting option **Q** to abandon the file.

Multi-Function Keys

Multi-function keys are used extensively in the keyboard commands that follow. These functions are described here as they appear on the template above the keyboard without reference to the modifier keys involved in accessing the specific function.

For example, **REFORM** refers to the function that is activated by pressing **CTRL** and **7** at the same time, and **END** refers to the function that is activated by pressing **CTRL** and **SHIFT** and **7** at the same time. Refer to the keyboard template or the previous chapters of this manual for instructions on executing these commands.

Using REFORM as an Editing Tool

During the process of editing a document, you will use **REFORM** extensively to reform the revised document just as Word Wrap and Justification formed the original text.

REFORM is also used for reforming text after margins have been changed, justification has been turned on or off, or line spacing commands have been changed.

REFORM performs these functions without requiring you to rekey any text. For example, after changing the margin settings, **REFORM** will instantly align text to conform with the new margins.

After making changes in a paragraph, place the cursor on the first line of the edited text and press **CTRL 7** to reform the paragraph. Text is reformed until a hard return is encountered.

Cursor Control

The cursor moves to virtually any point in the document with only
a few keystrokes. Commands that move the cursor within the text
are detailed below.

Left One Character   the **LEFT ARROW** key moves the cursor one
column to the left.

Right One Character   the **RIGHT ARROW** KEY Moves the cursor one
column to the right.

Left One Word   **CTRL** and the **LEFT ARROW** key moves the
cursor one word to the left.

Right One Word   **CTRL** and the **RIGHT ARROW** key moves the
cursor one word to the right.

Left End of Line   **CTRL SHIFT** and the **LEFT ARROW** key moves
the cursor to the first column of the
current screen line.

Right end of Line   **CTRL SHIFT** and the **RIGHT ARROW** key moves
the cursor to the column after the last
character on the current line.

Up One Line   the **UP ARROW** key moves the cursor up one
line.

Down One Line   the **DOWN ARROW** key moves the cursor down
one line.

Top of Screen   **CTRL SHIFT 1** moves the cursor to the
first line of the current file display.

Bottom of Screen   **MARKERS, REPEAT X** moves the cursor to the
last line of the current file display.

Beginning of File   **CTRL SHIFT** and the **UP ARROW** key moves the
cursor to Line 1 Column 1.

End of File   **CTRL SHIFT** and the **DOWN ARROW** key moves
the cursor to the first column after the
end of the file.

To Place Marker   **MARKERS, REPEAT 0-9** moves the cursor to
any place marker (0-9) that is selected.

To Source of Block   **MARKERS, REPEAT V** moves the cursor to the
original source of the last block of
marked text or last Find operation.

To Prior Position   **MARKERS, REPEAT P** moves the cursor to the
position prior to the last command.

Scrolling

Scrolling moves text that is displayed on the screen upwards or downwards for viewing purposes. Scrolling the screen is often the fastest way to move from one point to another while editing a document. Commands for scrolling include the following:

Up One Line | **SHIFT** and the **UP ARROW** key moves text upwards by one line, bringing an additional line onto the screen and rolling the top line off the display. The cursor remains at the same line unless positioned on the top line.

Up One "Screenful" | **CTRL** and the **UP ARROW** key moves text upwards by the number of lines currently on the display. The cursor remains at the same column of the same screen line.

Continuous Up | **MARKERS, REPEAT Z** moves the screen display up a line at a time continuously. A screen prompt allows you to set the scroll speed by typing a number from 1 to 9, with 1 being the fastest speed and 9 the slowest (the initial default is 3). Scroll speed may be changed any number of times during the scroll by typing a different number. The scroll stops when a key other than a number is pressed.

Down One Line | **SHIFT** and the **UP ARROW** key moves text downwards by one line, bringing an additional line onto the top of the screen and rolling the bottom line off the display. The cursor remains at the same column of the same line except when positioned at the bottom line.

Down One "Screenful" | **CTRL** and the **DOWN ARROW** key moves text downwards by the number of lines currently displayed. The cursor remains at the same column of the same line.

Continuous Down | **MARKERS, REPEAT W** moves the display down a line at a time continuously. A screen prompt allows you to set the scroll speed by typing a number from 1 to 9, with 1 being the fastest speed and 9 the slowest (the initial default is 3). Scroll speed may be changed any number of times during the scroll by typing a different number. The scroll stops when a key other than a number is pressed.

Text Deletion

WordStar-Plus delete functions will delete a single character or word, lines or partial lines, blocks of text, or entire files.

Delete commands are as follows:

Left of Cursor   **DEL** deletes the character immediately preceding the cursor and moves text at the right of the cursor one position to the left.

At Cursor   **SHIFT DEL** deletes the character at the cursor and moves text at the right of the cursor one position to the left.

Entire Word   **CTRL DEL** deletes a word beginning with the character at the cursor. Spaces and returns are considered to be words here.

Entire Line   **CTRL SHIFT DEL** deletes the entire line of text where the cursor is located.

Right End of Line   **MARKERS, REPEAT Y** deletes all text on the line to the right of and including the cursor position.

Left End of Line   **MARKERS, REPEAT DEL** deletes all text to the left of but not including the cursor position, and aligns remaining text at the first column.

Block of Text   **Printing, Control Y** deletes a marked block of text.

Entire File   **Printing, Control J** delete entire files from the diskette while you are editing another file. This command is useful for deleting unnecessary files if the diskette becomes full while you are attempting to save the current file.

Editing Techniques

The combinations of cursor motion, scrolling, insert on, insert off, delete, reform, etc. that comprise what is called "editing" are virtually endless, and are often a matter of personal editing style. Listed here are common editing problems and solutions.

Inserting Text - INSERT MODE "on"

With **Insert Mode** activated, text is inserted as you type. Place the cursor at the point where you wish to insert, activate **INSERT MODE**, and begin typing. Text to the right of the cursor is automatically advanced as the insertion is typed. **REFORM** the paragraph when you are finished.

Typing Over Text - INSERT MODE "off"

With **INSERT MODE** off, text is erased as you type over it with new text. Place the cursor at the point where you wish to type over existing text and begin typing. **REFORM** the paragraph when you are finished.

Inserting Hard Returns in Text

Hard returns are inserted by pressing **RETURN** while in **INSERT MODE** with the cursor at the column where the hard return is desired. A new line is created when **RETURN** is inserted in the text. All text to the right of the cursor is moved to the next line down. Hard returns may also be inserted by pressing **CTRL N**.

Removing Hard Returns in Text

Hard returns are removed by positioning the cursor to the left of the return and pressing **CTRL DEL**. Pressing **CTRL DEL** again moves the next text string to the cursor position.

Restructuring a Fragmented Paragraph

After text has been inserted, deleted, or moved to another location, the remaining text string may be quite fragmented. REFORM will restructure the text, but only until it encounters a hard return.

Continue restructuring from that point by pressing **CTRL DEL** to remove the return, and then press **CTRL DEL** again to move the next string of text up to the cursor position. REFORM again to rejustify the paragraph to the next hard return.

Inserting Text in a Paragraph

Text may be inserted in a paragraph by moving the cursor to the column where the insertion should begin, activating **INSERT MODE**, and typing the insertion, or by executing **MOVE** or **COPY** to bring in a block of text that has been marked elsewhere. Use the instructions above for restructuring a fragmented paragraph to rejustify the text when you are finished.

Merging Paragraphs

Paragraphs may be merged through a simple block operation if they are not adjacent. For adjacent paragraphs, position the cursor at the end of the first paragraph and press **CTRL DEL** to remove the hard returns and any blank lines between the two paragraphs. When the second paragraph is at the line below the first, press **CTRL DEL** again to bring the second paragraph to the cursor position. REFORM the paragraph as required.

Splitting a Paragraph

Split a paragraph by positioning the cursor at the point where the first paragraph should end. Activate **INSERT MODE** and press **RETURN**. A hard return will be inserted at the cursor position. Text to the right of the return will be moved to the next line. Press **RETURN** again to insert a blank line between the two paragraphs. REFORM the paragraphs as required.

Place Markers

Place markers are temporary position locators that may be imbedded in the text. Markers are automatically deleted when the file is saved, except when the Save and re-edit option (**CTRL SHIFT 4**) is selected.

Using place markers to identify various positions in the text is a convenient editing device for long documents. The cursor can be returned to a place marker with a single command, and as many as ten place markers may be specified for a document.

Set Place Markers

Activate **PRINTING, CONTROL** and type a number from zero to nine. This number will identify the place marker, and the marker will display as <n> at the cursor position, where "n" is the number.

Move Cursor to Place Marker

Activate **MARKERS, REPEAT** and type the number of the marker to move the cursor to. The cursor will then move to the marker position.

Hide Place Marker

Undisplay the marker by activating **PRINTING, CONTROL** and typing the number of the marker to "hide". Repeat this process to redisplay the marker. Note: the cursor may be moved to undisplayed markers as well as displayed markers.

Cancel Place Marker

Place markers are automatically deleted when the text is saved or abandoned and you return to the No-File Menu.

Block Operations - Moving or Copying Text

Block operations are used for moving, copying, or deleting blocks of text. Blocking involves identifying the start and end of the text to be included in the block operation, and then executing a command for moving that text elsewhere. Block commands are located on the second row of the multi-function template above the keyboard.

Mark Block Start

Position the cursor at the first character to be included in the block and activate **START**. The indicator <B> is inserted by WordStar-Plus at that point to mark the block start.

Mark Block End

Position the cursor one column behind the last character to be included in the block and activate **END**. The indicator <K> is inserted by WordStar-Plus at that point to mark the block end, and all text included in the block is highlighted on the screen.

Activate Column Mode

Columns or tables that do not use the entire line may be blocked and moved without affecting other columns on the same lines. To use this feature, activate **PRINTING, CONTROL** and option **N**. This activates "Column Mode."

Then mark the block start and end as for a normal block operation. The block end command must be preceded by a space. Deactivate Column Mode by activating **PRINTING, CONTROL** and option **N** again.

Note: the command to delete a block is inactive for Column Mode. Switch back to block mode to use this command.

Move a Block of Text

After marking the block start and end, position the cursor at the point in the document where the block will be moved to. Activate **MOVE** and the block is removed from the original location and appears behind the cursor. Under most circumstances you will then **REFORM** both the original location and the new location of the block to rejustify. Block markers move with the copy, so text may be moved back to its original location or to another location by moving the cursor to that location and executing **MOVE** again.

Copy a Block of Text

Copying a block is the same as moving a block except the original text is left at its position in the document. After marking the block start and end, position the cursor at the point where the block will be copied to. Activate **COPY** and a copy of the block appears at the cursor. **REFORM** the new copy as required. Note: block start and end markers move with the block copy. Multiple copies may be made by moving the cursor to the next location where a copy is desired and repeating the **COPY** command.

Delete a Block of Text

Mark the block start and end just as you would for a block move. Then activate **PRINTING, CONTROL** and select option **Y** from the menu. The marked block will be deleted from your document file.

Hide or Redisplay a Block of Text

Blocks are highlighted on the screen when the start and end are marked. Blocks remain highlighted until you return to the No-File Menu, even after the block is moved. To eliminate screen highlighting during editing, activate **HIDE** and the marked block appears with the same screen image as other text. Activating **HIDE** again changes the block image back to its highlighted condition.

Remove Unwanted Block Markers

Only one block of marked text is provided for at a time in a document. If you attempt to mark a block while another block is marked, start and end commands for the first block are erased automatically. Use this to your advantage:

If you mark a block and decide against using the mark, execute **HIDE** to remove block markers from the display. The next time you return to the No-File Menu or mark another block, block markers are removed automatically from the original block.

If you mark a block start and then change your mind, activate **END** with the cursor at the first column right of the start command, and then execute Block Delete (**PRINTING CONTROL Y**).

If you accidentally mark a block end without a block beginning, activate **START** with the cursor at the first column right or left of the end command. Then execute Block Delete to remove the unwanted block.

Common Cursor Movements for Block Operations

Several cursor movements described earlier in this section are especially useful during block operations. These commands are summarized here:

MARKERS, REPEAT B = cursor to block start.

MARKERS, REPEAT K = cursor to block end.

MARKERS, REPEAT P = cursor to position prior to last command.

MARKERS, REPEAT V = cursor to source of last block operation.

Block Operations Between Files

Blocks may be moved from one document to another for merging documents or moving passages and boiler plate materials to different document files.

There are two commands for moving text between files. The first command, WRITE, allows you to write a block from the file you are editing into another file but erases the contents of the other file. The second command, READ, allows you to read the contents of a file into the file you are editing but copies the entire file into your document.

To move text from one document to another, WRITE the block into a dummy file that you create to "hold" the block temporarily, and then READ that file into the document file.

Write Blocks to a Different File

After marking the start and end of the block, activate **PRINTING, CONTROL** and option W to write the block to another file. WordStar-Plus asks for the name of the file to write to. Text in the document being edited is not changed, but text in the file you are writing to is erased.

Read Blocks from a Different File

This command allows you to incorporate text from another file into the file you are currently editing. All text in that document is read into your file. Execute the READ function by activating **PRINTING, CONTROL** and option R. WordStar-Plus asks for the name of the file to read from and inserts the entire contents of that file into the document at the cursor position.

Commands for Moving Blocks to Other Files

Commands that are helpful for managing the movement of text among files include the following:

PRINTING, CONTROL J = Delete a file without exiting the current file.

PRINTING, CONTROL F = Display the document directory on the screen without exiting the current file.

PRINTING, CONTROL P = Print a file without exiting the current file.

PRINTING, CONTROL K = Copy a file without exiting the current file.

PRINTING, CONTROL E = Rename a file without exiting the current file.

PRINTING, CONTROL L = Change the logged disk drive without exiting the current file.

Limitations and Considerations

While the size of the block may run into thousands of characters, there are some considerations concerning processing speed and diskette capacity that should be considered for long blocks and long documents. As a general rule, if the block runs to more than several pages, create several smaller blocks and treat them as separate operations.

Block operations use temporary workfiles that are created on the diskette during the block operation. If the block is too large, there may not be enough room on the diskette for the workfile and a BLOCK TOO LARGE or DISK ERROR message will result. Use two or more blocks if this occurs, or check the disk directory to see if there are files on the disk that could be deleted.

Block operations may be quite slow on large documents if the block is large and if the text is being moved or copied to a portion of the text that is some distance from the cursor position. One way to avoid this is to write the block to an additional file and then read it back into the new location in your document rather than attempting to move it within the document.

Find and Replace

FIND provides a multi-level search capability. At its most basic level, **FIND** will search out any word or string of words in the document and move the cursor to that position in the text. **REPLACE** will search out the word or words and replace them with other words that you specify.

A number of options are available for both Find and Replace that maximize your flexibility in using these tools in editing. More than one option may be specified for a single command. These options are discussed on the following pages.

Using FIND

FIND without any options searches forward from the current cursor position and finds the first occurrence of the text string being searched. This search will be quite literal; without options, Find looks for an exact match on the text string.

For example, if you want to find the character string "his" in your document but do not specify any options, you will find "history" and "this" along with "his". You will not find "His" because of the upper case "H". All of these problems can be alleviated with Find options, which define the scope of the search.

There are also a series of special characters that may be imbedded in the Find String that will further limit or expand the scope of the search. For example, a search could look for a word or words that occur at the beginning of a line only, or for an unknown character or characters that are enclosed in parentheses or quotation marks.

Using REPLACE

REPLACE executes Find for a word or words, and then replaces the find string in the document with another word or words that you specify. This replacement may be for one or several or all occurrences in the file, and may be either automatic or with your verification, depending upon the options selected.

All Replace options and special characters may be used for the search that precedes the actual replacement. Additional Replace options allow replacement without asking (N) and/or a Global Replace (G) of all occurrences to the end of the file. These options are described on the following pages.

Activating FIND

Activate **FIND** with the multi-function keys on the top row of the keyboard. WordStar-Plus will prompt FIND?

Type the word or words to find and press **RETURN** (or **ESC** to bypass options). WordStar-Plus will prompt OPTIONS?

Type the option or options and press **RETURN** (or type **?** and **RETURN** to view available options).

Find will then search for the specified word and position the cursor at that point in the file.

Activating REPLACE

Activate **REPLACE** using the multi-function keys on the top row of the keyboard. WordStar-Plus will prompt FIND?

Type the word or words to find and press **RETURN.** WordStar-Plus will prompt REPLACE WITH?

Type the word or words that will replace the find string and press **RETURN** (or **ESC** to bypass options). WordStar-Plus will prompt OPTIONS?

Type the option or options and press **RETURN** (or type **?** and **RETURN** to view available options).

Find or Replace Again

Activate **FIND/REPLACE AGAIN** to continue the search after the desired text has been found or replaced. Find then continues to the next occurrence of the find string. The same options selected during the original Find or Replace apply.

FIND Options

One or more Find options may be specified in response to the question OPTIONS? each time a search is requested. Find Options are as follows:

U - IGNORE CASE   words in the Find String will be searched and found regardless of upper or lower case or upper/lower case combinations. Finds both "his" and "His."

W - WHOLE WORDS ONLY   words in the Find String will be searched
                        and found only if there is a non-digit
                        non-letter character on either side of
                        them. Finds "his" but not "this."

B - SEARCH BACKWARD   searches the file from the current cursor
                        position to the file's beginning. Without
                        this option, text is searched from the
                        cursor position to the file's end.

n - FIND "n" TIMES   where "n" equals the number typed here as
                        an option. If the number typed here is
                        higher than the number of occurrences, a
                        NOT FOUND error occurs when the cursor
                        finds the beginning or end of the file
                        before the last number requested.

Special Characters in FIND

Special characters may be imbedded in the Find String as a part
of the word or words to find, describing a further expansion or
limitation of the search.   These characters and their functions
are as follows:

^A - FIND SPECIFIC UNKNOWN CHARACTERS - recognize any character
     or characters that occur at this point in the find string.
     For example, "see ^A^A^A later" would find "see him later"
     and "see you later" but not "see me later"; this search is
     looking for three unknown characters at that point in the
     find string. ^A is imbedded in the find string by pressing
     CTRL P and then **CTRL A** for each occurrence.

^S - FIND SPECIFIC UNKNOWN NON-LETTER NON-DIGIT CHARACTERS -
     recognize only non-digits and non-characters, (blanks,
     special characters : . , < > ( ) , etc.) at this location in
     the text string. ^S is imbedded in the find string by
     pressing **CTRL P** and **CTRL S.**

^Ox - FIND ANY CHARACTER OTHER THAN "x" - where "x" is the
      character identified after ^O in the find string. For
      example, "truth^O?" would find "truth" and "truth!" but not
      "truth?". ^O is imbedded in the find string by pressing
      CTRL P and then **CTRL O** for each occurrence.

^N - MATCH CARRIAGE RETURNS AND LINE FEEDS - useful for finding
     text that is at the beginning of a line. For example,
     "^NTest" would find "Test" when it appears at the first
     column of a line only. ^N is imbedded in the find string by
     pressing **CTRL P** and then **CTRL N** for each occurrence.

REPLACE Options

All options and imbedded characters for Find that were discussed previously may be used for the find portion of Replace. The following options govern the actual replacement of text:

G - Replace every occurrence in the entire file. A "NOT FOUND" error is displayed after the last occurrence in the file.

N - Replace automatically without asking. This option is useful in conjunction with "G" when the results are fairly predictable.

Replace Each Occurrence

Global Replace (option G) will find all occurrences of a Find String from the beginning of the file and replace them with specified text. When used in conjunction with Automatic Replace (option N), the replacement is automatic. Without Automatic Replace, the cursor stops at each occurrence and the screen prompts for entry of Y or N in response to the question REPLACE?

To replace all occurrences from a point other than the beginning of the file, position the cursor at an appropriate place in the document and activate a normal Replace without the Global Replace option. Use the Find/Replace Again command to continue after each occurrence.

Return to Previous Position after Find

Find or Replace will usually leave the cursor at the beginning or end of the file, or at the position of the last find or replace. Return to the original cursor position by activating **MARKERS, REPEAT V.**

Reuse a Find String

To repeat a Find or Replace command without retyping the Find String and Replace String, activate Find or Replace and respond to the prompt for a text string by pressing **CTRL** and **R** at the same time. The previous text string will be displayed; press **RETURN** to keep that text string. This command may also be used for REPLACE? and OPTIONS? to retain the previous information and response.

Find and replace command strings can also be reused by activating the FIND/REPLACE AGAIN keys (**CTRL + SHIFT** and the + or _ keys).

WordStar-Plus Guide
Effects

Introduction

Getting Started

Create

Edit

Effects

Printing

Maintenance

Appendixes

Special Effects

Overview

WordStar-Plus Special Effects allow you to modify screen formats (such as margins or tabs), activate special printing instructions (such as boldface or underline), and specify dot command variables (such as page numbering or text headings and footing commands).

The following special effects are included in this section:

Change On-Screen Formats

On-screen formats are modified by changing settings on the **MARGINS, FORMAT** menu to override WordStar-Plus default values for the following:

o   Change Left or Right Margins
o   Horizontal Scrolling
o   Set or Change Tab Stops
o   Hyphen Help On/Off
o   Soft Hyphen Entry On/Off
o   WordWrap On/Off

o   Justification On/Off
o   Ruler Display On/Off
o   Page Break Display On/Off
o   Print Control Character
o   Variable Tabs On/Off
o   Set Line Spacing

Print Control Characters

Print Control Characters are imbedded on either side of the affected text to activate and deactivate the following:

o   Underline
o   Boldface
o   Doublestrike
o   Subscript
o   Superscript
o   Center Text

o   Strikeout Text
o   Imbedded Print Stop
o   Change Ribbon Color
o   Standard Character Pitch
o   Alternate Character Pitch
o   Backspace Overprint

Dot Commands

Dot Commands are inserted in the text as separate lines that begin with a period to specify the following:

o   Set Page Length
o   Set Line Height
o   Set Top Margin
o   Set Bottom Margin
o   Start New Page
o   Start/Stop Page Numbers
o   Set Page Number Column
o   Overprint Lines or Columns

o   Microjustification On/Off
o   Bidirection Print On/Off
o   Start/Stop Heading Text
o   Set Heading Text Margin
o   Start/Stop Footing Text
o   Set Footing Text Margin
o   Change Character Width
o   Set Sub/Superscript Roll

Margins

Margins may be set and reset at any point and at any time while creating or editing a document. When margins are reset, they remain at the new setting until set again or until the system is rebooted or the powered down.

Set Left Margin   (default - l)

Change the left margin by activating **MARGINS, FORMAT** and option **L.** Specify the column where the left margin is to occur, or press **ESC** to set the margin at the cursor position. Press **RETURN** to return to text entry without changing the margin setting.

Set Right Margin   (default - 65)

Change the right margin by activating **MARGINS, FORMAT** and option **R.** Specify the column where the right margin is to occur, or press **ESC** to set the margin at the cursor position. Press **RETURN** to return to text entry without changing the margin setting.

Margin Release

Type beyond the margin the same as a typewriter by activating **MARGIN RELEASE.** The margin is released until the cursor returns inside the margins or until **MARGIN RELEASE** is activated again.

Set Margins to Match Existing Text

Place the cursor on the line to be matched and activate **MARGINS, FORMAT** and option **F.** The left and right margins will be set to match the margins on the cursor line.

Reset Margin Temporarily at a Tab Stop

Margins may be set temporarily at tab stops by activating **MARGINS, FORMAT** and option **G.** Repeat the process to set the margin at the next tab stop. Margins return to the original setting when **RETURN** is pressed.

> For example, this margin has been temporarily set at the first tab stop so that Word Wrap indents the textproperly.

Pressing **RETURN** will reactivate the original margin.

Using REFORM to Change Margins

Set the new margins, move the cursor to the first line of text to receive new margins, and activate **REFORM**. All text in the paragraph beyond the cursor will be reformed within the new margins.

This may be used for routine editing, and for special effects such as when you want to change a margin for inserting a table or graphic. Set the margin at the desired column and **REFORM** the paragraph from the point of insertion.

Horizontal Scrolling

Horizontal Scrolling was introduced in the previous chapters. This feature allows you to type and view documents that are wider than the screen.

Since the screen will only display 80 characters at a time, horizontal scrolling displays 22 additional columns beyond the normal right screen boundary, while simultaneously "rolling" that many columns off the left side of the screen.

This is the same as vertical scrolling, only it is columns being scrolled left and right instead of lines being scrolled up and down. There is no limit to the number of columns for a line, but the scroll is always in increments of 22 columns.

The right margin may be set to a position beyond the normal right end of the screen, and the text will "roll" off the left side as text entry or editing continues beyond the normal right boundary.

This process also occurs when Word Wrap is deactivated unless **RETURN** is used to end the line. Use the left-right cursor motion commands to roll text horizontally on the screen during editing. The Character Flag "+" indicates the line has moved beyond the boundaries of the screen display.

Fixed Tabbing

Fixed Tabbing is useful in non-document files for program editing, but is not normally used in word processing. Fixed Tabbing is activated when Variable Tabs are turned off. Fixed tab stops are set every eight columns in a format that is compatible with the CP/M editor.

Fixed tabs are edited as characters - the cursor may not be placed in the space occupied by the tab, but will pop across to the next column.

Tab Stops

Tabs are set and cleared much the same as on a typewriter. Tab stops are indicated in the ruler line by "!" at each column where a tab occurs. The default setting for tab stops is every fifth column to column 56.

Move the Cursor to a Tab Stop

Press **TAB** to move the cursor to the next tab stop. Press **TAB** with **INSERT MODE** activated to move text from the cursor position to the next tab stop.

Moving the cursor with the **TAB** key inserts hard spaces between the original cursor position and the tab stop, just as if the move had been made with the space bar.

Set Tabs

Activate **SET** to set a tab. Enter the column number where the tab should occur and press **RETURN** as prompted, or press **ESC** to set the tab at the cursor position. Press **RETURN** to return to text entry without setting tab stops.

Clear Tabs

Activate **CLEAR** to clear a tab. Press **ESC** as prompted to clear the tab at the cursor column, or type **A** and **RETURN** to clear all tabs. Press **RETURN** to exit without clearing tabs.

Set Tabs to Match Existing Text

Margins and tabs may be reset to match an existing file line by activating **MARGINS, FORMAT** and option **F** while the cursor is positioned on the line to be matched. The new margins and tabs appear on the ruler line.

Variable Tabbing Mode   (default- on)

Variable tabbing provides default tabs every fifth column to column-56 and should be "on" for normal word processing use. Tab stops may be changed at any time when Variable Tabbing is activated. If Variable Tabbing Mode is deactivated, WordStar-Plus reverts to Fixed Tabbing Mode, which is useful for program editing with non-document files, but not for word processing.

Decimal Tabs - Building Tables and Columns

Decimal tabbing provides an easy method for building columns of figures with the decimal points aligned vertically in the column. Decimal tabbing is also convenient for entering right-aligned text rather than the normal left-side alignment.

Decimal tabs are created by activating **SET** and entering a **#** in the prompt field prior to identifying the column where the tab should appear. Decimal tabs are cleared with the **CLEAR** command, just as normal tab stops are cleared.

With decimal tabbing activated, press **TAB** to move the cursor to the tab stop, and then type the entry. The cursor remains at the tab stop while you type.

When a decimal is typed, the cursor moves to the right with the next entry and the decimal remains at the tab stop. When text is typed, all entries move to the left as they are typed, and the last character typed remains aligned at the tab stop.

The Ruler Line - Building Tables and Columns

The most convenient way for building tables and columns is to create a ruler line that describes the margins and tabs that are unique to that particular table.

This ruler line will be imbedded in the text with instructions not to print. You may also store the ruler as a separate file and use it again.

To create and use a ruler line, execute the following procedures:

Set the left and right margins to "size" the table. Place the cursor on a blank line and type two periods in the first two columns. Then activate **PRINT CODES** and **RETURN.**

The two periods keep the line from printing, **PRINT CODES RETURN** overprints the next line, which will be the ruler line.

This combination displays the ruler line with columns vertically aligned; the line containing the ruler is suppressed from printing but is displayed in the correct columns on the screen.

Position the cursor on the next line and type --------- from the left margin to the right margin. Then typeover "-" with !   at each column where a tab stop will occur, and with a # at each column where a decimal tab will occur.

The completed ruler line will look like a customized version of the ruler line at the top of the screen.

Activate **MARGINS, FORMAT** and option **F** with the cursor positioned
at any point on the ruler line. Margins and tabs will be changed
to match your ruler line. After the table is completed, move to
a line of normal text and repeat this process to reset margins
and tabs.

When you next need to access the table, repeat the processes
described in the preceding paragraph for easy update or editing.
Copy the ruler line to other parts of the file with a block
command for similar tables, or store it as a separate file that
can be read into other files when tables are required.

Changing Format Defaults

Screen formats govern WordStar-Plus operating parameters.
Activate the **MARGINS, FORMAT** menu to view and/or modify screen
formats:

Hyphen Help On or Off   (default - on)

MARGINS, FORMAT and option **H** turns Hyphen Help off; if already
off, turns Hyphen Help on. When on, **REFORM** stops at
multisyllable words that will not fit on a line and allows entry
of a soft hyphen. When off, **REFORM** moves the entire word
automatically to the next line and justifies the previous line.

Soft Hyphen Entry On or Off   (default - off)

MARGINS, FORMAT and option **E** turns Soft Hyphen Entry on; if
already on, turns Soft Hyphen Entry off. When on, all hyphens
are "soft" except those with ^P (**CTRL** and **P**) in front of the
hyphen. When off, all hyphens are "hard" except those entered
using Hyphen Help during **REFORM.**

Word Wrap On or Off   (default - on)

MARGINS, FORMAT and option **W** turns Word Wrap off; if already off,
turns Word Wrap on. When on, Word Wrap automatically moves text
to the next line when the line being typed is full. With Word
Wrap off, text is typed without regard to line forming criteria
and **RETURN** is used at the end of a line.

Justification On or Off   (default – on)

MARGINS, FORMAT and option **J** turns Justification off; if already off, turns Justification on. When on, text is automatically formed with margins vertically aligned during text entry or reform.   With Justification off, text is left "ragged" on the right margin, as on a typewriter.

Ruler Display On or Off   (default – on)

MARGINS, FORMAT and option **T** turns the Ruler Display off; if already off, turns the Ruler Display on.   The Ruler Display indicates margins and tab stops on the top of the screen.

Page Break On or Off   (default – on)

MARGINS, FORMAT and option **P** turns the Page Break Display off; if already off, turns the Page Break Display on.   The Display appears as a broken line (----------) after each page of text on the screen.

Control Character Display On or Off   (default – on)

MARGINS, FORMAT and option **D** turns the Control Character Display off; if already off, turns Display on.   When on, Control Characters appear on the screen as typed (such as ^B).   When off, Control Characters are not displayed and text is formed horizontally on the line as it will appear on the printout.

Variable Tabs On or Off   (default – on)

MARGINS, FORMAT and option **V** turns Variable Tabs off; if already off,turns Tabs on.   When on, Variable Tabs are in effect. When off, Fixed Tabbing Mode is in effect (see TABS in this section of the manual).

Set Line Spacing   (default – single space)

MARGINS, FORMAT and option **S** changes line spacing. Enter the number of lines (2 = double space, 3 = triple space, etc.) as prompted.

Print Control Characters

Print Control Characters are inserted in the text to denote special printing effects which will be interpreted during the print function. When inserting characters into existing text, activate Insert Mode to avoid typing over the first character.

Print Control Characters are as follows:

Underline

UNDERLINE activates or deactivates underlining. Print Control Characters are displayed as ^S. Activate **UNDERLINE** before and after the text to be underlined (^Stext^S). All text (but not spaces) between the two control characters will be underlined.

Boldface

PRINT CODES and option **B** activates or deactivates boldface. Print Control Characters are displayed as ^B. Activate **PRINT CODES B** before and after the text to print in boldface (^Btext^B). All text between the two control characters will print boldface, which is doublestrike with the second printing slightly offset.

Doublestrike

PRINT CODES and option **D** activates or deactivates doublestrike. Print Control Characters are displayed as ^D. Activate **PRINT CODES D** before and after the text to print in doublestrike (^Dtext^D). All text between the two control characters will print doublestrike, which is lighter than boldface but darker than regular print.

Subscript

PRINT CODES and option **V** activates or deactivates subscript. Print Control Characters are displayed as ^V. Activate **PRINT CODES V** before and after the text to print subscript (^Vtext^V). All text between the two control characters will print as subscript ($_{subscript}$).

Superscript

PRINT CODES and option **T** activates or deactivates superscript. Print Control Characters are displayed as ^T. Activate **PRINT CODES T** before and after the text to print superscript (^Ttext^T). All text between the two control characters will print as superscript (superscript).

Strikeout

PRINT CODES and option **X** activates or deactivates strikeout. Print Control Characters are displayed as ^X. Activate **PRINT CODES X** before and after the text to print with strikeout characters (^Xtext^X). All text between the two control characters will print with the "-" character (strikeout).

Center Text on the Line

MARGINS, FORMAT and option **C** centers the text on the cursor line. Activate **MARGINS, FORMAT C** with the cursor on the line to be centered. Text on the line will be moved so that an equal number of spaces are on either side within the current left and right margin settings.

Stop Print until Operator Restarts

PRINT CODES and option **C** causes the printer to stop at a given point in the text. Print Control Character displays as ^C. Activate **PRINT CODES C** to imbed the character ^C in the text. The printer will then stop at that point in the text during printing. This is handy for changing printwheels or ribbons at specific places in a document or for other special effects that require printer intervention. The printer may be restarted via **PRINT** and option **N,** or with the **P** option from the No-File Menu.

Change Ribbon Colors

PRINT CODES and option **Y** activates and deactivates alternate print color on the printer. Print Control Characters are displayed as ^Y. Activate **PRINT CODES Y** before and after the text to print in a different color (^Ytext^Y). All text between the two control characters will print in a different color (providing you have a two-color ribbon installed on your printer).

Alternate Character Pitch

PRINT CODES and option **A** activates alternate character pitch. The Print Control Character is displayed as ^A. Activate **PRINT CODES A** before the text to print 12-characters per inch. All text will print in the alternate pitch until a command (**PRINT CODE N** is given to return to standard pitch.

Return to Standard Character Pitch

PRINT CODES and option **N** reactivates standard character pitch. The Print Control Character is displayed as ^N. Activate **PRINT CODES N** to return to standard character pitch after printing in alternate pitch.

Backspace Overprint

PRINT CODES and option **H** activates backspace overprint. The Print Control Character displays as ^H. Activate **PRINT CODES H** to overprint a character. The next character you type will overprint the preceding character on the line.

Overprint a Line

PRINT CODES and **RETURN** activates line overprint. Print one line over another by activating **PRINT CODES** and then pressing **RETURN** with the cursor positioned on the first line. The next line will then print over the line containing the command.

Non-Break Space

PRINT CODES and option **O** activates a non-break space. The Print Control Character is displayed as ^O. Activate **PRINT CODES O** to imbed a non-break "required" space, which is useful when a single space is desired that will not be expanded during Justification or wrapped to the next line by Word Wrap.

Dot Commands

Dot Commands are special instructions inserted in the text to
perform functions such as page numbering and to activate features
such as text heading or footing variables.

These commands are also used to override a number of format
defaults, such as page length, line height, and top and bottom
margins.

Dot commands consist of a period in the first column of the line
followed by a two-character command. Some dot commands will then
have an optional number or line of text.

For example, a dot command to include page numbers from the first
page could be typed at the first column of the first line of the
first page as:

.PN

with text beginning on the next line or further down the page.
The dot command, while occupying a line on the display, does not
print and is not included in the line count for the page.

Dot commands are as follows:

Set Line Height   .LH n   (default - 6 lines per inch)

Set line height with the dot command .LH n, where "n" equals the
number of lines per inch on the page. Line height is set in 1/48
inches. The following table shows the dot commands required for
lines per inch settings:

2 lines per inch = .LH 24	4-4/5 lines per inch = .LH 10
2-2/5 lines per inch = .LH 20	5-1/3 lines per inch = .LH 9
2-2/3 lines per inch = .LH 18	6-4/5 lines per inch = .LH 7
3 lines per inch = .LH 16	8 lines per inch = .LH 6
4 lines per inch = .LH 12	9-2/3 lines per inch = .LH 5

Change Character Width .CW n (default – 10 characters / inch)

Character width is set in 1/120ths of an inch for daisy printers
in both regular and alternate character pitch. The default
standard pitch is ten characters per inch, and the default
alternate pitch is twelve characters per inch. These may be
changed at any time with the dot command .CW n, where "n" equals
the width in 1/120ths of an inch, as outlined in the table below:

5 characters per inch = .CW 24	12 characters per inch = .CW 10
6 characters per inch = .CW 20	15 characters per inch = .CW 8
7 characters per inch = .CW 17	20 characters per inch = .CW 6
8 characters per inch = .CW 15	24 characters per inch = .CW 5
10 characters per inch = .CW 12	30 characters per inch = .CW 4

Set Page Length .PL n   (default – 66 Lines)

Set page length with the dot command .PL n, where "n" equals the
number of lines per page including top and bottom margins. The
maximum number of lines for the body of a page is the total
number of lines on the page minus the top and bottom margins.

Set Top Margin .MT n   (default – 3 Lines)

Set the top margin with the dot command .MT n, where "n" equals
the number of blank lines between the top of the page and the
first line of text. The top of the page for printing purposes is
the line where you position the printer, unless the print option
"Use Form Feeds" is selected (see PRINTING in this manual).

Set Bottom Margin .MB n   (default – 8 lines)

Set the bottom margin with the dot command .MB n, where "n"
equals the number of blank lines between the last line of text
and the end of the page.

Start New Page   .PA   (default - every 55 lines)

Start a new page with the dot command .PA . A new page will be
started immediately when this command is encountered in the text.
The Page Break Display also honors this command on the screen.

Start New Page Conditionally   .CP n

Start a new page under specific circumstances with the dot
command .CP n, where "n" is the minimum number of lines that must
remain on the page if text is to print.

For example, .CP 5 means start a new page if there are less than
five lines remaining on the current page when the command is
encountered in the text. This command may be used to prevent
ending a page with a section title, to keep tables or charts from
splitting pages, and to keep blocks of text together.

Start New Text Heading   .HE

Activate the text heading feature with the dot command .HE .
Type the heading on the same line as the dot command (text in the
heading line will be adjusted leftward three columns by the
printer since the dot command doesn't print). The heading text
typed here will print at the top of every page until another .HE
command is encountered in the text.

Change Text Heading   .HE

Change headings with the dot command .HE   followed by the new
heading text. The next heading to print after the dot command
will begin the new text heading.

Deactivate Text Heading   .HE

Deactivate headings with the dot command .HE   followed by
RETURN. The last heading to print is prior to the dot command.

Set Heading Margin   .HM n   (default - 2 lines)

Heading text falls within the normal top margin for the page,
which is three lines by default. This leaves two lines between
the heading and first line of text. If more or fewer spaces are
desired between the heading and first line of text, override the
heading margin default with the dot command .HM n, where "n" is
the number of lines for the heading margin.

NOTE: the maximum for "n" in the heading margin is the top margin
less one. If this does not provide enough space between the
heading and text beginning, change the top margin appropriately
before changing the heading margin.

Start Text Footing   .FO

Activate the text footing feature with the dot command .FO .
Type the footing on the same line as the dot command (text in the
footing line will be adjusted leftward four columns by the
printer since the dot command doesn't print). The footing text
typed here will print at the bottom of every page until .FO is
encountered again in the text.

Change Text Footing   .FO

Change footings with the dot command .FO followed by the new
footing text. The next footing to print after the new dot
command will contain the new text footing.

Deactivate Text Footing   .FO

Deactivate footings with the dot command .FO followed by **RETURN.**
The last footing to print will be prior to the dot command.

Set Footing Margin   .FM n   (default - 2 lines)

Footing text falls within the normal bottom margin for the page.
Two lines are left between the last line of text and the footing
line unless changed with the dot command .FM n, where "n" is the
number of lines between the text and the footing text.

Microjustification On or Off .UJ 0 or UJ 1 (default – on)

Microjustification is the feature on daisy wheel printers that spreads spaces on a line of text evenly across the line.

This is useful except when a table or columns of figures have been typed, since microjustification has a tendency to spread the figures across the line rather than leave them in columns as they were typed.

To alleviate this problem, insert the dot command .UJ 0 prior to the table to turn microjustification off, and then insert the command .UJ 1 at the end of the table to turn microjustification back on.

Start Page Numbers .PN n

Page numbering is initially off. Start page numbering with the dot command .PN n, where "n" equals the number to print on the page containing the command. If "n" is left blank (just .PN), the page number will be the actual page in the document file.

Omit Page Numbers .OP

Stop page numbering with the dot command .OP . Page numbers will be omitted until a .PN command is issued. Note: the .OP command has no effect if if there is a "#" in the heading or footing text. Set a footing without the # to omit footing page numbers.

Restart Page Numbers .PN n

Restart page numbering after .OP with the dot command .PN n, where "n" equals the number to print on the page containing the command. If "n" is left blank (just .PN), the page number will be the page in sequence from the .PN command (including pages where page numbering was omitted).

Set Page Number Column for Printing .PC n

The default position for page number printing is column 33 at the bottom of the page. Change this with the dot command .PC n, where "n" equals the column to print the page number. Note: additional commands are required for page number column position when footing text is used, as described on the next page.

Print Page Number as Part of the Heading Text

Activate a text heading, or use the existing text heading. Type **#** in the column of the heading where the page number should print. You may also include other text on the heading line, such as PAGE-#, which prints the literal "PAGE-" prior to the page number. Note: a "#" heading will cause page numbering at both the top and bottom of the page unless a text footing or the dot command .OP has been issued.

Print Page Number as Part of the Footing Text

Activate a text footing, or use the existing text footing. Type # in the column of the footing where the page number should print. You may also include other text on the footing line, such as PAGE-#, which prints the literal "PAGE-" prior to the page number.

Using "#" as Text in a Heading or Footing

To override the "#" command for page numbers and still use a "#" in a text heading or footing, precede the # with \, such as \#. The "\" will not print, but the "#" will print and no page number command will be issued. (To print a "\", type \\ - the first \ indicates an override and the second \ will be printed as a normal character without any system interpretation.)

Offset Page Number Column Positions for Two-sided Printing

For two-sided printing, the page number may be offset to print on the right-hand side of odd numbered pages and the left-hand side of even numbered pages.

To activate this feature, use the dot command .HE or .FO to set a text heading or footing, followed by a space and the command ^K (press **CTRL** and **P** at the same time, then **CTRL** and **K** at the same time.)

Then space to the position where the page number should print for odd numbered pages and type **#** to activate page numbering for the text heading or footing. Page numbers will be indented as many spaces from the left margin on even numbered pages as they are from the right margin on odd numbered pages.

Offset Heading or Footing Text for Two-sided Printing

For two-sided printing, heading or footing text may be offset to print to the right side of odd numbered pages and to the left on even numbered pages.

To activate this feature, use the dot command .HE or .FO to set a text heading or footing, followed by a space and the command ^K (press **CTRL** and **P** at the same time, then **CTRL** and **K** at the same time).

Then type your heading or footing text. The text will be printed so the text is indented as many spaces from the left margin on odd numbered pages as it is from the right margin on even numbered pages.

Offset Print Positions From the Left Margin   .PO n

Print text left or right of the left margin with the dot command perforation on the left side of the paper to print the left margin.

The default position for the left margin is eight columns, which is good for most circumstances but may be inadequate for specialized printing or odd sized paper.

Bidirectional Printing On or Off .BP 0 or .BP 1 (default – on)

Bidirectional printing moves the print head across the paper and prints alternate lines from left to right and then back from right to left. This is normally on for daisy printers, but may be turned off to produce better quality output if the print quality is less than desirable.

Set Sub or Superscript Roll .SR (default – 3/48 of an inch)

The amount of sub or superscript line variation may be specified with the dot command .SR n, where "n" is the number of 1/48's of an inch the sub or superscript should be offset on the line.

Don't Print This.. .IG or ..

A line with two periods in the first two columns or the dot command .IG is considered to be commentary material and is not printed. This is useful for editorial inserts while composing, and for creating non-printing ruler lines for tables and columns.

WordStar-Plus Guide

Printing

Introduction

Getting Started

Create

Edit

Effects

Printing

Maintenance

Appendixes

Print a Document

Overview

The Print function prints the document file from the diskette.
Only files that are stored on diskette may be printed.

Printing may be initiated by activating **PRINT** with the multi-
function keys, or by typing **P** with the No-File menu on the
display.

After activating the Print function, type the name of the
document file to print as prompted. All document files on the
logged disk are listed in the directory on the display.

After typing the name, you can either press **ESC** or **RETURN** to
begin printing. If **RETURN** is pressed, a series of printer
options appears on the screen. If **ESC** is pressed, option
defaults are used and printing begins.

When the document has been recorded for printing, the No-File
menu returns to the screen. The option PRINT A FILE is changed
to STOP PRINT until the print job is completed. Selecting
option **P** again during printing causes the printer to stop, and
options for continuing or abandoning are displayed.

Print Options

If **RETURN** was used after the document name above, a series of
print options are displayed on the screen. These options are
detailed below. Each option has a default value. Press **RETURN** to
accept the default, or enter a new value for options you wish to
change. Press **ESC** at any time to use defaults for remaining
questions and begin printing.

Print options and defaults are as follows:

        DISK FILE OUTPUT - - - - - - - - - - - **RETURN** = NO

        START AT PAGE NUMBER - - - - - - - - - **RETURN** = FIRST

        STOP AFTER PAGE NUMBER - - - - - - - - **RETURN** = LAST

        USE FORM FEEDS - - - - - - - - - - - - **RETURN** = NO

        SUPPRESS PAGE FORMATTING - - - - - - - **RETURN** = NO

        PAUSE FOR PAPER CHANGE BETWEEN PAGES - **RETURN** = NO

Print Options

DISK FILE OUTPUT - RETURN sends the printer output to the printer. If **Y** is selected, you are prompted for the name of the disk file for output. Printer output is sent to that file instead of to the printer.

START AT PAGE NUMBER - RETURN starts printing at the first page of the file. Type the number of the page to start at if other than 1.

STOP AFTER PAGE NUMBER - RETURN stops printing after the last page of the file. Type the number of the last page to print if other than the last page of the document file.

USE FORM FEEDS - RETURN is best for daisy printers. Line feeds are sent to the printer automatically to advance forms to the top of the next page. For non-daisy printers, it is sometimes faster to position the paper at the first print line and use form feeds, which is accomplished by typing **Y** in response to this question.

SUPPRESS PAGE FORMATTING - RETURN causes dot commands and other imbedded commands to be interpreted by the printer. Typing **Y** here causes these commands to appear on the printout as they were keyed, but they are not interpreted by the printer.

PAUSE FOR PAPER CHANGE BETWEEN PAGES - RETURN assumes you are using continuous forms. To use single sheets, answer **Y** to this prompt. The printer stops after each page. Insert the next sheet and activate **PRINT** and option **N** to continue.

Stopping the Printer

Stop the printer by selecting option **P** from the No-File menu or by activating **PRINT**. The following options will appear:

Y - abandon print. The print job is terminated and system returns to No-File menu.

N - resume print. Continues printing at the point of interruption.

U - hold print. Suspends printing and returns to the No-File menu. Printing may be restarted at the point of interruption or abandoned using these same options at a later time.

Installing Printers for WordStar-Plus

While printers or other peripheral devices may be connected and used immediately for most software, WordStar-Plus requires that the printer is "installed" for the system. This is because of the way that special characters are handled by different printers. Printer installation is a one-time-only procedure unless you change to a different printer.

The WordStar-Plus installation program (INSTALL.COM) resides on the Attache Software diskette. Installation procedures are included for each of the following printers:

STANDARD - Any "Teletype-like" printer (i.e. almost any printer)

DIABLO - DIABLO 1610/1620 daisy wheel printers

XEROX - DIABLO 1640/1650/630/Xerox 1700 daisy wheel printers

QUME - QUME Sprint 5 daisy wheel printers

NEC - NEC Spinwriter 5510/5520 thimble printers

TEC - C. Itoh/TEC Starwriter Printers

If your printer is not listed here, select the option for a "Standard Teletype-like" printer or consult your dealer for help in determining which installation type is best for your printer.

WordStar-Plus installation parameters are stored in the WS.COM file. This file is called up when the WS command is executed from CP/M.

If more than one printer type is frequently used, keep a second copy of the WS.COM file (with a different name) for instant interface with another printer. (For example, use WS.COM for printer A and then create WS1.COM for Printer B. You would then call up WordStar-Plus by typing WS for printer A, and WS1 for printer B.)

The WordStar-Plus Installation Program

The WordStar-Plus installation program is described in detail on the following pages. The procedure for using this program is as follows:

1. Power up the unit, insert the Attache Software diskette in Drive A, and boot the system.

2. With the cursor at A>, type **INSTALL** and press **RETURN.**

3. Answer the questions as instructed on the following pages. Determine your answers for the Printer Menu, Communications Protocol Menu, and Driver Menu from the instructions that are provided for your specific printer type.

4. When you are finished with INSTALL, test your printer installation by printing a WordStar-Plus text file.

Installation Options

When INSTALL is executed, the following series of questions appears on the display screen. Answer each question as indicated, using the answer for your printer type.

Screen   COPYRIGHT (C) 1981 MicroPro International Corporation INSTALL version 4.2 for MicroPro WordStar release 3.00

Do you want a normal first-time INSTALLation of WordStar (Y = yes; N = display other options):

You   Type **N**

Screen   ***** WordStar INSTALLATION OPTIONS MENU *****

A - INSTALLation of a distributed WordStar, INSTALLing WSU.COM, producing WS.COM, and then running the INSTALLed WordStar.

B - INSTALLation or re-INSTALLation of a WordStar COM file of your choice, placing the newly INSTALLed WordStar in a file of your choice, and then exiting to the operating system.

C - Same as B except run the INSTALLed WordStar.

D - Modification of the INSTALLation of a WordStar COM file of your choice. The modified WordStar replaces the original file. The modified WordStar is then run.

PLEASE ENTER SELECTION (A, B, C, or D):

You	Type **C**
Screen	Filename of WordStar to be INSTALLed?
You	Type **WS** and press **RETURN.**
Screen	Filename for saving INSTALLed WordStar?
You	Type **WS** and press **RETURN.**

(Note: if setting up more than one WordStar-Plus WS.COM file to support multiple printer types, save the installation file as something other than WS (such as WS1 or WS2) to reflect the printer type stored in that file. You then type that name when calling up WordStar-Plus to use that printer type.)

Screen	MicroPro WordStar release 3.00 serial # WY08161J

***** WordStar TERMINAL MENU #1 *****

A Lear-Siegler ADM-3A   C Lear-Siegler ADM-31
D Hazeltine 1500   E Microterm ACT-IV
F Beehive 150/Cromemco 3100   G Imsai VIO
H Hewlett-Packard 2621 A/P   I Infoton I-100
J Processor Tech Sol / VDM   K Soroc IQ-120/140
L Perkin-Elmer 550 (Bantam)   2 Terminal Menu #2
3 Terminal Menu #3   Z none of the above
U no change

PLEASE ENTER SELECTION (1 LETTER):

You	Type **U**
Screen	Previous selection kept unchanged:

terminal: OTRONA ATTACHE

OK (Y/N):

You	Type **Y**

Printing

***** PRINTER MENU *****

A   Any "Teletype-like" printer (almost any printer)
C   "Teletype-like" printer that can BACKSPACE
D   DIABLO 1610/1620 daisy wheel printer
E   DIABLO 1640/1650/630/Xerox 1700 series daisy wheel
F   QUME Sprint 5 daisy wheel printer
G   NEC Spinwriter 5510/5520 thimble printer
I   "Half-Line-Feed" Printers
M   I/O Master / O.E.M. Printer Combination
R   C. Itoh/TEC Starwriter Printer
U   no change
Z   none of the above

PLEASE ENTER SELECTION (1 LETTER):

You   Type the letter that corresponds to the menu item for
           your printer. Common printers for each option are
           described on the screen as follows:

           A - **Teletype-like printer.** This selection will drive
           almost any printer. The printer must be capable of
           responding to ASCII printing characters, carriage
           return, and line feed only. Make sure any AUTO LF or
           LOCAL LF switch is OFF.

           If your printer is capable of backspacing, use CHOICE
           C instead for faster output. If you have a DAISY
           WHEEL or thimble printer shown on the menu, use the
           appropriate choice in order to obtain "Micro-
           justified" output and additional formatting
           capabilities.

           Refer to your printer manual for instructions on
           patching in optional control sequences for ribbon
           color change, character pitch change, and half-line
           roll (for subscripts and superscripts) if your
           printer has these capabilities.

           D - **Diablo 1610/1620 printer.** This choice is for the
           indicated daisy printers only. The serial versions
           of these printers should be interfaced at 1200 baud,
           otherwise printout will be very slow. To prevent
           buffer overflow with these printers interfaced at
           1200 baud, specify "ETX/ACK" protocol at the next
           menu. Make sure any AUTO LF or LOCAL LF switch is
           OFF.

E - Diablo 1640/1650/630 printer. This selection also works for Xerox 1730/1740/1750 printers. This choice is for the indicated daisy printers only. The serial versions of these printers should be interfaced at 1200 baud, otherwise printout will be very slow. To prevent buffer overflow with these printers interfaced at 1200 baud, specify "ETX/ACK" protocol at the next menu. Make sure any AUTO LF or LOCAL LF switch is OFF.

F - Qume Sprint 5 printer. This choice is for the indicated daisy printers only. The serial versions of these printers should be interfaced at 1200 baud, otherwise printout will be very slow. To prevent buffer overflow with these printers interfaced at 1200 baud, specify "ETX/ACK" protocol at the next menu. Make sure any AUTO LF or LOCAL LF switch is OFF.

G - NEC Spinwriter 5510/20 printer. This choice is for the indicated daisy printers only. The serial versions of these printers should be interfaced at 1200 baud, otherwise printout will be very slow. If you have Model 5515 or 5525 use selection "D" (Diablo 1610) instead. To prevent buffer overflow with these printers at 1200 baud without using a cable adapter, specify "ETX/ACK" or "XON/XOFF" protocol at the next menu, and configure the printer appropriately. Make sure any AUTO LF or LOCAL LF switch is OFF.

R. - C. Itoh/TEC Starwriter

Screen   (displays your printer selection)

OK (Y/N):

You   Type Y

(If you selected the wrong printer, type N and you will be prompted for printer selection again.)

(The next screen to appear on the display is for selection of communications protocol. Select the option that corresponds with your printer selection.)

Screen   ***** COMMUNICATIONS PROTOCOL MENU *****

A "Communications Protocol" is necessary with some printers to prevent printer buffer overflow and character loss.

E "ETX/ACK" Protocol
X "X-ON/X-OFF" Protocol
N NONE required (or handled outside of WordStar)
U no change

PLEASE ENTER SELECTION (E, X, N, B, or U):

You   For Standard (any teletype-like printer) configuration, select option N for NONE required.

For all other printers, select option E for "ETX/ACK" protocol.

Screen   (Displays your protocol selection)

OK (Y/N):

You   Type Y

(The next screen to appear on the display is for driver selection. Select the option that corresponds with your printer selection.)

Screen   ***** DRIVER MENU *****

Or, how should WordStar send characters to your printer?

L CP/M "List" device (LST:)
T CP/M primary console device (TTY:)
C CP/M secondary console device (CRT:)
P Port Driver (direct I/O to 8-bit ports)
N Parallel Centronics Printer Driver
Q Serial Driver on TRS-80 Model-2
S User-installed driver subroutines
U no change

PLEASE ENTER SELECTION (L,T,C,P,N,P,S,B or U):

You   For Standard (any teletype-like printer) configuration, select option L for CP/M List Output driver (LST:).

For all other printers select option P for the Port Driver (direct I/O to 8-bit ports).

Screen   (Displays your driver selection)

            OK (Y/N):

You   Type **Y**

            Note: all printer selections other than standard
            teletype will require additional patches.
            Instructions for these patches are itemized here. If
            a standard teletype-like printer was selected, the
            screen will bypass these questions and go directly to
            the question "Are the Modifications to WordStar Now
            Complete?" that follows the patch questions.

Screen   The port driver directly accesses hardware port(s) to
            control printer. This driver is normally used with
            serial printers and a protocol. As hardware ports
            are very non-standard with respect to location and
            status information, you may have to provide data
            (Note that WordStar will try to determine the data
            all by itself) so WordStar can modify the port
            driver. Note that the port driver contains a "busy
            test", resulting in the best response when editing
            and printing simultaneously.

            Are the printer ports "I/O" or "Memory Mapped" (I or
            M):

You   Type **I**

Screen   What is the output port for your printer? Do you
            wish WordStar to determine the values or should
            WordStar accept them from you (D or A):

You   Type **A**

Screen   What is the output port number in HEX:

You   Type **F2**

Screen   What is the output status port for your printer? Do
            you wish WordStar to determine the values or should
            WordStar accept them from you (D or A):

You   Type **A**

Screen   What is the output status port number in HEX:

You   Type **F3**

Screen   What are the bit(s) that change at the output status
            port when the output port becomes ready to accept a
            character for output (enter HEX value):

You   Type **04**

Screen	Which bit(s) change(s) from a 0 to a 1 (enter HEX value):
You	Type **04**
Screen	What is the input port for your printer? Do you wish WordStar to determine the values or should WordStar accept them from you (D or A):
You	Type **A**
Screen	What is the input port number in HEX:
You	Type **F2**
Screen	What is the input status port for your printer? Do you wish WordStar to determine the values or should WordStar accept them from you (D or A):
You	Type **A**
Screen	What is the input status port number in HEX:
You	Type **F3**
Screen	What are the input status port bits for your printer? Do you wish WordStar to determine the values or should WordStar accept them from you (D or A):
You	Type **A**
Screen	What are the bit(s) that change at the input status port when the input port has a character available for input. (enter HEX value):
You	Type **01**
Screen	Which bit(s) change(s) from a 0 to a 1 (enter HEX value):
You	Type **01**

Screen   ARE THE MODIFICATIONS TO WORDSTAR NOW COMPLETE?   IF
          THEY ARE ANSWER YES TO THE NEXT QUESTION.   IF YOU
          WISH TO MAKE ADDITIONAL PATCHES TO WORDSTAR'S USER
          AREAS, ANSWER NO.

          OK (Y/N):

You   Type **Y**

Screen   CONFIRM TERMINAL AND PRINTER SELECTIONS:
          terminal: OTRONA ATTACHE
          Your printer selection
          Your communications protocol selection
          Your driver selection

          OK (Y/N):

You   Type **Y**

          The installed configuration is then saved in the .COM
          file that was designated for storage in the question
          "Filename for saving INSTALLed WordStar?" and the
          system returns to A>.

WordStar–Plus Guide

Maintenance

Maintenance

Overview

This chapter discusses the programs that are used for performing diskette and file maintenance during word processing, including the following:

- o Display the file directory

- o Rename a file

- o Delete a file

- o Copy a file

- o Change the logged disk drive

- o Exit from word processing and return to CP/M

- o Exit from word processing temporarily and return

- o Display Filesize and Space Available

- o Diskette capacity and long document considerations

Note: Maintenance programs described here are in addition to Attache Disk Manager and CP/M utility programs that are included with Attache. Refer to the Software Guide and CP/M Guide for instructions on using those programs.

WordStar-Plus Maintenance Commands

Disk and file maintenance functions can be performed without exiting from WordStar-Plus, and without exiting from the document you are editing. These commands can be accessed from the No-File menu and from the Printing, Control menu. Options are the same from either menu.

WordStar-Plus maintenance options are as follows:

    E = Erase a file

    F = Display the file directory

    O = Copy a file

    X = Change the logged disk drive

    Y = Delete a file

The File Directory

The file directory lists on the display screen the names of all documents on the logged diskette.

The directory is displayed on the No-File menu screen by typing **F** from that menu. The directory is turned off by repeating the process.

The File Directory may also be displayed while creating or editing a document by activating **PRINTING, CONTROL** and option **F**. The directory is turned off by repeating the process.

The directory for the alternate drive can be displayed during word processing by temporarily changing the logged drive.

Rename a File

Rename a file by typing **E** at the No-File menu. When prompted, type the name of the file to rename and press **RETURN.** Then type the new name for the file and press **RETURN** again.

Files may also be renamed while creating or editing a document by activating **PRINTING, CONTROL** and option **E.**

To rename a file on the alternate diskette, precede the filename with the drive reference (A: or B:).

Delete a File

Delete a file by typing **Y** at the No-File Menu. When prompted, type the name of the file to delete and press **RETURN.** The deleted file will be removed from the File Directory.

Files may also be deleted while creating or editing a document by activating **PRINTING, CONTROL** and option **Y.**

To delete a file on the alternate diskette, precede the filename with the drive reference (A: or B:).

Copy a File

Copy of a file by typing **O** at the No-File menu. When prompted, type the name of the file to copy and press **RETURN.**

When prompted for the file to copy to, type a name that does not already exist on the diskette and press **RETURN** again as prompted. The old and new copies will be identical except for the different names.

If you type a name that already exists on the diskette, you are prompted OVERWRITE Y/N? If you answer **Y,** the existing file with that name will be overwritten by the file you are copying.

Files may also be copied while creating or editing a document by activating **PRINTING, CONTROL** and option **O.**

To copy a file from the logged disk to the alternate disk, or from the alternate disk to the logged disk, precede the filenames with the drive reference (A: or B:) for each file.

Change the Logged Disk Drive

Change the logged disk drive from the No-File menu by typing **L** and then x: and **RETURN,** where "x" is the name of the drive to log.

Change the logged disk drive during word processing by activating **PRINTING, CONTROL** and selecting option **L.**

Exit From WordStar-Plus

Exit from WordStar-Plus to run other programs by typing **X** at the No-File menu. The CP/M prompt (A> or B>, depending upon the logged drive selection), will appear with the cursor at the left side of the screen, waiting for a command.

Exit Temporarily and Return

Temporarily exit from WordStar-Plus to run other programs by typing R at the No-File menu. When WordStar-Plus prompts COMMAND?, type the name of the program to run and then press **RETURN.**

When the new is finished, press any key to return to the No-File menu.

7-3

Checking Filesize and Available Space

List the amount of space left on a diskette and the sizes of the existing files with the CP/M "STAT" command. This command is described in detail in the CP/M Guide.

To run STAT from the No-File menu, change the logged drive to Drive A (or the drive containing the STAT.COM program file) and then select option **R** to run a command.

When prompted for a command, type **STAT x:*.*** where "x" is the drive containing the disk to be listed.

The screen listing will show the name of each file on the disk and its size (in "K Bytes", which are increments of 1,024 characters). The last line shows how much space remains on the diskette.

Press any key to return to the No-File menu.

Diskette Capacity and Long Documents

Standard diskettes used by Attache will hold 360K-bytes of information. This translates to about 360,000 characters.

A single page in a document ranges from an average of about 2500 characters to a maximum of 5280 characters, depending upon the number of spaces, blank lines, etc. on the page.

During text editing, a workfile copy of the document is temporarily created. This means there must be space on the disk in addition to the actual files for WordStar-Plus to execute efficiently.

Leave at least as much space as your largest document on the diskette, and a good rule of thumb is to leave twice as much space as your largest document.

Processing time increases proportionally for longer documents, so documents that run over about ten pages should be split into two or more separate files.

The greatest increase in processing time for long documents will be noticed when the cursor is moving backwards though the document and during block operations where the source of the move is far away from the new location.

WordStar-Plus Guide

Appendixes

Glossary

A>
Prompt which appears at the first column of a line on the screen to indicate that Drive A is logged and waiting for a command.

Abandon
A Printing, Control menu command for exiting from a document without updating the file on diskette, losing all data entry since the document was last saved.

Alternate Pitch
A Print Codes menu command that prints 12 characters per inch on the line rather than the standard 10 characters per inch.

Arrow Keys
Move the cursor left, right, up, or down on the screen when used alone or in conjunction with the **SHIFT** and/or **CTRL** keys.

Auxiliary Video Jack
Outlet at the back of Attache for attaching an additional video display.

B>
Prompt which appears at the first column of a line on the screen to indicate that Drive B is logged and waiting for a command.

BACK SPACE Key
Moves the cursor one column to the left.

Backspace Overprint
A Print Codes menu command for printing two or more characters one on top of the other in a column.

Backup
Disk Manager option that copies an entire diskette to another diskette.

Baud Rate
The number of bits per second transmitted between two electronic devices.

Bidirectional Printer
A printer that prints from left to right and also from right to left.

Block Operations
A series of multi-function commands that identify sections of text and then move or copy that text to other locations in the same document or in another document.

Block
A section of text that has block start and end markers identifying it for use in a block operation.

Boldface
A Print Codes menu command for text highlighting that prints the same character twice in the same column, with the second character slightly offset.

A—1

Glossary

Boot
The loading of CP/M programs and/or execution of diagnostics that occur when **RESET** and the right **SHIFT** key are pressed at the same time (a "cold" boot) or when **CTRL** and **C** are pressed at the same time (a "warm" boot).

CAPS LOCK Key
Locks the keyboard in upper case.

Carriage Return
The function that ends a line and moves the cursor to the first column of the next line on the screen.

Center
The Margins, Format menu command that centers text on the line.

Character
A single letter, number, or other keyboard symbol.

Character Pitch
The number of characters printed per inch on a line.

Clear Tab
Multi-function command for clearing tab stops.

Column
The space on the screen for a single character on a line. Also one of two or more vertical sections of text and/or numbers that share the same lines but are separated by blank spaces and are functionally independent of each other.

Column Mode
Operating state that allows block operations for tables and columns that are independent of each other but share the same file lines.

Command
An instruction to the computer.

Communications
The transmission of data from one electronic device to another.

Control Character
See Print Control Characters.

Control Character Display
The Margins, Format menu command that "hides" or displays Print Control Characters on the screen.

Copy
The No-File menu command for copying a file on the same diskette, or the multi-function command for copying a block of text elsewhere in the same file.

CP/M
The operating system used by Attache.

Create
The process of opening a new document file.

CRT
Cathode Ray Tube, which is the display screen.

A-2

CTRL Key — Modifier key used in conjunction with other keys for activating multi-function commands and operating modes.

Cursor — The movable highlighted rectangle on the display screen that indicates the current typing position where "you" are "at" on the screen.

Cursor Movement Keys — See ARROW KEYS.

Cursor Column — The column where the cursor is located.

Cursor Line — The line where the cursor is located. screen.

Decimal Tab — A tab setting that provides for automatic vertical alignment of decimal points in a column of figures.

Delete — A command that provides for removal of data from a document file or from a diskette.

DEL Key — Used alone or in conjunction with other modifier keys for deleting data from a document file.

DIR — CP/M command for listing on the screen a directory of all files contained on a diskette.

Directory — A listing of the names of all files contained on a diskette.

Disk Drive — The piece of hardware that holds the diskette and transfers information from the diskette to the processing unit and back.

Disk Manager — Program that provides disk maintenance options (including Backup, Format, Sysdup, File Copy, Rename, Delete, View, and Print).

Diskette — Small magnetic "floppy" disk where computerized information is stored.

Document — See DOCUMENT FILE.

Document File — A single text (such as a letter of correspondence or report) that is created during word processing and stored on a diskette. Also referred to as a document or file.

A—3

Glossary

Document Name   The name that is used to identify a document file. The file name is user-specified when the file is opened, but may be changed at any time as a part of routine directory maintenance.

Dot Commands   Embedded commands that begin with a period in column one of a line and activate special effects for document customization.

Doublestrike   A Print Codes menu command for highlighting that prints the same character twice in the same column. The effect is slightly less than boldface because the second character is not offset.

Drive   See DISK DRIVE.

Edit   The process of revising a keyed document.

Embedded Command   An instruction that is integrated in the text, such as a Print Control Character or Dot Command.

End   A Multi-function command that signifies the end of a section of text being defined for a block operation.

ESC Key   Used alone in response to word processing prompts and messages, or as a modifier key in conjunction with the **CTRL** key to activate Set-Up Mode.

File   A collection of like records stored under a single file name, such as a document file containing a letter of correspondence or a report, or a command file containing program commands, executable programs, etc. See DOCUMENT FILE.

File Directory   A listing of all files contained on a diskette.

File Display Area The portion of the screen where text is keyed and displayed.

File Line   A specific line in a file, or the line where the cursor resides.

File Name   See DOCUMENT NAME.

Find   Multi-function command to search out a specific word or string of words in a document.

Find/Replace Again Multi-function command to search for the next occurrence of a specific word or words from a previous Find command.

Find String The word or words searched for during Find.

Fixed Tabs Tabs that are embedded in the file line by Fixed Tabbing Mode.

Fixed Tabbing Operating state normally used for non-document program editing where tabs are fixed as characters in the file line rather than the multiple spaced variable tabs used in word processing.

Flag Characters Characters that appear at the extreme right side of the screen to indicate line forming characteristics.

Floppy Disk See DISKETTE.

Footing Text Text that is instructed by a dot command to print below the bottom margin of the page.

Format Dimensions The physical dimensions of a page, including top and bottom margins, left and right margins, tab stops, and the number of lines per page.

Hard Hyphen A hyphen that is entered as a hyphen during word processing and always appears as a hyphen regardless of its location on the file line, as opposed to a soft hyphen, which is entered during paragraph reform and only appears on the printout if the word actually breaks a line at that point.

Hard Return A return that is entered from the keyboard and signifies a carriage return regardless of its location on the file line, as opposed to a soft return, which is entered by word wrap and overridden if further editing and paragraph reform change the carriage return requirements of the line.

Hard Space A space that is entered with the space bar and appears as a space regardless of its location on the file line, as opposed to a soft space, which is entered by justification and overridden if further editing and paragraph reform change the spacing requirements of the line.

Heading Text Text that is instructed by a dot command to print above the top margin of a page.

Glossary

Help,Dots Menu   The master help menu accessed from the multi-function keys that provides help menus for all other word processing menu functions and dot commands.

Help Level   A setting accessed from the multi-function keys that determines the amount of informational detail included in system prompts and help menus that are displayed on the screen.

Hide   Multi-function command that "undisplays" marked blocks of text used in block operations by changing the marked text from screen highlight to normal screen intensity.

Horizontal Scrolling   Rolls the screen left or right in increments of 22 columns when lines are longer than the width of the screen.

Hyphen Help   A Margins, Format menu commandthat allows entry of "soft" hyphens during paragraph reform.

Imbedded Command   An instruction that is integrated in the text, such as a Print Control Character or Dot Command.

Insert   A word processing function that allows typing of additional text between existing characters or words in a document.

Insert Mode   Operating state for text editing that allows text insertion by moving existing text in front of new text as it is keyed.

Justification   A word processing function that spreads spaces throughout a line of text so that both margins are vertically aligned.

K   Kilobyte, which is 1,024 characters.

LINE FEED Key   Used for indicating the end of a line during program editing, but not used for word processing.

Line Overprint   The Print Codes menu command that prints two lines one on top of the other for special effects.

Load Programs   The process of copying programs from diskette storage to the processing unit so that work can be done on the computer.

A-6

Logged Disk   The disk drive containing the diskette that is being used by the computer.

Lower Case   Small letters of type, as opposed to upper case (capital) letters.

MailMerge^{tm}   An optional companion software package to WordStar that integrates variable data such as names and addresses with previously prepared letters or other correspondence for mass mailing.

Margin   The boundary to either side, above, and below text on a printed page.

Margin Release   A multi-function command that allows typing beyond the normal left-right margins.

Margins,Format Menu   The word processing menu accessed from the multi-function keys that provides commands for changing margins and various format dimension default settings.

Markers,Repeat Menu   The word processing menu accessed from the multi-function keys that provides commands for place markers, repetitive commands, and unusual cursor movements and text deletions.

Menu   A table listing available command options.

Merge-Print^{tm}   See MAILMERGE.

Microjustification A printer function that spreads justified text and spaces evenly on the printed line so that the space between columns and words is fairly uniform.

Mode   One of a computer system's operating states or modes, which provide the means for keyboard multi-functions and other tasks where internal interpretations depend upon the active mode.

Modifier Keys   The **CTRL** and **SHIFT** keys, which are used alone or with each other in conjunction with the multi-function keys, arrow keys, or **DEL** key to perform a variety of tasks.

Move   The multi-function command that takes a block of marked text from one location to another in a document.

Multi-Functions   Commands that are described on the template above Attache keyboard and activated by pressing one or more modifier keys at the same time as one of the multi-function keys.

Glossary

Multi-Function Keys   Keys on the top row of the keyboard that have capabilities in addition to normal upper and lower case when used in conjunction with one or more keyboard modifier keys.

Naming   See DOCUMENT NAMES.

No-File Commands   Word processing commands that are initiated from the No-File menu.

No-File Menu   The main menu for word processing.

Non-Break Space   A Print Codes menu command to create a space that is treated like a normal character for line forming purposes. Non-break or "required" spaces are commonly used when two adjacent words must appear on the same line regardless of other considerations.

Non-Document File   A file created from the No-File menu in WordStar-Plus for purposes other than word processing. These files contain a different set of format defaults and line forming characteristics than document files and are used primarily for program editing.

Offset for Two Sided Printing   Special effect created with dot commands where variables such as headings and page numbers appear on the right side of odd-numbered pages and on the left side of even-numbered pages.

Open a File   The process of creating a new file or editing an existing file.

Operating System   The set of programs that run the computer hardware and interpret software commands. Attache uses an enhanced version of the CP/M operating system.

Overprint   Printing two or more characters in one column, or two or more lines one on top of the other on one line.

Page Break   A line of dashes that appear on the screen at the point where a new page will begin on the printed version of the document file.

Page Numbering   A word processing feature that allows page numbers to be printed, omitted, or selectively printed and omitted for each page within a document file.

Paragraph Reform   See REFORM.

Paragraph Tab   A Margins,Format menu command for setting the left margin temporarily at the first tab stop on a line.

PIP   CP/M command for transferring information, commonly used for copying files from one diskette to another.

Place Markers   Temporary position locators that may be embedded in a document file for ready access to a location or locations in the text.

Port   The connectors on the back of Attache for attachment of printer or communications cables.

Print   No-File menu command or multi-function command for printing a word processing document.

Print Codes Menu   The word processing menu accessed from the multi-function keys that provides commands for activating Print Control Characters.

Print Control Characters   Print Codes menu commands that are embedded in a document to specify special printing effects.

Printer Port   The connectors on the back of Attache for attaching a cable to transmit data to a printer.

Printing,Control Menu   The word processing menu accessed from the multi- function keys that provides commands for general directory maintenance and for getting out of a document.

Read File   The Printing, Control menu command for moving the contents of a file into the file being edited.

Reboot   The loading of CP/M programs and/or execution of diagnostics that occurs when the **RESET** key is pressed at the same time as the **SHIFT** key on the right side of the keyboard (also called a "cold" boot) or when **CTRL** and **C** are pressed at the same time (also called a "warm" boot).

Reform   The multi-function command that rejustifies text after editing.

Rejustify   To reform or "realign" to conform with format dimensions after editing has "scrambled" alignment, margins, spacing, etc.

Rename The CP/M command, WordStar-Plus No-File Menu command, or Printing,Control Menu command for changing the name of a document file.

Replace The multi-function command for finding a text string and replacing it with another text string.

Return The function that indicates the end of a line and moves the cursor to the beginning of the next line, as on a typewriter. In word processing, returns are either "hard" or "soft", depending on whether they were issued from the keyboard (hard) or by the word processing system (soft) during line forming.

RETURN Key Used for entering "hard" carriage returns in word processing and for "sending" keyboard commands to the computer.

Ruler Line Indicates on the screen the locations of the left and right margins and all tab stops in between.

Save A word processing function that transfers work from the processing unit to the diskette. Work is not completed and cannot be printed or accessed again unless it has been saved.

Save/Re-edit The word processing function that is activated when SAVE is called from the multi-function keys. When the transfer is complete, the cursor returns to the point in the document where Save was initiated from.

Save/Return CP/M The word processing function that is activated with a Printing, Control menu command to execute Save and then exit WordStar-Plus and return to A> or B>.

Save/Return to No-File Menu The word processing function that is activated with a Printing, Control Menu command to execute Save and then return to the WordStar-Plus No-File Menu.

Scratch Diskettes Diskettes which have been previously used that will be erased and used again.

Screenful The number of text lines on the screen display at one time.

Scrolling The word processing function that "rolls" lines of text or entire "screenfuls" of text up or down on the display screen.

Set Tab	Multi-function command for setting tab stops.
Set-up Mode	Operating state used for setting or changing screen brightness, keyboard click sound, volume level, baud rates, etc.
Shift Keys	Used for activating upper case as on a typewriter, and as modifier keys when used in conjunction with other multi-function keys.
Soft Hyphen	A hyphen created during Reform with Hyphen Help that will appear on the printout if the word requires hyphenation, but will be suppressed if further paragraph reforming eliminates the need for a hyphen.
Soft Hyphen Entry	A Margins, Format menu command that interprets all further hyphen entries as soft hyphens.
Soft Return	A return embedded in a text string by word wrap that will be automatically deleted by further paragraph reform if no longer required.
Soft Space	A space embedded in a text string by justification that will be automatically deleted by further paragraph reform if no longer required.
Software	The programs that instruct the computer at each step in the accomplishment of a task.
Special Effects	Word processing features such as underlining that serve to embellish the finished document.
SpellStar^{tm}	An optional companion software package to WordStar that automatically finds spelling errors in a file.
Standard Pitch	Prints ten characters per inch on the line.
Start	A multi-function command that signifies the beginning of a section of text being defined for a block operation.
STAT	CP/M command for listing (in kilobytes) the status of a diskette and its files.
Strikeout	A Print Codes menu command that prints "---" through specified strings of text in a document file.
Strikeover	The editing technique where new text is typed over existing text.

Subscript	The Print Codes menu command where specified text strings are printed slightly below the normal line.
Subscript Roll	The amount in 1/48 inch increments for subscript to print below the normal line.
Superscript	The Print Codes menu command where specified text strings are printed slightly above the normal line.
Superscript Roll	The amount in 1/48 inch increments for superscript to print above the normal line.
Sysdup	A program that copies the CP/M operating system from one diskette to another.
System	The necessary hardware and software for a "computer" that is functionally complete. Sometimes used in reference to the software package being used.
Tab Clear	Multi-function command for clearing tab stops.
TAB Key	Used for moving the cursor from one tab stop to another. With Insert Mode activated, text is moved ahead of the cursor to the next tab stop when the tab key is pressed.
Tab Set	Multi-function command for setting tab stops.
Terminal Mode	Operating state where Attache emulates a computer terminal.
Text Entry Display Screen	The display that appears on the screen when word processing is activated and the system is ready to accept text input.
Text String	A group of adjacent characters or words.
Top of Screen	The multi-function command that moves the cursor to the first line that appears on the screen.
Typeover	See STRIKEOVER.
Underline	The multi-function command for underlining specified text strings in a document.
Upper Case	Capital letters, as opposed to lower case letters.
Utility Program	A program used to assist in the operation and maintenance of the computer.

Variable Tab   Normal tabs for word processing, as opposed to "fixed" tabs used for program editing in non-document files.

Word Wrap   A word processing function that moves the cursor and the word being typed to the next line when the right margin is encroached during text entry.

Write File   The Printing, Control menu command for moving a block of marked text from the file being edited into another file on the diskette.

10-Key Mode   Operating state where certain keys emulate a 10-key pad for numeric entry.

Index

Function Index

Cursor Motion

[←]	one character			[→]
CTRL [←]	one word			CTRL [→]
SHIFT [←]	one word			SHIFT [→]
SHIFT CTRL [←]	end of line			SHIFT CTRL [→]
TOP OF SCREEN	top of screen	bottom of screen		MARKERS. REPEAT [X]
SHIFT CTRL [↑]	beginning of file	end of file		SHIFT CTRL [↓]

Scrolling

SHIFT [↑]	one line	SHIFT [↓]
CTRL [↑]	one "screenful"	CTRL [↓]
MARKERS. REPEAT [Z]	continuous scroll	MARKERS. REPEAT [W]

Delete

DEL	backspace
SHIFT DEL	cursor column
CTRL DEL	entire word
SHIFT CTRL DEL	entire line

CTRL Functions

1 - Markers,Repeat Menu

2 - Help,Dots Menu

3 - Margins,Format Menu

4 - Print Codes Menu

5 - Printing,Control Menu

6 - Insert Mode

7 - Reform

8 - Margin Release

9 - Set Tabs

0 - Clear Tabs

_ - Find

+ - Replace

CTRL SHIFT Functions

1 - Top of Screen

2 - Help Level

3 - Underline

4 - Save

5 - Print

6 - Start Block

7 - End Block

8 - Move Block

9 - Copy Block

0 - Hide Block

_ - Find/Replace Again

+ - Find/Replace Again

"NO-FILE" Menu

```
-------------------------- NO-FILE MENU --------------------------

D - Open a document file    P - Print a File    R - Run a program

N - Open a non-document file                    X - Exit to system

F - File directory          E - Rename a file

H - Set help level          O - Copy a file     M - Run MailMerge

L - Change Logged  Drive    Y - Delete a file   S - Run SpellStar

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

"MARKERS, REPEAT" Menu

```
-------------------- MARKERS, REPEAT MENU ----------------------
----------- Move Cursor ------------------|----- Scroll ---------
R - Beginning of file    C - End of file  |  W - Continuous down
B - Beginning of block   K - End of block |  Z - Continuous up
V - Last find or block                    |------ Delete --------
P - To previous position                  |  Y - To right of line
0-9 - To place marker 0-9                 | DEL - To left of line
Q - Repeat next command or key until another key is pressed.
------------------ Press Space Bar to Exit Menu ------------------
```

"MARGINS, FORMAT" Menu

```
-------------------- MARGINS, FORMAT MENU ----------------------
L-Set left margin    C-Center text on line    G-Set paragraph tab
R-Set right margin   F-Set ruler from line     S-Set line spacing
W - WordWrap off (ON)                     H - Hyphen Help off (ON)
J - Justification off (ON)                E - Soft Hyphen on (OFF)
D - Control Character Display off (ON)   T - Ruler Line off (ON)
P - Page Break Display off (ON)          V - Variable Tabs off (ON)
------------------ Press Space Bar to Exit Menu ------------------
```

"HELP, DOTS" Menu

```
--------------------- HELP, DOTS MENU ------------------------
H - Help levels explained        S - Status line explained
B - Paragraph reform explained   R - Ruler line explained
F - Character flags explained    M - Margins and tab summary
D - Dot command, print control   P - Place markers explained
I - Command index summary        V - Block operations explained
------------------ Press Space Bar to Exit Menu -------------------
```

"PRINT CODES" Menu

```
--------------------- PRINT CODES MENU ------------------------
B - Boldface     X - Strikeout         O - Non-break space
D - Doublestrike Y - Change ribbon color C - Printer pause here
V - Subscript    A - Alternate pitch   H - Overprint character
T - Superscript  N - Standard pitch    RETURN - Overprint line
------------------ Press Space Bar to Exit Menu -------------------
```

"PRINTING, CONTROL" Menu

```
-------------------- PRINTING,CONTROL MENU ---------------------
Y - Delete block       R - Read file          P - Print file
W - Write block        O - Copy file          E - Rename file
S - Save and re-edit            N - Column Mode On/Off
D - Save and return to No-File Menu  L - Change logged Disk Drive
X - Save and return to CP/M     F - File Directory on (OFF)
Q - Abandon current edit file    0-9 - Set or hide place marker
------------------ Press Space Bar to Exit Menu -------------------
```

Command Summary

Command Summary

Saving Files

Save/Re-edit .... SAVE
Save/Go to No-File .. PRINTING D
Save/Go to CP/M ..... PRINTING X
Abandon Edit .... PRINTING Q

Block Operations

Column Mode On/Off .. PRINTING N
Mark Block Beginning ..... START
Mark Block End .... END
Hide/Display Block .... HIDE
Copy Block .... COPY
Move Block .... MOVE
Delete Block .... PRINTING Y
Write Block to File . PRINTING W
Read Block from File PRINTING R

Print Control Characters

Alternate Pitch   PRINT CODES A
Boldface Begin/End PRINT CODES B
Doublestrike Begin/End " CODES D
Overprint Character .. " CODES H
Overprint Line PRINT CODE RETURN
Center Text ....MARGINS C
Print Pause ....PRINT CODES C
Ribbon Color Change .. " CODES Y
Standard Pitch (10) .. " CODES N
Strikeout Begin/End .. " CODES X
Subscript Begin/End .. " CODES V
Superscript Begin/End " CODES T
Underline Begin/End .. UNDERLINE

Dot Commands

Bidirect Print On/Off .... .BP
Microjustify On/Off......... .UJ
Page Offset .... .PO
Character Width .... .CW
Comment .... .IG
Conditional Page .... .CP
Footing .... .FO
Footing Margin .... .FM
Heading .... .HE
Heading Margin .... .HM
Line Height .... .LH
Bottom Margin .... .MB
Top Margin .... .MT
New Page .... .PA
Omit Page Number .... .OP
Start Page Number .... .PN
Page Number Column .... .PC
Sub/Superscript Roll .... .SR
Page Length .... .PL

Miscellaneous Commands

Interrupt a Command ..... CTRL U
Repeat Next Command .. MARKERS Q
File Directory On/Off PRINTING F
Change Logged Disk .. PRINTING L

Character Pitch

Pitch	Dot Command
5	.CW24
6	.CW20
7	.CW17
8	.CW15
10	.CW12 *
12	.CW10
15	.CW8
20	.CW6
24	.CW5
30	.CW4

* = default

Line Height

Lines Per Inch	Dot Command
2.0	.LH24
2.4	.LH20
2.6	.LH18
3.0	.LH16
4.0	.LH12
4.8	.LH10
5.3	.LH9
6.0	.LH8 *
6.8	.LH7
8.0	.LH6
9.6	.LH5

VALET GUIDE

for Attache and Attache S

Portable Computer Systems

Copyright

Disclaimer

Trademarks

Contents

Contents

How to USE this Guide

This manual describes Valet programs and functions, including alarms, screen dump, printer installation, calculator, and Set-up Mode. Each function is described here in a separate chapter.

Valet functions can be used with both the Attache (dual drive) and Attache S (single drive) models. The only requirement is that the file "VALET.VL2" resides on the diskette in Drive A.

The appendixes in the back of this guide contain a comprehensive glossary and cross-referenced index.

Valet Guide

Introduction

Introduction

Set-Up Mode

Alarms

Screen Dump

Printer Install

Calculator

Appendixes

Introduction

Overview

Valet is a software package that allows you to temporarily interrupt a program to perform other functions and then return directly to the program that was interrupted.

Valet functions range from simply displaying the date and time of day to performing complex mathematical calculations.

When the Valet function is complete, a single keystroke returns you to the interrupted program immediately.

How might you use this? Say you're working on a report using word processing and need to figure some percentages for inclusion in the text. You can quickly switch to Valet's calculator, make the required calculations, and just as quickly return to your report.

Continuing with this example, after you make the calculations and return to word processing, you could type in a table based on your calculations and then use Valet's screen dump to print what is displayed on the screen.

When the printout is complete, you can instantly return to word processing, with the cursor at the point of interruption in your report.

If you are writing your report and also trying to maintain your schedule, you can use Valet's alarm function to schedule alarms that will sound at specified times with messages to remind you of meetings or other obligations.

These are just a few of the many uses for Valet. The following pages describe Valet functions and the data files that make up Valet.

Valet Functions

There are two levels of Valet functions. The first level, Set-up Mode, allows you to interrupt a program to change the operating environment (screen brightness, keyboard volume, baud rates, etc.) and then return to the interrupted program.

The second level, Valet's Main Menu, allows you to interrupt a program to perform other tasks (calculator, screen dump, alarms, etc.) and then return to the interrupted program.

Set-Up Mode Functions

Valet's "Set-Up Mode" functions are described on the top row of the keyboard template above the number keys that activate them.

Set-up Mode functions are displayed on the screen with their current settings when you press **CTRL** and **ESC** simultaneously.

You may then press the appropriate number key for your desired function, or press **ESC** again to return to what you were doing before activating Set-Up Mode.

Set-up Mode functions are as follows:

o   Date and Time Display

o   Screen Brightness Control

o   Keyboard Volume Control

o   Keyboard Click Sound Control

o   Communications Port Baud Rate Selection

o   Printer Port Baud Rate Selection

o   Bell Sound Control

o   Access to Valet Main Menu

Main Menu Functions

Valet's "Main Menu" functions are accessed while in Set-Up Mode by pressing the **TAB** key.

The Main Menu displays options for using the calculator, alarms, printer installation, and screen dump functions.

The interrupted program remains on the screen when Valet is being used. When you are finished with the Valet function, Attache returns directly to the interrupted program.

Main Menu functions are as follows:

o   Alarm and Message Scheduling

o   Four-Function RPN Calculator

o   Screen Dump to Print Screen Contents

o   Printer Installation for Screen Dump

Warning about Write-Protect Tabs

Do not apply a write-protect tab to the Attache Software diskette if you will be using Valet's Main Menu functions. Valet's functions are contained in program files on the Attache Software diskette. Data is routinely written to these files as the Main Menu functions execute. Valet programs will abort if a write-protect tab has been applied to the diskette.

Valet's Set-Up Mode programs are contained in ROM and will still function if a write protect tab has been applied to the Attache Software diskette.

Valet Files

Two Valet files are included on the Attache Software diskette. These files are named VALET.VL2 and PRINTER.VL2 on the disk. Some Valet functions require these files are on the diskette inserted in Drive A at all times. Other Valet functions will work properly even if the files are not on the system diskette.

If the required Valet file is not on the diskette in Drive A when you attempt to access a Valet function (or if the diskette contains a write-protect tab), the following message appears:

Fatal Error on Disk x:
CR to Abort

Press **RETURN** to clear this message. Then insert a diskette in Drive A that contains the required Valet files and retry the operation.

VALET.VL2

The VALET.VL2 file contains programs for alarms, screen dump, printer install, and calculator. These programs will only work if the VALET.VL2 file is on the diskette inserted in Drive A.

If an alarm is scheduled and the Valet.VL2 file is not in Drive A when the alarm is set to sound, the alarm will be ignored.

However, if the alarm is set to sound when Attache is turned off, the alarm will sound when the unit is powered up and booted with the VALET.VL2 file on the diskette in Drive A.

PRINTER.VL2

The PRINTER.VL2 file provides printer settings for the install function. The calculator, alarm, and screen dump programs will function properly even if PRINTER.VL2 is not included on the diskette in Drive A.

Once a printer has been selected, the selection is inserted in the screen dump programs in the VALET.VL2 file. PRINTER.VL2 is not required again unless you want to change printer selection for the screen dump.

Set-Up Mode will function properly even if VALET.VL2 and PRINTER.VL2 are not on the diskette in Drive A when the function is activated.

Valet Guide
Set-Up Mode

Set-Up Mode

Overview

Set-up Mode controls functions on the top row of the keyboard template, displays the date and time, and provides access to the Valet Main Menu.

Set-up Mode may be activated at any time when the unit is powered up and CP/M has been booted, even while other programs are being used. The program that is interrupted remains on the screen while Set-Up Mode is activated. The screen returns to its previous function when you exit from Set-up Mode.

Values that you set in Set-Up Mode remain constant until you change them, even if the unit is powered down for long periods.

Activate Set-Up Mode

1. Press **CTRL** and **ESC** at the same time. The Set-Up Mode display will appear on the bottom two rows of the screen.

```
TIME        DATE  BRIGHT VOLUME  KEY    COMM  PRINTER  BELL
13:52:26  10/14    27      8     BEEP1  2400   1200     ON
```

2a. Press the number key that corresponds to the specific operation you want to perform, as described on the top row of the keyboard template and displayed at the bottom of the Set-Up Mode screen,

   or...

2b. Press **TAB** if you want to display the Valet Menu.

3. Press **ESC** again to exit Set-Up Mode and return the screen to its previous function.

Display Time and Date

The time and date are displayed when Set-Up Mode is activated. Both are displayed on the lower left corner of the Set-Up Mode screen. Time is shown on a 24-hour clock (in military hours:minutes:seconds) where 00:00:00 = midnight, 12:00:00 = noon, 18:00:00 = 6 p.m., etc.) The date is in month:date format.

Press **ESC** to exit from Set-Up Mode and return the screen to its previous function after displaying the time.

Change Screen Brightness

To increase the screen brightness, activate   Set-Up Mode and press 1.   To reduce the screen brightness, press **2**.   Keep pressing for more or less brightness.   Press **ESC** to return to the previous function.

Change Keyboard Volume

To increase the keyboard click volume, activate Set-up Mode and press 3. To reduce the keyboard volume, press **4**. Keep pressing for more or less volume.   Press **ESC** to return to the previous function.

Change Key "Click" Sound

To change the keyboard click sound, activate Set-up Mode and press 5.   A different click will be heard each time the key is pressed. Four different clicks are available, or you may turn the click sound off altogether.   Press **ESC** to return to the previous function.

Change Comm Port Baud Rate

To change the baud rate for the communications port, activate Set-up Mode and press **6** to increase the baud rate or **7** to decrease the baud rate.   The setting will be increased or decreased by one increment each time the key is pressed.   Press **ESC** to return to the previous function.

Change Printer Port Baud Rate

To change the baud rate for the printer port, activate Set-up Mode and press **8** to increase the baud rate or **9** to decrease the baud rate.   The setting will be increased or decreased by one increment each time the key is pressed.   Press **ESC** to return to the previous function.

Turn Bell on or off

To turn the keyboard bell on or off, activate Set-up Mode and press **0**.   If the bell is set to off it will change to on and vice versa. Press **ESC** to return to the previous function.

Valet's Main Menu

The Main Menu is displayed by activating Set-Up Mode and then
pressing the **TAB** key.

```
M A I N ||   CALCULATOR     SCREEN DUMP
M E N U ||    ALARMS   INSTALL   EXIT
```

The Main Menu appears on the bottom two lines of the display and
provides access to the alarms, calculator, screen dump, and
printer installation programs. As with Set-Up Mode, the program
that was interrupted remains on the screen while Valet's Main
Menu and other Valet programs are activated.

Selecting Valet Functions

Select programs from the Main Menu by pressing the arrow keys to
move screen highlighting the desired function. Then press **RETURN**
to activate that function. Exit from this menu and return the
screen to its previous function by pressing the **ESC** key.

You can also activate functions from the Main Menu by typing the
first letter of the function. For example, typing **C** with the
Main Menu on the display activates the calculator.

Bypassing the Main Menu

When you are familiar with the options provided by the Main Menu,
you can bypass this menu and go directly from Set-Up Mode to the
desired function by typing the letter that would select your
option, such as **C** for calculator or **A** for alarms.

For example:

> **CRTL ESC** and **TAB** and **C** displays the Set-Up Mode screen, then
> the Main Menu screen, and then activates the calculator
> program.

> **CTRL ESC** and **C** displays the Set-Up Mode screen and then
> activates the calculator program without displaying the Main
> Menu screen.

Set the Clock

A number of Valet functions access the battery-powered real-time clock, which operates even when Attache is turned off.

The clock must be set for Valet functions to work correctly. If the clock is not set, the message CLOCK NOT SET will appear where the time and date would normally appear when you activate Set-Up Mode.

Set or reset the clock when necessary by executing the following:

1. With the Attache Software diskette inserted in Drive A and the cursor at A>, type **TIME** and press **RETURN**. The Time Utility display will then appear on the screen.

> A t t a c h e ^{tm} Date and Time Utility
>
> Options: Current Status
>   Hrs. Mins. Yrs Mos Days Day of Week
>
> Set Time = T
> Set Date = D
> Exit Opt.
> or Prog.
>
> Option:

2. Type **T** and enter the time (in military hours/minutes) where 00:00:00 = midnight, 12:00:00 = noon, 18:00:00 = 6 p.m., etc. Your entry will be displayed for verification. Press **RETURN** if it is correct, or press **ESC** if it is not.

3. Type **D** and enter the date and day of the week (1 = Sunday, etc.) as prompted. Your entry will be displayed for verification; press **RETURN** if it is correct, or press **ESC** if it is not.

4. Press **ESC** when time and date have been properly set. Then activate Set-Up Mode to view the time and date display.

Valet Guide

Alarms

Introduction

Set-Up Mode

Alarms

Screen Dump

Printer Install

Calculator

Appendixes

Alarms

Overview

The alarms feature lets you schedule alarms that will display messages or initiate program commands. It's as simple as an alarm clock, only more capable.

Each scheduled alarm contains a message or command and a date and time for retrieval. When the scheduled time arrives, a low beeping tone is issued three times by the computer.

You answer the alarm by activating Set-Up Mode, and the message or command is displayed on the screen. If you do not answer the alarm, it will be repeated every four minutes until you respond.

If the machine happens to be turned off when the scheduled time arrives, the alarm will be sounded the next time the machine is powered up and CP/M is booted.

As many as six different alarms may be set at any one time, and each message or command can be up to 58 characters long. When an alarm sounds, you are given the option of changing the message or rescheduling the alarm for another time. The alarms feature also lets you schedule programs for execution at a later time.

Commands may be chained together using the SUBMIT facility of CP/M, so the computer can be instructed to begin working even while you are occupied elsewhere. This may be useful for scheduling data transmissions at "off hours" when line rates are lowest or for compiling programs when you are otherwise occupied.

The following pages provide complete instructions for scheduling and answering alarms.

Alarm Types

There are three different alarm types available - Message, Command, and Immediate Command. The function for each alarm type is as follows:

Message allows you to type a message that will be displayed when the alarm is answered.

Command Line allows you to type a command for execution of a program or programs at a later time, effectively "time bombing" program initiation.

This alarm requires operator response before the command is actually executed, and also provides an option for rescheduling if it is not convenient to initiate the command as scheduled.

Note: if the command is allowed to execute while another program is being used, the work in progress is lost.

Immediate Command is the same as Command except that the command is executed immediately at the scheduled time without requiring operator response and regardless of the status of other programs.

If you are using another program when this alarm sounds, the scheduled command will be executed and you will lose your work in progress. Use this option carefully to avoid losing important data.

The Alarm Menu

Alarm functions are accessed from Valet's Main Menu or by pressing **A** when Set-Up Mode is activated. When the alarms feature has been selected, the Alarm Menu appears on the bottom two lines of the screen.

M A I N || CALCULATOR   SCREEN DUMP
M E N U || ALARMS   INSTALL   EXIT

The Alarm Menu allows you to set alarms, review and/or reschedule alarms that have already been scheduled, or cancel alarms that are scheduled. The menu also identifies any of the six alarms that are already activated (Alarms in Use).

As with all Valet functions, the program that was interrupted remains on the screen while the Alarm Menu is displayed.

To activate the alarm feature, use the arrow keys to highlight ALARMS and then press **RETURN**. Press **ESC** if you want to return to the previous menu rather than proceed.

Bypassing the Alarm Menu

When you are familiar with the options provided by the Alarm Menu, you can bypass this menu and go directly from Set-Up Mode to the desired function by typing the letters that would activate the Alarm Menu (**A**) and your option, such as **S** for Set or **R** for Review.

Rather than display each menu, you can activate the "Set" option for alarms by pressing **CTRL** and **ESC** simultaneously and then **A** and **S** in sequence without waiting for the menus to be displayed.

Setting Alarms

To set an alarm, use the arrow keys to highlight SET on the Alarm Menu and press **RETURN,** or type S. If you decide not to schedule any alarms, press **ESC** to return to the Main Menu.

```
A L A R M   || SET  REVIEW  CANCEL || ALARMS IN USE
M E N U     ||   PRESS ESC TO EXIT ||
```

When the S option is selected, the current time, date, and available alarms will be displayed with a series of prompts about the alarm you are scheduling.

```
ENTER ALARM NUMBER: ALARMS AVAILABLE: 1  2  3  4  5  6
  11:07:20  10/15   PRESS ESC TO EXIT
```

Type a number from 1 to 6 from the list of available alarms to enter the alarm number. The next screen will prompt for the date and time to sound the alarm.

```
MOS (0-12):  DAY (0-31):  HRS (00-23):  MIN (00-59):
```

Answer these prompts as instructed below. If you make a mistake while typing, press the left arrow key or the **BACK SPACE** key to erase the previous entry and then type the correct data.

MOS: (01-12): Type the month (1-12) to schedule the alarm for.

DAY: (01-31): Type the day of the month (1 to 31) to schedule the alarm for.

HRS: (00-23): Type the hour to schedule the alarm for (in military time where 00 = midnight, 12 = noon, 18 = 6pm, etc.)

MIN: (00-59): Type the minute (0 to 59) to schedule the alarm for.

Note that leading zeros are not required, and the cursor moves automatically to the next field when an entry is made. In cases where the number is also the first digit for another entry (such as 1 = January, 11 = November), either use the leading zero or use the **RETURN** key to move the cursor to the next field.

When the time and date for scheduling the alarm have been correctly input, your entry is displayed along with the current time and date. In addition, you are prompted to set the alarm or exit to the Alarm Menu.

> **ENTER ALARM MOS: DAY: HRS: MIN:**
>   11:08:19 10/15   (S)ET OR PRESS ESC TO EXIT

Press **ESC** if you want to cancel what you've done so far and return to the Alarm Menu, or press S to set the alarm and proceed to the next menu (where you will identify the alarm type).

Enter Alarm Type

From this menu, you define the type of alarm to schedule. Instructions for setting and using each of the three alarm types follow.

> **ENTER ALARM TYPE:(M)ESSAGE (C)OMMAND LINE (IMM)EDIATE LINE**

Message Scheduling

At the prompt to ENTER ALARM TYPE, type **M** to enter a message.

> **ENTER MESSAGE: ||**
>   11:10:00 10/15 ||

The cursor appears at the first line of the message entry screen. Type the message, using both lines if necessary.

Press **ESC** when you are finished and the display returns to the Alarm Menu. Then press **ESC** to return to the Main Menu, and **ESC** again to return to the program that was interrupted by Valet. The message that was typed here will appear at the bottom of the display screen at the scheduled time when you respond to the alarm.

Command Line Scheduling

At the prompt to ENTER ALARM TYPE, type **C** to enter a command line.

ENTER COMMAND: ||
11:10:00 10/15 ||

The cursor appears at the first line of the message entry screen. Type the command. Use SUBMIT to chain more than one command if desirable.

Press **ESC** when you are finished and the display returns to the Alarm Menu. Then press **ESC** to return to the Main Menu, and **ESC** again to return to the program that was interrupted by Valet.

The command that was typed here will appear at the bottom of the display screen at the scheduled time when you respond to the alarm.

You may then reschedule the command line for a later time or allow it to execute as originally scheduled.

Immediate Command Scheduling

At the prompt to ENTER ALARM TYPE, type **IMM** to enter an immediate command line.

ENTER COMMAND: ||
11:10:00 10/15 ||

The cursor appears at the first line of the message entry screen. Type the command. Use SUBMIT to chain more than one command if desirable.

Press **ESC** when you are finished and the display returns to the Alarm Menu. Then press **ESC** to return to the Main Menu, and **ESC** again to return to the program that was interrupted by Valet.

Use this command only when you want to initiate processing while you are away from your computer. The command that was typed here will be initiated automatically at the scheduled time, regardless of what else the computer is doing.

If you are working with another program at the time of the alarm, the command you have scheduled here will execute anyway. Your current program will be immediately terminated and work in progress will be lost. Be careful when using this option!

Answering Alarms

When an alarm is heard, activate Set-Up Mode. The message or command line is displayed on the bottom two lines of the screen.

```
RESCHEDULE?   MSG   || MEETING W/ J. JACKSON AT 10AM
10:10:00      10/22 || BRING MANUSCRIPTS AND ARTWORK
```

You may then reschedule the alarm for a later time, change the message or command, change the alarm type, or simply "clear" the alarm by pressing the **ESC** key.

Unanswered alarms are repeated every four minutes until you respond. If the machine is turned off, the alarm will be heard when you turn the machine back on and boot CP/M.

Note: If the alarm is for an Immediate Command Line, the command will begin execution after the alarm has sounded.

If you are working on another program and are unsure about the alarm type when the alarm sounds, press **CTRL** and **BACK SPACE** at the same time.

If the alarm is an Immediate Command Line, it will be changed to a Command Line for four minutes rather than begin execution immediately.

This gives you time to save your work in progress if an immediate alarm type is pending and you are not ready for it.

Messages are "cleared" from the alarm system after you answer them unless you reschedule them.

If the message is for a repetitive type alarm (such as a luncheon appointment, staff meeting, etc.) it might be more convenient to reschedule it and revise the message rather than retype it later as a new alarm.

Command Lines are executed immediately after you answer them unless you reschedule them. If you are using another program when a scheduled command line is answered, reschedule it for a time when you are not using the machine.

Immediate Command Lines do not require intervention on your part. When an alarm sounds for an immediate command line, execution of the scheduled program begins automatically.

Immediate Command Lines should not be scheduled for times when you may be using your computer. The immediate command will supersede the program you are working on and your work in progress will be lost. If an immediate command line is pending during the time you are using the machine, reschedule the alarm for a later time.

Again, you may temporarily postpone an immediate command line by pressing **CTRL** and **BACK SPACE** simultaneously during the time when the alarm is sounding.

The alarm is then changed to a regular command line for a period of four minutes. During this time, you may activate Set-Up Mode to evaluate the alarm, reschedule the alarm, or initiate execution of the command by activating Set-Up Mode.

If no action is taken, the alarm reverts to its original status as an immediate command line and begins automatic execution of the scheduled command after four minutes.

Rescheduling Alarms in Advance

Alarms may be rescheduled in advance using the Review option from the Alarm Menu. Activate Set-Up Mode and the Alarm Menu, and then use the arrow keys to highlight REVIEW and press **RETURN.** The review function can also be activated by typing **R** from this menu.

```
A L A R M || SET  REVIEW  CANCEL  || ALARMS IN USE
M E N U    ||   PRESS ESC TO EXIT  ||    1
```

After the **R** option is selected, the alarm numbers for alarms that are set are displayed with a prompt to ENTER ALARM NUMBER.

```
ENTER ALARM NUMBER:      ALARMS SET:  1
12:20:20   10/15
```

Enter the number of the alarm you want to review or revise, or press **ESC** to return to the Alarm Menu. The selected alarm is displayed with the scheduled date and time, alarm type, message or command and a prompt to RESCHEDULE?

RESCHEDULE?   **MSG** || **MEETING W/ J. JACKSON AT 10AM**
   10/22   10:00 || **BRING MANUSCRIPTS AND ARTWORK**

If you do not want to reschedule the alarm, type **N**. You will then be prompted NEW MESSAGE? or NEW COMMAND?

If you do not want to change the message or command line, type **N** again. You will then return to the Alarm Menu.

To reschedule the alarm, type **Y** at the prompt RESCHEDULE?

   || 12/22 10:00 ||
   || 12:21:04 10/15 ||

The scheduled date and time will be displayed in the message area with the cursor positioned to the right. Use the arrow keys to move the cursor through the date and time fields and type your changes. Press **ESC** when you are finished.

The screen will then display the message or   command line and prompt NEW MESSAGE? or NEW COMMAND?

    NEW MESSAGE? || **MEETING W/ J. JACKSON AT 10AM**
   12:22:14 10/15 || **BRING MANUSCRIPTS AND ARTWORK**

If you do not want to change the message or command, type **N** to return to the Alarm Menu.

To change the message, type **Y**. The next display on the screen will be the prompt for alarm type. From this screen, you may change the alarm type or press **RETURN** to retain the same alarm type as before.

When the message screen appears, type your new message or command line and press **ESC** to return to the Alarm Menu. Then press **ESC** to return to the Main Menu, and **ESC** again to return to the program that was interrupted by Valet.

Rescheduling when the Alarm Sounds

When you answer an alarm at the scheduled time, the screen prompts RESCHEDULE? as it displays the message or command.

RESCHEDULE?   MSG || MEETING W/ J. JACKSON AT 10AM
10/22   10:00 || BRING MANUSCRIPTS AND ARTWORK

If you answer **N**, the message is cleared from the system and the alarm number is returned to the available alarm stockpile. If the alarm is for a command line, the command program will begin processing when you type **N**.

If you answer **Y**, The scheduled date and time will be displayed in the message area.

**   10/22   10:00**
10:00:45 10/22 ||

Use the arrow keys to move the cursor through the date and time fields and type your changes. Press **ESC** when you are finished.

The screen will then display the message or command line and prompt NEW MESSAGE? or NEW COMMAND?

NEW MESSAGE? || MEETING W/ J. JACKSON AT 10AM
12:22:14 10/15 || BRING MANUSCRIPTS AND ARTWORK

If you do not want to change the message or command, type **N** to return to the Alarm Menu.

To change the message or command line, type **Y** at the prompt for NEW MESSAGE? or NEW COMMAND?

The next display on the screen will be the prompt for alarm type. From this screen, you may change the alarm type or press **RETURN** to retain the same alarm type as before.

When the message screen appears, type your new message or command line and press **ESC** to return to the Alarm Menu. Then press **ESC** to return to the Main Menu, and **ESC** again to return to the program that was interrupted by Valet.

Cancelling Alarms

Alarms are automatically cancelled or "cleared" if you respond at
the scheduled time and elect to not reschedule them. Messages
are cleared from the system and command lines begin program
execution and then clear.

Alarms may be cancelled in advance by highlighting CANCEL on the
Alarm Menu and pressing **RETURN,** or by typing **C.**

```
A L A R M  || SET  REVIEW  CANCEL || ALARMS IN USE
M E N U    ||  PRESS ESC TO EXIT  ||
```

The screen prompts for the alarm number to cancel and then
prompts again CANCEL (Y)ES OR (N)O.

```
ENTER ALARM NUMBER: CANCEL (Y)ES OR (N)O:
   14:20:20   10/22
```

Type **Y** to cancel the alarm or **N** to return to the Alarm Menu
without cancelling the alarm.

Using SUBMIT to Chain Commands in the Alarm

Commands may be chained together in the command and immediate
command alarm types so that more than one program will execute
when the alarm sounds. This is done with the CP/M utility
program SUBMIT.

SUBMIT is a command that retrieves a given file from the disk.
The file that is retrieved contains a series of commands that are
then executed in sequence.

This file may be built using either WordStar-Plus or the ED.COM
facility of CP/M. The file must have the extension .SUB in order
to be recognized by SUBMIT (such as XYZ.SUB). To chain commands
for execution by an alarm, the command "SUBMIT filename" is keyed
as the command line in the alarm.

The name of the file to be retrieved is substituted for
"filename" (such as SUBMIT XYZ). Note that the .SUB extension is
assumed and is not required in the command.

The file being retrieved must reside on the diskette in Drive A.
When the scheduled alarm is activated, SUBMIT is called and
retrieves the specified file. The chained commands are then
executed from that file. When all commands have been executed,
the system is returned to CP/M and the cursor is at A>.

A more complex use of SUBMIT is to initiate and execute programs
that would normally require operator intervention to answer
screen prompts. This is accomplished with SUBMIT and the CP/M
Utility XSUB.

SUBMIT is used to call a file as described above, and XSUB is
used to insert the answers to operator prompts that will appear
when the program begins execution.

An example of how this might be used is to initiate a data
transfer to another computer at a time when the line rates are
reduced but no operator is present.

The Command File for SUBMIT

The file containing the actual commands may be built using either
WordStar-Plus or ED.COM. If you are using WordStar-Plus, create
the file as a "Non-Document File" by selecting the "N" option at
the No-File Menu.

Select a filename and use the extension .SUB (such as XYZ.SUB).
Then enter each command as a separate line in the file.

In the example that follows, PIP, STAT, and DIR will be keyed as
separate lines in the non-document file XYZ.SUB on the diskette
in the A Drive.

SUBMIT Example

In this example, SUBMIT XYZ will be used as the command line for
the alarm. When the alarm begins command execution, SUBMIT will
retrieve the file XYZ.SUB.

The file DOCFILE will then be copied from the diskette in Drive B
to the diskette in Drive A by PIP. The file directory (DIR) and
filesizes (STAT) will then be displayed and the system will then
return to A>.

    A:XYZ.SUB   FC=34   FL=3   COL=5

       PIP A:=B:DOCFILE [V]   <
       DIR   <
       STAT *.*   <

Using XSUB to Insert Variables in the SUBMIT File

Files with XSUB will automatically insert variables into the program as it executes, eliminating the need for operator intervention.

The naming and building process are the same as the file described on the previous page, but the command XSUB is entered on the first line in the file and a variable ($#, where "#" is the next number in sequence) is entered for each prompt that would require intervention.

In the example that follows, a communications program (called TRANCOM) will be used to transfer data to another computer.

XSUB Example

XSUB is entered as the first line in a file named ABC.SUB, followed by the name of the program to execute (TRANCOM) and a variable ($#) for each question that will appear on the screen when TRANCOM begins execution.

The actual answers to the questions represented by $1, $2, $3, $4, and $5 are entered in the alarm's command line. XSUB substitutes the next value on the command line for each $# line as operator prompts appear on the screen during program execution.

            A:ABC.SUB   FC=397   FL=3   COL=6

     XSUB   <
     TRANCOM   <
     $1   <
     $2   <
     $3   <
     $4   <
     $5   <

In this example, SUBMIT ABC 1 T DOCFILE Y 6 will be used as the command line for the alarm. When the alarm begins command execution, SUBMIT will retrieve the file ABC.SUB and XSUB will be called. XSUB will then call TRANCOM and program execution will begin.

When TRANCOM issues a screen prompt, XSUB looks to the next line in the command file ($1) and substitutes the next value in the alarm's command line (1) for that value. At the next question, XSUB substitutes the next value (T) in the command line for $2, and so on as each question appears on the screen.

The alarm that initiates chained program execution may be a Command Line or an Immediate Command Line, but not a Message type alarm. For the exercises that follow, an Immediate Command Line will be assumed.

After the alarm has been scheduled and set, the command line appears with a prompt to ENTER COMMAND:

```
ENTER COMMAND:    ||
11:10:00  10/15  ||
```

The command to enter here is SUBMIT, followed by the name of the file to retrieve. If that file contains XSUB, the answers to questions that will be substituted for variables ($#) in the file are also included here.

For example, to set an alarm that calls the file XYZ.SUB in the first example on the preceding pages, you would enter **SUBMIT XYZ** at the command line.

```
ENTER COMMAND:    || SUBMIT XYZ
1:10:00  10/15   ||
```

When the alarm sounds as scheduled, the file XYZ will be retrieved from the diskette in Drive A and the programs PIP, DIR, and STAT will be executed. Note that the file must reside on the diskette in Drive A to be retrieved by SUBMIT.

To call the file ABC (which contains XSUB) in the second example, you would enter **SUBMIT ABC 1 T DOCFILE Y 6** at the command line.

```
ENTER COMMAND:     || SUBMIT ABC 1 T DOCFILE Y 6
11:10:00  10/15   ||
```

When the alarm sounds as scheduled, the file ABC is retrieved from the diskette on Drive A and the TRANCOM program begins execution. As TRANCOM asks questions, XSUB inserts the next answer from the command line.

In the preceding example, a menu is displayed and option "1" is inserted for a computer to computer transfer. TRANCOM then asks if you want transfer or receive, and the answer "T" is inserted.

TRANCOM asks for the file to transfer and XSUB inserts "DOCFILE". TRANCOM then asks "Check Sum Transfer Y/N" and XSUB inserts the value "Y" from the command line.

Assuming that cable connections, baud rates, and other protocols are properly set between the two devices involved in the data transfer, TRANCOM then transfers the file DOCFILE to the receiving device.

When the transfer is complete, TRANCOM cycles back to its first menu and XSUB inserts the next value "6" from the command line. This number corresponds to the item on the TRANCOM menu to return the system to CP/M.

Note that the number of parameters that are passed from the command line to the .SUB file must match the number of $# variables in the .SUB file or the program will abort.

In the preceding example, the command line contained five values (1, T, DOCFILE, Y, 6) and the .SUB file contained five variable lines ($1, $2, $3, $4, $5).

Since TRANCOM returns to its first question when the transfer is complete, additional files could be transferred by including additional answers in the command line and inserting matching variable lines into the .SUB file.

For example, you could activate TRANCOM and transfer both DOCFILE and REPFILE with a single alarm. The alarm's command line would be as follows:

ENTER COMMAND: || SUBMIT ABC 1 T DOCFILE Y 1 T REPFILE Y 6
11:10:00   10/15 ||

The file ABC.SUB would now require nine variable lines ($1 through $9). XSUB would pass the parameters for the first transfer (1 T DOCFILE Y) and TRANCOM would transfer the file DOCFILE.

When the data transfer is complete, TRANCOM returns to its first menu. Since the command line now specifies option 1 rather than option 6, TRANCOM begins another computer to computer transfer. The remaining questions are answered in sequence (T, REPFILE, Y) and REPFILE is transferred.

When the transfer is complete, TRANCOM cycles back to its first menu and XSUB inserts the next value "6" from the command line.

This number corresponds to the item on the TRANCOM menu to return the system to CP/M and the cursor returns to A>.

Valet Guide
Screen Dump

Overview

The screen dump feature allows you to temporarily exit from the program you are working on to print all or part of the text or graphics that are currently on the display screen.

Screen dump provides four different options to allow maximum flexibility in printing and to support a large variety of printer types.

Screen Dump Options

Screen dump options are as follows:

Quick Text - works with most printers and is the fastest method for printing straight text without graphics, screen attributes, or alternate character sets. Only ASCII characters are printed.

Text Only - works with any of the printers identified in the Install option on Valet's Main Menu. All ASCII characters and Attache's alternate character sets (forms ruling, Greek upper and lower case, and math characters) are printed. Graphics characters are ignored.

Graphics Only - works with any of the printers identified in the Install option on Valet's Main Menu. All graphics characters are printed. ASCII characters, alternate character sets, and screen attributes are ignored.

Entire Screen - works with any of the printers identified in the Install option on Valet's Main Menu and is essentially a combination of the Text Only and Graphics Only options. All displayed characters are printed.

Activate Screen Dump

To print the contents of the display screen, activate Set-Up Mode and press the **TAB** key to display Valet's Main Menu.

When Set-Up Mode has been activated, graphics characters are "undisplayed" on the screen. Do not be alarmed by this. Graphics characters will still be printed and will be redisplayed when you exit from Valet.

```
M A I N ||  CALCULATOR    SCREEN DUMP
M E N U ||   ALARMS   INSTALL   EXIT
```

From the Main Menu, use the arrow keys to highlight SCREEN DUMP and press **RETURN**, or type S. The Print Menu will then appear on the bottom two lines of the screen, with your installed printer selection identified at the left side of the first row.

```
E P S O N  || QUICK TEXT    TEXT ONLY    GRAPHICS ONLY
PRINT MENU ||    ENTIRE SCREEN        PRESS ESC TO EXIT
```

Note: prior to making a selection from the Print Menu, you can send line feeds to the printer to align the paper properly by pressing **LINE FEED**.

Use the arrow keys to highlight your selection and then press **RETURN**, or type the letter that corresponds with your desired option. The contents of the screen will be printed according to the option that was selected. Press **ESC** to return to Valet's Main Menu without printing.

The Main Menu appears on the screen when printing is completed. You may then select an option from that menu to continue Valet processing or press **ESC** to return to the interrupted program.

Printers

Note that the Text Only, Graphics Only, and Entire Screen options will only work with a printer that has graphics capability and has been "installed" for use with Valet's Screen Dump. Installation instructions are detailed in the next section of this manual.

Virtually any printer may be used to print from the screen with the Quick Text option. This option ignores graphics, alternate character sets, and screen attributes.

Bypassing the Print Menu

When you are familiar with the options provided by the Print Menu, you can bypass this menu and Valet's Main Menu and go directly from Set-Up Mode to the desired function.

This is done by typing the letters that would activate Screen Dump's Print Menu (**S**) and your option, such as **Q** for Quick Text or **G** for Graphics Only.

For example, you can activate the "Quick Text" option for Screen Dump by pressing **CTRL** and **ESC** simultaneously and then **S** and **Q** in sequence without waiting for the menus to be displayed.

Valet Guide
Printer Installation

Introduction

Set-Up Mode

Alarms

Screen Dump

Printer Install

Calculator

Appendixes

Printer Installation

Overview

There is currently no industry standard among printer manufacturers for the way dot graphics codes are interpreted by printer software or the way bits are aligned on the printer head.

Because of this, Valet's screen dump program must be customized for each printer that is used for printing screen graphics. This is done through the Install option on Valet's Main Menu.

The Install program tells Attache which printer-type is being used for printing graphics from the screen and sets escape codes and other printer protocol automatically for that specific printer.

The following pages provide complete instructions for installing printers for use with Valet's Screen Dump feature.

Printers

Valet's screen dump feature currently supports graphics printer lines from five different manufacturers. These printers are as follows:

Epson (MX-100 and MX-80 with Graphtrax option)

Okidata (ML-83, ML-84, and ML-84 Step 2 with Graphics option)

Axiom (IMP Series)

C. Itoh (8500 Series)

Anadex (DP-9000 and DP-9500 series)

Mannesmann (MT160)

Note: even if your printer is not capable of printing graphics or is not yet supported for printing graphics from the screen using Valet, you can still use the screen dump feature to print ASCII character text (but not graphics, alternate character sets, or display screen attributes).

Valet is factory set to default to the Epson printer. This setting may be changed using the Install option on Valet's Main Menu. If your printer is not listed above, use Epson as the installed printer.

Printer Settings

Printers used with the screen dump feature should be set to
receive eight-dot bits. Auto Line Feed and Parity settings
should be "off."

Printer baud rate must be the same as the setting for Attache's
printer port baud rate. Use Valet's Set-Up Mode to match the
printer port baud rate with that of the printer.

Activating Install

To select a printer for printing graphics, activate Set-Up Mode
and press the **TAB** key to display Valet's Main Menu.

```
M A I N ||   CALCULATOR     SCREEN DUMP
M E N U ||    ALARMS   INSTALL   EXIT
```

From Valet's Main Menu, select option **I** to install a printer.
The Install Menu will then appear on the screen.

```
I N S T A L L  || EPSON    AXIOM    OKI  83A    OKI 84 STEP 2
M E N U        || ANADEX   C.ITOH   OKI 84      MANNESMANN
```

Type the letter shown in parenthesis for your printer selection
and then press **ESC** to return to the Main Menu. You may then
select an option from that menu to continue Valet processing or
press **ESC** again to return to the interrupted program.

Valet Guide

Calculator

Calculator

Overview

Valet's RPN calculator function provides the capability for temporarily exiting from a program, performing a quick (or complex) calculation, and returning directly to the interrupted program.

Using the RPN logic system, Valet's calculator allows you to perform complex calculations easily. RPN, which is short for Reverse Polish Notation (really!), is used by Hewlett-Packard and other pocket calculator manufacturers. If you are not familiar with RPN, the exercises in this chapter will step you through a number of calculations using this logic system.

Besides the four basic functions (add, subtract, multiply, and divide), Valet's calculator supports scientific notation and uses an eight-level automatic register stack as a last-in-first-out temporary storage area for storing operands and intermediate results.

Eight different memory registers may also be maintained manually. Four of these registers are retained for storing constants between calculator sessions; the other four are cleared when you exit from the calculator.

Since Valet's calculator is not limited by a one-line display, the stack and memory registers are displayed and updated on the screen as an operation is performed. Numbers are displayed to 14 digits and fractions to 13 digits before conversion to scientific notation.

Activate the Calculator

Like other Valet functions, the calculator is accessed from Valet's Main Menu. The Main Menu is accessed by activating Set-Up Mode and pressing the **TAB** key. Then press **C** to select the calculator function.

        M A I N || CALCULATOR   SCREEN DUMP
        M E N U || ALARMS   INSTALL   EXIT

Bypassing the Main Menu

Like other Valet functions, the calculator may be activated directly from Set-Up Mode without displaying the Main Menu. To bypass the Main Menu, activate Set-Up Mode and then press **C** to activate the calculator.

Exiting from the Calculator

When your calculation is complete, press the **ESC** key to return to the Main Menu, and then press **ESC** again to return to the program that was interrupted for Valet processing.

Number Keys

10-Key Mode is automatically activated when the calculator is selected, and automatically deactivated when you exit from the calculator program.

When 10-Key Mode is activated, certain letter keys are interpreted as numbers or math functions to emulate a 10-Key pad on the Attache keyboard.

10-Key Mode Key Conversion

M or 0 = 0

J or 1 = 1

K or 2 = 2

L or 3 = 3

U or 4 = 4

I or 5 = 5

O or 6 = 6

7 = 7

8 = 8

9 = 9

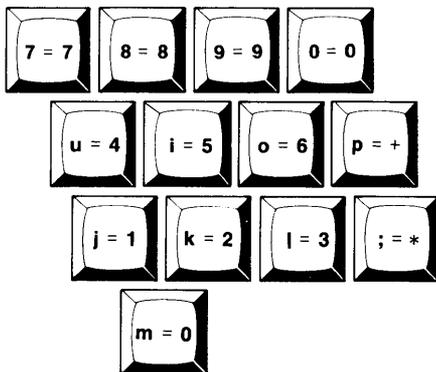7 = 7   8 = 8   9 = 9   0 = 0

u = 4   i = 5   o = 6   p = +

j = 1   k = 2   l = 3   ; = *

m = 0

To enter numbers for calculator operation, you can use either the letter keys from the simulated 10-key pad or the number keys on the top row of the keyboard, or both interchangeably.

Function Keys

Add, subtract, divide, and multiply functions can also be performed either from the simulated 10-key pad or from the normal typewriter keys.

On the 10-key pad, the letter P indicates addition and the semicolon key indicates multiplication. These keys may be used interchangeably with the typewriter keys for addition (+) and multiplication (*). Calculator functions are activated as follows:

Minus = −   Multiply = ; or *   Plus = P or +   Divide = /

Additional Calculator Keys

In addition to the number keys and math function keys, the following keys may be used for Valet's calculator:

.	Decimal Point.
ESC	Exits the calculator and returns to the Main Menu.
RETURN	The Enter key. Separates numbers in a calculation and rolls figures up the stack.
UP ARROW	Same as the **RETURN** key.
DOWN ARROW	Rolls figures down the stack.
LEFT ARROW	Moves the cursor to the left.
BACK SPACE	Same as the **LEFT ARROW** key.
X	Exchange. Swaps values in the X and Y registers.
N	Negate. Changes the sign in the current entry or X Register from + to − or − to +.
S	Store. Copies the value in the X Register to a specified memory register.
C	Clear. Clears the X Register or the current entry.
R	Recall. Places the contents of a specified memory register in the X Register and bumps the previous contents of the X Register to the Y Register.
T	Recalls the value that was displayed prior to the last function and bumps the previous contents of the X Register to the Y Register.
E	Enters scientific notation.

RPN Logic System

RPN operates on a very simple theory - every calculation can be reduced to a series of two-number operations. For each operation, both numbers must be in the calculator before the function is defined.

This is quite easy to learn. The first number is keyed and **RETURN** is pressed to separate the first number from the second number.

The second number is then keyed and a function key is pressed to define the operation (add, subtract, multiply, or divide).

The function is performed automatically and immediately on the two numbers when the function key is pressed.

For example, 2 + 3 is performed by pressing **2 RETURN 3 +** in sequence and the answer **5** is displayed.

No matter how complex the calculation, RPN handles it as a series of two-number operations. You only work with one function at a time.

For complex calculations, intermediate results are automatically stored and retrieved on a last-in first-out basis.

Even with the most complex calculations, you still only work with one function at a time, just as you would if working with pencil and paper.

Calculator Display

The calculator is displayed on the screen with the cursor positioned at the numeric entry position for the X Register, which is located at the bottom of the stack on the lower left part of the display screen.

T. REG.	0.00		MEM. 8	0.00
R. REG.	0.00		MEM. 7	0.00
S. REG.	0.00		MEM. 6	0.00
Q. REG.	0.00		MEM. 5	0.00
P. REG.	0.00		MEM. 4	0.00
Z. REG.	0.00		MEM. 3	0.00
Y. REG.	0.00		MEM. 2	0.00
X. REG.	0.00		MEM. 1	0.00

Do not be intimidated by the display. While Valet's calculator is quite sophisticated, the number of registers that you actually use depends entirely on the complexity of your calculations.

Most calculations require only the X and Y registers on the display. Numbers are represented in all registers with up to 14 digits displayed. Fractions are represented to 13 digits.

Values requiring even more digits are represented by scientific notation on the display up to E 125 before an overflow condition occurs. An underflow condition occurs if the value is less than E -127.

X and Y Registers

For simple calculations, the X and Y Registers are the only areas of the display where figures appear. The X register is the "active" area for the current entry that is being keyed, and also serves as the first storage register in the stack.

```
Y. REG.  |  0.00
X. REG.  |  0.00
```

When you key a number, it appears as the current entry on the X Register line of the display. When **RETURN** or a function key is pressed, the number is "stored" in the X Register and another number can be keyed as the current entry.

For example, if you key **100** and press **RETURN**

```
Y. REG. | 0.00

X. REG. | 100       (first number)
```

The number you keyed was displayed as the current entry in the active area when it was keyed. When **RETURN** was pressed, the number was stored in the X Register.

When a second number is keyed, that number appears as the current entry on the X Register line of the display and the first number is "bumped" up to the Y Register.

For example, if you key **50**

```
Y. REG. | 100       (first number)

X. REG. | 50        (second number)
```

The first number is now stored in the Y Register and the second number is displayed in the active area of the X Register.

Calculator

When a function key is activated, the function is performed on
the numbers displayed in the X and Y registers. The result of the
calculation is stored in the X Register.

For example, if you press the + key

    Y. REG. | 0.00   (cleared)

    X. REG. | 150   (the result of the calculation 100 + 50)

Notice in the example above that the X Register is highlighted on
the display before any entries are made, but when a number is
keyed, the new number is not highlighted. Then when the value is
"stored" in the X Register, it appears highlighted again.

Highlighting differentiates between the current entry and the
stored value in the X Register. The stored value is highlighted
and the current entry appears without screen highlighting.

Note: the result of a calculation appears highlighted because
that value is now stored in the X Register. Additional
operations could be performed using this result since that value
is now stored in the X Register.

When another number is keyed, the result of the previous
operation becomes the first number in the next calculation and is
bumped to the Y Register, just as the first number was bumped
when the second number was entered in the previous example.

For example, if you key **10**

    Y. REG. | 150   (the previous result becomes the new first
                                    number)

    X. REG. | 10   (the new second number)

and then press *****

    Y. REG. | 0.00   (cleared)

    X. REG. | 1500   (the result of the calculation 150 x 10)

The calculation has now expanded to 100 plus 50 times 10. You
could continue chaining operations like this using only one
function and two numbers at a time.

For example, you could divide the result of the previous
calculation by three. The problem is now 100 plus 50 times 10
divided by 3.

Key 3 and press **/**

> **Y. REG. | 0.00**   (cleared)
>
> **X. REG. | 500**   (the result of the calculation 1500 / 3)

The answer **500** is displayed (and stored) in the X Register.

For more complex calculations, you will still be working with only one function and two numbers at a time. Intermediate results will be moved farther up the stack and then retrieved automatically after additional two-number calculations have been made.

Each intermediate result will be made independent of the other calculations and stored. Calculations will then be made on the results of these independent operations.

The role played by the **RETURN** and function keys in moving values up and down the stack will become clear as the sample problem is worked out on the following pages.

The **RETURN** key will indicate a new set of values that are being used independently of the previous calculations and move existing values up the stack.

The function keys (add, subtract, multiply, and divide) will perform operations on the values in the X and Y Registers. Values will move back down the stack automatically as X and Y become a single new value (the result of the operation).

Other Registers

Directly above the X and Y Registers on the calculator display are registers labelled Z, P, Q, R, S, and T.

     T. REG. | 0.00
     S. REG. | 0.00
     R. REG. | 0.00
     Q. REG. | 0.00
     P. REG. | 0.00
     Z. REG. | 0.00
     Y. REG. | 0.00
     X. REG. | 0.00

Calculator

These registers are also in the stack. When a calculation
requires storing intermediate results in addition to those stored
in the X and Y registers, values are stacked in ascending order
in these registers and then retrieved on a last-in first-out
basis as calculations are made.

Continuing with the example on the previous pages, the X Register
now displays 500 (which is the result of 100 + 50 x 10 / 3).

    Y. REG. | 0.00   (cleared)

    X. REG. | **500**   (the result of the calculation 1500 / 3)

A more complex calculation will require storing values for
retrieval and inclusion in the calculation at a later time.
Suppose that the total problem is as follows:

$$\frac{(100 + 50) \times 10 / 3}{25} \times \frac{(5 \times 30)}{2}$$

So far, the top half of the left side of the problem (100 + 50 x
10 / 3) has been calculated and the result (500) is stored in the
X Register.

The next step is to divide this value by 25.

Key **25**

    Y. REG. | **500**   (the previous result)

    X. REG. | 25   (the new number)

and then press **/**

    Y. REG. | **0.00**   (cleared)

    X. REG. | 20   (the result of the calculation 500 / 25)

The previous result (500) is bumped to the Y Register when the
new number (25) is keyed. The function (/) then divides 500 by
25. The result (20) is then displayed (and stored) in the X
Register.

The next step in the problem requires a calculation (5 x 30) that
is independent of the previous calculations, but the results of
the previous calculation must be retained for inclusion at a
later time.

The **RETURN** key will separate the previous result from the current calculation by bumping that value up the stack.

Key 5

    Y. REG. | 20   (the previous result)

    X. REG. | 5   (the new number displayed as the current entry)

and then press **RETURN**

    Y. REG. | 20   (the previous result)

    X. REG. | 5   (the new number stored in the X Register)

Notice that "5" became highlighted when you pressed **RETURN**. This indicates that "5" is now the stored value in the X Register (previously 5 was the displayed value). The intermediate (20) was bumped to the Y Register when the current entry was keyed.

In all of the previous calculations, the second number was keyed and then a function was performed. The value that was actually stored in the X Register was the result of the operation, not the second number.

By pressing **RETURN** instead of a function, you have indicated that a new calculation is being made independent of the previous operations.

The new value in the X Register (5) is the first number in the new calculation and the second number (30) will be entered next.

Key **30**

    Z. REG. | 20   (the intermediate result from prior operations)

    Y. REG. | 5   (the first number in the new operation)

    X. REG. | 30   (the second number in the new operation)

The first number in the new calculation has been bumped to the Y Register and the previous intermediate that was in the Y Register is now bumped to the Z Register. The second number in the new calculation is the current entry.

Calculator

Press *

    Z. REG. | **0.00**   (cleared)

    Y. REG. | 20   (the intermediate result from prior
                               operations)

    X. REG. | 150   (the result of the calculation 5 x 30)

The result of the calculation (5 x 30) is now stored in the X Register and the previous intermediate that was in the Z Register (20) has moved down the stack to the Y Register.

Look again at the calculation in its entirety.

$$\frac{(100 + 50) \times 10 / 3}{25} \times \frac{(5 \times 30)}{2}$$

The left side of the problem has been solved and the result (20) is stored in the Y Register. The top half of the right side of the problem has been solved and the result (150) is stored in the X Register.

Completing the calculation will now require dividing the contents of the X Register by 2 and multiplying that result by the contents of the Y Register.

Key 2

    Z. REG. | 20   (the intermediate result from prior
                               operations)

    Y. REG. | 150   (the result of the calculation 5 x 30)

    X. REG. | 2   (the current entry)

The contents of the X and Y registers are now bumped up to the Y and Z Registers and the number just keyed is the current entry.

Press /

    Z. REG. | **0.00**   (cleared)

    Y. REG. | 20   (the intermediate result from prior
                               operations)

    X. REG. | 75   (the result of the calculation 150 / 2)

The result of the calculation (150 / 2) is now stored in the X Register and the previous intermediate that was in the Z Register (20) has moved down the stack to the Y Register.

All that is left in the calculation is to multiply the contents of the X Register by the contents of the Y Register.

Press *

    Z. REG. | 0.00   (cleared)

    Y. REG. | 0.00   (cleared)

    X. REG. | 1500   (the result of the calculation 75 x 20)

The result (1500) is now stored in the X Register and the Y Register is cleared. As you can see, it would take a fairly complex problem to use more than the X, Y, and Z registers for storing intermediate results.

Memory Registers

The eight registers on the right side of the calculator display are the memory registers. These registers allow you to manually store and recall constants or set aside numbers for use in later calculations.

    | MEM. 8 | 0.00
    | MEM. 7 | 0.00
    | MEM. 6 | 0.00
    | MEM. 5 | 0.00
    | MEM. 4 | 0.00
    | MEM. 3 | 0.00
    | MEM. 2 | 0.00
    | MEM. 1 | 0.00

Values placed in the top four memory registers (5 - 8) are retained even when the unit is powered down. Several values are preset in these registers but may be changed at any time.

Values in the lower four registers (1 - 4) are cleared automatically when you exit from the calculator function.

Storing Numbers

The memory registers provide a convenient permanent storage area for retaining constants that are used frequently and for temporarily storing numbers that will be used again in the same session with the calculator.

Numbers may be copied from the X Register to any of the eight memory registers on the right side of the display by pressing the **S** key. The display will prompt **STORE** when **S** is pressed. Type the number of the register to copy to (1 to 8) and the value is copied to that register.

Figures stored in registers one through four are automatically cleared when you exit from the calculator.

Figures stored in registers five through eight are permanently stored until another entry is stored in the same register.

Storing an entry in a register that already has numbers stored in it results in the new entry overwriting the old entry.

Recalling Numbers

Numbers may be copied from any of the eight memory registers to the X Register by pressing the **R** key.

The display will prompt **RECALL** when **R** is pressed. Type the number of the register to recall (1 to 8) and the value is retrieved from that register.

The value that is recalled will be stored in the X Register, and the value that was previously stored in the X Register (if any) will be bumped to the Y Register.

Order of Entry

For complex problems with brackets inside of brackets, a good rule of thumb is to work from the innermost brackets first, just as you would if working the problem manually.

Negative Numbers

To type a negative number, enter the number and then press the **N** key. The number is changed to a negative number on the display. Pressing **N** again changes the number back to positive.

Clear the Current Entry

If you are in the process of entering a number, pressing **C** will clear the current entry. If you are not in the process of entering a number, pressing **C** will clear the X Register.

Overflow and Underflow

When the result of a calculation is larger than 14 digits, the figure is displayed using scientific notation.

When the result is even greater than scientific notation's upward limit (E 125), an overflow occurs. The display shows all 9's and E 126. This means you have exceeded the display capabilities of the calculator. Clear the entry to correct this condition.

Conversely, if the result of a calculation is so small that all thirteen digits on the display are zero, the figure is displayed using scientific notation.

If the number is even less than scientific notation can display (E -127), an underflow occurs. The display then shows all 9's and E 126. This means you have exceeded the display capabilities of the calculator. Clear the entry to correct this condition.

Roll the Stack Up or Down

Pressing the **RETURN** key or the **Up Arrow** Key will roll the contents of the stack upward.

For example, the contents of the Y Register will be bumped up to the Z Register and the contents of the X Register will be bumped up to the Y Register.

Pressing the **Down Arrow** key will roll the contents of the stack downward. For example, the contents of the Y Register will be moved to the X Register, and the contents of the Z Register will be moved to the Y Register.

Recall X Register

Press **T** to recall the contents of the X Register from the last operation. The number that is displayed will be the value that was displayed prior to the performance of a function.

For example, if you add 2 + 3, the result 5 is stored in the X register. If you press **T**, the value that was previously displayed (3) will be recalled to the X Register and the value 5 will be bumped up the stack to the Y Register.

Exchange X and Y Registers

Pressing the **X** key exchanges the contents of the X Register with the contents of the **Y** Register. What was in the X Register is now in the Y Register and vice versa. Pressing **X** again returns the registers to their original status.

Scientific Notation

Scientific notation is engaged by pressing **E.** This is a convenient numbering system for very large numbers or very small fractions.

Valet's calculator is capable of both displaying numbers in scientific notation and making calculations using numbers entered under scientific notation.

Under scientific notation, the value E on the display stands for the power of ten to the power represented by the next number keyed.

For example, rather than typing 2500000 for a calculation, you could just type 25 E 5. This is 25 times ten to the fifth power. The number will be converted to 2500000.

When using scientific notation, enter the first number (25 in the example above) and then press **E.** When E is displayed on the screen, key the second number (5 in the example above).

Sample Problems

Example # 1:   2 + 3   (2 plus 3)

You key:

2	Current Entry = 2	displays current entry (2)
RETURN	X Register = 2	stores current entry (2) in X REG.
3	Y Register = 2 Current Entry = 3	displays current entry (3) and bumps X REG. (2) to Y REG.
+	Y Register = 0 X Register = 5	adds 2 plus 3, stores result in X REG. and clears Y REG.

Example # 2:   2 - 3   (2 minus 3)

You key:

2	Current Entry = 2	displays current entry (2)
RETURN	X Register = 2	stores current entry (2) in X REG.
3	Y Register = 2 Current Entry = 3	displays current entry (3) and bumps X REG. (2) to Y REG.
−	Y Register = 0 X Register = -1	subtracts 3 from 2, stores result in X REG. and clears Y REG.

Example # 3:   2 x 3   (2 times 3)

You key:

2	Current Entry = 2	displays current entry (2)
RETURN	X Register = 2	stores current entry (2) in X REG.
3	Y Register = 2 Current Entry = 3	displays current entry (3) and bumps X REG. (2) to Y REG.
*	Y Register = 0 X Register = 6	multiplies 3 times 2, stores result in X REG. and clears Y REG.

Calculator

Example # 4:   2 / 3   (2 divided by 3)

You key:

    2   Current Entry = 2   displays current entry (2)

    RETURN   X Register = 2   stores current entry (2) in X REG.

    3   Y Register = 2   displays current entry (3) and
           Current Entry = 3   bumps X REG. (2) to Y REG.

    /   Y Register = 0   divides 2 by 3, stores result in X
           X Register = .6666666666666   REG. and clears Y REG.

Example # 5:   (2 + 3) x 4   (2 plus 3 times 4)

You key:

    2   Current Entry = 2   displays current entry (2)

    RETURN   X Register = 2   stores current entry (2) in X REG.

    3   Y Register = 2   displays current entry (3) and
           Current Entry = 3   bumps X REG. (2) to Y REG.

    +   Y Register = 0   adds 2 plus 3, stores result in X
           X Register = 5   REG. and clears Y REG.

    4   Y Register = 5   displays current entry (4) and
           Current Entry = 4   bumps X REG. (5) to Y REG.

    *   Y Register = 0   multiplies 5 times 4, stores
           X Register = 20   stores result in X REG. and clears
                            Y REG.

Example # 6:
$$\frac{(2 + 3) \times (4 - 1)}{5} \times (14 \times 4)$$

You key

    2   Current Entry = 2   displays current entry (2)

    RETURN   X Register = 2   stores current entry (2) in X REG.

    3   Y Register = 2   displays current entry (3) and
           Current Entry = 3   bumps X REG. (2) to Y REG.

| + | Y Register = 0 | adds 2 plus 3, stores result in X |
| | X Register = 5 | REG. and clears Y REG. |

| **4** | Y Register = 5 | displays current entry (4) and |
| | Current Entry = 4 | bumps X REG. (5) to Y REG. |

| **RETURN** | Y Register = 5 | stores current entry (4) in X Reg. |
| | X Register = 4 | |

1	Z Register = 5	displays current entry (1) and
	Y Register = 4	bumps X Reg. (4) to Y REG. and Y
	Current Entry = 1	REG. (5) to Z REG.

-	Z Register = 0	subtracts 1 from 4, stores result
	Y Register = 5	(3) in X Reg., moves Z Reg. (5)
	X Register = 3	to Y REG. and clears Z REG.

*	Z Register = 0	multiplies 5 times 3, stores
	Y Register = 0	result (15) in X REG. and clears
	X Register = 15	Y REG.

5	Z Register = 0	displays current entry (5) and
	Y Register = 15	bumps X REG. (15) to Y REG.
	Current Entry = 5	

/	Z Register = 0	divides 15 by 5, stores result (3)
	Y Register = 0	in X REG. and clears Y Reg.
	X Register = 3	

14	Z Register = 0	displays current entry (14) and
	Y Register = 3	bumps X REG. (3) to Y Reg.
	Current Entry = 14	

RETURN	Z Register = 0	stores current entry (14) in X
	Y Register = 3	REG. and bumps X REG. (3) to Y
	X Register = 14	REG.

4	Z Register = 3	displays current entry (4) and
	Y Register = 14	bumps X REG. (14) to Y REG. and
	Current Entry = 4	Y REG. (3) to Z REG.

*	Z Register = 0	multiplies 14 times 4, stores
	Y Register = 3	result (56) in X REG., moves Z
	X Register = 56	REG. to Y REG. and clears Z REG.

*	Z Register = 0	multiplies 3 times 56, stores
	Y Register = 0	result (168) in X REG., and
	X Register = 168	clears Y REG.

Valet Guide

Appendixes

Glossary

A>   Prompt which appears at the first column of a
                    line on the screen to indicate that Drive A is
                    logged and waiting for a command.

Alarms   Valet feature that allows you to schedule
                    messages or commands for automatic retrieval
                    and display at a specified time.

Alarm Menu   Menu that is used to access Valet's Alarm
                    functions.

Alarm Number   A number from 1 to 6 that identifies a
                    specific alarm (scheduled or available).

Alarm Scheduling The process of setting an alarm for automatic
                    retrieval and display at a specified time.

Alarm Type   Indicates the type of alarm (Message, Command
                    Line, or Immediate Command Line).

B>   Prompt which appears at the first column of a
                    line on the screen to indicate that Drive B is
                    logged and waiting for a command.

BACK SPACE Key Moves the cursor one column to the left on the
                    line and deletes the character at that
                    position.

Baud Rates   The number of bits per second transmitted
                    between two electronic devices.

Bell   The Set-Up Mode function that activates or
                    deactivates a software controlled bell sound.

Boot   The loading of CP/M programs and/or execution
                    of diagnostic programs that occur when Attache
                    is powered up.

Brightness   The Set-Up Mode function that allows the
                    brightness of the display screen to be
                    adjusted up or down.

Calculator   The Valet function that provides a four-
                    function RPN calculator with an eight-level
                    storage stack area and eight memory registers.

Calculator   The multi-level grid that appears on the
Display   display screen when Valet's calculator is
                    activated.

Calculator Keys Keys that may be used to perform calculator
                    functions when Valet's calculator is
                    activated.

Glossary

Cancel Alarms The Alarm Menu function that is used to cancel alarms that have been scheduled for automatic retrieval and display at a later time.

Chaining Commands The process of specifying a series of commands that will execute when a scheduled alarm is sounded.

Clear Alarms The process of responding to a scheduled alarm, removing its contents from the message or command area, and returning the alarm number to the pool of available alarm numbers.

Clear Calculator The process of removing an entry from the calculator's current entry area or from storage in one of the storage registers.

Click Keyboard sounds that are activated or modified in Set-Up Mode.

Clock Attache's battery powered 24-hour clock.

Command An instruction to the computer.

Command Line Alarm type that provides entry of a command for a scheduled alarm.

CP/M The operating system used by Attache.

CTRL KEY Modifier key used in conjunction with other keys for activating keyboard functions and operating modes.

Cursor The movable highlighted rectangle on the display screen that indicates the current typing position where "you" are "at" on the display screen.

ED.COM A CP/M Utility program that provides the facility for creating files.

Enter Imputting a keyed value to the computer. For example, in the calculator function, the **RETURN** key is used to enter values.

Entire Screen A screen dump option that prints all characters that are currently displayed on the screen (including both graphics and text).

ESC Key Used to exit from Valet functions, and with the **CTRL** key to activate Set-Up Mode.

Exchange X and Y Calculator function that exchanges the values that are displayed in the X and Y Registers.

A-2

File   A collection of like records stored under a
                                single filename, such as a command file or a
                                data file.

Function Keys   Calculator keys for performing addition,
                                subtraction, division, or multiplication.

Graphics Only   A screen dump option that prints graphics
                                characters from the display screen but ignores
                                text.

Immediate Command   Alarm type that provides entry of a command
                                for a scheduled alarm. Immediate command
                                lines begin execution automatically when the
                                alarm sounds.

Install   Valet Main Menu option that sets escape codes
                                and other printer protocol automatically for
                                graphics printers supported by the screen dump
                                programs.

Install Menu   Menus containing printer selections that are
                                displayed when the Install option is selected
                                from Valet's Main Menu.

Keyboard Click   Keyboard sounds that are activated or modified
                                in Set-Up Mode.

Keyboard Template   The area above the keyboard with printed
                                instructions for activating keyboard multi-
                                function commands.

Keyboard Volume   The Set-Up Mode command for determining the
                                sound level of keyboard click.

LINE FEED Key   Used for sending line feeds to the printer for
                                forms alignment prior to screen dump.

Main Menu   The menu containing options for activating
                                Valet functions that is displayed when the **TAB**
                                key is pressed from Set-Up Mode.

Memory Registers   Eight areas on the right side of the
                                calculator display where values may be stored
                                for later inclusion in a calculation.

MEM. 1 - 8   The memory registers in Valet's calculator
                                function.

Menu   A table listing available command options.

Message   Alarm type that provides entry of a message
                                that will be retrieved and displayed when the
                                scheduled alarm sounds.

Military Time	24-hour clock with hours 00 to 23, where 00:00 = midnight, 12:00 = noon, and 18:00 = 6 p.m.
Mode	One of a computer system's operating states which provide the means for keyboard multi-functions and other tasks where internal interpretations depend upon the active mode.
Negative Numbers	Numbers that are represented as negative values in Valet's calculator function.
No-File Menu	The main menu for word processing in WordStar-Plus.
Non-Document File	A data file created in WordStar-Plus that is not formatted as a document file and is normally used as a program editing file.
Number Keys	Keys that are used for entering numbers, including the top row of the keyboard and certain letter keys in the simulated 10-key pad area when 10-Key Mode is activated.
Operating System	The set of programs that run the computer hardware and interpret software commands. Attache uses an enhanced version of the CP/M operating system.
Overflow	Condition that occurs when when a calculation is made that exceeds the display capabilities of the calculator.
P Register	One of the temporary storage registers in the calculator's stack.
Print Menu	Menu that is displayed when Valet's screen dump function is activated.
PRINTER.VL2	Valet program file where escape codes and other printer protocols are stored for graphics printers that are supported by Valet for the screen dump function.
Printer Install	The process of selecting a graphics printer from Valet's Install function for use with the screen dump feature.
Q Register	One of the temporary storage registers in the calculator's stack.
Quick Text	Screen dump option that prints ASCII characters on any printer regardless of selections for the printer installation. Graphics and alternate character sets are ignored.

Recall MEM.
Values
A calculator function that retrieves a value from a specified memory register and stores it in the X Register.

Recall X Register
A calculator function that redisplays the value that was displayed prior to the last function.

RPN Logic System
Reverse Polish Notation, the logic system that is used by Valet's calculator function.

Reschedule Alarms
The process of changing the scheduled date and time for an alarm to sound, either in advance or when the alarm sounds as scheduled.

RETURN Key
Used to "enter" a keyed value or "send" a command to the computer.

Review Alarms
Alarm Menu option for retrieving and revising a scheduled alarm.

Roll the Stack
The process of moving values up or down in the registers that comprise the "stack" in valet's calculator function.

.SUB File
A file that is created for retrieval by the SUBMIT program.

S Register
One of the temporary storage registers in the calculator's stack.

Schedule Alarms
The process of setting alarms for automatic retrieval and display at a specified date and time.

Scientific
Notation
A convenient numbering system for representing very large numbers or very small fractions.

Screen Brightness
The Set-Up Mode function that allows the brightness of the display screen to be adjusted up or down.

Screen Dump
A Valet function that prints the contents of the display screen.

Set Alarms
The process of scheduling alarms for automatic retrieval and display at a specified date and time.

Set Clock
The process of setting the date and time in Attache's 24-hour clock (using the TIME utility).

Glossary

Set-Up Mode
Operating state used for setting or changing screen brightness, keyboard click sound, volume level, baud rates, etc., and for activating Valet's Main Menu or displaying the date and time.

SHIFT Keys
Modifier keys used for activating upper case as on a typewriter, and for activating multi-functions when used in conjunction with other modifier keys (such as **CTRL**).

Stack
The temporary storage registers on the calculator display where operands and other intermediate results are stored during a calculation.

Store Values
A calculator command that copies values from the X Register to a specified memory register.

SUBMIT
A CP/M Utility program that retrieves a specified .SUB file from the diskette.

System
The necessary hardware and software for a "computer" that is functionally complete. Sometimes used in reference to the operating system or a specific application software package that is being used.

T Register
One of the temporary storage registers in the calculator's stack.

TAB Key
Used to move the cursor to the next tab stop, and to activate Valet's Main Menu when pressed from Set-Up Mode.

Text Only
Screen dump option that prints text characters but ignores graphics characters on the display screen.

Time Utility
Attache Utility program that is used for setting the 24-hour clock.

Underflow
Condition that occurs when the result of a calculation is too small to be displayed by the calculator.

Utility Program
A program that is used to assist in the operation and maintenance of the computer.

Valet
Attache software programs that allow temporary interruption from a program to perform other operations and then return automatically to the interrupted program.

Valet Files
Files that contain the Valet programs.

VALET.VL2   One of the two Valet files contained on the Attache Software diskette. VALET.VL2 contains calculator programs, screen dump programs, alarm programs, and the current printer installation.

Valet's Main Menu Menu containing Valet functions that is activated by pressing the **TAB** key while in Set-Up Mode.

X Register   One of the temporary storage registers in the calculator's stack.

XSUB   CP/M Utility program that automatically inserts predefined answers to operator prompts.

Y Register   One of the temporary storage registers in the calculator's stack.

Z Register   One of the temporary storage registers in the calculator's stack.

10-Key Mode   Operating state where certain keys emulate a 10-Key pad for numeric entry.

24-Hour Clock   Attache's battery powered clock that operates on military time, where hours are 00-23 and 00:00 = midnight, 12:00 = noon, 18:00 = 6 p.m., etc.

Index

Index

Index

CHARTON GUIDE

for Attache and Attache S

Portable Computer Systems

Copyright

Disclaimer

Trademarks

Contents

Contents

4. Pie Chart

5. Appendixes

How to USE this Guide

This manual describes Charton programs and functions, including line charts, bar charts, and pie charts. Each function is described here in a separate chapter.

Charton functions can be used with both the Attache (dual drive) and Attache S (single drive) models. The only requirement is that the file "BRUN.COM" resides on the diskette in the logged drive. The file "CHARTON.COM" may reside on either disk.

The appendixes in the back of this guide contain a comprehensive glossary and a cross-referenced index.

Charton Guide

Introduction

Introduction

Overview

Charton provides the capability for creating screen graphics that can display almost any type of comparative information. Since you specify the type of chart to create for each display, your data can be displayed in different formats for different situations.

Charts are created by entering values in response to a series of screen prompts. The chart is displayed instantly when all values have been keyed. If your chart is not what you expected, just revise it and redisplay it.

Once created, charts may be printed using the screen dump feature from Valet. You can also save the chart as a disk file for retrieval at a later time.

Charton Functions

Charton can create three different Chart types: Bar Charts, Line Charts, and Pie Charts. These Chart Types are illustrated in this section and discussed in detail in the sections that follow.

Bar Charts

Bar charts display data as vertical bars on a graph.
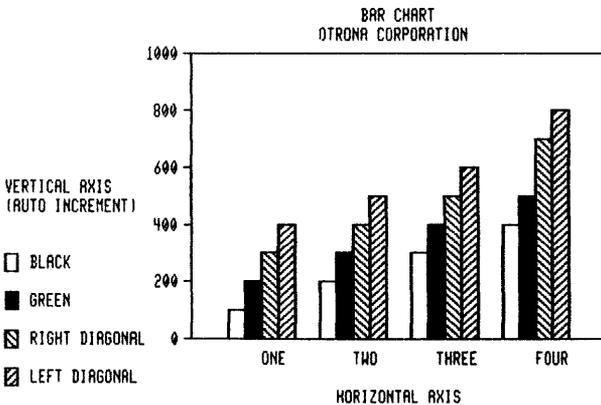
Line Charts

Line Charts display data as horizontal lines on a graph.

```
                        LINE CHART
                     OTRONA CORPORATION
                100
                 80
                 60
VERTICAL AXIS
(AUTO INCREMENT)
                 40
 — THIN
                 20
 — REGULAR
 — THICK          0
                     J   F   M   A   M   J   J   A
 — BOLD
                       HORIZONTAL AXIS
```
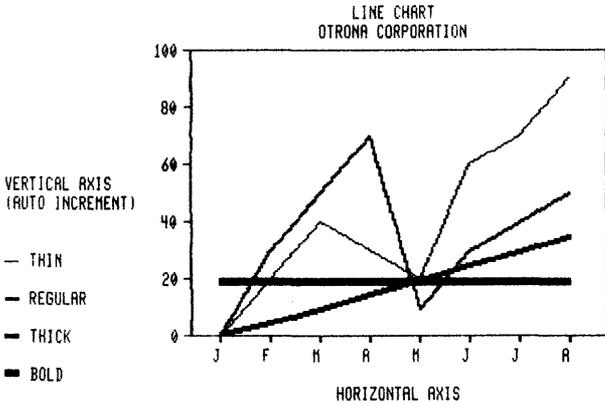
Pie Charts

Pie charts display data as slices of a pie.

```
                    PIE CHART
                                        TWENTY %

                                        TWELVE %

28% DISPLACED

                                        TEN %

                                        THIRTY %
```
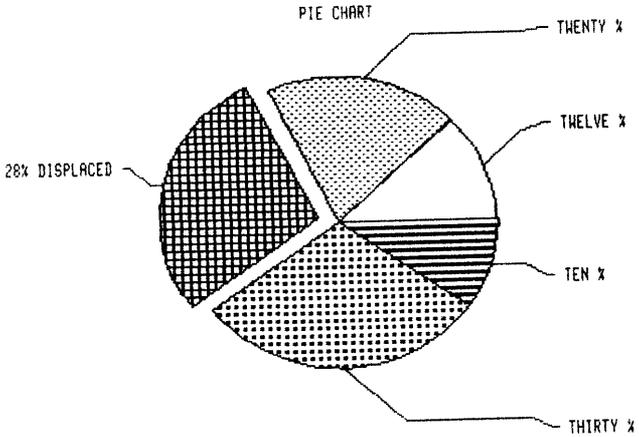
Charton Files

Charton programs are located in two files on the Attache Software diskette (named CHARTON.COM and BRUN.COM). While Charton may be run from either Drive A or Drive B, BRUN.COM must reside on the diskette that is in the logged drive.

For printing, Valet's screen dump is used and the VALET.VL2 file is required. This file is also located on the Attache Software diskette. Even if Charton is activated from a diskette in the B Drive, the VALET.VL2 file must reside on the diskette in Drive A for the screen dump feature to work. The PRINTER.VL2 file is not required if the printer has already been installed.

Data files may be created during Charton processing. You create these files to save charts for later retrieval. Filenames for these data files are user-specified. The extension .CHT is supplied by Charton.

Charton data files (filename.CHT) will remain on the diskette until you delete them with the CP/M ERA utility program.

Activate Charton

Charton may be activated at any time when the system is under CP/M and the cursor is at the prompt A> (or B> if called from Drive B).

To activate Charton, insert the Attache Software diskette in Drive A and boot the system by pressing **RESET** and the **SHIFT** key on the right side of the keyboard simultaneously.

The display will look like the illustration below when the system has been booted.

CP/M x.x.x Otrona ATTACHE <56K>
A>

With the cursor at A> (or B> if you have logged the B Drive), type **CHARTON** in either upper or lower case and press the **RETURN** key.

Charton's Main Menu

When the programs are loaded, Charton's Main Menu appears on the display. This menu provides three options: you can create a new chart, display an existing chart, or exit from Charton and return to CP/M.

    Otrona CHARTON Version x.x

      (C)reate a new chart
      (D)isplay an existing chart
      Press ESC to exit

      Main Menu option:

Select an option from this menu by typing the letter shown in parenthesis (**C** = Create or **D** = Display), or press the **ESC** key to return to CP/M.

Create a New Chart

If you select option **C** from Charton's Main Menu, a prompt appears to select a chart type to create. From this display, you elect to create a bar chart, line chart, or pie chart.

    Otrona CHARTON Version x.x

      (C)reate a new chart
      (D)isplay an existing chart
      Press ESC to exit

      Create What Kind of Chart?

      (B)ar Chart
      (L)ine Chart
      (P)ie Chart
      Press ESC to exit

      Option:

Select the chart type by typing the number shown in parenthesis or press **ESC** to return to the Main Menu.

Display an Existing Chart

If you select option **D** from Charton's Main Menu, a prompt appears
to enter the filename to display. A directory of all Charton
data files (filename.CHT) on the logged diskette appears above
this prompt.

Otrona CHARTON Version x.x

    (C)reate a new chart
    (D)isplay an existing chart
    Press ESC to exit
    ————————————————————————
    SALESBAR.CHT SALESLIN.CHT SALESPIE.CHT

    Filename of chart to DISPLAY (ESC returns to Main Menu)

Select the chart to display by typing its filename and pressing
RETURN. You do not need to type the extension .CHT.

When a valid filename is keyed, the file is retrieved and the
chart is displayed on the screen. Instructions for displaying,
printing, and revising existing charts are detailed in the next
three sections of this manual.

Note: the three sample charts at the beginning of this section
are included on the Attache Software diskette. You can display
these charts on the screen by typing the filenames BARSAMPL for
the bar chart, LINSAMPL for the line chart, or PIESAMPL for the
pie chart.

Exit from Charton

Exit from Charton at any time by pressing **ESC.** If you are at
Charton's Main Menu, you will exit to CP/M. If you are creating
a new chart, you will exit to the Main Menu. If you are revising
a new or existing chart, you will exit to the chart display for
that chart and then to the Main Menu.

Press **ESC** again at each menu to exit from Charton and return to
CP/M.

Charton Guide

Bar Charts
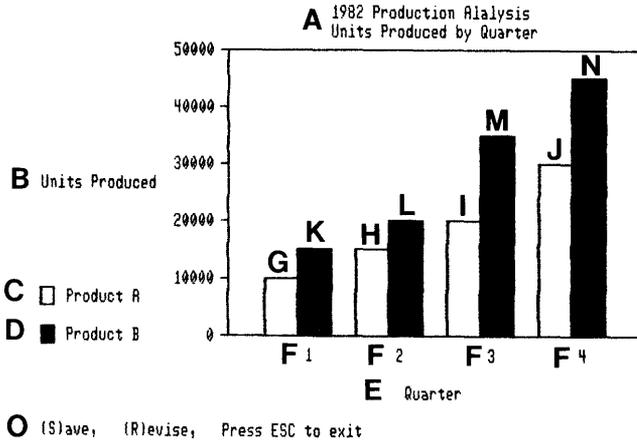
A 1982 Production Alalysis
Units Produced by Quarter

B Units Produced

C ☐ Product A

D ■ Product B

F 1   **F** 2   **F** 3   **F** 4

E Quarter

O (S)ave,   (R)evise,   Press ESC to exit

A = Chart Title   F = Horizontal Axis Points (4)
B = Vertical Axis Title   G = Type #1 Horizontal Point #1
C = Bar Type #1   H = Type #1 Horizontal Point #2
D = Bar Type #2   I = Type #1 Horizontal Point #3
E = Horizontal Axis Title   J = Type #1 Horizontal Point #4

                    K = Type #2 Horizontal Point #1
                    L = Type #2 Horizontal Point #2
                    M = Type #2 Horizontal Point #3
                    N = Type #2 Horizontal Point #4
                    O = Options to Continue

Create a New Bar Chart

Bar Charts are created from Charton's Main Menu by selecting option **C** to CREATE A NEW CHART.

When the prompt CREATE WHAT KIND OF CHART appears, select option **B** for BAR CHART.

A series of prompts will then appear on the screen. Answer each question as instructed on the next page. Use the chart on the previous page as a reference in determining which answers will affect which fields in the chart.

If you make a mistake, you can either press the **ESC** key to return to the Main Menu and start over, or you can finish the chart and then revise it.

Bar Chart Screen Prompts

The following prompts appear on the screen when the option to create a new chart is selected. Refer to the samples at the beginning and end of this chapter to see how the answers to these prompts appear on the displayed chart.

Chart Title – The Chart title will appear centered at the top of the chart.

    Chart title – top line?
    Chart title – second line?

Type the title (up to 40 characters) and press **RETURN.** Then type a second line of title information if desired, again using up to 40 characters. Press **RETURN** again to continue with the next prompt.

Bar Types – The number of Bar Types determines how many different bars will appear at each horizontal axis point.

    How many types of Bars are required?   (4 maximum)?

    Bar Type #1 Name:
    Bar Type #2 Name:
    Bar Type #3 Name:

Type the number of Bar Types (up to 4 maximum) that will be included in the chart and press **RETURN.**

Then type the name for each Bar Type (up to 15 characters) as prompted and press **RETURN** after each entry.

The names typed here are displayed with the fill pattern for each selected Bar Type on the lower left portion of the chart.

Horizontal Axis Title - The Horizontal Axis title will appear centered at the bottom of the chart.

    Horizontal Axis Title?

Type the title (up to 40 characters) and press **RETURN.**

Horizontal Axis Points - The number of Horizontal Axis Points determines how many sets of Bar Types will appear on the chart.

    Number of Horizontal Axis Points?   (16 Maximum)

Type the number of Horizontal Axis Points and press **RETURN.**

For example, the bar chart at the beginning of this section has two Bar Types and four Horizontal Axis Points, so the two sets of Bar Types are displayed at four different Horizontal Axis Points.

Axis Labeling - The label for each Horizontal Axis Point can be either numeric (n) or alphanumeric (a).   The label appears beneath the Axis Point on the chart.

    (n)umeric or (a)lphanumeric labeling of horizontal axis?

        (n) = Enter numeric value of first point?
            Enter increment?

        (a) = Enter name of Horizontal point #1
            Enter name of Horizontal point #2

If **N** is selected you are prompted for the numeric value of the first point.

Bar Charts

Type the number and press **RETURN.** You are then prompted for the increment. Enter the number and press **RETURN.**

The number entered for the first point will be incremented by the increment number for each additional Horizontal Axis point.

For example, if the first number is 1981 and the increment is 1, the second point is 1982, the third point is 1983, etc.

If **A** is selected you are prompted for the name of the first Horizontal Axis Point.

Type the name (up to 15 characters) and press **RETURN.** Then enter the name for each successive Axis Point as prompted and press **RETURN** after each entry.

Note: Charton will use as much of the typed name as it can. The number of characters used depends upon the available space, which is determined by the number of Horizontal Axis Points.

Vertical Axis Title – The Vertical Axis title will appear on the left side of the chart.

    Vertical Axis Title - line 1?
    Vertical Axis Title - line 2?

Type the title (up to 20 characters) and press **RETURN.**

The number of Bar Types and the number of Horizontal Axis Points are now displayed at the top of the screen.

Vertical Scale – The vertical scale may be either automatic (based on values you input for each horizontal axis) or defined.

    Select (A)uto or (D)efined Vertical Scale. (A or D)

Type **A** or **D** to identify the vertical scale. If Auto is selected, the top and bottom values on the chart will be determined by the horizontal axis values.

If Defined is selected, you are prompted to enter the base and top values for the chart.

Value for Base of Chart?
Value for Top of Chart?

Enter the base and top values as prompted and press **RETURN.**

It the base value entered here is greater than the value of the smallest horizontal axis point, the chart will appear flattened out at that point. Conversely, if the top value entered here is less than the value of the largest horizontal axis point, the chart will appear flattened out at that point.

Values at Horizontal Points - The first prompt is for the value that will represent Bar Type #1 for the first Horizontal Axis Point.

Bar Type #1   Name

Value at Horizontal point #1:
Value at Horizontal point #2:

Type the value and press **RETURN** for each entry.

When Bar Type #1 values have been entered for all Horizontal Axis Points, the prompt is for the value that will represent Bar Type #2 for the first Horizontal Axis Point.

Bar Type #2   Name

Value at Horizontal point #1:
Value at Horizontal point #2:

Type the value and press **RETURN** for each entry.

Continue entering values until you have defined the bar for each Bar Type at each Horizontal Axis Point. The Bar Chart will be displayed when all values have been entered.

Print Bar Charts

Bar Charts can be printed at any time using Valet's Screen Dump feature and a printer with graphics capability that has been installed for Valet. (Refer to the Valet Guide for printer installation instructions.)

With the Bar Chart on the display, press **CTRL** and **P** simultaneously. This removes the Charton options from the lower left side of the display.

Then activate Valet (press **CTRL** and **ESC** simultaneously and then press **TAB**). From Valet's Main Menu, select option **S** for Screen Dump. When the screen dump options appear, select option **E** to print the Entire Screen.

When Valet is activated, the graphics characters will be undisplayed on the screen until Valet is deactivated. Do not be alarmed. These characters will still be printed.

When printing is complete, the screen returns to Set-Up Mode. Press **CTRL** and **ESC** simultaneously again to return to the chart. Graphics characters are then redisplayed.

Press **CTRL** and **P** simultaneously again to redisplay the Charton options.

Change a Bar Chart to a Line Chart

The Bar Chart can be changed instantly to a Line Chart. With the Bar Chart on the display, select option **R** to revise.

When the screen prompts Chart Type OK?, press **C** to change. The chart is changed to a Line Chart. Press **ESC** to view the new chart.

Revise a New Bar Chart

Any of the values that were used to create the chart can be easily changed after the chart is displayed. With the chart on the display, select option **R** to revise.

When the screen prompts Chart Type OK?, press **C** to change the Chart Type, or press the **space bar** to leave the Chart Type as is and continue.

Chart type Ok?

Each value that was entered while creating the chart is then displayed individually with the prompt **Okay?** Press the **space bar** to leave a value as is and continue.

Press **C** to change the value. The value is deleted and the cursor moves to the entry field for that value. Type a new value and press **RETURN.**

Press the **BACK SPACE** key to scroll to the previous prompt and redo the entry, or press **ESC** to display the "new" chart.

Chart title:	Okay?
Number of Bar Types	Okay?
Name of Bar Type #1:	Okay?
Name of Bar Type #2:	Okay?
Name of Bar Type #3:	Okay?
Horizontal Axis title:	Okay?
Number of Horizontal Axis Points?	Okay?
Alphanumeric labeling of Horizontal Axis:	Okay?
Name of Horizontal Point #1:	Okay?
Name of Horizontal Point #2:	Okay?
Vertical Axis Title:	Okay?
Vertical Scaling:	Okay?
Bar Type #1 Name	
Value at Horizontal point #1:	Okay?
Value at Horizontal point #2:	Okay?
Bar Type #2 Name	
Value at Horizontal point #1:	Okay?
Value at Horizontal point #2:	Okay?
Bar Type #3 Name	
Value at Horizontal point #1:	Okay?
Value at Horizontal point #2:	Okay?

Notice the power in the Revise feature. You can use the **space bar** to scroll down through the values, or the **BACK SPACE** key to scroll back up.

Values are changed by pressing **C,** retyping the value, and pressing **RETURN.**

At any point, you can press **ESC** to redraw the chart with your revisions included.

If **ESC** is pressed when the cursor is in the entry field, the old value is retained.

If **ESC** is pressed after **RETURN,** the new value appears on the chart display.

Abandon a New Bar Chart

You can print or revise a new chart when it is displayed, but it is not stored on the disk. If you do not want to save the chart, press **ESC.** Charton will return to the Main Menu and the chart will be cleared from memory.

Save a New Bar Chart

If you want to save the chart for retrieval at a later time, select option **S** to Save. You will be prompted NAME OF FILE FOR SAVING CHART?

Type a filename (up to eight characters) that will help you remember the contents of the chart, such as SALESBAR or BUDGTBAR and press **RETURN.**

The chart will then be saved on the disk file and the display screen will return to Charton's Main Menu.

You can also save the file on a diskette other than the logged disk by preceding the filename with the drive letter (such as B:filename).

Note: Charton will add the file extension .CHT, so the file will be displayed on the file directory as SALESBAR.CHT or BUDGTBAR.CHT.

Display an Existing Bar Chart

To recall a chart that has been saved, activate Charton's Main Menu and select option **D** to display an existing chart. All .CHT files on the logged disk will be displayed on the directory with the prompt FILENAME OF CHART TO DISPLAY?

Type the name of the file containing the chart to display and press **RETURN.** The chart will be displayed with the (S)ave and (R)evise options displayed. Press **ESC** to return to the Main Menu.

Note: you can display a file from a diskette other than the logged disk by preceding the filename with the drive letter (such as B:filename).

To display a directory of .CHT files contained on the diskette in the alternate drive, type **B:** or **A:** and press **RETURN** at the prompt FILENAME OF CHART TO DISPLAY?

Revise an Existing Bar Chart

To revise an existing Bar Chart, display the chart as instructed above. When the chart is displayed, select option **R** to Revise.

The values that were used to create the chart are displayed individually, just as when revising a new chart. (Refer to the instructions for "Revising a New Bar Chart" on the previous pages for details on the revision process.)

Change values as appropriate and press **ESC** to display the "new" chart.

Abandon a Revised Bar Chart

You can print the revised chart when it is displayed, but the revisions are not stored on the disk. If you do not want to save the revised chart, press **ESC**. Charton will return to the Main Menu and the revised chart will be cleared from memory.

The file that was retrieved for revision remains on the disk with its original status intact, just as though no revisions had been made.

Save a Revised Bar Chart

If you want to save the revised chart, select option **S** to Save. You will then be prompted NAME OF FILE FOR SAVING CHART? At this point, you can either create a new file for the revised chart or overlay the old file.

If you type the same filename as when you retrieved the chart for revision, the revised chart will replace the original chart in the file.

If you type a filename that does not already exist on the diskette, the revised chart will be saved in that file and the original file will remain intact.

The display screen will return to Charton's Main Menu when the file has been saved.

You can save the file on a diskette other than the logged disk by preceding the filename with the drive letter (such as B:filename).

Note: Charton will add the file extension .CHT, so the file will be displayed on the file directory as SALESBAR.CHT or BUDGTBAR.CHT.

Delete Chart Files

Use the CP/M DIR command to display the file directory. Files containing charts (.CHT) can be deleted from the diskette with the CP/M ERA Utility program.

With the cursor at A>, type **ERA** and the name of the file to erase (such as SALESBAR.CHT) and then press **RETURN.**

If the file is on a diskette other than the logged disk, precede the filename with the drive letter (such as B:filename).

Bar Chart Examples

Sample #1

Chart type: BAR   Chart title: Territorial Sales Performance
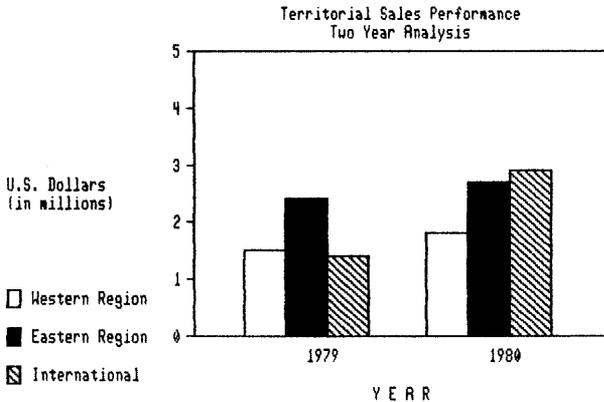   Two Year Analysis

Number of Bar Types = 3
Name of Bar Type #1: Western Region
Name of Bar Type #2: Eastern Region
Name of Bar Type #3: International

Horizontal Axis title: Y E A R
Number of Horizontal Axis Points = 2

Numeric Value for First Horizontal Point: 1979   Increment = 1
Vertical Axis Title: U.S. Dollars
                         (in millions)
Vertical Scale: Auto

Bar Type #1	Bar Type #2	Bar Type #3
Value at Horizontal point #1: 1.5	#1: 2.4	#1: 1.4
Value at Horizontal point #2: 1.8	#2: 2.7	#2: 2.9

Bar Charts

Sample #2

Chart type: BAR   Chart title: Territorial Sales Performance
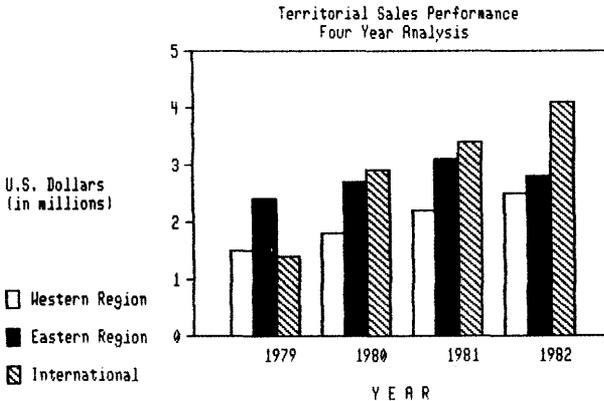   Four Year Analysis

Number of Bar Types = 3
Name of Bar Type #1: Western Region
Name of Bar Type #2: Eastern Region
Name of Bar Type #3: International

Horizontal Axis title: Y E A R
Number of Horizontal Axis Points = 4

Numeric Value for First Horizontal Point: 1979 Increment = 1
Vertical Axis Title: U.S. Dollars
                     (in millions)
Vertical Scale: Auto

Bar Type #1	Bar Type #2	Bar Type #3
Value at Horizontal point #1: 1.5	#1: 2.4	#1: 1.4
Value at Horizontal point #2: 1.8	#2: 2.7	#2: 2.9
Value at Horizontal point #3: 2.2	#3: 3.1	#3: 3.4
Value at Horizontal point #4: 2.5	#4: 2.8	#4: 4.1

Territorial Sales Performance
Four Year Analysis

Sample #3

Chart type: BAR   Chart title: Territorial Sales Performance
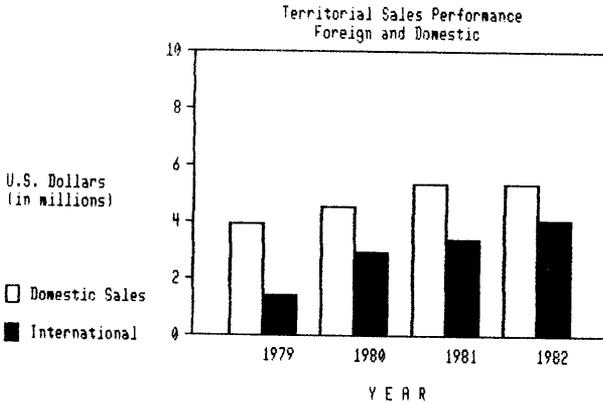   Foreign and Domestic

Number of Bar Types = 2
Name of Bar Type #1: Domestic Sales
Name of Bar Type #2: International

Horizontal Axis title: Y E A R
Number of Horizontal Axis Points = 4

Numeric Value for First Horizontal Point: 1979 Increment = 1
Vertical Axis Title: U.S. Dollars
                    (in millions)
Vertical Scale: Auto

Bar Type #1   Bar Type #2
----------------------------------- -----------
Value at Horizontal point #1: 3.9   #1: 1.4
Value at Horizontal point #2: 4.5   #2: 2.9
Value at Horizontal point #3: 5.3   #3: 3.4
Value at Horizontal point #4: 5.3   #4: 4.1

Bar Charts

Sample #4

Chart type: BAR   Chart title: Territorial Sales Performance
                              1982 Foreign Sales By Month

Number of Bar Types = 1
Name of Bar Type #1: Sales

Horizontal Axis title: M O N T H
Number of Horizontal Axis Points = 12

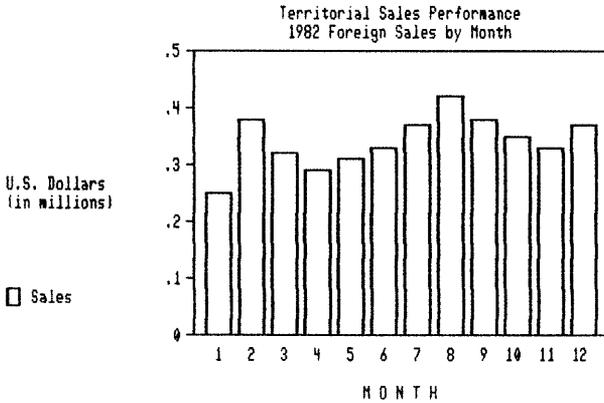Numeric Value for First Horizontal Point : 1   Increment = 1

Vertical Axis Title: U.S. Dollars
                       (in millions)
Vertical Scale: Auto

Bar Type #1

Value at Horizontal point #1:   .25   #7: .37
Value at Horizontal point #2:   .38   #8: .42
Value at Horizontal point #3:   .32   #9: .38
Value at Horizontal point #4:   .29   #10: .35
Value at Horizontal point #5:   .31   #11: .33
Value at Horizontal point #6:   .33   #12: .37

Territorial Sales Performance
1982 Foreign Sales by Month

U.S. Dollars
(in millions)

☐ Sales

M O N T H

Charton Guide

Line Charts
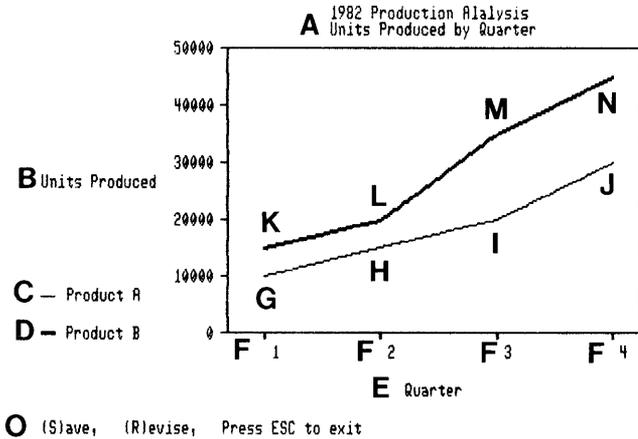
A 1982 Production Alalysis
Units Produced by Quarter

```
        50000 ┤
                                                    N
        40000 ┤                          M
        30000 ┤
B Units Produced
        20000 ┤        K           L              J
                                           I
        10000 ┤              H
            0 ┤        G
              └──┬──────────┬──────────┬──────────┬──
C — Product A    F 1        F 2        F 3        F 4
D — Product B
                            E Quarter
```

O (S)ave, (R)evise, Press ESC to exit

A = Chart Title   F = Horizontal Axis Points (4)
B = Vertical Axis Title   G = Type #1 Horizontal Point #1
C = Line Type #1   H = Type #1 Horizontal Point #2
D = Line Type #2   I = Type #1 Horizontal Point #3
E = Horizontal Axis Title   J = Type #1 Horizontal Point #4

          K = Type #2 Horizontal Point #1
          L = Type #2 Horizontal Point #2
          M = Type #2 Horizontal Point #3
          N = Type #2 Horizontal Point #4
          O = Options to Continue

Create a New Line Chart

Line Charts are created from Charton's Main Menu by selecting option **C** to CREATE A NEW CHART.

When the prompt CREATE WHAT KIND OF CHART appears, select option **L** for LINE CHART.

A series of prompts will then appear on the screen. Answer each question as instructed on the next page. Use the chart at the top of this page as a reference in determining which answers will affect which fields in the chart.

If you make a mistake, you can either press the **ESC** key to return to the Main Menu and start over, or you can finish the chart and then revise it.

Line Chart Screen Prompts

The following prompts appear on the screen when the option to create a new chart is selected. Refer to the samples at the beginning and end of this chapter to see how your answers to these prompts appear on the displayed chart.

Chart Title - The Chart title will appear centered at the top of the chart.

> **Chart title - top line?**
> **Chart title - second line?**

Type the title (up to 40 characters) and press **RETURN**. Then type a second line of title information if desired, again using up to 40 characters. Press **RETURN** again to continue with the next prompt.

Line Types - The number of Line Types determines how many different lines will appear on the chart.

> **How many types of Lines are required (4 maximum)?**
>
> **Line Type #1 Name:**
> **Line Type #2 Name:**
> **Line Type #3 Name:**

Type the number of Line Types (up to 4 maximum) that will be included in the chart and press **RETURN.**

Then type the name for each Line Type (up to 15 characters) as prompted and press **RETURN** after each entry.

The names typed here are displayed with the fill pattern for each selected Line Type on the lower left portion of the chart.

Horizontal Axis Title? - The Horizontal Axis title appears centered at the bottom of the chart.

   Horizontal Axis Title?

Type the title (up to 40 characters) and press **RETURN.**

Horizontal Axis Points - The number of Horizontal Axis Points determines how many values to measure for lines on the chart.

   Number of Horizontal Axis Points (16 Maximum)

Type the number of Horizontal Axis Points and press **RETURN.**

For example, the line chart at the beginning of this section has two Line Types and four Horizontal Axis Points, so the two sets of Line Types are measured at four different Axis Points.

Axis Labeling - The label for each Horizontal Axis Point can be either numeric (n) or alphanumeric (a). The label appears beneath the Axis Point on the chart.

   (n)umeric or (a)lphanumeric labeling of horizontal axis?

   (n) = Enter numeric value of first point?
   **   Enter increment?**

   (a) = Enter name of Horizontal point #1
   **   Enter name of Horizontal point #2**

If **N** is selected you are prompted for the numeric value of the first point.

Line Charts

Type the number and press **RETURN.** You are then prompted for the increment. Enter the number and press **RETURN.**

The number entered for the first point will be incremented by the increment number for each additional Horizontal Axis point.

For example, if the first number is 1981 and the increment is 1, the second point is 1982, the third point is 1983, etc.

If **A** is selected above, you are prompted for the name of the first Horizontal Axis Point.

Type the name (up to 15 characters) and press **RETURN.** Then enter the name for each successive Axis Point as prompted and press **RETURN** after each entry.

Note: Charton will use as much of the typed name as it can. The number of characters used depends upon the available space, which is determined by the number of Horizontal Axis Points.

Vertical Axis Title - The Vertical Axis title appears on the left side of the chart.

> **Vertical Axis Title - line 1?**
> **Vertical Axis Title - line 2?**

Type the title (up to 20 characters) and press **RETURN.**

The number of Line Types and the number of Horizontal Axis Points are now displayed at the top of the screen.

Vertical Scale - The vertical scale may be either automatic (based on values you input for each horizontal axis) or defined.

> **Select (A)uto or (D)efined Vertical Scale. (A or D)**

Type **A** or **D** to identify the vertical scale. If Auto is selected, the top and bottom values on the chart will be determined by the horizontal axis values.

If Defined is selected, you are prompted to enter the base and top values for the chart.

Value for Base of Chart?
Value for Top of Chart?

Enter the base and top values as prompted and press **RETURN.**

If the base value entered here is greater than the value of the smallest horizontal axis point, the chart will appear flattened out at that point. Conversely, if the top value entered here is less than the value of the largest horizontal axis point, the chart will appear flattened out at that point.

Values at Horizontal Points - The first prompt is for the value that will represent Line Type #1 for the first Horizontal Axis Point.

Line Type #1   Name

Value at Horizontal point #1:
Value at Horizontal point #2:

Type the value for each entry and press **RETURN.**

When Line Type #1 values have been entered for all Horizontal Axis Points, the prompt is for the value that will represent Line Type #2 for the first Horizontal Axis Point.

Line Type #2   Name

Value at Horizontal point #1:
Value at Horizontal point #2:

Type the value for each entry and press **RETURN.**

Continue entering values until you have defined the line for each Line Type at each Horizontal Axis Point. The Line Chart will be displayed when all values have been entered.

Print Line Charts

Line Charts can be printed at any time using Valet's Screen Dump feature and a printer with graphics capability that has been installed for Valet. (Refer to the Valet Guide for printer installation instructions.)

With the Line Chart on the display, press **CTRL** and **P** simultaneously. This removes the Charton options from the lower left side of the display.

Then activate Valet (press **CTRL** and **ESC** simultaneously and then press **TAB**). From Valet's Main Menu, select option S for Screen Dump. When the screen dump options appear, select option **E** to print the Entire Screen.

When Valet is activated, the graphics characters will be undisplayed on the screen until Valet is deactivated. Do not be alarmed. These characters will still be printed.

When printing is complete, the screen returns to Set-Up Mode. Press **CTRL** and **ESC** simultaneously again to return to the chart. Graphics characters are then redisplayed.

Press **CTRL** and **P** simultaneously again to redisplay the Charton options.

Change a Line Chart to a Bar Chart

The Line Chart can be changed instantly to a Bar Chart. With the Line Chart on the display, select option **R** to Revise.

When the screen prompts CHART TYPE OK?, press **C** to change. The chart is changed to a Bar Chart. Press **ESC** to view the new chart.

Revise a New Line Chart

Any of the values that were used to create the chart can be easily changed after the chart is displayed.

With the chart on the display, select option **R** to Revise. When the screen prompts CHART TYPE OK?, press **C** to change the Chart Type, or press the **space bar** to leave the Chart Type as is and continue.

   Chart type Ok?

Each value that was entered while creating the chart is then displayed individually with the prompt **Okay?** Press the **space bar** to leave a value as it was and continue.

Press **C** to change the value. The value is deleted and the cursor moves to the entry field for that value. Type a new value and press **RETURN.**

Press the **BACK SPACE** key to scroll to the previous prompt and redo the entry, or press **ESC** to display the "new" chart.

Chart title:	Okay?
Number of Line Types	Okay?
Name of Line Type #1:	Okay?
Name of Line Type #2:	Okay?
Name of Line;Type #3:	Okay?
Horizontal Axis title:	Okay?
Number of Horizontal Axis Points?	Okay?
Alphanumeric labeling of Horizontal Axis:	Okay?
Name of Horizontal Point #1:	Okay?
Name of Horizontal Point #2:	Okay?
Vertical Axis Title:	Okay?
Vertical Scaling:	Okay?
Line Type #1	
Value at Horizontal point #1:	Okay?
Value at Horizontal point #2:	Okay?
Line Type #2	
Value at Horizontal point #1:	Okay?
Value at Horizontal point #2:	Okay?
Line Type #3	
Value at Horizontal point #1:	Okay?
Value at Horizontal point #2:	Okay?

Notice the power in the Revise feature. You can use the **space bar** to scroll down through the values, or the **BACK SPACE** key to scroll back up.

Values are changed by pressing **C**, retyping the value, and pressing **RETURN.**

At any point, you can press **ESC** to redraw the chart with your revisions included.

If **ESC** is pressed when the cursor is in the entry field, the old value is retained.

If **ESC** is pressed after **RETURN**, the new value appears on the chart display.

Abandon a New Line Chart

You can print or revise a new chart when it is displayed, but it
is not stored on the disk. If you do not want to save the chart,
press **ESC.** Charton will return to the Main Menu and the chart
will be cleared from memory.

Save a New Line Chart

If you want to save the chart for retrieval at a later time,
select option **S** to Save. You will be prompted NAME OF FILE FOR
SAVING CHART?

Type a filename (up to eight characters) that will help you
remember the contents of the chart, such as SALESLIN or BUDGTLIN
and press **RETURN.**

The chart will then be saved on the disk file and the display
screen will return to Charton's Main Menu.

You can save the file on a diskette other than the logged disk by
preceding the filename with the drive letter (such as
B:filename).

Note: Charton will add the file extension .CHT, so the file will
be displayed on the file directory as SALESLIN.CHT or
BUDGTLIN.CHT.

Display an Existing Line Chart

To recall a chart that has been saved, activate Charton's Main
Menu and select option **D** to display an existing chart. All .CHT
files on the logged disk will be displayed on the directory with
the prompt FILENAME OF CHART TO DISPLAY?

Type the name of the file containing the chart to display and
press **RETURN.** The chart will be displayed with the (S)ave and
(R)evise options displayed. Press **ESC** to return to the Main
Menu.

Note: you can display a file from a diskette other than the
logged disk by preceding the filename with the drive letter (such
as B:filename).

To display a directory of .CHT files contained on the diskette in
the alternate drive, type B: or A: and press **RETURN** at the prompt
FILENAME OF CHART TO DISPLAY?

Revise an Existing Line Chart

To revise an existing Line Chart, display the chart as instructed above and select option **R** to revise when the chart is displayed.

The values that were used to create the chart are displayed individually, just as when revising a new chart. (Refer to the instructions for "Revising a New Line Chart" on the previous pages for details on the revision process.)

Change values as appropriate and press **ESC** to display the "new" chart.

Abandon a Revised Line Chart

You can print the revised chart when it is displayed, but the revisions are not stored on the disk. If you do not want to save the revised chart, press **ESC.** Charton will return to the Main Menu and the revised chart will be cleared.

The file that was retrieved for revision remains on the disk with its original status intact, just as though no revisions had been made.

Save a Revised Line Chart

If you want to save the revised chart, select option **S** to Save. You will then be prompted NAME OF FILE FOR SAVING CHART? At this point, you can either create a new file for the revised chart or overlay the old file.

If you type the same filename as when you retrieved the chart for revision, the revised chart will replace the original chart in the file.

If you type a filename that does not already exist on the diskette, the revised file will be saved in that file and the original file will remain intact.

The display screen will return to Charton's Main Menu when the file has been saved.

You can save the file on a diskette other than the logged disk by preceding the filename with the drive letter (such as B:filename).

Note: Charton will add the file extension .CHT, so the file will be displayed on the file directory as SALESLIN.CHT or BUDGTLIN.CHT.

Delete Chart Files

Use the CP/M DIR command to display the file directory. Files containing charts (.CHT) can be deleted from the diskette with the CP/M ERA Utility program.

With the cursor at A>, type **ERA** and the name of the file to erase (such as SALESLIN.CHT).

If the file is on a diskette other than the logged disk, precede the filename with the drive letter (such as B:filename).

Line Chart Examples

Sample #1

Chart type: LINE   Chart title: Territorial Sales Performance
                                 Two Year Analysis

Number of Bar Types = 3

Name of Bar Type #1: Western Region
Name of Bar Type #2: Eastern Region
Name of Bar Type #3: International

Horizontal Axis title: Y E A R
Number of Horizontal Axis Points = 2
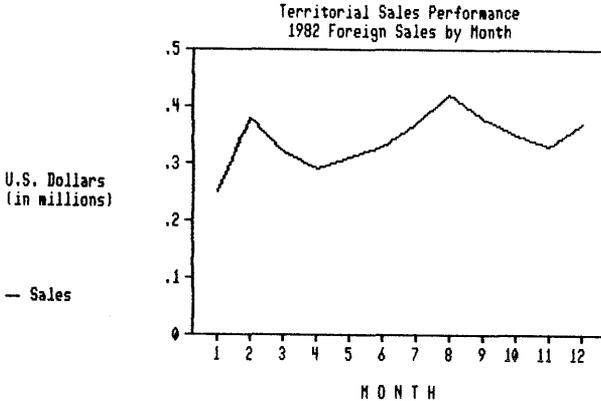Numeric Value for First Horizontal Point: 1979   Increment = 1

Vertical Axis Title: U.S. Dollars
                         (in millions)
Vertical Scale: Auto

Bar Type #1	Bar Type #2	Bar Type #3
Value at Horizontal point #1: 1.5	#1: 2.4	#1: 1.4
Value at Horizontal point #2: 1.8	#2: 2.7	#2: 2.9

Sample #2

Chart type: LINE   Chart title: Territorial Sales Performance
                                  Four Year Analysis
Number of Bar Types = 3
Name of Bar Type #1: Western Region
Name of Bar Type #2: Eastern Region
Name of Bar Type #3: International

Horizontal Axis title: Y E A R
Number of Horizontal Axis Points = 4

Numeric Value for First Horizontal Point: 1979   Increment = 1
Vertical Axis Title: U.S. Dollars
                     (in millions)
Vertical Scale: Auto

Bar Type #1	Bar Type #2	Bar Type #3
Value at Horizontal point #1: 1.5	#1: 2.4	#1: 1.4
Value at Horizontal point #2: 1.8	#2: 2.7	#2: 2.9
Value at Horizontal point #3: 2.2	#3: 3.1	#3: 3.4
Value at Horizontal point #4: 2.5	#4: 2.8	#4: 4.1

Territorial Sales Performance
Four Year Analysis

U.S. Dollars
(in millions)

— Western Region
— Eastern Region
— International

Y E A R

Sample #3

Chart type: LINE   Chart title: Territorial Sales Performance
                                 Foreign and Domestic
Number of Bar Types = 2
Name of Bar Type #1: Domestic Sales
Name of Bar Type #2: International

Horizontal Axis title: Y E A R
Number of Horizontal Axis Points = 4

Numeric Value for First Horizontal Point: 1979   Increment = 1
Vertical Axis Title: U.S. Dollars
                     (in millions)
Vertical Scale: Auto

Bar Type #1   Bar Type #2
--------------------   -----------
Value at Horizontal point #1: 3.9   #1: 1.4
Value at Horizontal point #2: 4.5   #2: 2.9
Value at Horizontal point #3: 5.3   #3: 3.4
Value at Horizontal point #4: 5.3   #4: 4.1

Territorial Sales Performance
Foreign and Domestic

U.S. Dollars
(in millions)

— Domestic Sales

— International

1979   1980   1981   1982

Y E A R

Sample #4

Chart type: LINE   Chart title: Territorial Sales Performance
                              1982 Foreign Sales By Month
Number of Bar Types = 1
Name of Bar Type #1: Sales

Horizontal Axis title: M O N T H
Number of Horizontal Axis Points = 12

Numeric Value for First Horizontal Point : 1   Increment = 1
Vertical Axis Title: U.S. Dollars
                     (in millions)
Vertical Scale: Auto

Bar Type #1

Value at Horizontal point #1: .25   #7:   .37
Value at Horizontal point #2: .38   #8:   .42
Value at Horizontal point #3: .32   #9:   .38
Value at Horizontal point #4: .29   #10: .35
Value at Horizontal point #5: .31   #11: .33
Value at Horizontal point #6: .33   #12: .37

Territorial Sales Performance
1982 Foreign Sales by Month

U.S. Dollars
(in millions)

— Sales

M O N T H

Charton Guide
Pie Charts
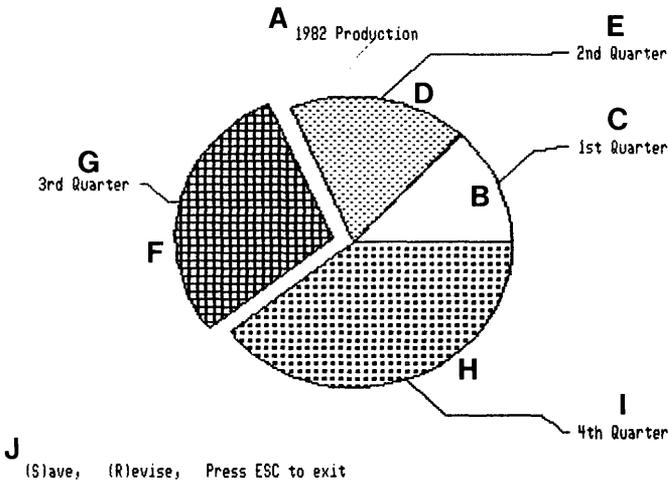
A = Chart Title   F = Slice 3

B = Slice 1   G = Slice 3 Title

C = Slice 1 Title   H = Slice 4

D = Slice 2   I = Slice 4 Title

E = Slice 2 Title   J = Options to Continue

Create a New Pie Chart

Pie Charts are created from Charton's Main Menu by selecting option **C** to CREATE A NEW CHART.

When the prompt CREATE WHAT KIND OF CHART appears, select option **P** for Pie Chart.

A series of prompts will then appear on the screen. Answer each question as instructed on the next page. Use the chart at the top of this page as a reference in determining which answers will affect which fields in the chart.

If you make a mistake, you can either press the **ESC** key to return to the Main Menu and start over, or you can finish the chart and then revise it.

Pie Chart Screen Prompts

The following prompts appear on the screen when the option to create a new chart is selected. Refer to the samples at the beginning and end of this chapter to acquaint yourself with the ramifications of your answers to these prompts.

Chart Title – The chart title appears centered at the top of the chart.

> **PIE CHART**
>
> **Chart title:**

Type the title (up to 24 characters) and press **RETURN.**

Number of Slices – The number of slices determines how many "pieces" will make up the pie. Up to 24 slices are allowed.

> **Number of Slices:**

Type the number of slices and press **RETURN.**

Slice Displacement

The pie is displayed whole except for slices that you specify to displace. These slices are exploded from the rest of the pie.

Slices may be displayed in three different ways:

o   **Whole** (option **W**) displays the pie intact.
o   **Exploded** (option **E**) displays all slices displaced.
o   **Displaced** (option **D**) combines the first two options.

> **(W)hole, (E)xploded, or (D)isplaced Slices?**

Type the letter (**W, E,** or **D**) for your desired option. The number of slices and the display type are then displayed on the screen with a prompt to enter the size for Slice #1.

Slice 1

Size?
Title?

Slice 2

Size?
Title?

Slice 3

Size?
Title?

Type a value for the size of the first slice as prompted and press **RETURN.** Then type the title for that slice (up to 13 characters) as prompted and press **RETURN** again.

Continue defining slices as prompted, pressing **RETURN** after each entry. The Pie Chart will be displayed when all slices have been defined.

Print Pie Charts

Pie Charts can be printed at any time using Valet's Screen Dump feature and a printer with graphics capability that has been installed for Valet. (Refer to the Valet Guide for printer installation instructions.)

With the Pie Chart on the display, press **CTRL** and **P** simultaneously. This removes the Charton options from the lower left side of the display. Then activate Valet (press **CTRL** and **ESC** simultaneously and then press **TAB**).

From Valet's Main Menu, select option **S** for Screen Dump. When the screen dump options appear, select option **E** to print the Entire Screen. When Valet is activated, the graphics characters will be undisplayed on the screen until Valet is deactivated. Do not be alarmed. These characters will still be printed.

When printing is complete, the screen returns to Set-Up Mode. Press **CTRL** and **ESC** simultaneously again to return to the chart. Graphics characters are then redisplayed.

Press **CTRL** and **P** simultaneously again to redisplay the Charton options.

Revise a New Pie Chart

Any of the values that were used to create the chart can be easily changed after the chart is displayed. With the chart on the display, select option **R** to Revise. Each value that was entered while creating the chart is then displayed individually with the prompt **Okay?**

Press the space bar to leave a value as it was and continue.

Press **C** to change the value. The value is deleted and the cursor moves to the entry field for that value. Type a new value and press **RETURN.**

Press the **BACK SPACE** key to scroll to the previous prompt and redo the entry, or press **ESC** to display the "new" chart.

   PIE CHART

   Chart title: **Okay?**
   Number of Slices: **Okay?**
   (W)hole, (E)xploded, or (D)isplaced Slices?   **Okay?**

   Slice 1
   Size?   **Okay?**
   Title?   **Okay?**

   Slice 2
   Size?   **Okay?**
   Title?   **Okay?**

   Slice 3
   Size?   **Okay?**
   Title?   **Okay?**

Notice the power in the Revise feature. You can use the **space bar** to scroll down through the values, or the **BACK SPACE** key to scroll back up.

Values are changed by pressing **C**, retyping the value, and pressing **RETURN.**

Press **ESC** at any time to redraw the chart with your revisions included.

If **ESC** is pressed while the cursor is in the entry field, the old value is retained.

If **ESC** is pressed after **RETURN**, the new value appears in the chart display.

Abandon a New Pie Chart

You can print or revise a new chart when it is displayed, but it is not stored on the disk. If you do not want to save the chart, press **ESC.** Charton will return to the Main Menu and the chart will be cleared from memory.

Save a New Pie Chart

If you want to save the chart for retrieval at a later time, select option **S** to Save. You will be prompted NAME OF FILE FOR SAVING CHART?

Type a filename (up to eight characters) that will help you remember the contents of the chart, such as SALESPIE or BUDGTPIE and press **RETURN.**

The chart will then be saved on the disk file and the display screen will return to Charton's Main Menu.

You can save the file on a diskette other than the logged disk by preceding the filename with the drive letter (such as B:filename).

Note: Charton will add the file extension .CHT, so the file will be displayed on the file directory as SALESPIE.CHT or BUDGTPIE.CHT.

Display an Existing Pie Chart

To recall a chart that has been saved, activate Charton's Main Menu and select option **D** to display an existing chart. All .CHT files on the logged disk will be displayed on the directory with the prompt FILENAME OF CHART TO DISPLAY?

Type the name of the file containing the chart to display and press **RETURN.** The chart will be displayed with the (S)ave and (R)evise options displayed. Press **ESC** to return to the Main Menu.

Note: you can display a file from a diskette other than the logged disk by preceding the filename with the drive letter (such as B:filename).

To display a directory of .CHT files contained on the diskette in the alternate drive, type **B:** or **A:** and press **RETURN** at the prompt FILENAME OF CHART TO DISPLAY?

Revise an Existing Pie Chart

To revise an existing Pie Chart, display the chart as instructed
above and select option **R** to revise when the chart is displayed.

The values that were used to create the chart are displayed
individually, just as when revising a new chart. (Refer to the
instructions for "Revising a New Pie Chart" on the previous pages
for details on the revision process.)

Change values as appropriate and press **ESC** to display the "new"
chart.

Abandon a Revised Pie Chart

You can print the revised chart when it is displayed, but the
revisions are not stored on the disk. If you do not want to save
the revised chart, press **ESC.** Charton will return to the Main
Menu and the revised chart will be cleared.

The file that was retrieved for revision remains on the disk with
its original status intact, just as though no revisions had been
made.

Save a Revised Pie Chart

If you want to save the revised chart, select option **S** to Save.
You will then be prompted NAME OF FILE FOR SAVING CHART?

At this point, you can either create a new file for the revised
chart or overlay the old file. If you type the same filename as
when you retrieved the chart for revision, the revised chart will
replace the original chart in the file.

If you type a filename that does not already exist on the
diskette, the revised chart will be saved in that file and the
original file will remain intact.

The display screen will return to Charton's Main Menu when the
file has been saved.

You can save the file on a diskette other than the logged disk by
preceding the filename with the drive letter (such as
B:filename).

Note: Charton will add the file extension .CHT, so the file will
be displayed on the file directory as SALESPIE.CHT or
BUDGTPIE.CHT.

Delete Chart Files

Use the CP/M DIR command to display the file directory. Files containing charts (.CHT) can be deleted from the diskette with the CP/M ERA Utility program.

With the cursor at A>, type **ERA** and the name of the file to erase (such as SALESLIN.CHT).

If the file is on a diskette other than the logged disk, precede the filename with the drive letter (such as·B:filename).

Pie Chart Examples

Sample #1

Chart type: PIE
Number of Slices: 3
Chart Title: 1982 Sales
Chart Format: Whole

Slice 1

Size: 2.5
Title: Western

Slice 2

Size: 2.8
Title: Eastern

Slice 3

Size: 4.1
Title: International
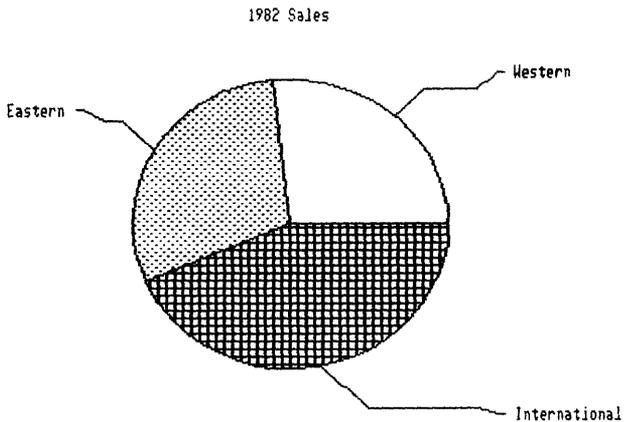
1982 Sales

Sample #2

Chart type: PIE
Number of Slices: 3
Chart Title: 1982 Sales
Chart Format: Exploded

Slice 1   Slice 2   Slice 3
-------   -------   -------
Size: 2.5   Size: 2.8   Size: 4.1
Title: Western   Title: Eastern   Title: International
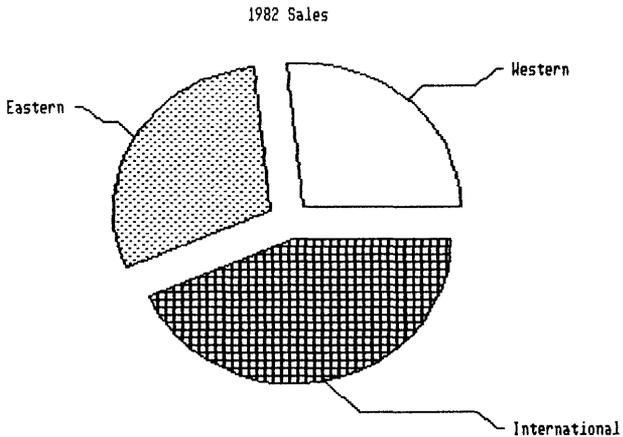
1982 Sales

Pie Charts

Sample #3

Chart type: PIE
Number of Slices: 3
Chart Title: 1982 Sales
Chart Format: Displaced

Slice 1	Slice 2	Slice 3
Size: 2.5	Size: 2.8	Size: 4.1
Title: Western	Title: Eastern	Title: International
Not Displaced	Not Displaced	Displaced

1982 Sales

Sample #4

Chart type: PIE	Chart Title: 1982 Foreign Sales
Number of Slices: 12	Chart Format: Exploded

Slice 1:	.25	January	Slice 7:	.37	July
Slice 2:	.38	February	Slice 8:	.42	August
Slice 3:	.32	March	Slice 9:	.38	September
Slice 4:	.29	April	Slice 10:	.35	October
Slice 5:	.31	May	Slice 11:	.33	November
Slice 6:	.33	June	Slice 12:	.37	December
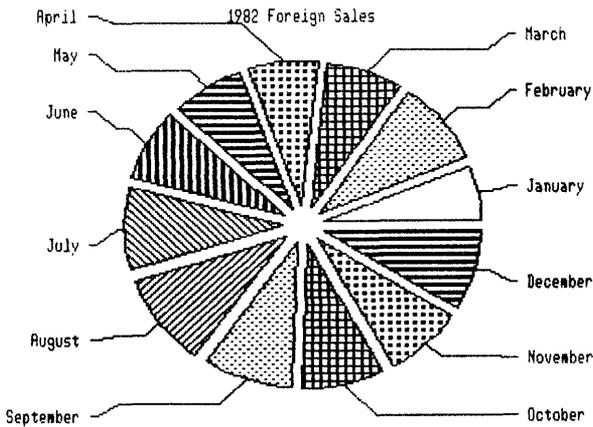
Charton Guide

Appendixes

Glossary

Abandon New Chart   Process of exiting from a newly created chart without saving it.

Abandon Revised Chart   Process of exiting from an existing chart that has been revised without saving it. The original chart remains intact in the disk file as though no revisions were made.

Activate Charton   Process of activating Charton by typing CHARTON and pressing **RETURN** when the cursor is at A> (or B> if called from that drive).

Bar Chart   A chart that displays data as vertical bars in a numerically scaled rectangle.

Bar Type   Values that determine how many bars will appear at each Horizontal Axis Point on a bar chart.

Bar Type Name   The name given to each Bar Type in a bar chart.

Charton   Attache software programs that provide the capability for creating bar charts, line charts, and pie charts.

CHARTON.COM   The file on the Attache Software diskette that contains Charton programs.

Charton Files   Files that are required for running Charton programs.

Chart Files   .CHT files created to store charts that you have created with Charton.

Chart Title   The one or two line chart description that is keyed during chart creation and appears at the top of the screen when the chart is displayed.

Chart Type   Either a bar chart, line chart, or pie chart.

Create   The Charton Main Menu option for creating a new chart.

Delete Charts   The process of deleting files that were created with Charton for storing charts.

Displaced Slices   Pie Chart option that displays specified slices of the pie exploded from the rest of the pie.

Glossary

Display The Charton Main Menu option for displaying an existing chart that was previously created and saved in a chart file.

ESC Key Used to exit from Charton, return to Charton's Main Menu, or redisplay a chart after revision.

Exit Charton Process of returning from a chart to Charton's Main Menu, and from the Main Menu to CP/M.

Exploded Slices Pie Chart option that displays slices of the pie separated from each other other on the display.

Horizontal Axis The horizontal line at the bottom of a chart.

Horizontal Axis Points Points on the Horizontal Axis where bars are displayed in a bar chart, and where values are displayed to measure lines in a line chart.

Horizontal Axis Title The title that appears below a chart.

Horizontal Points Horizontal Axis Points.

Increment The amount of increase in numeric values from one Horizontal Point to another.

Line Chart A chart that displays data as horizontal lines in a numerically scaled rectangle.

Line Type Values that determine the number of lines that will appear on a line chart.

Main Menu Charton Menu that provides options to create a new chart, display an existing chart, or return to CP/M.

Pie Chart A chart that displays data as slices in a pie.

Print Process of printing a chart, using Valet's Screen Dump feature.

Revise New Chart Process of revising a newly created chart that has not been saved in a disk file.

Revise Existing Chart Process of revising an existing chart that has been saved in a disk file.

Save New Chart Process of storing a newly created chart in a disk file.

Save Revised Chart Process of storing an existing chart that has been retrieved from a disk file and revised.

Screen Dump   Valet feature that prints the contents of the display screen.

Slice Size   The size of an individual slice in a pie chart.

Slices   Pieces of the pie in a pie chart.

Valet   Attache software programs that allow temporary interruption from a program to perform other operations and then return automatically to the interrupted program.

Vertical Axis Title   Title that appears on the left side of a bar or line chart.

Whole Slices   Pie Chart option that displays the pie without displacing any of the pieces.

Index

Index

OTRONA