write

A member of the integrated PFS Family of Software

Software Publishing Corporation
1901 Landings Drive, Mt. View, CA 94043

Apple IIc and IIe
Please complete this card and mail it at your earliest convenience. Enrollment in the PFS User Group entitles you to receive product update information, new product announcements, and tips on using the PFS Family of Software.

Title: 

Industry/Profession: 

Education: 

How familiar are you with computers? 

Computer Model: 

Printer: Make: 

Floppy Disk Drives: 

Hard Disk Drives: 

Have you bought: PFS:FILE 

PFS:REPORT 

PFS:GRAPH 

Comments:

Date Bought:

Size: 

> 128K

128K

64K

> 2+ 

2+ 

1+ 

0+ 

No

Make:

Model:

Brand:
pfs:write

user's manual

for the Apple Iic and IIe

Program Authors: Sam Edwards, Charles Leu and Brad Crain
Manual Authors: Chris Doerr and Laura Varteressian
Support Policy

To participate in Software Publishing’s support service, fill out and return the User Group Enrollment Card.

Warranty: Software Publishing Corporation warrants that the PFS:WRITE diskette is free from defects in material and workmanship, assuming normal use, for a period of ninety (90) days from date of purchase. If a defect occurs during this period, you may return your diskette to Software Publishing Corporation or its authorized dealer, along with a dated proof of purchase, where it will be replaced free of charge.

Program Updates: Software Publishing will notify you of all WRITE updates. These new versions may be obtained from Software Publishing Corporation or its participating dealer by returning your current diskette along with a check in the amount specified in the notification letter.

NOTICE
SOFTWARE PUBLISHING MAKES NO WARRANTY OF ANY KIND WITH REGARD TO THIS MATERIAL, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Software Publishing shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

©1983 Software Publishing Corporation
First Printing, September 1983

Rev. E, September 1984
Software Publishing Corporation
1901 Landings Drive
Mountain View, CA 94043

Apple® and Apple dot Matrix® are trademarks of Apple Computer
C.itoh ProWriter™ is a trademark of C.itoh Electronics, Inc.
IDS Prism™ is a trademark of Integral Data Systems, Inc.
NEC® is a trademark of Nippon Electric Corporation.
Okidata™ is a trademark of Okidata Corporation.

This manual explains how to use the PFS:WRITE program to help you prepare documents of all different kinds. If you are not familiar with the general operation of your computer system, read through your Owner’s Manual before beginning.

To use WRITE, you need an Apple IIc or Apple IIe computer system, an 80-column video monitor, a printer, the PFS:WRITE diskettes, and a supply of blank, formatted diskettes. If you have an Apple IIe system, you also need at least 64K of memory, an 80-column text card, and at least one diskette drive.

This manual contains eight chapters and three appendices. The chapters give detailed, step-by-step instructions on how to use each of WRITE’s features. Examples are included to illustrate these features, and there is a summary at the end of each chapter. One way to learn WRITE is to read through the chapters, using your own computer to follow along with the examples. The appendices include information on error messages and recovery and a quick reference guide.

If you have not already done so, please fill out and return the User Group Enrollment Card. Enrollment in this group entitles you to receive product update information, new product announcements, and tips on using the PFS Family of Software.
Protecting Your PFS:WRITE Documents

By the time you have typed and/or edited a group of documents, you may have invested a lot of time. To protect that investment from such problems as disk failure, a power outage, or an inadvertent error such as writing over a document you need to keep, follow the guidelines below:

1. Use only high-quality, double density diskettes.
2. Always keep at least one extra (backup) copy of each diskette that contains important documents.
3. Handle your diskettes carefully. Store away from heat, sunlight, and devices with strong magnetic fields (TVs, diskette drives, etc.).

Recommended Backup Procedure:

1. Save your documents on a diskette frequently. A good rule-of-thumb is to stop and save at least every half hour, so that you never have the possibility of losing more than half an hour's work.
2. Use the DOS COPY or COPYA command to make a backup copy of the diskette at least once a week. Update that backup copy oftener if you make significant changes to one or more documents. See your DOS manual for more information.
3. If you encounter problems with a document or get an I/O ERROR message, discard the diskette at once and use the backup diskette. If the problem recurs with the backup diskette, ask your computer dealer for help.

Table of Contents

Introduction .......................................................... I-1
What is PFS:WRITE? ................................................ I-1
Getting Started with PFS:WRITE .............................. I-3
   What You Need to Use WRITE ................................. I-3
   Making a Copy of the PFS:WRITE Diskette .............. I-4
Starting the WRITE Program ..................................... I-6
Using WRITE with Only One Diskette Drive .............. I-7
Keyboard Control Keys .......................................... I-7
Document Name Conventions .................................. I-8
The PFS:WRITE Main Menu ..................................... I-8
Experimenting with WRITE ....................................... I-10
   Sample 1: A Memo ........................................... I-11
   Sample 2: A Price List ..................................... I-14
   Sample 3: A Report .......................................... I-17
When You Need Help ............................................. I-20
Summary .................................................................. I-22

TYPE/EDIT ............................................................... 1-1
   The Working Copy ............................................... 1-1
   Selecting TYPE/EDIT .......................................... 1-1
   Entering Text into the Document ............................ 1-4
   Correcting Mistakes ............................................. 1-6
   Using the DELETE Key ......................................... 1-6
   Moving the Cursor .............................................. 1-7
   Inserting Characters ............................................ 1-8
   Removing Characters ........................................... 1-9
   Removing a Word or an Entire Line ....................... 1-9
   Replacing Characters .......................................... 1-10
Setting Tabs ................................................................ 1-11
Returning to the Main Menu .................................... 1-13
Advanced Editing Features ..................................... 1-14
Summary .................................................................. 1-14
I: introduction

What is PFS:WRITE?

PFS:WRITE (or simply WRITE) is a computer program that you can use to prepare, print, and store the documents you need in your daily work or personal life. It produces all kinds of documents—interoffice memos, letters, articles, financial tables, even books. WRITE is integrated with the other programs in the PFS Family of Software, enabling you to use addresses from your PFS files, or to print a chart created by PFS:GRAPH as part of your WRITE document. Yet WRITE is so easy to learn that you can actually be producing documents in just a few minutes.

WRITE operates much like a standard typewriter, but with many improvements. When you begin a document, an image appears on the screen that shows the top and side boundaries of a piece of paper. The margins are set for a standard page width and length. All you have to do is begin typing your document.

You don’t need to worry about reaching the end of the line or the bottom of the page—WRITE automatically moves to the next line when at the end of a line, and to the next page when at the end of the page. Best of all, if you make a mistake you just back up and type over it, or change it using one of WRITE’s many editing functions. Thus, you can produce error-free documents in less time than it would take you with a typewriter—and with considerably less frustration.
Here are some sample documents you might produce with WRITE:

**A Business Letter**

[Image of a business letter]

**A Financial Report**

[Image of a financial report]

---

**A Journal Article**

[Image of a journal article]

When you produce documents such as these, what you see on the screen is, in most cases, exactly what you will get when you print the document. Thus, it is easy to control the way the printed copy looks.

**Getting Started with PFS:WRITE**

**What You Need to Use WRITE**

To use WRITE, you need the following equipment:

- an Apple IIc or Apple IIe computer system with at least 64K memory
- an 80-column video monitor, properly connected to the computer
- for the Apple IIe, an 80-column text card, compatible with the current Apple 80-column cards. (Note: If you have the Apple 80-column text card with an additional 64K of memory or if you have an Apple IIc, WRITE takes advantage of the additional memory, allowing you to create larger documents.)
any parallel or serial printer properly connected to your computer with a
Pascal-compatible card*

the PFS:WRITE package, which includes the program diskette, a Sampler
diskette, and this manual

blank, high-quality, double-density diskettes, formatted using DOS or ProDOS.
You will use one to make a copy of the program diskette and the others to store
documents.

for the Apple IIe, a disk drive (built-in for the Apple IIc)

Making a Copy of the PFS:WRITE Diskette

Before you use the PFS:WRITE program, you should make a copy of the program
diskette. It is very important that you follow these copy instructions before using the
PFS:WRITE diskette for the first time. Making the copy takes from 15 to 20
minutes.

WARNING: You can make only one copy of the program diskette and you
cannot stop the copy operation once you've completed Step 5, below.
Therefore, follow the instructions very carefully. If you complete Steps 1
through 5 of the copy procedure, but do not finish the entire procedure, you
will lose your one opportunity to copy the program diskette.

You will need one high-quality, double-density diskette (new or containing
information you don't want to keep). Remove its write-protect tab if it has one.

In this manual Drive 1 refers to the built-in drive on the Apple IIc. Drive 1 on the
Apple IIe is labeled.

Step 1: Make sure your video monitor or TV set is turned on, and your computer is
turned off.

Step 2: Insert the PFS:WRITE program diskette in Drive 1. (As you remove the
WRITE program diskette from its envelope, take a moment to read the
precautions on the back of the envelope. Improper care could cause you
to lose information.) Slip the diskette into the slot with the label upwards.
The oval cutout in the diskette jacket should enter the drive first. The label
should enter the drive last. Gently push the diskette until it is entirely inside
the drive. Then close the drive door by pushing it down.

*PFS:WRITE will include PFS graphs in documents when used with the following printers:
Apple Dot Matrix, Epson 8023, Combee ProWriter, IDS Prism, and Okidata 82, 92, or
93. WRITE will not print graphs in documents when used with a Grappler, a Grappler +,
or a PKASO card.

Step 3: Turn on your computer. The red in-use light on the disk drive should come
on. You can hear the drive as it loads the WRITE program. This takes
approximately 20 seconds. When it is finished, the in-use light goes off
and you will see the following screen:

You should now make a copy of your PFS program diskette.
To do this, you will need one
blank, double-density diskette.
Press FLT C to start making the copy.
Press ESC if you are not ready
and want to copy this diskette.

Once you've made a copy of the WRITE program diskette, this screen will
not appear again. If you aren't ready to make a copy (for example, you
don't have a blank diskette), press ESC. You will go directly to the WRITE
Main Menu.

Step 4: Press CTRL C to continue with the copy procedure.

For a Single Drive System:

Step 5: When WRITE asks you to, remove the WRITE program diskette from the
drive. Insert a high-quality, blank diskette on which you will copy the
program diskette. WRITE is formatting the diskette while the "Formatting
Diskette" message is on the screen.

Step 6: When requested, replace the WRITE diskette in the drive and press CTRL
C.

Step 7: Continue switching the two diskettes when requested. You will switch
diskettes several times.

Step 8: When WRITE tells you it is finished making the copy, remove the diskette
in the drive. Place a write-protect tab on both diskettes.
Step 9: With a felt-tipped pen, label the new copy as PFS:WRITE for Apple IIC/IIE.

Step 10: Test the new copy by using it to start WRITE, as explained in the next section. If you see the WRITE Main Menu, you have confirmed that the copy diskette works. Store the copy in a safe place and use the original PFS:WRITE for your work.

You are now ready to begin using WRITE. Skip to the section called "Starting the WRITE Program."

For a Two-Drive System:

Step 5: When WRITE asks you to, insert a high-quality, blank diskette in Drive 2. You will make a copy of the WRITE program on the diskette in Drive 2. Press CTRL C to continue.

Step 6: WRITE is formatting the diskette while the "Formatting Diskette" message is on the screen. When the "Copying Program Diskette" message is on the screen, the copy procedure is underway.

Step 7: When WRITE tells you it is finished making the copy, remove both diskettes and place a write-protect tab on each of them.

Step 8: With a felt-tipped pen, label the new copy as PFS:WRITE for Apple IIC/IIE.

Step 9: Test the new copy by using it to start WRITE, as explained in the next section. If you see the WRITE Main Menu, you have confirmed that the copy diskette works. Store the copy in a safe place and use the original PFS:WRITE diskette for your work.

You are now ready to begin using WRITE.

Starting the WRITE Program

How you start WRITE depends on whether or not the computer is already turned on. If the computer is turned off, insert the WRITE diskette in Drive 1 and turn the computer on. If the computer is already turned on, insert the WRITE diskette in Drive 1 and press APPLE CTRL RESET. The Main Menu will appear and you are ready to use WRITE.

Insert the WRITE Sampler diskette in Drive 2.

This manual is written assuming that you have a two-drive system. With a two-drive system, leave the WRITE program diskette in Drive 1 at all times. Use Drive 2 for your Sampler diskette and other document diskettes. WRITE always looks for the Program diskette in Drive 1 and a document diskette in Drive 2.

Using WRITE with Only One Diskette Drive

WRITE can be used with a single diskette drive. You will have to exchange the program diskette for a document diskette any time you Get or Save a document. The program will tell you to change diskettes in the drive any time it is necessary.

Keyboard Control Keys

As you work with WRITE and its menus, you will use several special keys:

<table>
<thead>
<tr>
<th>Key</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTRL C</td>
<td>tells WRITE to begin or continue with the specified function. (CTRL C means hold down the CONTROL key and at the same time press C.)</td>
</tr>
<tr>
<td>ESC</td>
<td>always returns to the WRITE Main Menu.</td>
</tr>
<tr>
<td>TAB</td>
<td>when filling in a menu, moves the cursor forward to the next item; when typing or editing a document, works like a typewriter tab key.</td>
</tr>
<tr>
<td>←</td>
<td>moves the cursor one character to the left.</td>
</tr>
<tr>
<td>→</td>
<td>moves the cursor one character to the right.</td>
</tr>
<tr>
<td>↑</td>
<td>moves the cursor up one line.</td>
</tr>
<tr>
<td>↓</td>
<td>moves the cursor down one line.</td>
</tr>
<tr>
<td>CTRL P</td>
<td>displays the previous screenful of text</td>
</tr>
<tr>
<td>CTRL N</td>
<td>displays the next screenful of text</td>
</tr>
</tbody>
</table>
When you type or edit a WRITE document, other key combinations are used to initiate WRITE's many editing functions. Some of these keys are demonstrated later in this chapter. All of the keystrokes are explained in Chapters 1 (TYPE/EDIT) and 7 (Advanced Editing).

**Document Name Conventions (File Name Conventions)**

All information stored on a diskette is stored in files. Each file must have a unique name. The files stored by WRITE are all document files, but other programs, such as PFS:GRAPH, store other kinds of files such as chart files. This manual refers to your WRITE files as files or documents interchangeably.

The name given to the document can be up to 15 characters long, including letters, numbers, and periods. The first character must be alphabetic. Here are a few sample file names:

- **MEMO**
- **YEAREND83**
- **LETTER.JFB**

**The PFS:WRITE Main Menu**

The WRITE Main Menu lists the five main functions provided by PFS:WRITE:

1. **TYPE/EDIT**
2. **DEFINE PAGE**
3. **CLEAR**
4. **GET/SAVE/REMOVE**
5. **PRINT**

**This menu appears whenever you first load PFS:WRITE, and whenever you press the ESC key. The following diagram shows how the functions on this menu work together:**

You use the TYPE/EDIT function to type a new document, or to edit an existing document. When you type a document, WRITE stores it in a temporary area in the machine's memory that we will call the working copy. When you edit a document, the changes are made to that working copy only. You can edit individual characters in the document, or you can edit a block of text together by "labeling" the block and then selecting one of the editing functions. To make the document or changes permanent, you must SAVE the working copy on a diskette.

The DEFINE PAGE function allows you to modify the standard settings for paper size and margins, and to add headings, footings, and page numbers to each printed page. If you choose PRINT, you can print the document in the working copy on the printer connected to your computer system.

The GET/SAVE/REMOVE function allows you to retrieve documents stored on diskette, store the working copy on a diskette for later use; or permanently delete a document from a diskette. You can also get a list of all the documents on the diskette with this function.

CLEAR erases everything from the working copy, so that you can start a new document.
Experimenting with WRITE

Now that you have an idea of how PFS:WRITE works, let's experiment with some sample documents. There are several sample documents stored on the WRITE Sampler diskette. Before continuing with this section, we recommend that you make a copy of the Sampler diskette (use DOS or PASCAL) and use the copy for the examples in this manual. That way, the original version of the sample documents will remain on the diskette in case someone else wants to learn WRITE from this manual at a later time.

Now, start the WRITE program, if you have not already done so, according to the instructions given earlier. Then insert the Sampler diskette in Drive 2. The Main Menu should be on the screen:

Type 4 in the Selection Number item to select the GET/SAVE/REMOVE function, and press CTRL C to continue. Next you see the GET/SAVE/REMOVE Menu:

Sample 1: A Memo

Let's look at the document named MEMO first. Type 1 for the Selection Number to select the Get Document option. Then press the TAB key to move the cursor to the Document Name item and type MEMO. Press CTRL C to continue. WRITE retrieves the document from the Sampler diskette in Drive 2 and displays the first lines of it on the screen:

Suppose that you want to change the description of the subject from “Plan for 1983 Ad Campaign” to “FY83 Advertising Strategy”. Press the down arrow key until the cursor reaches the line containing Subject. Then press the right arrow key until the cursor is on the P in Plan:
Now type the new description:

FY83 Advertising Strategy

The letters you type replace the existing letters. After the replacement, the screen looks like this:

Now, suppose that is the only change needed for the memo. You can store the revised memo back on the Sampler diskette. To do that, press ESC to return to the Main Menu, then type 4 to select the GET/SAVE/REMOVE function. Press CTRL C to continue, and when WRITE displays the Get/Save/Remove Menu type 2 to select the Save option. You could give the document a new name if you wished to save both the old and new versions. Since you have the original on another disk, that is not necessary, so enter the same name, MEMO. The screen now looks like this:

If you press CTRL C to store the document, WRITE warns you that the version on the diskette is about to be overwritten by the version with the changes you just made:

Press CTRL C again to complete the Save option. The revised version replaces the original version on the Sampler diskette.
Sample 2: A Price List

At the Main Menu, select the GET/SAVE/REMOVE function once more. When WRITE displays the Get/Save/Remove Menu, type 1 for the Selection Number, press TAB to move to the Document Name item, and type PRICE.

Press CTRL C to continue.

When WRITE has retrieved the price list, it displays the first screenful:

<table>
<thead>
<tr>
<th>Service</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maui Air Flights</td>
<td>295.00</td>
</tr>
<tr>
<td>4 Day Flights</td>
<td>995.00</td>
</tr>
<tr>
<td>3 Day Flights</td>
<td>715.00</td>
</tr>
<tr>
<td>2 Day Flights</td>
<td>515.00</td>
</tr>
<tr>
<td>Three Island Tour</td>
<td>1,059.00</td>
</tr>
<tr>
<td>2 Day Flights</td>
<td>725.00</td>
</tr>
<tr>
<td>1 Day Flights</td>
<td>575.00</td>
</tr>
<tr>
<td>3 Day Flights</td>
<td>875.00</td>
</tr>
<tr>
<td>Charter Fishing</td>
<td>8:00 — 10:00 a.m. per 8 hours</td>
</tr>
<tr>
<td></td>
<td>10:00 — 12:00 a.m. per 8 hours</td>
</tr>
</tbody>
</table>

This document was created using WRITE tab stops. WRITE provides two kinds of tab stops, making it easy to type columns of data such as this price list.

A typewriter tab moves the cursor to the tab stop, places the first typed character at that location, and places succeeding characters to its right as shown here:

Typewriter Tab Stop

Maui
Hawaii
Oahu
Molokai

The result, after several lines, is a column that is lined up on the left.

A decimal tab, on the other hand, allows you to automatically line up a column of figures by the decimal point. When you press the TAB key to move the cursor to the tab stop and then type a number, WRITE moves the digits so that the decimal point is located at the tab stop. Thus, you could end up with a column that looks like this:

<table>
<thead>
<tr>
<th>Decimal tab stop</th>
</tr>
</thead>
<tbody>
<tr>
<td>123.45</td>
</tr>
<tr>
<td>4473.22</td>
</tr>
<tr>
<td>1.79</td>
</tr>
<tr>
<td>727.80</td>
</tr>
</tbody>
</table>

If you look again at the sample price list, you can see that both typewriter and decimal tabs exist. They are marked on the ruler at the bottom of the screen—a T marks a typewriter tab, and a D marks a decimal tab.

Now, suppose a new charter package has been organized, and you want to add it to the bottom of the price list. The first thing you have to do is move the cursor to the end of the list. To do that, press CTRL G (for Go To) and then E (for End) to move to the end of the document. The screen now looks like this:

<table>
<thead>
<tr>
<th>Service</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scuba Diving</td>
<td>95.00</td>
</tr>
<tr>
<td>Diving for Beginners</td>
<td>129.00</td>
</tr>
<tr>
<td>Half Day Adventure</td>
<td>95.00</td>
</tr>
<tr>
<td>Surfing Lessons</td>
<td>35.00</td>
</tr>
</tbody>
</table>

Press the RETURN key twice to skip a line. The first column lists the description of each package. Type Scuba Diving and then press TAB to move to the next tab stop. Type 5 days and press TAB one more time to move to the price column. Note that this is a decimal tab (you can tell by the D on the ruler at the bottom of the screen.) Now type in the price of the package:

<table>
<thead>
<tr>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>599.00</td>
</tr>
</tbody>
</table>
and press RETURN to move to the beginning of the next line. The screen looks like this:

Now, suppose that the package named Diving for Beginners is no longer available, and you want to delete it from the list. Use the up arrow key to move the cursor to any position in the first line of that item and press CTRL E to erase the line. Press CTRL E two more times to erase the next line and the blank line, so that the list looks like this:

At this point, the price list is up to date and you need to store it on the Sampler diskette. It probably makes sense to keep a copy of the original price list for archival purposes, so let's save the revised list with a different name. Press ESC to return to the Main Menu, select the GET/SAVE/REMOVE function, and then the Get Document option. Enter the name

ANNUAL

in the Document Name item. Press CTRL C to retrieve the document and display it on the screen:

Press CTRL C to save the revised list with the new name, leaving the original document safely stored on the diskette.

Sample 3: A Report

For the last example, let's look at the document named ANNUAL. Return to the Main Menu, select the GET/SAVE/REMOVE function, and then the Get Document option. Enter the name

ANNUAL

in the Document Name item. Press CTRL C to retrieve the document and display it on the screen:
This longer document (4 pages) reports a company’s 1982 performance. To look at the rest of the document, press the down arrow (or CTRL N). Look through several pages of the document so that you can see the variety of information presented in this report. Notice that on the second page there is a command to insert a graph in the text:

If you were to print this page of the document, the referenced graph would be printed where indicated:

Suppose that the Board of Directors for the company has decided to change its name to better communicate the company’s business to the public. The new name is Holidays in Hawaii. You could easily change the name throughout the annual report, even at the last moment, by using WRITE’s search-and-replace function. Just press CTRL S and WRITE prompts you for the letters/words to search for, and the letters/words with which to replace them. Enter the name

Maui Charter Trips

in the Search For item, press the TAB key to move to the Replace With item, and type

Holidays in Hawaii

When you have filled in those items, the prompts look like this:
Now press CTRL C to begin searching. When WRITE finds the first instance of Maui Charter Trips, it asks whether or not you want the phrase replaced:

If you type Y, WRITE makes the replacement and searches for the next instance. If you type N, it does not make the replacement, but still searches for the next instance. Typing Q cancels the search-and-replace function.

Go ahead and replace the name throughout the report, then press ESC to return to the Main Menu.

When You Need Help

All of WRITE's functions are described in detail in the next seven chapters. One way to learn how to use WRITE is to read through at least the first five of those chapters, following the examples on your own computer and comparing your results with those in this manual.

Another way to learn to use WRITE is to simply sit down at your computer and begin. Appendix B, the Quick Reference Guide, summarizes all the information you need to use WRITE. If at any time you need an explanation of your options, you can also press Open Apple H (for Help) to display a Help screen. The following screens are available to you.

If you press Open Apple H at a menu, you will see an explanation of the options on that menu. For example, if you press Open Apple H at the Main Menu, you will see the following screen:

If you press Open Apple H in TYPE/EDIT, on the other hand, you will see this screen:

To return to your document after reviewing the information on these screens, press CTRL C.
Summary

- PFS:WRITE is a computer program that prepares and prints all kinds of documents—letters, memos, financial reports, etc.

- To use WRITE, you need an Apple IIe computer with 64K of memory, an 80-column video monitor with an 80-column text card, and one disk drive; or an Apple IIc computer with an 80-column video monitor. You also need the PFS:WRITE package, several formatted diskettes, and a printer with a Pascal-compatible printer card.

- Make a copy of the PFS:WRITE diskette before you start using the program. Keep the copy in a safe place; use the original for your work.

- Press Open Apple H for an explanation of the options available on each menu, and for a list of the editing options available in TYPE/EDIT mode.

1: type/edit

You use the TYPE/EDIT function to enter a new document, making corrections as you go along, and to edit an existing document.

The Working Copy

As you type a new document, WRITE places it in a temporary storage area in the machine called the working copy. Similarly, when you retrieve a document from a diskette for editing, WRITE makes a copy of it and places that copy in the working copy. You can display 22 lines of the working copy on the screen. Any editing changes that you make are made to the copy in the working copy only, and have no effect on the version still stored on the diskette. When you have finished typing or editing the document, you must use the Save option of GET/SAVE/REMOVE to store the new or edited document on a diskette. (GET/SAVE/REMOVE is discussed in detail in Chapter 4.)

Selecting TYPE/EDIT

To start the TYPE/EDIT function, load the WRITE program into your computer system, as explained in the introduction. (If you have been following the examples in the introduction, you should reload the program or CLEAR the working copy before continuing.)

When the Main Menu appears, you will see the cursor next to the words SELECTION NUMBER. Type 1 to indicate that you want to select TYPE/EDIT. Your screen should look like the illustration below:
Once you have entered a selection number, press CTRL C to proceed with the TYPE/EDIT function. WRITE displays a new (blank) piece of paper so that you can begin typing a document:

As you can see, there are already several things on this "blank" piece of paper. The vertical lines from top to bottom mark the side boundaries of the page, and the horizontal line across the top marks the top of the page. The number line across the bottom is called the ruler, and the line below that is called the status line. The last item to notice is the cursor near the top of the page. Let’s take a look at each of these items.

**Page Boundaries.** The page boundaries mark the top and sides of a standard 8-1/2 by 11 inch sheet of paper. When you are working with a document, it looks on the screen the way it will look when printed, except that you can see only 22 lines at a time.

To see the next part of the document, either press the down arrow to move the cursor down line by line, or press CTRL N to display the next screenful. CTRL P displays the previous screen, unless you are at the beginning of the document.

As you move the cursor through the document, a pair of horizontal lines will appear to mark the end of one page and the beginning of another. Also, the line and page number shown on the status line will be constantly updated to show the current cursor position.

**Ruler.** The ruler, visible when you have a document on the screen, shows three things:
- the left and right margin settings, shown by [ and ]
- the current tab settings, shown by T for Typewriter Tab or D for Decimal Tab
- the current column position of the cursor, shown by a highlighted rectangle at the corresponding column on the ruler

**Status Line.** The status line displays several kinds of information, depending on whether or not you have requested a special editing function:
- when you are entering or looking through a document, the status line displays the name of the document, how much of the space available in the working copy has been used, and the line number and page number of the current cursor position. If you are inserting or labeling text, that is noted as well. Also, if the cursor is positioned on a character with any special enhancements, such as boldface or underlining, the status line identifies that enhancement.
- when you have requested a special editing function, such as Search, the status line requests any additional information needed to complete the operation, such as what word(s) you want to search for.
- when a function cannot be completed because of an error condition, the status line displays the appropriate error message.

**Cursor.** The cursor always marks the location where any characters you type will appear. When you begin a new document, WRITE automatically sets the left margin at column 10, and the top margin at 6. The cursor first appears there. If you begin typing the document, the first character you type will appear in column 10 of the seventh line. (WRITE counts the lines of text, rather than lines on the page, and in the status line refers to this line as line 1.)
Entering Text into the Document

To start a new document, just begin typing. You do not need to press the RETURN key; keep typing and WRITE will automatically place the next word you type at the beginning of the next line. This feature, called **wordwrap**, allows you to type your document very quickly, without paying attention to the length of each line. When you reach the end of a paragraph, however, you can press the RETURN key twice to leave a blank line before the next paragraph.

For example, suppose you want to enter the first few lines of a letter. First, press the RETURN key four times to start the letter four lines down from the top margin. Type

October 13, 1982

to date the letter. Then press RETURN four more times to move the cursor down four lines. Type the inside address for the letter:

Mr. and Mrs. Harvey Wellington  
11379 Pioneer Drive  
Ridgewood, CA 97766

If you make a mistake while typing, use the left arrow key to back up and retype the characters in error.

After typing the zip code, press RETURN twice. Now type the salutation:

Dear Mr. and Mrs. Wellington,

and press RETURN two more times. You are ready to begin typing the body of the letter. Type in the following paragraphs (remember you don't need to press RETURN at the end of each line, just between paragraphs):

Enclosed are the tickets for your charter flight to Maui the first week of December. You will find vouchers for your condominium and car rental in the folder with the airplane tickets.

I am also enclosing a brochure and price list for tours, excursions, and sports instruction available once you reach the island. Please let me know, either before or after you arrive, if you would like to book any of these activities.

We hope you will enjoy your trip to our beautiful island.

That is the end of the letter, so press RETURN twice to move the cursor down two lines, and type the closing:

Very truly yours,

The letter on your computer screen looks like this:

If you were to print this letter, it would look just the way it does on the screen (except that all of it would be visible):
Correcting Mistakes

As you type in a document, it is quite likely that you will occasionally make typing errors, or simply change your mind about what you want to say. You can correct simple errors in one of two ways:

- if the error is in the last few characters, use the DELETE key to back up, erasing characters as the cursor moves. Then retype the characters correctly.
- if the error is earlier in the document, move the cursor to the location of the error and make the necessary changes (remove or insert characters or words).

The next few sections explain how to make these corrections. Note that if you need to correct more than a few words, it is easier to use one of the block editing procedures. (See Chapter 6 for a full explanation of block editing.)

Using the DELETE Key

When you press DELETE, WRITE moves the cursor one space to the left, erasing any character in that location.

For example, suppose you decide to close this letter “Sincerely yours” instead of “Very truly yours”. If you have just typed the letter, the cursor will be positioned just after the comma at the end of that phrase. (If the cursor is in some other location, use the cursor control keys to move to that location.) To make the change, press DELETE repeatedly until you have erased the entire phrase, then type

Sincerely yours,

The screen now looks like this:

Moving the Cursor

When you need to correct an error located earlier in the text, you need to first move the cursor to the error location. The cursor movement keys are the four keys with arrows to the right of the space bar.

These keys move the cursor one space in the specified direction.

The cursor can be moved more than one space or line at a time by using one of the special control keys:

<table>
<thead>
<tr>
<th>Control Key</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTRL + G, then B</td>
<td>moves to the beginning of the document</td>
</tr>
<tr>
<td>CTRL + G, then E</td>
<td>moves to the end of the document</td>
</tr>
<tr>
<td></td>
<td>moves to the previous word</td>
</tr>
<tr>
<td></td>
<td>moves to the next word</td>
</tr>
<tr>
<td></td>
<td>moves to the beginning of the current line</td>
</tr>
<tr>
<td></td>
<td>moves to the end of the current line</td>
</tr>
</tbody>
</table>
Inserting Characters

To insert text in the middle of a document, move the cursor to the position where you want to start the insertion, and press CTRL Y (for Ynsert; I is not available). Notice that the cursor blinks faster, and that the message "Inserting" appears on the status line. All you have to do is type the material you want to insert. When you have typed everything you want to insert, press CTRL Y again to stop inserting.

Suppose you want to insert the word travel just before the word vouchers in the first paragraph:

First, move the cursor to the "v" in vouchers, then press CTRL Y. The screen looks like this:

Notice that there is a message on the status line to indicate that you are inserting text, and that the cursor is blinking faster. Now type the word travel, and press the space bar once to leave a space between it and the next word. The paragraph now looks like this:

Since travel is the only word you want to insert, press CTRL Y again to finish the insertion. Notice that the message "Inserting" disappears from the status line.

Note that many people choose to stay in insertion mode at all times, so that they never take the chance of typing over text that they want to keep. WRITE's editing functions work the same in either mode.

Removing Characters

To remove one or more characters from your document, move the cursor to the first character that you want to remove, and press CTRL R (for Remove). Press CTRL R repeatedly to remove more than one character. The characters that occur after the removed characters are moved to the left to fill up the empty space.

Suppose you want to remove the word charter from the first sentence of the letter:

To do that, move the cursor to the space preceding the word charter, and press CTRL R eight times, so that the paragraph looks like this:

Removing a Word or an Entire Line

You can more quickly remove the word the cursor is on by pressing CTRL W (for Word). The characters to the right of the word move to the left to fill up the empty space.

For example, in the letter you have been working with, suppose you want to change the words "Mr. and Mrs. Wellington" to the more informal "Harvey and Jill". First, move the cursor to the M in Mr.:
Press CTRL W four times to erase the rest of the salutation:

Dear

Declared are the tickets for your flight to Maui the first week of December. You will find travel vouchers for your hotel/lease car rental in the folder with the airplane ticket.

Now type the first names, Harvey and Jill:

Dear Harvey and Jill,

Declared are the tickets for your flight to Maui the first week of December. You will find travel vouchers for your hotel/lease car rental in the folder with the airplane ticket.

You can also remove an entire line by moving the cursor anywhere in that line and pressing CTRL E (Erase). The line below moves up to fill in the empty space.

Replacing Characters

To replace text in the document, move the cursor to the first character you want to replace, and type the replacement. If the replacement has fewer characters than the original text, you will need to remove the leftover characters. If it has more characters, you will need to insert the characters that won't fit.

For example, to replace the word condominium with the word hotel, move the cursor to the c in condominium, and type the word hotel. At this point, the paragraph looks like this:

Declared are the tickets for your flight to Maui the first week of December. You will find travel vouchers for your hotel/lease car rental in the folder with the airplane ticket.

Notice that the six letters, minimum, are left over from condominium, since the two words are not the same length. The cursor should be on the first leftover letter, m, so simply press CTRL R six times to remove the unneeded characters. Now the paragraph looks like this:

Declared are the tickets for your flight to Maui the first week of December. You will find travel vouchers for your hotel/lease car rental in the folder with the airplane ticket.

Setting Tabs

Only one tab is set automatically by WRITE in a new document. That tab is set for normal five-space paragraph indentation. You can set other tabs quickly and easily, and you can change them as many times as needed in a single document.

WRITE recognizes two kinds of tabs: typewriter tabs, represented on the ruler by a T, and decimal tabs, represented by a D. Typewriter tabs work just like the tabs on a typewriter—you press the TAB key to move to the tab stop, then start typing at that location.

Decimal tabs work a little differently. You press the TAB key to move to the tab stop, but characters that you type are placed to the left of that stop until a decimal point is typed; after that, any characters typed are placed to the right of the tab stop. This type of tab lines up the decimal points in a column of numbers for you.

Suppose that you want to add a few sample prices to the bottom of the letter to the Wellingtons you just typed. You want the letter to look like this:

Declared are the tickets for your flight to Maui the first week of December. You will find travel vouchers for your hotel/lease car rental in the folder with the airplane ticket.

Maui Charter Flights
11800 Lahana Rd.
Lahaina, HI 96761

October 22, 1982

Mr. and Mrs. Harvey Wellington
1135 Waikiki Rd.
Honolulu, HI 96826

Dear Harvey and Jill,

Declared are the tickets for your flight to Maui the first week of December. You will find travel vouchers for your hotel/lease car rental in the folder with the airplane ticket.

Here are some sample prices:

   Hotel Rooms  $35.00
   Restaurante  $15.00
   Car Rental    $20.00

We hope you will enjoy your trip to the beautiful islands.

Sincerely yours,

Leslie Conklin
Travel Agent.
Since there is already a tab at column 5, let's enter the package descriptions at that column, and set a new tab stop at column 48 for the price column. The letter should still be on your screen, so press CTRL T (for Tabs) to set the new tab. When WRITE prompts you to enter the new tab settings, move the cursor to column 48, and press D to set a decimal tab there. Note that the new tab stop shows up immediately on the ruler:

Press CTRL C to store the new tab and return to the document. Next, to enter the first line of price information, move the cursor to the last paragraph in the letter and press CTRL Y to begin inserting. Press RETURN to leave a blank line and move the cursor back up one line. Type the sentence

   Here are some sample prices:

and press RETURN twice. Next, press TAB to move to the first tab stop, and type

   Scuba Diving

Press TAB again to move to the second tab stop, and type

   15.00

Notice that the price is entered so that the decimal point appears at the tab stop. Now follow the same procedure to enter the next three lines:

   Volcano Tour     32.50
   Two Day Excursion 124.95
   Luau/Fire Eater Show 8.50

Press RETURN to leave a blank line and then CTRL Y to stop inserting. The letter now looks like this:

If you want to clear or "unset" a tab, press CTRL T, move the cursor to the position on the ruler where the T or D appears, and press the space bar. Then press CTRL C to return to the document.

Returning to the Main Menu

You can return to the Main Menu at any time while entering or editing a document by pressing ESC. The document you have been working with remains in the working copy, unless you use the CLEAR function, the Get option of the GET/SAVE/REMOVE function, or turn off your computer. To return to the document, simply select TYPE/EDIT from the Main Menu.
Advanced Editing Features

WRITE provides a number of other editing functions that allow you to perform the following functions:

- search for any word or phrase
- search for a word or phrase and automatically replace it with another word or phrase
- remove, move, or copy a block of text
- center, right-justify, or left-justify a line of text
- underline words or print in bold type
- insert a document stored on diskette into your document
- merge data from a PFS file into your document
- insert a PFS graph into your printed document

These features, plus others, are described in Chapters 6 and 7.

Summary

- Use TYPE/EDIT to type a new document, or edit an existing document.

- move the cursor one space in the indicated direction
- displays help screens
- allows you to set or clear tab stops
- moves the cursor to the previous word
- moves the cursor to the beginning of the line
- moves the cursor to the next word

- moves the cursor to the end of the line
- erases the word at the current cursor position
- erases the line where the cursor is currently located
- moves the cursor to the beginning of the document
- moves the cursor to the end of the document
- displays the next screen of the document
- displays the previous screen of the document
- begins inserting characters at the current cursor position (press CTRL Y again to end the insertion)
- removes the character at the current cursor position
- removes the character to the left of the current cursor position
- moves the cursor to the next tab stop
- moves the cursor to the previous tab stop
- moves the cursor to the beginning of the next line
- returns to the Main Menu
where you will immediately see the changes you have made.

Whenever this menu is displayed: Whatever you have made all the changes as you type them. You can change any of the items that have and type the new value. You can change any of the items that have.

To change one of the menu items, press the TAB key to move the cursor to...

The values shown in this menu are called the default values, i.e., WRITE:

display the Define Page Menu

To begin the DEFINE PAGE function, return to the Main Menu (press ESC)

SELECTING DEFINE PAGE

information specified with this function is saved as part of the document.

Any changes that you make with this function are immediately made in the

You use the DEFINE PAGE function to change the way a document looks.
Note that when you CLEAR the working copy, WRITE clears any values you have entered in this menu, restoring the default values.

If you have Saved a document with values different from the default values, the values you specified for the document are saved with the document.

Changing the Page Length

The Page Length item defines the length of each page, including the top and bottom margins. The default page length of 66 is correct for most printers if you are printing on standard 8-1/2 x 11 inch computer paper. If you are using shorter or longer paper, you will need to modify this value.

For example, let's retrieve a sample document named FLYER from the Sampler diskette. To retrieve the document, press ESC to return to the Main Menu, type 4 in the Selection Number item, and press CTRL C to continue. On the next screen, type 1 in Selection Number and the name FLYER

in the Document Name item. Press CTRL C to continue. If WRITE displays the warning message “Latest changes not saved”, press CTRL C again (unless you want to save the working copy). WRITE retrieves the document and displays the first lines on the screen:

This flyer was designed to be printed on a 6 by 11 inch sheet. However, suppose that you want to print it as a brochure, with each page six inches wide and four inches tall. The current line width is about five inches, which is small enough, but the length of the page needs to be decreased to four inches. If your printer prints six lines per inch (fairly standard), you need to set the page length to 24 lines.

To make that change, return to the Main Menu and select DEFINE PAGE, then press CTRL C. When the Define Page Menu appears, type 24 in the Page Length item, so that the menu looks like this:

Press CTRL C to store the changes in the computer's memory and return to the working copy. If you browse through the document, you can see that each page is now only 24 lines long, including the top and bottom margins of six lines each.

To accurately figure the page length for a page longer or shorter than 11 inches, measure the paper from top edge to bottom edge, and multiply that value by the number of lines per inch that your printer prints.

If you want a document to be one continuous page, with no page breaks, set Page Length equal to 0.
Setting the Top and Bottom Margins

The Top Margin and Bottom Margin items determine the size of those margins, including the heading and footing if any are defined. The default settings are 6 and 6, a good size for most documents.

To change the margins, display the Define Page Menu, move the cursor to the appropriate item, and enter the desired setting. Then press CTRL C to continue. Note that the maximum size for each margin is 18, and that the sum of the two margins must be less than the page length.

For example, suppose you want to decrease the size of the margins for the sample document named FLYER that you altered in the previous section. Since the size of the paper only allowed a page length of 24 lines, with a top margin of 6 and a bottom margin of 6 you could only print 12 lines of text on each page. Let's reduce the size of both margins so that each is three lines.

First, return to the Main Menu (press ESC if necessary). Then type 2 to select DEFINE PAGE, and press CTRL C to continue. When the Define Page Menu appears, press TAB to move the cursor to the Top Margin item. Type 3 to change the size of the top margin, press TAB to move the cursor to the Bottom Margin item, and type 3 again, so that the menu looks like this:

![Define Page Menu]

Press CTRL C to complete the margin change and return to the working copy. Notice that the top and bottom margins are noticeably smaller, much more in scale with the overall size of the paper.

Setting the Left and Right Margins

The Left Margin and Right Margin items determine the position of the left and right margins, and thus the width of the printing on each line.

The default settings for the left and right margins are 10 and 70 respectively. The minimum setting for the left margin is 1, and the maximum setting for the right margin is 78; a value must be entered for each margin, and the value of the left margin must be less than the value of the right margin.

If you change the margins for a document already in the working copy, WRITE will reformat the document so that it fits between the new margins.

Adding Headings and Footings

You can have WRITE print a standard heading on the top of each page of the document, a footing at the bottom of each page, or both a heading and footing. Up to two lines are allowed for each. The heading is centered in the top margin, both horizontally and vertically. Likewise, the footing is centered in the bottom margin.

To add a heading, select DEFINE PAGE from the Main Menu. When the Define Page Menu appears, move the cursor to the Heading item and type in one or two lines of text that you want to appear at the top of each page. Press RETURN at the end of each line. Then press CTRL C to return to the working copy, where you will see the heading at the top of the page. The next time you print the document, the heading visible at the top of the screen will be printed at the top of each page.

For example, let's retrieve the sample document named ANNUAL from the Sampler diskette and add a heading that will make it easy to identify each page. First, retrieve the document from the diskette. When the document is in the working copy, return to the Main Menu, select DEFINE PAGE, and press CTRL C. When the Define Page Menu appears, press TAB five times to move the cursor to the Heading item, and type the following phrase:

1982 Annual Report
Since that is the only change you want to make to this menu, press CTRL C to return to the working copy. Notice that the first page shows the heading you just entered:

To add a footing, you would enter up to two lines in the Footing item on the menu. You can enter both heading and footing at the same time, along with any other changes you want to make to the Define Page Menu.

Page Numbers

You can have WRITE automatically number the pages in a document by entering the starting page number in the footing. If WRITE finds a number in the footing, it assumes that it is a page number, and increases it by one for each new page. (If more than one number is found in the footing, WRITE assumes that the last number is the page number.)

For example, if you enter

Page 1

the first three pages of the document will be numbered like this:

Page 2
Page 3

Other examples are:

Footing
Page 16
Page 2.1.1

Page Numbers
Page 16, Page 17, etc.
Page 2.1.1, Page 2.1.2, etc.

Leaving the DEFINE PAGE Function

Whenever you are finished making changes to the Define Page Menu, press CTRL C to return to the Main Menu. The changes that you have specified will appear in the working copy. If you use ESC to leave the Define Page Menu and return to the Main Menu, your changes will not be made.

Summary

- Use the DEFINE PAGE function to determine the page size and layout of a document.
- Set the page length to determine the length of each page:
  - 66 (default) for standard 8-1/2 x 11 paper
  - 84 for standard legal-size (8-1/2 x 14) paper
  - 102 for standard ledger (11 x 17) paper
  - 0 or blank for one continuous page
- Make sure to leave top and bottom margins large enough to accommodate any headings and/or footings entered.
- Set left and right margins to values between 1 and 78
- Set top and bottom margins from 1 to 18
- Headings and footings can be up to two lines each; they are centered in the top and bottom margin, respectively.
- Automatic page numbers can be specified by entering the starting number anywhere in the footing.

3: print

You use the PRINT function to produce a paper copy of the document in the working copy. WRITE will print to any printer that is properly connected to your computer system. By selecting different print options, you can print the entire document, a single page from the document, or a range of pages. If you wish, WRITE will print multiple copies of the document or selected pages.

Other options allow you to single-space or double-space your document, print an envelope from the address in a letter, pause at the end of each page to insert a new piece of paper, or shift the entire printed page to the right to allow for variations in the position of your printer's left margin.

Using WRITE, you can combine data from a PFS file with a document to produce personalized form letters; you can insert a PFS graph; or you can insert other WRITE documents into your working copy when printing it. When combining these other items, you first enter a command in the document at the place where you want the graph or other document to appear. Then you select PRINT, fill in the Print Options, and provide additional information as requested by the program. Chapter 6 explains how to add graphs and other WRITE files to a document; Chapter 7 tells you how to prepare and print form letters.

Selecting the PRINT Function

To begin the PRINT function, return to the Main Menu (press ESC if necessary), type 3 in the Selection Number item, and press CTRL C to continue. The Print Options screen appears next:
This screen requests information about how you want the document printed and whether you are combining the document with one or more PFS:GRAPH charts or with information from a PFS file. If you want to use the default values shown for these options, press CTRL C without making any changes.

To change any of the items, press the TAB key to move the cursor to that item and type the desired value. You can change as many items on the screen as are appropriate. When you have made all the desired changes, press CTRL C to continue. If you have indicated that a PFS graph is to be included in the document, or that data is to be read from a PFS file, WRITE will ask you for more information, as explained in later chapters. Otherwise, WRITE will ask you to get your printer ready and then begin printing.

Printing an Entire Document

Depending on the printer that you are using, you will probably use the default Print Options to print many of your documents. For example, suppose you want to print the document named LETTER1 that is stored on the WRITE Sampler diskette. First, retrieve that document from the diskette. To do that, return to the Main Menu, select GET/SAVE/REMOVE, choose the Get option and enter

LETTER1

in the Document Name item. When you press CTRL C, WRITE retrieves the document and displays the first part of it.

The next few sections explain when and how to modify the Print Options.

Printing a Range of Pages

When working with a multiple page document, you may sometimes want to print a single page from that document, or a range of pages. Most often, that is because you have corrected one page and want to reprint it, or because you have made changes part way through the document and don't want to reprint the unchanged pages. The From/To Page items are used to print selected pages.
The default value for From Page is the first page in the document, and the default value for To Page is the last page in the document. If you want to start printing somewhere other than page 1, enter the number of the first page you want to print in the From Page item. If you want to stop printing before the end of the document, enter the number of the last page you want to print in the To Page item.

For example, if you want to print pages 3 through 7 of a 10-page document, enter the following information in the From Page and To Page items:

```
PRINT OPTIONS
FROM PAGE: 3 (Page)
TO PAGE: 7 (Page)
PRINT HEADERS AND FOOTERS: X
PRINT OPTIONS
```

Then press CTRL C and WRITE will print pages 3, 4, 5, 6, and 7 of the document.

Note that the page numbers you enter in these items are absolute page numbers, i.e., the first page printed is page 1, the second page printed is page 2, etc. The page numbers shown in the Print Options will correspond to the page numbers shown in the status line of the working copy.

Page numbers in Print Options do not correspond to the page number you have assigned in the footing, however. For instance, you might have a document which is a chapter of a book. The first page of this document might be numbered 76 in the footing, but will be numbered page number 1 in the status line.

If you include a "JOIN", "GRAPH", or "NEW PAGE" command or add text from a PFS file (explained in Chapter 6 and 7), these can all change the pagination at print time.

### Printing One Page of a Document

If you want to print only one page of a multiple page document, enter that page number in both the From Page and To Page items. For instance, if you want to print just page 4 from the same 10-page document, enter 4 for both the From Page and To Page items.

### Printing Single Sheets

If you are using loose sheet paper, you will want to modify the Pause Between Pages item so that WRITE pauses at the end of each page to allow you to insert a clean sheet of paper. All you have to do is enter Y for Pause Between Pages before starting to print. When WRITE reaches the end of each page, it displays the message:

```
Print new page in your printer
Press CTRL C to continue
```

When you have changed the paper, press CTRL C to print the next sheet.

### Printing More than One Copy

You might want to print a duplicate copy of some of your documents, rather than relying on a copying machine. To print more than one copy of a document, enter the desired number in the Number of Copies item. WRITE will print that many copies before returning to the Main Menu.

If you request more than one copy of a multiple page document, WRITE will print the entire document once, then print the second copy, and so on until the requested number of copies has been printed.

### Choosing the Line Spacing

The Single/Double/Envelope option determines whether your document is double-spaced or single-spaced, and allows you to print an address on an envelope without any special preparation.

If you want to print a document single-spaced, leave the default value of S for this option. When you press CTRL C, WRITE prints the document, single spacing from line to line.
If you want to print a document double-spaced, type D for this option. When you press CTRL C, WRITE prints the document, double spacing between lines. (If there are blank lines in the document, two blank lines will be printed for each of them.)

Printing an Envelope

If you want to print the address from a letter onto a business-size envelope, enter E for the Single/Double/Envelope option. When you press CTRL C, WRITE tells you to position your envelope in the printer. Position the envelope so that the top edge of the envelope is at the print head. When you press CTRL C again, the program will print the address centered on the envelope, 10 lines down and indented 35 spaces.

The address is found as follows: First the program looks for the first line of text in your document starting at the left margin. If that line of the document ends with at least two digits, WRITE interprets it as a date and does not print that line as part of the address. It considers the next non-blank line to be the first line of the address, and continues printing until it reaches the next line with a blank at the left margin (or until it runs out of room on the envelope.) If the first line is not a date, WRITE considers it the first line of the address and prints in the same manner.

For example, suppose you want to print envelopes for the two letters shown below. The letter shown on the right should still be in the working copy (if it is not, retrieve it from the Sampler diskette). Before you begin, take a look at the first part of these letters:

---

Mr. and Mrs. Henry Williams
123 Main Street
Springfield, IL 62706

October 1, 1982

Dear Mr. and Mrs. Williams,

Enclosed are the tickets for your sightseeing trip to Rome. The tour starts on November 1st and we will return on November 15th. Arrangements are made by the hotel in the manner with the airplane

A list enumerating a list of things you will need on the plane. Below are some suggestions:

1. A list enumerating a list of things you will need on the plane. Below are some suggestions:
2. A list enumerating a list of things you will need on the plane. Below are some suggestions:
3. A list enumerating a list of things you will need on the plane. Below are some suggestions:

We hope you will enjoy your trip to our beautiful country. Very truly yours,

Sincerely yours,

Packing Agent

---

October 8, 1982

Mr. and Mrs. Henry Williams
123 Main Street
Springfield, IL 62706

Dear Mr. and Mrs. Williams,

Enclosed are the tickets for your sightseeing trip to Rome. The tour starts on November 1st and we will return on November 15th. Arrangements are made by the hotel in the manner with the airplane

A list enumerating a list of things you will need on the plane. Below are some suggestions:

1. A list enumerating a list of things you will need on the plane. Below are some suggestions:
2. A list enumerating a list of things you will need on the plane. Below are some suggestions:
3. A list enumerating a list of things you will need on the plane. Below are some suggestions:

We hope you will enjoy your trip to our beautiful country. Very truly yours,

Sincerely yours,

Packing Agent

---

Notice that the first three lines and the date line of the letter on the left will be ignored because they are not at the left margin. The first line of the letter on the right is the date line which ends with a four-digit number so WRITE will automatically skip that line. It will assume that the next lines are the address and print them on the envelope.

To print the sample envelope for the letter on the right, return to the Main Menu and type 3 for the Selection Number item. Press CTRL C to go on to the Print Menu. Use the TAB key to move the cursor to the Pause Between Pages item, and set it to Y. Then move to the Single/Double/Envelope option and type E as shown below:

Press CTRL C to continue. When WRITE displays the message

Insert the envelope into the printer, and press CTRL C to space down to the center of the envelope and print the address. The envelope looks like this when it is finished:
Indenting the Page

Some printers begin printing very close to the left edge of the paper, not leaving an adequate margin on the left side of a standard document. To counteract this problem, WRITE will shift the entire page to the right as many spaces as you wish. You specify this shift by entering the desired number of spaces in the Indent item.

For example, suppose when you printed the letter earlier in this chapter it came out looking like this:

As you can see, the letter has a much larger right margin than left margin, even though the margins within the document are set to be nearly equal. What you would want to do in this case is to move the letter, margins and all, to the right about 6 spaces so it is centered on the page. To do that, you would select PRINT from the Main Menu and, when the Print Options appear, enter 6 for the Indent item. Then you would continue as usual. The printed letter would look much better:

The instructions you use for this letter in the Print Options will be permanently stored on the document diskette when you save the letter. Any time in the future that you print the letter, it will be printed with the same indentation unless you change it.

Sending Special Codes to Your Printer

You can send special character codes to your printer by entering a command in the document when you are typing it. This allows you to set a special printing mode, such as italics, if your printer supports different printing modes. See Chapter 6 for details.

Stopping the Print Function

You can temporarily halt printing at any time by pressing the space bar. To resume printing, press CTRL C. You can stop printing and return to the Main Menu by pressing ESC. WRITE completes the line it is on and then returns to the Main Menu.
Summary

- Use PRINT to produce a paper copy of the working copy, including any added material (see Chapters 6 and 7).

- The Print Options are:
  - From Page/To Page: prints a range of pages
  - Pause Between Pages: allows single sheet printing
  - Number of Copies: prints multiple copies of a document
  - Single/Double/Envelope: prints with single spacing (S), double spacing (D), or prints only the address of a letter for easy envelope preparation (E).
  - Indent: shifts the entire text page, including margins, the specified number of spaces to the right
  - Include PFS Graph: prints a chart created with PFS:GRAPH as part of a document if you enter Y (and insert a "GRAPH name" command in the document. See Chapter 6 for details.)
  - PFS File Name: merges data from a PFS file with a document to produce form letters if you enter a PFS file name (and insert an item identifier in the document. See Chapter 7 for details)

4: get/save/remove

You use the GET/SAVE/REMOVE function to manage the documents that are stored on diskette. Using GET/SAVE/REMOVE, you can retrieve a document, save the working copy, or remove any document. If you wish, you can list the documents on a diskette before performing one of these functions.

Selecting the GET/SAVE/REMOVE Function

To begin the GET/SAVE/REMOVE function, return to the Main Menu (press ESC if necessary) and type 4 in the Selection Number item. Press CTRL C to continue, and WRITE displays the Get/Save/Remove Menu:

This menu asks which function you want to perform, and the name of the document with which to perform that function.

Type the number of the function you choose, enter the document name, and press CTRL C.

If you are using an Apple IIc, as you read this chapter keep in mind that Drive 1 is the built-in disk drive; Drive 2 is the external disk drive.
Listing Documents

Often you do not remember the exact spelling of the name of the document you want to get or remove, or you want to be sure to save the working copy with a name that fits in with the naming scheme you have been using. In either of these cases, you want to list the documents on the diskette you want to use. To do so, insert the diskette in Drive 2, type 1, 2, or 3 in the Selection Number item, and leave the Document Name item blank, as shown below:

Press CTRL C and WRITE displays the list of documents on that diskette, prompting you for the name of the document at the same time:

To continue with the function you have requested, enter the document name and press CTRL C. If you do not want to continue, perhaps because the document you want to get or remove isn't on that diskette, press ESC to return to the Main Menu.

Retrieving a Document

You use the Get Document option to retrieve a previously-stored WRITE document from a diskette.

When you retrieve a document, WRITE makes a copy of it and places that copy in the working copy. You can then edit the copy or print it. Note that any editing changes take effect on the document in the working copy only—the version that is still on the diskette remains the same. (To make your editing changes permanent, use the Save Document option to store the modified document on the diskette.)

To retrieve a document, select the Get Document option from the Get/Save/Remove Menu and enter the name of the document you want to retrieve. Make sure the diskette containing the document is in Drive 2, and press CTRL C to continue.

When the document is found, WRITE places a copy of the document in the working copy. If there is already a document in the working copy that has not been saved since the last changes were made, WRITE warns that it is about to overwrite the working copy:

If you do not want to lose the current version in the working copy, press ESC to cancel the retrieval. Save the contents of the working copy and then use the Get Document option again. If you do not care to save the contents of the working copy, press CTRL C to go ahead and replace the working copy with the document retrieved from diskette.
For example, let's retrieve the document named MEMO from the Sampler diskette. To begin, make sure the Main Menu is on the screen (press ESC if necessary), and be sure the Sampler diskette is in Drive 2. Type 4 in the Selection Number item, and press CTRL C to display the Get/Save/Remove Menu.

Type 1 to select the Get Document option, and enter MEMO for the Document Name item, so the menu looks like this:

![Image of Get/Save/Remove Menu]

Press CTRL C to continue. When WRITE has retrieved the document, it displays the first part of the memo:

```
To: John Jeter
   Sales 206

From: Jane Smith
       Marketing Dept.

Subject: J206 Summarized

Attached is the preliminary plan for J206's advertising plans for the next fiscal year. With the increased emphasis in this plan, we are asking that you present this plan to the Marketing Committee for approval. We look forward to hearing your thoughts on our current marketing plan. This plan is attached.
```

You can begin editing or press ESC to return to the Main Menu and select another function.

---

**Saving the Working Copy**

You use the Save Document option to store the working copy on a diskette. Until you use this option, the document that you have typed into the working copy only exists in the computer's memory—if you turn off the computer system, you will lose the document.

It is important, especially if you are working on a lengthy document, to save it frequently (every half hour is a good rule of thumb). You can too easily lose information if there is a power outage, or through some inadvertent error like clearing the working copy by mistake. We also suggest that you keep a duplicate diskette copy of any lengthy document, in case the original diskette becomes damaged or worn out.

To save a document, select the Save Document option from the Get/Save Remove Menu and enter the name you want to give to the working copy. The diskette must be formatted before you use it to store documents.

---

**Saving to a New Diskette**

When you first save a document on a newly formatted diskette, enter a document name. WRITE recognizes that the diskette is not a document disk and displays the following warning message:

```
The diskette is not a MEMORY diskette. You have the following options:

1. Insert a MEMORY diskette in the Drive.
2. Leave the current diskette in the Drive.
3. Quit or cancel SAVE operation.

Press 1 or 2 to continue
```
If you leave the current diskette in the drive and press CTRL C, you will see
the following warning:

![Warning message]

If you press CTRL C following the warning message, WRITE begins the
special formatting that labels the diskette a WRITE document diskette. Any
files on the diskette are erased in the process. WRITE will save your
document on the diskette and recognize the diskette as a document diskette
from then on. You will not see this warning message again with this diskette.

Saving to a WRITE Document Diskette

To save a document on the Sampler diskette or any other WRITE document
diskette, simply select the Save Document option from the Get/Save/Remove
Menu and enter the name you want to give to the working copy.

If the document name you enter already exists on the diskette, WRITE warns
you that it is about to overwrite the copy on the diskette. Press CTRL C to
replace the version stored on the diskette or, if you do not want to overwrite
that version, press ESC to return to the Main Menu. Then save the working
copy under a different name.

If you leave the Document Name item of the Get/Save/Remove Menu
blank, WRITE lists the files on the diskette in Drive 2 and prompts you for the
name you want to give to the working copy. If the document in the working
copy was previously retrieved from a diskette, WRITE automatically enters its
name in the Document Name item. To replace that version, press CTRL C to
continue, and press CTRL C again when WRITE asks if you want to overwrite
the existing copy. Otherwise type the new name you want to give to the
working copy.

For example, let’s save the document in the working copy to the diskette in
Drive 2. (If you have been following the examples in this chapter, the
document named MEMO is currently in the working copy. If it is not, retrieve it
from the Sampler diskette before continuing.)

First, return to the Main Menu (press ESC if necessary), type 4 for the
Selection Number item, and press CTRL C to continue. When the Get/Save/
Remove Menu appears, type 2 for the Selection Number, and leave the
Document Name item blank, as shown below:

![Get/Save/Remove Menu]

Press CTRL C to display the list of files on the Sampler diskette:
Notice that WRITE has filled in the Document Name item with the name MEMO, since the document in the working copy was retrieved from the diskette under that name. But let's save the document under a different name. Type NEWMEMO into the Name of Document to Save item, so that the screen looks like this:

![Screenshot of the screen showing the new document name](image)

Now press CTRL C to store the document under the name NEWMEMO. WRITE stores the working copy under the name NEWMEMO on the diskette in Drive 2.

If there is already a document on the diskette with the name that you enter, WRITE warns you that it will be overwritten. For example, if the document above had been saved as MEMO instead of NEWMEMO, the following message would have been displayed:

![Screenshot of the warning message](image)

If you want to replace the document on the diskette with the document in the working copy, press CTRL C to continue. If you want to preserve the document on the diskette, press ESC and restart the Save option using a different document name.

Note that the document remains in the working copy even when you Save it. You can continue editing (select TYPE/EDIT) or choose another selection from the Main Menu.

## Removing a Document

You use the Remove Document option to permanently erase a document from a diskette. Be very sure that you want to remove the document that you specify, because there is no way to recover it once the function is complete. (This is another good reason for keeping backup copies of all your documents.)

To remove a document, select the Remove Document option from the Get/Save/Remove Menu and enter the name of the document you want to remove.

Press the CTRL C to continue. WRITE displays a warning before removing the document. Press CTRL C to go ahead and remove the document. If you don't want to remove the document, press ESC to return to the Main Menu.

If you are not sure of the name of the document you want to remove, leave the Document Name item blank to get a list of the documents on your diskette. Then enter the name of the document you want to remove and press CTRL C to proceed with the removal. Again, WRITE warns you that it is about to remove the document; press CTRL C once more to complete the operation.
For example, let's remove the document named EXTRA from the WRITE Sampler diskette. First, return to the Main Menu (press ESC if necessary). Type 4 for the Selection Number item, and press CTRL C to continue. WRITE displays the Get/Save/Remove Menu. Type 3 for the Selection Number item, and EXTRA for the Document Name item:

Press CTRL C and WRITE warns you that it is going to remove the document:

Press CTRL C to complete the Remove operation. WRITE permanently removes the document from the diskette and returns to the Main Menu.

WARNING

Once you Remove a document or file, there is no way to recover it. Make sure you really want to delete it permanently from the diskette before using this function.

Summary

- The GET/SAVE/REMOVE function has three options:
  - Get Document retrieves a document from diskette
  - Save Document stores the working copy on diskette
  - Remove Document permanently erases a document from diskette

- Leave the Document Name item blank in the Get/Save/Remove Menu to list the files on the diskette.

- Save your documents frequently, and keep duplicate copies of important or lengthy documents.

- Make sure you have no further need for a document before you Remove it.
You use the CLEAR function to erase whatever text is currently in the working copy. If there is a document in the working copy and you want to type a new document, you must clear the working copy first.

Selecting the CLEAR Function

To clear the working copy, return to the Main Menu (press ESC if necessary) and type 5 for the Selection Number item. Press CTRL C to continue. If there is currently something in the working copy and the latest changes have not been saved, WRITE displays a warning.

If you do not wish to erase the contents of the working copy, press ESC to abandon the CLEAR operation. Otherwise, press CTRL C to confirm it. WRITE clears the document from the working copy, including its name and any information entered in the Define Page Menu, then returns to the working copy (now blank).

For example, suppose you want to type a new document. If you have been doing the examples in this book and have not turned off your computer since the last chapter, the working copy currently contains the document named MEMO. To clear MEMO from the working copy, type a 5 in the Selection Number item of the Main Menu, and press CTRL C to continue. WRITE erases MEMO and displays a new (blank) document in the working copy.
Summary

- Use the CLEAR function to clear the contents of the working copy so you can type a new document.

6: advanced editing

The TYPE/EDIT function offers a number of editing features besides those described in Chapter 1. These additional features, termed "advanced" since they are not usually needed for the preparation and printing of simple documents, are explained in this chapter.

One of the advanced features is the ability to include other documents, including charts produced by PFS:GRAPH, as part of a WRITE document. You can easily include PFS graphs and other WRITE documents anywhere you wish in your document. Other advanced features allow you to remove, move, and copy a block of text; search for a word or phrase and, if you wish, automatically replace it with another word or phrase; center, left- or right-justify a line of text; and add print enhancements such as boldface type and underlining, or send special commands to the printer.

Block Editing

There are times when you want to perform some function, such as removing, on an entire section or "block" of text. WRITE allows you to move, copy, and remove any successive lines of text that you have "labeled" as a block.

Labeling a Block

You can label as many characters, words, or lines as necessary for a block editing procedure. All you have to do is move the cursor to the first character that you want to label and press CTRL L (for Label). Then move the cursor to the last character you want to label and specify the function you want to perform, as explained below. The characters that are labeled appear highlighted on the screen. You can use any of the cursor movement keys to move the cursor while labeling.
For example, retrieve the document named ANNUAL from the WRITE Sampler diskette, so that the screen shows the first lines of the annual report:

Suppose you want to label a sentence in the letter from the President. First, press CTRL N three times to display the first paragraph of the President’s letter. Move the cursor to the beginning of the last sentence in that paragraph and press CTRL L. WRITE highlights that character to show that it has been labeled:

The sentence is now labeled for block editing. The next step is to specify what you want to do with the block. The block editing functions are described in the next few sections.

If you should want to unlabeled a block of labeled text, press CTRL L again. All of the labeled characters will be unlabeled, as shown by the disappearance of the highlighting. Moving the cursor to any point before the labeled section or pressing ESC to return to the Main Menu also unlables the block.
Removing a Block

To remove a block of labeled text, press CTRL R (for Remove). WRITE removes the block and places it in a special location in memory known as the "block buffer". The block remains in the block buffer until it is replaced by another block or until the computer is turned off. This last feature allows you to transfer a block of text from one part of the document to another, or to another document.

For example, suppose you want to remove the sentence from the President's letter that you labeled in the previous section. (If you unlabeled it with CTRL L, label it again.) All you have to do is press CTRL R. After the block is removed, the screen looks like this:

![Letter from the President]

If you later realize that you didn't really want to remove a block of text that has been removed, you may be able to get it back. If the block is still in the block buffer, you can return the block to the document by pressing CTRL D (for Duplicate). For example, you can re-insert the sentence you removed from the President's letter. The cursor should be in the original location, so press CTRL D to return the sentence to its original place.

The block buffer will hold a block up to about 10 lines of text. If you attempt to remove more than will fit in the block buffer, WRITE displays the following message:

![Block Buffer Full]

Moving a Block

When you want to move a block of text from one location to another in a document, label the block and use CTRL R to remove it from its original location. WRITE puts it in the block buffer. Then move the cursor to the new location and press CTRL D. WRITE brings in a copy of the block in the block buffer and inserts it at the cursor location (again, the block remains in the buffer).

For example, suppose you want to move the "prepared by" section of the annual report so that it appears on the financial statement page of the annual report. Press CTRL G, then B to return to the beginning of the Annual Report, and then the down arrow to move to the line

![Prepared by]

Label the section by pressing CTRL L and pressing the RETURN key five times. The screen looks like this:

![Prepared by}
Now press CTRL R to remove the lines from that location, as shown below:

![Annual Report](image)

Next, move the cursor to the financial statement (which now appears starting at the bottom of page 3) using the down arrow or CTRL N keys. Insert 5 blank lines so that the words Financial Statement appear at the top of page 4. Page 4 now looks like this:

![Financial Statement](image)

Move the cursor to the second line under the date. Then press CTRL D to duplicate the contents of the block buffer at the cursor position. The beginning of the financial statement now looks like this:

If you want to move a block of text from one document to another, you follow much the same procedure. First, label the block and remove it from the original document. Then retrieve the second document and move the cursor to the location where you want to insert the block from the original document. When the cursor is in place, press CTRL D to duplicate the block at the specified location.

### Copying a Block

Copying a block of text is very similar to moving it, except that the block remains in the original location as well as appearing in the new location.

To copy a block of text, first label the block, then press CTRL D to duplicate it. WRITE makes a copy of the block and places it in the block buffer. Next, move the cursor to the location where you want to insert the copy of the original block, and press CTRL D again. WRITE inserts the copy in that location. You can insert multiple copies of the same block of text by repeatedly moving the cursor and pressing CTRL D—WRITE inserts the text at the cursor location each time CTRL D is pressed.
Searching for a Word or Phrase

WRITE will search through your document, looking for a particular word or phrase. To begin a search, press the CTRL S (for Search) to display the following prompt on the status line:

All you have to do is enter the word or phrase you want to find in the Search For item—this is called the "search phrase". When you have entered the search phrase, press CTRL C to continue. WRITE searches through the document starting immediately after the current cursor position, and displays the first occurrence of the search phrase.

WRITE uses the following rules when searching for the search phrase:

- spaces before and after the search phrase are ignored
- more than one space between words in the search phrase is ignored
- the search phrase is found regardless of upper and lower case differences (thus "cat" finds cat, Cat, CAT, and so on.)

For example, suppose you want to search for the first mention of Sales in the annual report. First, press CTRL G. then B to return to the beginning of the document. Then press CTRL S to indicate that you want to make a search. WRITE prompts you for the search phrase. Type

Sales

as shown here:

Press CTRL C to begin searching. WRITE finds the first occurrence of the word Sales, displays that part of the document with the cursor on the S in Sales, and returns you to normal editing:

To search for the next occurrence of Sales, press CTRL S. Notice that Sales is already entered in the Search For item. Now press CTRL C to have WRITE search for the next occurrence of the phrase.

Searching for Partial Phrases (Wild Card Searches)

Sometimes you want to search for partial words or partial phrases in a document. WRITE recognizes the use of the special symbol . . (two periods) to indicate unknown characters somewhere in the search phrase. This symbol works just as it does in PFS:FILE, as shown below:

If you enter

abc . .
.. xyz
.. abc .
.

WRITE will find

the next word starting with abc
the next word ending with xyz
the next word containing abc in any position
the next word, no matter what it is
Manual Search-and-Replace

To search for a word or phrase and replace it with another word or phrase, start with the same step: press CTRL S and enter the search phrase in the Search For item. Then press TAB to move the cursor to the Replace With item, and enter the phrase—called the replacement phrase—that you want to substitute for the search phrase. Press CTRL C to continue.

WRITE searches for the first occurrence of the search phrase, then asks you if you want to make the replacement. Type Y to make the replacement, N to leave the phrase as it is. WRITE makes the replacement or not, depending on your answer, then goes on to find the next occurrence of the search phrase. (If you enter Q, WRITE stops the search-and-replace function and returns you to normal editing at the current cursor position.)

When WRITE reaches the end of the document, it leaves the cursor at the last occurrence found.

For example, in the document named ANNUAL that you have been editing throughout this chapter, suppose you want to change the word October to the word November. First (assuming the document is still in the working copy), press CTRL G, then B to return to the beginning of the document and then press CTRL S to display the search prompt.

Type the word
October
in the Search For item, press TAB to move the cursor to the Replace With item, and type
November

The screen looks like this:

Press CTRL C to continue. WRITE finds the first occurrence of the word October and asks you if you want to make the replacement:

If you want to make the replacement, type Y, and WRITE will replace October with November and search for the next occurrence. If you do not want to replace this instance of October, but want to search for the next occurrence, type N. If you want to quit searching, type Q.

Automatic Search-and-Replace

Occasionally, you want to replace every occurrence of a phrase with another phrase. This is called an automatic search-and-replace operation.

To specify an automatic search-and-replace, press CTRL S, then enter the search phrase in the Search For item. Press TAB to move the cursor to the Replace With item, and enter the replacement phrase. Press TAB again to move the cursor to the Auto/Manual item, and type A to indicate that you want WRITE to make each replacement automatically, without asking you for verification. Then press CTRL C to continue. WRITE searches for every occurrence of the search phrase, replacing it automatically with the replacement phrase. When the last occurrence has been replaced, WRITE leaves the cursor at the last phrase replaced.

You should be careful when using an automatic search-and-replace. It can sometimes be tricky to reverse it if you realize that you didn't really want to replace all occurrences of the search phrase. You can, if you need to, stop the search-and-replace operation at any time by pressing the space bar.
Counting Words

You can use the Search function to count the usage of a particular word or to count the total number of words in a document.

To count uses of a word or phrase, return the cursor to the beginning of the document, press CTRL S, enter the word or phrase in the Search For item, leave Replace With blank, and set the Auto/Manual item to A. Press CTRL C and WRITE will count the occurrences of the search phrase throughout the document and displays the number on the screen.

To count the total number of words in a document, return the cursor to the beginning of the document, enter ... in the Search For item, and set Auto/Manual to A. WRITE will count every word and display that number.

Formatting a Line of Text

Once a line of text is entered in a document, you can change its position with respect to the left and right margins. Simply move the cursor to the line you want to format, and press CTRL F (for Format). WRITE highlights the line and prompts you on the status line for the way you want it formatted:

Type one of the following choices:

L  to move the line so the first character in the line is at the left margin
C  to center the line between the left and right margins
R  to move the line so the last character in the line is at the right margin

As soon as you type your choice, WRITE makes the desired adjustment and redispays the line.

For example, the two-line financial statement title should probably be centered on the page. Use the up arrow to move the cursor to the first line of the title. Press CTRL F to display the prompt shown at the bottom of the screen:

Notice that the line where the cursor is located is highlighted on the screen. Type

C

to indicate that you want to center the line within the margins. WRITE immediately redispays the centered line. Now repeat the procedure for the date. The screen now looks like this:
Formatting a Page (Removing Space)

Sometimes you need to close up text on a page. Use CTRL E and CTRL R to remove unwanted space.

For example, suppose you want to combine the two paragraphs of LETTER1 into one paragraph. First, Get Letter1 from the Sampler diskette and then position the cursor on the blank line as shown below:

Use CTRL E to erase the blank line first. Then position the cursor two spaces after the end of the first paragraph:

Adding a Document or Graph

There are several ways to add material to your WRITE documents. You can use CTRL A (Append) to append another WRITE document to the working copy for editing. You can also use the JOIN command to add multiple WRITE documents together at print time. You can use the GRAPH command to add charts to your WRITE documents at print time. These operations are described in the following sections.

Adding Another Document to the Working Copy

WRITE allows you to combine two documents by appending a document from a diskette to the document in the working copy. This feature makes it possible to insert "boilerplate" material into a document. Once the appended document is in the working copy, it can be edited just as if you had typed it.

To append a stored document to the working copy, press CTRL A and, when WRITE asks you for the name of the document to append, enter the document name and press CTRL C. WRITE will retrieve the document and append it at the left margin of the line above the one the cursor is on. If the margins of the appended document are different from the margins for the working copy, the appended document will be reformatted within the margins of the working copy.

For example, let's append the document named NAME from the Sampler diskette into the annual report. (Retrieve Annual from the Sampler diskette before beginning this example.)
Adding Another Document when Printing

To join another document to a document when it is being printed, without adding any material to the working copy, you enter a special command at the location in the working copy where you want the joined document to appear. The command is:

"JOIN name"

where name is the name of the document. (The command can be abbreviated "J name"). You would use the JOIN command rather than CTRL A when the document to be joined will not fit in the working copy or when you have no need to edit the joined material.

For example, if you want to add a WRITE document named Pricelist to your working copy when it is printed, you would type

"JOIN Pricelist"

in your document at the point where you want the price list included.

When you print the document, make sure the disk containing the document to be joined is in Drive 2. WRITE will find it at the appropriate time, and insert it at the correct location, preserving its margins but otherwise conforming to the page layout of the working copy.

Note that you can join an unlimited number of documents while printing. This capability is useful when preparing a very large document. You can split it up into several smaller documents, then print it all together when you are ready to print the final copy. To do this, you would enter the required "JOIN name" commands at the end of the first small document, making sure they are arranged in the order you want the other documents to appear when printed.

The JOINed document will be printed in your document where the command appears. Any blank lines before or after the command will be printed before or after the JOINed document. WRITE does not execute an asterisk command in a JOINed document.
Adding a PFS Graph

You can print a chart created with Apple IIc or IIe PFS:GRAPH version B:00 (or later) at any location in a WRITE document, as long as that chart has been saved on a WRITE document diskette. (See the PFS:GRAPH manual for instructions on saving charts to a document diskette.)

To include a chart in your document, type the command

"GRAPH chartname"

at the location in the document where you want the chart to be printed. (The command can be abbreviated "G chartname"). For example, to print a chart stored with the name Sales.Pic, you would enter

"GRAPH Sales.Pic"

at the desired location in the document.

The first asterisk of the GRAPH command will determine the placement of your chart. If you want to change the position of the chart, move the command to the left or right accordingly.

When you are ready to print the document, enter Y for the Include PFS Graph item on the Print Options. When you press CTRL C, WRITE displays a special menu that asks you which graphics printer you are using:

Although WRITE can print a standard document on any printer, it can only print a chart as part of a document if you are using one of the graphics printers on this menu. Type the number that corresponds to your printer, and press CTRL C for WRITE to begin printing the document.

Note: When you print a pie chart as part of a document, it should be printed on the same printer that was specified when the chart was saved. Otherwise, the pie might not be perfectly round.

When WRITE reaches the part of the document where the graph is to appear, it reads the document diskette and prints the chart in the correct location. The printed chart will be approximately 3-1/2 by 4-1/2 inches, occupying 18 lines of the page. If it will not fit on the current page, WRITE starts a new page before printing it.

It is a good idea to leave at least 18 blank lines in the document to accommodate the chart, since that will make the page breaks shown in the working copy correspond to those that occur in the printed document.

You can print as many charts in a document as you wish; just enter the "GRAPH" command wherever you want the charts to appear, and follow the above procedure. As WRITE reaches each graph command, it will look for the chart on the document diskette in Drive 2.
Print Enhancements

WRITE supports three print enhancements directly, and any others supported by your printer through the use of special printer control codes. The three directly-supported enhancements are boldface type, underlining, and page break.

Printing Characters in Boldface

To print a character in boldface, move the cursor to that character, and press CTRL B (for Boldface). WRITE highlights that character on the screen. When it is printed, the printer will print that character twice so the letters are darker. The status line identifies the enhancement whenever the cursor is on the boldfaced character.

For example, suppose you want to print the title “Annual Report” in bold type. First, move the cursor to the A in Annual:

Now press CTRL B repeatedly until the entire title is highlighted:

If you move the cursor back a character, you can see that the status line identifies the print enhancement which has been set for the character the cursor is on:

To remove boldfacing, you must retype the material.
Printing Characters with Underlining

You underline a character in much the same way: just move the cursor to that character, and press CTRL _ (The CTRL key, the SHIFT key, and the underline key). WRITE highlights that character as it does for boldfaced characters. Underlined characters can be distinguished from boldfaced characters by positioning the cursor on a highlighted character and noting the enhancement identified in the status line. Characters can be both boldfaced and underlined, in which case the status line will indicate both enhancements.

To underline several characters, press CTRL _ repeatedly. To remove underlining, you must retypne the material.

Starting a New Page

If you wish to start a new page at any point in your document, simply type the command:

"NEW PAGE"

The line following the New Page command will begin on the next page of the printed output.

The command can be abbreviated to "N".

Sending Special Codes to Your Printer

You can send any control codes recognized by your printer by entering the following information at the location in your document where you want a special printing mode to begin:

"PRINTER code1, code2, etc."

The codes in the command are the ASCII decimal equivalents for the desired control code. Separate the control codes with commas. At the end of the text that you wish to have affected by that control code, you should send the code that "turns off" that enhancement.

For example, suppose you want to print the word very in a document in double-wide mode on an Epson MX-80. You would enter the command

"PRINTER 14"

just before the word very. Then, after very, you would enter the command

"PRINTER 20"

to return to normal printing.

The command can be abbreviated to "P 20".

Most printer manuals contain a list of the control codes that initiate and terminate special printing modes; if yours does not, contact your printer dealer for help.

Summary

- Use the TYPE/EDIT function to perform any of WRITE's advanced editing features.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTRL L</td>
<td>labels the character the cursor is on. To label the rest of a block of text, move the cursor to the last character in the block. When text is already labeled, CTRL L unlabels the entire block.</td>
</tr>
<tr>
<td>CTRL R</td>
<td>removes a labeled block of text, if there is one, and places it in the block buffer if a block is labeled, places a copy of the block in the block buffer. If no block is labeled, places a copy of whatever is in the block buffer at the cursor location.</td>
</tr>
<tr>
<td>CTRL D</td>
<td>(Duplicate) searches for a phrase and, if requested, replaces it with another.</td>
</tr>
<tr>
<td>CTRL S</td>
<td>(Search) leave Auto/Manual at M to verify each replacement</td>
</tr>
<tr>
<td>abc</td>
<td>change Auto/Manual to A to replace all occurrences without asking for confirmation</td>
</tr>
</tbody>
</table>
  |          | leave Replace With blank to search for a word or phrase and count occurrences entered in a search phrase, finds the next word starting with abc


This chapter explains how to merge a letter in the working copy with data from a file created with the PFS:FILE program in order to produce form letters automatically. This feature is extremely useful when preparing personalized letters for people on a large mailing list. (In fact, you can merge data from a PFS file with any kind of a WRITE document, not just a form letter.)

The First Step: A PFS File

The PFS:FILE program is used to organize and store information in many different situations. One very common use is to keep lists of people—customers, patients, subscribers, employees, and so forth. Assuming that you have a list of people and their addresses stored in a PFS file, regardless of what other information is stored for those people, you can print individual letters for all the people on the list, or for any selected group of people from the list.

For example, the STAFF file described in Chapter 2 of the PFS:FILE Apple IIc and IIe manual contains personnel information for six fictitious employees. The form from the file looks like this:

By combining the data in this file with a WRITE document, you can print identical letters to each person whose name is in the file, to each person who works in a particular department, or to each person who lives in a particular town.
WRITE can read data from Apple II, IIc, or IIe PFS:FILE files. The files can be in 40- or 80-column format. On the Apple IIc, the files are read and displayed in the format they were created in, regardless of the setting of the 40/80-column switch. However, text from Apple II files is printed entirely in upper case letters.

The Second Step: A WRITE Document

The next step is to prepare the letter that you want to send to the people whose names are on the list. Type the letter just as you would a normal document, except that you must identify each piece of information that is to be read from the PFS file. You do that by entering an asterisk, an item identifier (either the item name from the form, or a shortened version of that name), and another asterisk. For example, suppose you want to send a form letter to all of your employees announcing a new bonus plan. You would start by entering the following:

    November 25, 1983

    *Name*
    *Address*
    *City* "State" *Zip*

    Dear *Name*;

Notice that there are asterisks surrounding each item that is to be read from the PFS file, even when several items appear on one line. Also, both spaces and punctuation have been inserted where needed. (Note: the item identifier must all be on one line.)

Now enter the rest of the letter:

    We are pleased to announce a new profit sharing plan that will affect all employees. Here's the way it works: 10% of profits will be reserved for employee profit sharing. It will be allocated to employees based on their monthly salary at the end of the fiscal year. Your monthly salary was "Salary (T)" at the end of fiscal 1982, so that will be your base for this year's profit sharing distribution.

    We will be distributing the checks at the end of this month.

    Very truly yours,

    John Adams, Personnel Mgr.

You can insert data from the PFS file wherever you want in the document, as shown by the "Salary (T)" item in the body of the letter. (Note: (T) for text placement is explained in the later section titled Placement of Merged Data.)

The Final Step: Printing the Form Letters

When you have finished entering the letter, you are ready to begin printing the form letters. Let's print the bonus announcement letters as an example. Return to the Main Menu, enter 3 in the Selection Number item, and press CTRL C to continue. WRITE displays the Print Options for you to fill in:

Fill in these options appropriately (enter Y for Pause Between Pages if you want to use single sheet stationery). When you reach the PFS File Name item, enter the name of the PFS file—STAFF for this example.
Once you have filled in all the options, insert the diskette that contains the PFS file in Drive 2 and press CTRL C to continue.

Next, WRITE displays the form from the file with the words RETRIEVE SPEC at the bottom of the form. You need to fill it in with retrieve specifications that identify which forms from the PFS file you want to use to prepare the letters. This allows you to prepare form letters for some special group of people from the file, such as those who live in Honolulu or those who are flight attendants.

Fill in the retrieve specifications just as you would when working with PFS:FILE (see Chapter 4 of the PFS:FILE manual if you need an explanation of retrieve specifications). For this example, you want to print letters for all employees in the file, so leave the form blank and press CTRL C to continue.

Again, WRITE displays the form from the PFS file, this time with the words IDENTIFIER SPEC at the bottom of the form:

You use this form to enter any shortened item names that you used in the letter. Just use the TAB key to move to the item, then type the name you used in the letter. For example, you entered the item identifier of "Salary (T)" in the letter, but the actual item name on the form might have been Monthly Salary. You would press TAB to move to the Monthly Salary item, and enter "Salary"

When you have filled in the names of any items identified with a different name in the letter, press CTRL C to continue. If you have used the exact item names from the form in the letter as in this example, leave the identifier spec form blank and press CTRL C to continue. WRITE asks you to position the paper in your printer, then begins printing the first letter.

When the first letter has been printed, WRITE will go on to the next letter unless you have entered Y for the Pause Between Pages item. In that case, WRITE will pause and display the message:

Follow its instructions and WRITE will print the next letter, pausing after it is finished for the next sheet of paper, and so on.
Placement of Merged Data

WRITE provides three methods of placing merged data in your document: left justified, text placement, and right justified.

Left Justified

Ordinarily WRITE will place items from your PFS file starting at the position of the left asterisk of the command which identifies a PFS file item. If an item from the file is more than one line, it will be printed in your document as more than one line.

For example, if your PFS file contains the item “address” which looks like this:

1200 North State
Ukiah, CA 95482
type

*Name*
*Address*

in your document to have the name and address printed on three lines.

Text Placement

The text method will print an item as text. Any time you wish to insert items into a paragraph, use this option. If an item is more than one line in the PFS file, the entire item will be printed as text, filling lines and wordwrapping when the margin is reached.

For example, if you wish to insert the amount from an item called Salary into a paragraph, follow the item identifier with a T in parentheses as shown here:

*Salary (T)*

Right-Justified

The right-justified option will place an item from the PFS file in front of the position of the right asterisk. This option allows you to merge data into a column of numbers and have the final column lined up correctly on the right.

To specify right placement, follow the item identifier with an R in parentheses as shown here:

*Total Cost (R)*

This will print the data from the item, such as 25.00, with the final digit in the same column as the right asterisk.

Summary

- You can merge data from any Apple II, Apple IIc, or Apple IIe PFS file into a WRITE document.
- Specify the item in the document by entering an asterisk, an item identifier, and another asterisk, e.g., *Name*
- Enter the name of the PFS file in the PFS File Name item in the Print Options.
- Fill in the retrieve spec form with retrieve specifications that identify the group of forms you want to use.
- Fill in the item identifier spec form with the names of any items used in the document where the name is different from the name on the form.
- Specify placement of the PFS file item as follows:
  *item* will insert item at position of left asterisk
  *item (T)* will insert item as a string of text
  *item (R)* will insert item right-justified to final asterisk
Error Messages

PFS:WRITE displays a message whenever it encounters an error condition. Certain errors are the result of mistakes you make as you use the program, while others are the result of physical limitations or problems with certain parts of your computer system.

Most of these messages appear in the message area at the bottom of the screen:

PFS:WRITE displays other messages on a separate screen:
When you encounter one of these messages, simply locate the message in the list below and follow the instructions in the Corrective Action column. To restart normal WRITE operation, press ESC to return to the Main Menu.

Following is the list of WRITE messages, arranged in alphabetical order.

<table>
<thead>
<tr>
<th>Message</th>
<th>Description</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLOCK TOO LARGE TO SAVE. REMOVE ANYWAY? (Y/N):</td>
<td>You have labeled and tried to remove a block of text that will not fit in the block buffer. The block buffer will hold only about 10 lines.</td>
<td>Type Y to delete the block without saving it in the block buffer, or N to return to the working copy. Label the block in smaller sections to remove and save the smaller blocks one at a time.</td>
</tr>
<tr>
<td>CAN'T FIND DISK</td>
<td>The computer cannot find the disk drive.</td>
<td>Check the cable connections.</td>
</tr>
<tr>
<td>CAN'T FIND DOCUMENT</td>
<td>WRITE cannot find the document you specified when using the GET/SAVE/REMOVE function or Append command. Or, if you try to Get a GRAPH chart from a document diskette, you will get this message.</td>
<td>Make sure you have entered the name correctly, and that the diskette containing the document is in Drive 2. WRITE can use charts only to print them. You cannot Get a chart.</td>
</tr>
<tr>
<td>DISK DIRECTORY IS DAMAGED</td>
<td>The area of the diskette where WRITE keeps track of the documents on the disk can no longer be read.</td>
<td>Immediately make another copy of your backup copy, and then use the backup. The damaged diskette must be reformatted and recreated or should be discarded.</td>
</tr>
<tr>
<td>DISK FULL</td>
<td>WRITE attempted to save the working copy and found that the specified diskette did not have sufficient space. The diskette that contains the PFS file you are using is so full there is no room for your retrieve specifications or identifier specifications. You already have the maximum number (26) of files on the diskette.</td>
<td>If you have some unnecessary files on the diskette, use the REMOVE function to delete them. Or, you could use a different diskette on which to save the working copy. Use the REMOVE function of PFS:FILE to remove some unneeded forms from the file. Use the REMOVE function of PFS:FILE to remove some unneeded forms from the file.</td>
</tr>
<tr>
<td>DOCUMENT FULL</td>
<td>There is no more room in the working copy.</td>
<td>Save the working copy, then enter the rest of the document as a new document. To combine the two documents when printing, insert a JOIN command at the end of the first document. You could also remove text from the working copy.</td>
</tr>
<tr>
<td>DOCUMENT TOO FULL TO REMARGIN</td>
<td>Your working copy does not have enough room to adjust the margins.</td>
<td>Make the document smaller before you adjust the margins.</td>
</tr>
<tr>
<td>DOCUMENT TOO LARGE TO APPEND</td>
<td>The document you tried to Append will not fit in the working copy.</td>
<td>Resave the original document in smaller sections and then Append again, or JOIN the document at print time.</td>
</tr>
<tr>
<td>DOCUMENT TOO LARGE TO GET</td>
<td>You have tried to get a document which was created on a system with more memory. It will not fit in memory on this system.</td>
<td>To get this document, you must return to a computer with more memory and save the document in smaller sections.</td>
</tr>
<tr>
<td>'FROM' PAGE IS TOO LARGE</td>
<td>The page number you entered in the From Page item of the Print Menu is larger than the number of the last page of the document.</td>
<td>Enter a number smaller than the last page of the document.</td>
</tr>
<tr>
<td>IDENTIFIER LIST TOO LONG</td>
<td>The PFS file items you have entered in the identifier spec will not fit in WRITE's internal storage space.</td>
<td>Make the names in your document shorter, for example, Zip instead of Zip Code.</td>
</tr>
<tr>
<td>INCORRECT MARGINS</td>
<td>WRITE cannot use the margin numbers you have specified.</td>
<td>The minimum left margin is 1 and maximum right margin is 78. Both margins must be given a value, and the left margin value must be less than the right margin value.</td>
</tr>
<tr>
<td>Message</td>
<td>Description</td>
<td>Corrective Action</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>INVALID DOCUMENT NAME</td>
<td>WRITE cannot recognize the document name you have typed.</td>
<td>Document names can be only 15 characters long; can include only letters, numbers, and periods, and the first character must be alphabetic. Retype the name.</td>
</tr>
<tr>
<td>INVALID SELECTION NUMBER, RE-ENTER</td>
<td>You entered a number for the Selection Number of a menu that is invalid. The number must be shown on the menu.</td>
<td>Re-enter a number that is shown on the menu.</td>
</tr>
<tr>
<td>I/O ERROR</td>
<td>There is a physical problem with either the disk drive, the disk controller, or the diskette. Some possible causes are:</td>
<td>Close the door. Remove the disk, then re-insert it properly. Format the diskette. Check that cables between computer and disk drives are properly connected.</td>
</tr>
<tr>
<td></td>
<td>Disk drive door open.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diskette inserted incorrectly.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The diskette isn't formatted.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Loose cables.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dirty head.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Worn out diskette.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Malfunction.</td>
<td>DO NOT USE THIS DISKETTE AGAIN. Make a copy of your backup disk, then use that copy. If I/O ERROR persists, take the disk drive to your dealer for testing.</td>
</tr>
<tr>
<td>MARGIN MUST BE LESS THAN 19</td>
<td>You have entered a top or bottom margin that is too large.</td>
<td>Enter a number smaller than 19 in the Top Margin or Bottom Margin item.</td>
</tr>
<tr>
<td>NO TEXT TO DUPLICATE</td>
<td>You have pressed CTRL D when there is neither a labeled block of text, nor any text in the block buffer.</td>
<td>Label the text you want to place in the block buffer, then press CTRL D.</td>
</tr>
<tr>
<td>NOT A PFS FILE</td>
<td>The file whose name you entered in the PFS File Name Item of the Print Options is not a PFS file.</td>
<td>Make sure you are using the correct name, and that the diskette containing the file is in Drive 2.</td>
</tr>
<tr>
<td>PAGE LENGTH MUST BE LESS THAN 1000</td>
<td>You entered too large a number for the Page Length item on the Define Page Menu.</td>
<td>Enter a number less than 1000, or enter 0 to print the document as one continuous page (no page breaks).</td>
</tr>
<tr>
<td>PAGE LENGTH NOT LONG ENOUGH</td>
<td>The page length you have entered is not large enough to accommodate the top and bottom margins.</td>
<td>Enter a number at least one larger than the sum of the top and bottom margins.</td>
</tr>
<tr>
<td>MUST ENTER A DOCUMENT NAME</td>
<td>You have not specified the name of the document you want.</td>
<td>Enter the name of the document you want.</td>
</tr>
<tr>
<td>SEARCH LIST TOO LONG</td>
<td>The retrieve specifications you have entered for the PFS file will not fit in WRITE's internal storage area.</td>
<td>Specify fewer requests in the retrieve specifications.</td>
</tr>
<tr>
<td>SEARCH PHRASE NOT FOUND</td>
<td>WRITE found no occurrences of the phrase you entered in the Search For item.</td>
<td>WRITE searches from the position of the cursor forward. Usually you would want to start a search from the beginning of a document. Also check the spelling of the search phrase word.</td>
</tr>
<tr>
<td>TEXT IS TOO LARGE TO DUPLICATE</td>
<td>You have labeled and tried to duplicate a block of text that will not fit in the block buffer. The block buffer will hold only about 10 lines.</td>
<td>Press CTRL C to return to the working copy. Then duplicate the original block in smaller sections.</td>
</tr>
<tr>
<td>WORKING COPY IS FULL</td>
<td>You have used all the space in memory.</td>
<td>Save the working copy on a diskette, then use CLEAR to continue with a new, blank working copy.</td>
</tr>
</tbody>
</table>
## PFS:WRITE Quick Reference Guide

### Cursor Movement

<table>
<thead>
<tr>
<th>Keystroke</th>
<th>Moves the Cursor</th>
</tr>
</thead>
<tbody>
<tr>
<td>← → ↑ ↓</td>
<td>one space in the direction shown by the arrow</td>
</tr>
<tr>
<td>⌘ ←</td>
<td>to the next word</td>
</tr>
<tr>
<td>⌘ →</td>
<td>to the previous word</td>
</tr>
<tr>
<td>⌘ ↑</td>
<td>to the end of the line</td>
</tr>
<tr>
<td>⌘ ↓</td>
<td>to the beginning of the line</td>
</tr>
<tr>
<td>RETURN</td>
<td>to the beginning of the next line</td>
</tr>
<tr>
<td>TAB</td>
<td>to the next tab stop</td>
</tr>
<tr>
<td>⌘ TAB</td>
<td>to the previous tab stop</td>
</tr>
<tr>
<td>⌘ N</td>
<td>to the next screenful of text</td>
</tr>
<tr>
<td>⌘ P</td>
<td>to the previous screenful of text</td>
</tr>
<tr>
<td>⌘ G</td>
<td>to the beginning of the document</td>
</tr>
<tr>
<td>⌘ G</td>
<td>to the end of the document</td>
</tr>
</tbody>
</table>

### Special Function Keys

<table>
<thead>
<tr>
<th>Keystroke</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>⌘ C</td>
<td>WRITE continues with the specified function</td>
</tr>
<tr>
<td>⌘ H</td>
<td>WRITE displays the Help screen</td>
</tr>
<tr>
<td>ESC</td>
<td>WRITE displays the Main Menu</td>
</tr>
</tbody>
</table>
### Editing Options

<table>
<thead>
<tr>
<th>Keystroke</th>
<th>Function</th>
<th>How to Use It</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CTRL</strong> A</td>
<td>append</td>
<td>CTRL A, then specify document name, then press <strong>CTRL</strong> C</td>
</tr>
<tr>
<td><strong>CTRL</strong> B</td>
<td>boldface</td>
<td><strong>CTRL</strong> B to boldface each letter, retype to remove boldfacing</td>
</tr>
<tr>
<td><strong>CTRL</strong> D</td>
<td>duplicate</td>
<td>label a block (see <strong>CTRL</strong> L below), then <strong>CTRL</strong> D to put copy in block buffer, move cursor to new location. <strong>CTRL</strong> D again to duplicate at new location</td>
</tr>
<tr>
<td><strong>CTRL</strong> E</td>
<td>erase line</td>
<td><strong>CTRL</strong> E to remove each line</td>
</tr>
<tr>
<td><strong>CTRL</strong> F</td>
<td>format</td>
<td><strong>CTRL</strong> F, then L, R, or C</td>
</tr>
<tr>
<td><strong>CTRL</strong> Y</td>
<td>insert</td>
<td><strong>CTRL</strong> Y, then insert text. <strong>CTRL</strong> Y again to leave insert mode</td>
</tr>
<tr>
<td><strong>CTRL</strong> L</td>
<td>label block</td>
<td><strong>CTRL</strong> L, then move cursor. <strong>CTRL</strong> L again to unlabel</td>
</tr>
<tr>
<td><strong>CTRL</strong> R</td>
<td>remove character</td>
<td><strong>CTRL</strong> R to remove each character or a labeled block</td>
</tr>
<tr>
<td><strong>CTRL</strong> S</td>
<td>search</td>
<td>move cursor to beginning of document, press <strong>CTRL</strong> S, type Search Phrase, press <strong>CTRL</strong> C</td>
</tr>
<tr>
<td>search and replace</td>
<td>move cursor to beginning of document, press <strong>CTRL</strong> S, type Search Phrase and Replacement Phrase, specify Manual or Automatic, then press <strong>CTRL</strong> C</td>
<td></td>
</tr>
<tr>
<td>count</td>
<td>move cursor to beginning of document, press <strong>CTRL</strong> S, type a word or . . . in Search For item, specify Automatic, then press <strong>CTRL</strong> C</td>
<td></td>
</tr>
<tr>
<td><strong>CTRL</strong> T</td>
<td>set tabs</td>
<td><strong>CTRL</strong> T, then <strong>T</strong> or <strong>D</strong> where you want tab. Space over <strong>T</strong> or <strong>D</strong> to remove. <strong>CTRL</strong> C to continue</td>
</tr>
</tbody>
</table>

### Define Page Options

- **Left/Right Margin**
  - enter the column number for these margins

- **Top/Bottom Margin**
  - enter the number of lines for these margins

- **Page length**
  - enter the number of lines from the top edge of your paper to the bottom edge
    - 66 for standard 8½ x 11 paper
    - 84 for standard legal-size (8½ x 14) paper
    - 102 for standard ledger (11 x 17) paper
    - 0 or blank for one continuous page

- **Heading**
  - enter up to two lines of text to appear at the top of each page

- **Footing**
  - enter up to two lines of text to appear at the bottom of each page. For automatic page numbering, enter the starting page number in the footing.

### PRINT Options

- **From/To Page**
  - enter the first and last page of a range of pages

- **Pause Between Pages**
  - Y to pause after each page to insert a new sheet of paper

- **Single/Double/Envelope**
  - enter S to print single-spaced
  - D to print double-spaced
  - E to print the address

- **Indent**
  - enter the number of spaces to shift the printing to the right on the paper

- **Include PFS Graph**
  - enter Y to print a chart created by PFS:GRAPH as part of the document

- **PFS File Name**
  - enter the name of the PFS file from which to read data

**Hold CTRL, press SHIFT and underscore (underline) to underline each letter.**
**Retype to remove underlining.**

**CTRL W to erase each word.**
Printing Form Letters

1. Enter the letter in the working copy, typing item identifiers in the letter where you want an item of data to be inserted from the PFS file. Item identifiers must be enclosed in asterisks, e.g., "Name". Use T for text placement, R for right-justified placement, for example, "Name (T)"

2. Return to Main Menu and select PRINT.

3. Enter the name of the PFS file in the PFS File Name item on the Print Options and E in Single/Double/Envelope item if you want matching envelopes printed.

4. To print on single sheet stationery, enter Y for the Pause Between Pages item of the Print Options.

5. Fill in the retrieve spec to identify the group of forms from the file that you want to use.

6. Fill in the identifier spec with any item names you entered in the letter differently than they appear on the form.

7. After WRITE prints the first letter, insert an envelope or a new piece of stationery and continue.

SEARCH Options

Search For

enter the word or phrase you want to search for

Replace With

enter the word or phrase with which to replace the search phrase

Manual/Auto

A (Automatic) replaces all occurrences of the search phrase. (If there is no replacement phrase, counts the occurrences and displays the count at the end of the search)

M (Manual) asks for confirmation before replacing each occurrence

Wild card symbol entered in search phrase:

  e.g., abc      finds the next word starting with abc
   ... xyz      finds the next word ending with xyz
    ... abc ... finds the next word with abc in any position
     ...         finds the next word

Special Commands

*JOIN name*
("J name")

gets from diskette the WRITE document "name" and prints it at the location where the command appears

*GRAPH chartname*
("G chartname")

gets from diskette the chart file "chartname" and prints it at the location where the command appears

*PRINTER code1, code2, ...*
("P code1, code2, ...")

sends ASCII decimal code to the printer to initiate or terminate special printing modes

*NEW PAGE*
("N")

starts a new page when printing
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASCII</td>
<td>The letters ASCII (pronounced ASK-key) stand for the American Standard Code for Information Interchange.</td>
</tr>
<tr>
<td>cursor</td>
<td>the symbol on the screen that indicates where the next action will occur; i.e., typing, deleting, etc.</td>
</tr>
<tr>
<td>default values</td>
<td>responses to menu items and other prompts that are automatically filled in. Usually default values are the most common values, or the last-used values.</td>
</tr>
<tr>
<td>document</td>
<td>a single piece of writing stored under one name. In the context of the WRITE program, a document is the same as a file.</td>
</tr>
<tr>
<td>file</td>
<td>information stored as a unit under one name, the file name; as in the contents of one file folder.</td>
</tr>
<tr>
<td>format disk</td>
<td>to prepare a disk to receive data.</td>
</tr>
<tr>
<td>format text</td>
<td>to move a line of text to the left margin, center, or right margin of the page.</td>
</tr>
<tr>
<td>load</td>
<td>the process of transferring a program from a disk into the computer's memory.</td>
</tr>
<tr>
<td>menu</td>
<td>the list of functions that you can choose at a given time. The Main Menu appears when you first load the program. You can always return to the Main Menu by pressing the ESC key.</td>
</tr>
<tr>
<td>wild card character</td>
<td>a character that can be used to represent any other character. The concept is also described as using a &quot;don't care&quot; character or a &quot;global&quot; character.</td>
</tr>
<tr>
<td>wordwrap</td>
<td>the action whereby the computer automatically moves a whole word to the following line if it will not fit at the end of the current line.</td>
</tr>
</tbody>
</table>
G-2 pfs:write

work copy

a temporary working area in the computer where your document exists before it is stored on a disk.

write-protect tab

a gummed label stuck on a diskette to cover the notch in the side of the diskette cover. If this notch is open, the disk can be written on. If the notch is covered, the disk drive senses this and cannot write on the diskette.
Index-2  pfs:write

graph printing, using blank lines 6-19
graphics printers I-4, 6-18

H
headings 2-5
Help screens I-20
highlight 6-1, 6-13, 6-20, 6-22

I
identifier spec 7-4
include other files 6-15
indent printing 3-8
insert characters 1-8
item identifier 7-2

J
JOIN documents 6-17
JOIN versus Append 6-17

K
keys, summary of 8-1

L
label a block 6-1
left-justified 6-12, 7-6
left margin 2-5
letters, form 7-1, B-4
line, blank 6-19
line delete 1-9
line number 1-3
line spacing 3-5
list files 4-2
load G-1

M
mail-merge 7-1
Main Menu I-8, 1-13
manual search-and-replace 6-10
margin, maximum size 2-4
margins, left and right 2-5
margins, top and bottom 2-4
menu G-1
merging PFS data 7-6
messages, error A-1
move block 6-5
move cursor I-7, I-7, 1-14, B-1
multiple copies 3-5

N
new page 6-22
next screen 1-15
next word 1-14
number pages 2-6

O
overwrite 4-6

P
page boundaries 1-2
page break 6-22
page format 6-14
page length 2-2, 2-3, 2-7
page, new 6-22
page number 1-3, 2-6
percent full meter 1-22
PFS:FILE files 7-1
PFS:GRAPH graphics 6-18
pie chart, printing 6-19
placement of merged data 7-6
previous screen 1-15
previous word 1-15
print blank lines 6-17
enhancements 6-20
envelopes 3-6
footing 2-5
form letters 7-3
heading 2-5
modes 6-22
multiple copies 3-5
new page 6-22
one page 3-5
page numbers 2-6
range of pages 3-3
single sheets 3-5
stop 3-9
PRINT function 3-1
printer control codes 3-9, 6-22

R
range of pages, printing 3-3
remove block 6-4
characters 1-9
document 4-9
file 4-9
label 6-3
space 6-14
tab setting 1-13
replace characters 1-6, 1-10, 6-10
retrieve document 4-3
retrieve spec 7-4
return to Main Menu 1-13
right-justified 6-12, 7-6
right margin 2-5
ruler 1-3

S
save documents 4-5
search
-and-replace 1-19
-and-replace, automatic 6-11
-and-replace, manual 6-10
for partial phrases 6-8
options 8-4
phrase 6-8
rules 6-8
starting point 6-8
wild card 6-9
set margins 2-4, 2-5
set tabs 1-11
single page, printing 3-5
single space 3-5

T
tabs 1-14, 1-3, 1-11
clear setting 1-13
text placement 7-6
text, format 6-12
top margin 2-4
TYPE/EDIT function 1-1
typewriter tabs I-14, 1-11

U
underline 6-22
unlabel block 6-3
unset tab 1-13

W
wild card character 6-9, G-1
wild card search 6-9
word count 6-12
word, delete 1-9
word wrap 1-4, G-1
working copy I-9, 1-1, 4-3, G-2
write-protect tab G-2