

Assistant Series

IBM DisplayWrite Assistant™

Productivity Family



**Personal
Computer
Software**

59X9851

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Productivity Family



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Computer
Software**

First Edition (June 1986)

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About This Book

IBM DisplayWrite Assistant is one of a series of programs in the IBM Assistant Series. This book is organized as a reference tool, and it explains how you can use the DisplayWrite Assistant program to create, edit, save, and print documents.

The DisplayWrite Assistant *Quick Start Card* can also help you become familiar with the program. It is designed to get you up and running with DisplayWrite Assistant, and also can be used for future reference, as it lists DisplayWrite Assistant's major functions and keys.

User Prerequisites

You should be familiar with DOS 2.10 or above and have a working knowledge of your IBM Personal Computer. If you are not familiar with DOS, read through *IBM Disk Operating System* before beginning this program. If you are not familiar with the general operation of your computer system, read through *IBM Personal Computer Guide to Operations* before beginning this program.

Important: Some functions of DisplayWrite Assistant may not be supported by your system. For example, your printer may not support all pitches.

How to Use This Book

This book contains eight chapters:

- “Chapter 1. Introduction” introduces the DisplayWrite Assistant program and briefly explains its features and the programs with which DisplayWrite Assistant is compatible.
- “Chapter 2. Getting Started” explains what you need to use DisplayWrite Assistant, how to install the program and back up diskettes, how to configure your system and printer with Quick Menu/Setup, how to start the program, and how to use DisplayWrite Assistant’s Main Menu.
- “Chapter 3. Creating and Editing” describes the editing functions, cursor movement functions, and control functions available with DisplayWrite Assistant and explains how to create a document in the working copy.
- “Chapter 4. Getting and Saving” describes the different ways to get and save files with DisplayWrite Assistant.
- “Chapter 5. Formatting” explains how to change DisplayWrite Assistant’s page format defaults to format your documents in different ways or change the formats within a document.
- “Chapter 6. Merging” describes how to use the Instructions function within the working copy and how to merge files when you print your document.
- “Chapter 7. Printing” explains how to print a document or create a print file with DisplayWrite Assistant.
- “Chapter 8. Utilities” explains how to use utilities to copy, erase, and rename files and change the drive and directories with DisplayWrite Assistant.

This book also contains three appendixes:

- “Appendix A. Error Messages” describes the error messages that can display when DisplayWrite Assistant encounters an error condition for which it cannot provide help.
- “Appendix B. Printer Description Utility” describes how to create and edit Printer Description Tables for supported and non-supported printers.
- “Appendix C. Tutorial” contains two detailed, step-by-step exercises for those who want additional help learning DisplayWrite Assistant.

You can use the Table of Contents and Index to find references to explanations for questions that you might have. You can also find onscreen help information by pressing F1 from most screens.

The terms *disk*, *diskette*, and *fixed disk* are used throughout this book. Fixed disk refers to a nonremovable fixed disk. Where disk is used, it applies to both fixed disks and diskettes. Diskette refers to floppy disks.

Important: Procedures in this book are written for 5.25-inch diskettes. If you are using 3.5-inch diskettes, use Diskette 1 when the procedure calls for Diskette 1 or Diskette 2.

Contents

Chapter 1. Introduction	1-1
About DisplayWrite Assistant	1-1
DisplayWrite Assistant Features	1-1
Using Assistant Series Programs Together	1-4
Using DisplayWrite Programs Together	1-4
Using DisplayWrite Assistant with Other Programs	1-5
Chapter 2. Getting Started	2-1
Learning DisplayWrite Assistant	2-1
What You Need to Use DisplayWrite Assistant	2-3
When You Need Help	2-4
Using the Backup/Install Program	2-4
Installing the Program on an Installation Disk	2-6
Making a Backup Copy of the Program Diskettes ..	2-8
Removing the Program from a Fixed Disk	2-9
Using Quick Menu/Setup	2-10
Using Menu Maintenance	2-12
Setting Up Your Program	2-14
Starting DisplayWrite Assistant	2-17
Starting from the Programs Menu	2-17
Starting from DOS	2-17
Exiting from the Program	2-20
If You Started from the Programs Menu	2-20
If You Started from DOS	2-20
Protecting Your Data	2-21
Recommended Backup Guidelines	2-22
Chapter 3. Creating and Editing	3-1
Creating a New Document	3-2
Working Copy	3-3
Creating Your Document	3-4
Editing a Document	3-5

Editing Functions	3-9
Align	3-9
Block Edit	3-10
Block Emphasis	3-14
Search and Replace	3-16
Repeat Search	3-18
Find	3-18
Error Correcting Backspace	3-19
Single Character Delete	3-20
Delete Word	3-21
Delete Line	3-22
Insert/ Replace	3-22
Spelling and Synonyms	3-23
Changing the Personal Dictionary	3-26
Go To Page	3-28
Cursor Draw	3-29
Line Adjust	3-30
Auto Adjust On/ Off	3-31
Page Adjust	3-34
Exit/Quit	3-35
Cursor Movement Functions	3-36
Cursor Up	3-36
Cursor Down	3-36
Cursor Left	3-36
Cursor Right	3-37
Word Advance	3-37
Word Return	3-37
Start of Line	3-37
End of Line	3-37
Start of Page	3-38
End of Page	3-38
Start of Document	3-38
End of Document	3-38
Page Left	3-39
Page Right	3-39
Page Up	3-40
Page Down	3-40

Control Functions	3-41
Required Carrier Return	3-41
Carrier Return	3-41
Tab	3-41
Bold On/Off	3-42
Underline On/Off	3-42
Center Text	3-43
1/2 Down	3-44
1/2 Up	3-45
Indent	3-46
Page End	3-47
Required Page End	3-48
Required Space	3-49
Syllable Hyphen	3-49
Required Backspace	3-50
Chapter 4. Getting and Saving	4-1
Getting	4-1
Getting a File at the Main Menu	4-1
Getting a File with Get/Insert in the Typing Frame	4-2
Saving	4-2
Saving a Document at the Main Menu	4-3
Saving a Document with Quick Save in the Typing Frame	4-4
Chapter 5. Formatting	5-1
Formatting in the Typing Frame	5-1
Line Margins and Spacing	5-1
Page Layout and Paper Options	5-5
Tabs	5-9
Headers and Footers	5-10
Defining Defaults at the Main Menu	5-13
Line Margins and Spacing Defaults	5-13
Page Layout and Paper Option Defaults	5-14
Edit Defaults	5-14
Keyboard Extension Definition	5-18

Chapter 6. Merging	6-1
Using Instructions	6-3
Using Join File	6-3
Using Graph	6-5
Using Insert Field	6-6
Using Merge File with Document	6-7
Special Considerations	6-8
Filing Assistant Files	6-9
Personal Decision Series Text Files	6-10
Dif™ and SYLK™ Files	6-10
dBase II™ Files	6-10
Chapter 7. Printing	7-1
Printing from the Main Menu	7-2
Printing in the Typing Frame	7-4
Canceling Print	7-4
Chapter 8. Utilities	8-1
Copying a File	8-1
Erasing a File	8-2
Renaming a File	8-2
Changing the Default Drive/Directory	B-3
Using the Directory	B-3
Appendix A. Error Messages	A-1
Appendix B. Printer Description Utility	B-1
User Prerequisites	B-1
Hexadecimal Charts	B-2
Printer Description Tables	B-4
Special Considerations	B-4
Control Sequences	B-5
Control Sequence with Variable N	B-5
Valid Control Sequence Characters	B-8
Using the Printer Description Utility	B-8
Loading	B-8
Printer Description Utility Main Menu	B-9
Edit Printer Description Table	B-9
Highlighting	B-10
Superscripts/Subscripts	B-11
Paper Handling	B-11
Character Sets	B-12
Color Selection	B-12

Get	B-12
Save	B-13
Function Selection Tests	B-13
Configuring for the New Printer	B-14
Special Considerations	B-15
Appendix C. Tutorial	C-1
Overview	C-1
Starting DisplayWrite Assistant	C-1
Typing Concepts	C-2
Saving and Printing a Document	C-2
Exercise 1 — Using Clear to Create a New Document ..	C-3
Creating the Document	C-3
Saving the Document	C-5
Escaping the Working Copy	C-6
Exercise 2 — Getting, Editing, and Printing	C-7
Getting the Document	C-7
Editing the Document	C-8
Printing the Document	C-9
Returning to DOS	C-10
Index	Index-1

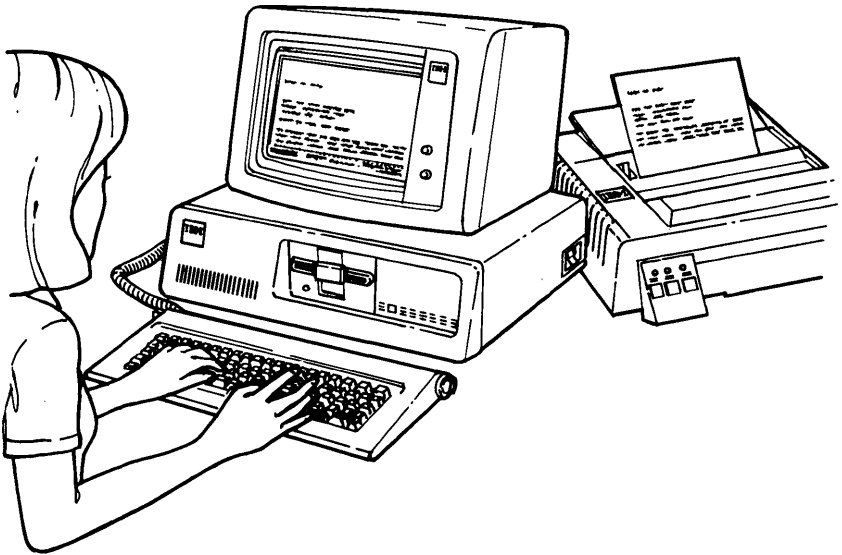
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Chapter 1. Introduction

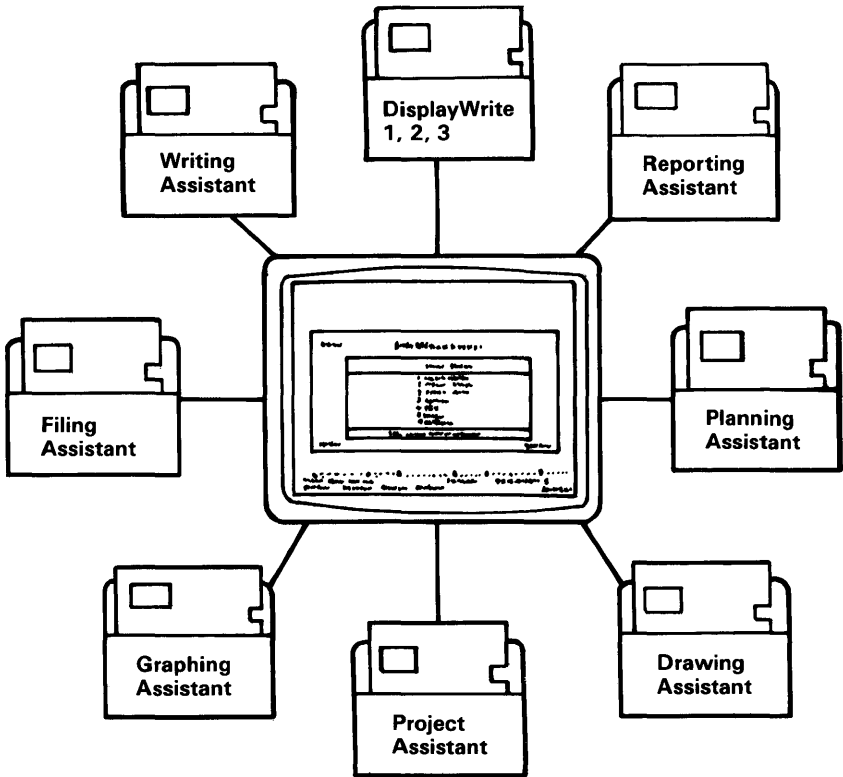
This chapter introduces the IBM DisplayWrite Assistant program and describes its features.

About DisplayWrite Assistant

DisplayWrite Assistant is a word processing program you can use to create, edit, save, and print documents.



DisplayWrite Assistant can also use files created with programs in the IBM Assistant Series family and the IBM DisplayWrite family.



DisplayWrite Assistant Features

DisplayWrite Assistant has the following features:

- Online help — any time you see **F1=Help** at the bottom of the screen, you can get information about tasks or options on the screen right in front of you.
- Typing Frame resembling a piece of paper — the area in which you enter text to create a document looks like the printed version of that document.
- Spelling Checker — an online dictionary allows you to check and correct the spelling of words in your documents.
- Synonym lists — an online list of synonyms for many words allows you to choose different ways to say what you want to say.
- Compatibility with other programs — DisplayWrite Assistant can be used with files from many other popular word processing programs (explained fully later in this chapter).
- Cursor Draw — a single function key enables you to draw or erase horizontal and vertical lines with the cursor movement keys.
- Flexible document formatting — the formatting possibilities with DisplayWrite Assistant allow you to create a document with a wide variety of formats and appearances.
- Merge capabilities — files can be merged and printed together, including art and picture files.
- Printer support through the Printer Description Utility — the ability to create a printer table specifically for your printer enables you to print to many unsupported printers.
- All typical word processing functions — most functions you have used with other word processing programs are available with DisplayWrite Assistant.

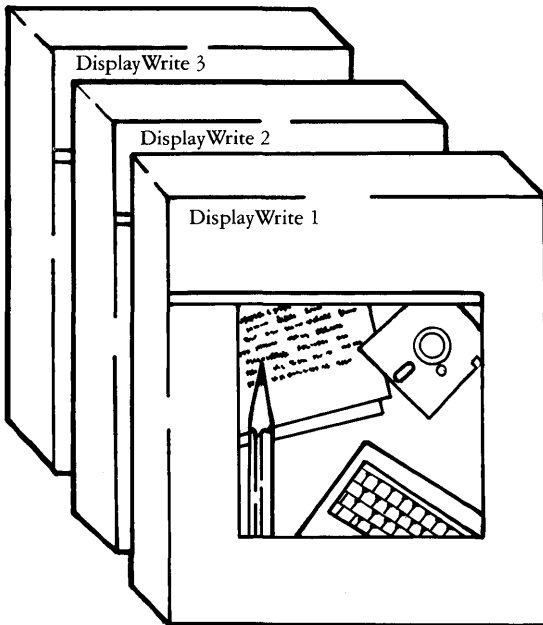
Using Assistant Series Programs Together

You can use DisplayWrite Assistant with files created with the IBM Assistant Series family:

- Filing Assistant
- Writing Assistant
- Reporting Assistant
- Planning Assistant
- Graphing Assistant
- Drawing Assistant
- Project Assistant.

Using DisplayWrite Programs Together

You can use files created with the IBM DisplayWrite family.



DisplayWrite Assistant can get and save files as IBM Reversible Form Text (RFT) files, the IBM standard for interchanging documents.

Using DisplayWrite Assistant with Other Programs

You can use DisplayWrite Assistant to create or edit ASCII files such as BATCH files or programs. DisplayWrite Assistant can also merge files using:

- Filing Assistant
- IBM Personal Decision Series text files
- dBase II™¹ files
- DIF™² files
- SYLK™³ files.

¹ Trademark of Ashton-Tate, Inc.

² Trademark of Lotus Development Corporation.

³ Trademark of Microsoft Corporation.

Notes:

Chapter 2. Getting Started

This chapter explains how to get ready to use the IBM DisplayWrite Assistant program. It describes what equipment you need, how to back up and install the program, and how to set it up for your equipment. This chapter also tells you how to start DisplayWrite Assistant and how to get Help as you work. When you have finished reading this chapter and have followed its instructions, you should be ready to begin using DisplayWrite Assistant.

Learning DisplayWrite Assistant

A condensed version of this chapter can be found on the DisplayWrite Assistant *Quick Start Card*. This card can help you quickly get up and running with the DisplayWrite Assistant program. We recommend that you first use the *Quick Start Card* to install or back up the DisplayWrite Assistant program and to set up your equipment if necessary. If you need additional help, you can press F1 when **F1=Help** is displayed at the bottom of the screen. If you still require help, use this chapter and the following chapters as a reference guide.

Important: Be sure to follow the Backup/Install instructions before using DisplayWrite Assistant for the first time.

As you follow the instructions in this chapter, you will use two programs included on your DisplayWrite Assistant Diskette 1: the Backup/Install program and the Quick Menu/Setup program.

You will use the Backup/Install program to install DisplayWrite Assistant on a disk (either a fixed disk or a 1.2MB high-capacity diskette) you can use as your working installation disk. If you have enough space, you can install more than one Assistant Series program on the same installation disk so you do not have to insert a different program diskette each time you start another program. If you are using a two diskette drive system, use the Backup/Install program to make a backup copy of the DisplayWrite Assistant diskettes. If one copy gets damaged, you have the original program diskettes to back up again.

The Quick Menu/Setup program lets you customize DisplayWrite Assistant for your computer system. For example, you can indicate the type of printer that you have. This program also lets you control the way data is displayed or printed (for example, you can change the format of dates). If you have more than one Assistant Series program, you can list them all on a single menu (called the Programs Menu) and then start each program from that menu.

What You Need to Use DisplayWrite Assistant

To use DisplayWrite Assistant, you need the following equipment and programs:

- A supported computer from the IBM Personal Computer family with at least 256KB of memory and one of the following:
 - A fixed disk with at least one diskette drive
 - Two 3.5-inch, single-sided diskette drives
 - Two 5.25-inch, double-sided diskette drives.
- A supported display from the IBM Personal Computer family or a compatible 80-column personal computer display.
- A supported printer from the IBM Personal Computer family or a compatible serial or parallel printer.
- The IBM Disk Operating System (DOS) Version 2.10 or later. (The IBM Personal Computer AT and the IBM PC Convertible use DOS 3.20.)
- The DisplayWrite Assistant package, with three 5.25-inch 360KB diskettes or two 3.5-inch 720KB diskettes, this User's Guide, and the *Quick Start Card*.
- Several blank, formatted diskettes.

The examples in this book assume you are using a fixed-disk system. Therefore, the examples assume the program diskette is installed on the fixed disk and a data diskette is in drive A.

If you are using a system with two diskette drives, use drive A for the program diskette and drive B for the data diskette.

When You Need Help

As you continue with this chapter, you learn the general way to work with any Assistant Series program. You'll find that instructions appear on the screen and that menus are designed to help you through each procedure.

If you need more information, you can press **F1** for Help whenever the message **F1=Help** appears in the bottom left corner of the screen. If you want more information about an option on a menu, use the cursor movement keys to highlight that option. Press **F1** and an explanation appears.

If the Help information explains more than one option or task, you can get additional help on the items within the Help as long as **F1=Help** still appears at the bottom of the screen. To get these "Helps within Helps," simply highlight the item about which you want additional information and press **←**. To remove the Help panels, press the Escape (Esc) key.

Once you begin working with DisplayWrite Assistant, you can even get Help when most errors occur. DisplayWrite Assistant displays an error message that often gives you enough information to correct a problem. If you need more Help, press **F1**. Help for some errors is provided in "Appendix A. Error Messages."

Using the Backup/Install Program

Before you begin using DisplayWrite Assistant, use the Install program to install DisplayWrite Assistant on an installation disk, which can be either a fixed disk or a high-capacity (1.2MB) diskette. You can also use the Backup/Install program to make a backup copy of the program diskettes if you are using a two diskette drive system.

Important: If you have a composite video display (such as the IBM Portable Computer Display), DisplayWrite Assistant may attempt to display in color. The result is difficult to read. To avoid this, at the DOS prompt, type **MODE BW80** and press **←**. This switches the color off.

Follow these steps to display the Backup/Installation Menu.

1. Be sure the DisplayWrite Assistant diskettes are not write-protected.
2. Insert the DisplayWrite Assistant Diskette 1 in drive A (the default drive — see your IBM *Disk Operating System* book for an explanation of default drive.)

Important: If you are using a Personal Computer AT, remember that a diskette written on a 1.2MB diskette drive may not be readable on a 360KB diskette drive. The backup, install, and remove functions write on a diskette; so if you perform these functions using a 1.2MB drive, you cannot thereafter use the program diskettes in a 360KB drive.

3. Type **a:** and press \leftarrow .
4. Type **install** and press \leftarrow . The Backup/Install Menu is displayed, listing the three tasks (called options) you can perform here.

Backup/Install Menu
1. Back up program diskette 2. Install on a disk 3. Remove program from a fixed disk
To select, use \uparrow or \downarrow and press \leftarrow .

Notice that the first option is highlighted. You can move this highlight by pressing \uparrow or \downarrow . You can get Help on a highlighted option by pressing F1. Select a highlighted option by pressing \leftarrow .

If you are using a two diskette drive system, you must now make copies of the DisplayWrite Assistant program diskettes. Go on to “Making a Backup Copy of the Program Diskettes” on page 2-8.

Installing the Program on an Installation Disk

You can install the DisplayWrite Assistant program on a disk (either a fixed disk or a high-capacity diskette) and use that installation disk to run DisplayWrite Assistant. You can install DisplayWrite Assistant on a disk that contains other programs, including other Assistant Series programs, so you do not have to insert a program diskette each time you want to start a different program.

You can create an installation disk by using the install function of DisplayWrite Assistant to place a copy of the program on the disk you select as your installation disk.

On a fixed disk, we recommend that you install all of your Assistant Series programs in a subdirectory named ASSIST2. (You can store your data files in any subdirectory, regardless of where you install the program.)

If you want to install DisplayWrite Assistant in a subdirectory where an earlier version already exists, you must first delete the earlier version from the disk. Do so by using the Remove function described in "Removing the Program from a Fixed Disk" on page 2-9. Once you have removed the earlier version, follow the install procedure as described next.

Installation Steps

The following procedure includes the creation of one subdirectory, which you can name ASSIST2 or another name of your choice. If the path you type during this procedure has more than one subdirectory, you must create all but the last subdirectory before you begin this installation procedure. Refer to your DOS book for instructions on creating subdirectories.

1. Be sure the *original* DisplayWrite Assistant Diskette 1 is in the default drive and that it is not write-protected.
2. At the Backup/Install Menu, press \uparrow or \downarrow to highlight **Install on a disk.**
3. Press \leftarrow .

4. Follow the instructions that are displayed on the screen.
5. The subdirectory **C:\ASSIST2** is displayed as the default drive and directory path. If you want DisplayWrite Assistant installed in a different location, just type over **C:\ASSIST2** with the drive and directory path you want.
6. Press **←** and a prompt is displayed, asking you to confirm the locations of your disks. Continue to follow the instructions that appear on the screen. You will be inserting each DisplayWrite Assistant diskette once.
7. Installation is complete when you see the message **Installation is complete.**
8. Press **Esc** twice, and press **y** when prompted, to return to **DOS**. Store the original diskettes in a safe place and use the installed program to continue with procedures in this chapter.

If this is the first Assistant Series program you have installed in a directory, its name automatically appears on the Programs Menu. Otherwise, you need to add the name, using Menu Maintenance, described later in this chapter.

When installing the program diskettes on an installation disk, you do not need to make a backup copy of the DisplayWrite Assistant diskettes. Press **Esc** and go on to “Using Quick Menu/Setup” on page 2-10.

Making a Backup Copy of the Program Diskettes

Important: Never use the DOS COPY or DISKCOPY commands to back up the DisplayWrite Assistant program diskettes.

When using a two diskette drive system, you should make a backup copy of the DisplayWrite Assistant diskettes before you begin to use DisplayWrite Assistant. You will then have two sets of diskettes. If one set becomes damaged, use the original DisplayWrite Assistant diskettes to make another copy and use the backup diskettes to run DisplayWrite Assistant.

Important: Never use the original DisplayWrite Assistant diskettes to run the program.

1. Have blank, formatted diskettes ready. You will need three 5.25-inch diskettes or two 3.5-inch diskettes for the backup. The blank diskettes must be formatted to the same capacity as the original DisplayWrite Assistant diskettes. That is, back up a 360KB diskette to a 360KB diskette, or a 720KB diskette to a 720KB diskette. (See your DOS book for instructions on formatting.)
2. At the Backup/Install menu, press \uparrow or \downarrow to highlight **Back up program diskette**.
3. Press \leftarrow .
4. Follow the instructions that are displayed on the screen.
5. The Backup process is complete when you see the message **Backup is complete**.
6. Press Esc twice, and press y when prompted, to return to DOS. Store the original diskettes in a safe place and use the backup copy of Diskette 2 to run the program.

Removing the Program from a Fixed Disk

If you want to reorganize your fixed disk or move DisplayWrite Assistant to another fixed disk system, you should first remove DisplayWrite Assistant from the location where it is currently installed. The Remove procedure removes the DISPLAY.EXE file from your fixed disk only, not from diskettes.

The Remove function also allows you to delete this version of DisplayWrite Assistant from a fixed disk so you can install another version in the same location.

Check to be sure the original DisplayWrite Assistant Diskette 1 is not write-protected and follow these steps:

1. Insert your *original* DisplayWrite Assistant Diskette 1 in drive A.
2. Type **a:** and press **↵** .
3. Type **install** and press **↵** . The Backup/Install Menu is displayed.
4. Select **Remove program from a fixed disk**. The subdirectory **C:\ASSIST2** appears as the default drive and directory path.
5. If DisplayWrite Assistant is in this directory, press **↵** . If DisplayWrite Assistant is in another subdirectory, type that directory path over the default and press **↵** .
6. DisplayWrite Assistant is removed from your fixed disk. The remove process is complete when you see the message **Remove is complete**.
7. Press Esc to return to DOS.

Important: Not all DisplayWrite Assistant files are deleted by this procedure. If you wish to free more space on your fixed disk, you must manually delete the files in the DisplayWrite Assistant subdirectory.

The Remove function does not delete the program's name from the Programs Menu. The Menu Maintenance section later in this chapter explains how you can do so.

Using Quick Menu/Setup

The Quick Menu/Setup program provides a menu where you will usually begin your work with any Assistant Series program. At this Programs Menu, you can use Menu Maintenance to add, delete, edit, or sort the names on the Programs Menu and to change the Programs Menu appearance. You can also use Setup to customize DisplayWrite Assistant (and any of the other Assistant Series members on the Programs Menu) for your equipment. For example, you can indicate your printer type, set up the default drive for data, or adjust screen colors.

The Setup Menu also allows you to indicate how you want information to be displayed or printed. For example, you can specify how you want dates to appear.

The Quick Menu/Setup procedure varies depending upon whether you have installed DisplayWrite Assistant on an installation disk or you are using the backup copy of the DisplayWrite Assistant program diskette. Follow these steps:

1. If you have installed DisplayWrite Assistant on an installation disk, make sure the default directory is the directory where DisplayWrite Assistant is installed.

If you are using your backup copy of the DisplayWrite Assistant program diskette, insert it in the default diskette drive.

Important: Most commonly, the Programs Menu is located in the same directory as DisplayWrite Assistant. If you followed our recommendation, it will be in the subdirectory named ASSIST2. However, whenever you install the first Assistant Series 2.0 program, a Programs Menu is installed along with the program. If you install programs into different subdirectories, you will have more than one copy of the Programs Menu. To any of these copies of the Programs Menu, you can add the names of Assistant Series programs located in any directory or on any drive, even a diskette drive.

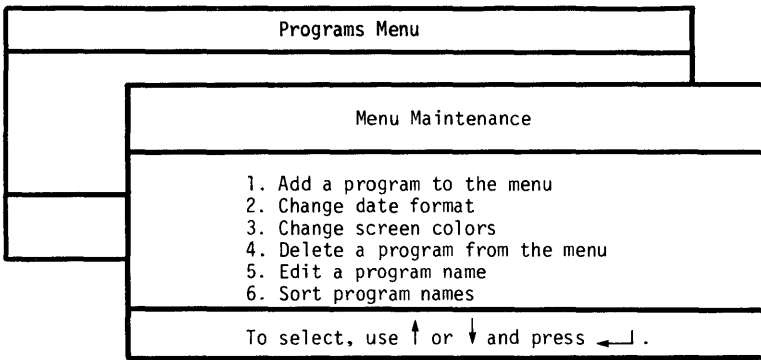
2. At the DOS prompt, type **g**.
3. Press **←**. The Assistant Series Quick Menu/Setup logo is displayed.
4. Press **←** again. The Programs Menu is displayed. DisplayWrite Assistant's name is listed if it is the first Assistant Series program in this location. Otherwise, you will want to add DisplayWrite Assistant's name using Menu Maintenance.

Programs Menu
DisplayWrite Assistant
To start a program, use ↑ or ↓ keys to highlight the program, then press ← .

Using Menu Maintenance

Use Menu Maintenance to:

- Add DisplayWrite Assistant to the Programs Menu if it is not already there.
 - Add other Assistant Series program names to the Programs Menu.
 - Delete, edit, or sort the names of programs listed on the menu.
 - Change the appearance of the Quick Menu/Setup screens.
1. With the Programs Menu displayed, press F3 and the Menu Maintenance menu appears.



Notice that the Menu Maintenance panel is displayed in front of the Programs Menu panel. Throughout the Assistant Series programs, successive panels are displayed so you can see your steps as you follow a procedure. You can go back one step (that is, return to a previous panel) by pressing Esc.

2. Select the appropriate option to perform the following operations. Instructions on the screen help you through steps.

- If you want to start an Assistant Series program from the Programs Menu, the program name must be on the menu. The name is already on the Programs Menu on the original DisplayWrite Assistant program diskette and on the backup copy. However, if you have installed DisplayWrite Assistant on an installation disk and if it is not the first Assistant Series program in that location, you need to select **Add a program to the menu** and specify the drive and directory where the program is located.
- You can change the format of the date that appears at the top of the Quick Menu/Setup screens by selecting **Change date format**. (To change the date format displayed in DisplayWrite Assistant, use the Setup Menu as discussed on page 2-14.)
- You can change the color combinations for Quick Menu/Setup screens by selecting **Change screen colors**. (To change the color combinations for DisplayWrite Assistant, use the Setup Menu.)
- You can delete any name from the menu. When you select **Delete a program from the menu**, the highlighted program name is deleted from the Programs Menu only. The program is not deleted from your disk. (The Remove procedure described earlier does not delete the name from the Programs Menu.)
- You can change any name displayed on the Programs Menu. Type the name you choose in the edit menu that appears when you select **Edit a program name**.
- You can rearrange the names on the Programs Menu alphabetically by selecting **Sort program names**.

Setting Up Your Program

DisplayWrite Assistant is preset to work with an IBM Personal Computer with a fixed disk and an IBM Proprinter. If you have other equipment, you must use the Setup Menu to change the default settings for your computer system.

Setup lets you specify the drive and directory path (called the *default data path*) where you typically want to save DisplayWrite Assistant data. If you use a fixed disk, we recommend setting a separate subdirectory from the subdirectory in which DisplayWrite Assistant resides on which to save data. Or, you could save data to drive A, or to any drive other than your fixed disk. If you use a two diskette drive system, set the default data path to a different drive from which you typically operate DisplayWrite Assistant. (You should never save data or create a work file on the DisplayWrite Assistant program diskettes.)

With Setup, you can also change the way dates, times, and numbers appear in DisplayWrite Assistant. The colors are preset, but you can change these also. You may find other color combinations more attractive or readable on your display. You can also choose whether the program will notify you with sound tones when tasks are completed and when errors occur.

You can set up DisplayWrite Assistant and any other Assistant Series programs appearing on the same Programs Menu at the same time. All the changes you make become the new settings until you use the Setup function to change them again.

If you do not need to use Setup, go now to "Starting DisplayWrite Assistant" on page 2-17.

Follow this procedure to set up your Assistant Series programs:

Important: Although Quick Menu/Setup's setup procedure allows you to define your printer, you may have unexpected print results unless the appropriate mode command is executed before you run DisplayWrite Assistant. The first step in this procedure gives you the appropriate command for your printer.

1. If you have installed DisplayWrite Assistant on a fixed disk, at the DOS prompt, type the command below that corresponds to your printer. (You may need to temporarily change the current directory to the directory where DOS is located.)

If you are operating on a two diskette drive system, insert your DOS diskette in the default drive, then type at the DOS prompt the appropriate command below.

All parallel printers	—	MODE LPT1:,,p
IBM Compact Printer	—	MODE COM1:12,n,8,2,p
IBM Pageprinter	—	MODE COM1:96,n,8,1,p

Important: Depending upon your system configuration, you may use LPT2, LPT3, or COM2.

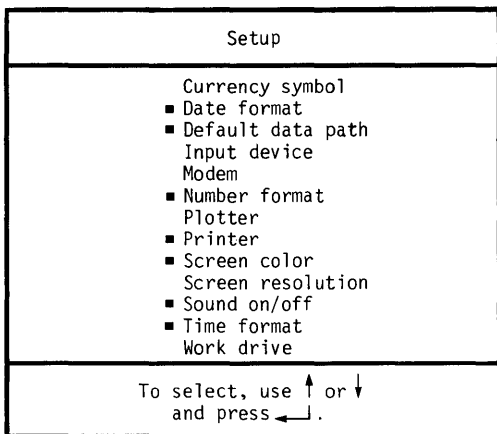
You may wish to put this command in your AUTOEXEC or BATCH file.

2. If you have installed DisplayWrite Assistant on a fixed disk, make sure the default directory is the directory on which DisplayWrite Assistant is installed.

If you are operating on a two diskette drive system, insert DisplayWrite Assistant Diskette 1 in the default drive.

3. Type **g** at the DOS prompt.
4. Press **←**. The Assistant Series Quick Menu/Setup logo is displayed.
5. Press **←** again. The Programs Menu is displayed.
6. Press **F2**.
7. If DisplayWrite Assistant is the only program listed on the Programs Menu, go on to step 10. If there are other programs listed on the Programs Menu, proceed with the next step.

8. Select each program you wish to set up by highlighting the name and pressing \leftarrow . An arrow at the left of the program name indicates which programs you have selected to be set up.
9. Press **F10**. The Setup menu is displayed.



10. Select the Setup option you want to change and follow the instructions on each screen to change settings. On each screen, the current default setting is highlighted.

A square bullet (■) before an option indicates that the option is available for at least one of the programs you have selected and you can proceed with that option. Not all options are possible for all programs. If an option does not apply to any of your programs, Setup will not let you select it.

Important: Earlier versions of the Assistant Series programs use a different procedure to set up the program. You cannot set up earlier versions using this Setup function, even if they are listed on the Programs Menu.

11. Continue selecting Setup options and choosing new settings. A beep indicates the selection was successful. When you have finished making changes at the Setup menu, press Esc. Quick Menu/Setup saves the new settings and redisplay the Programs Menu.

Important: If you are using a non-supported printer, you must select **Other** in the Printer panel. Use the steps in “Configuring for the New Printer” on page B-14 to do this. The supported printers are listed in Appendix B.

Starting DisplayWrite Assistant

You can start DisplayWrite Assistant either from the Programs Menu or from DOS. Follow these steps:

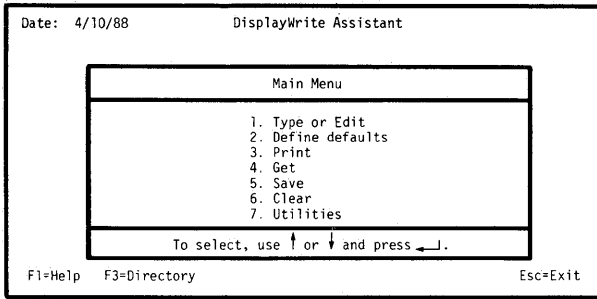
Starting from the Programs Menu

1. At the Programs Menu, press \uparrow or \downarrow to highlight DisplayWrite Assistant.
2. Press \leftarrow . The Main Menu is displayed.

Important: When using a two diskette drive system, you will be prompted to insert the DisplayWrite Assistant Diskette 2 and press \leftarrow before the Main Menu is displayed.

Starting from DOS

1. If using a fixed disk system, make sure the default drive and directory is the location of the DisplayWrite Assistant program. If using a two diskette drive system, insert the DisplayWrite Assistant Diskette 2 in the default diskette drive.
2. At the DOS prompt, type **dwa**.
3. Press \leftarrow . The DisplayWrite Assistant logo is displayed.
4. Press \leftarrow again. The Main Menu is displayed.



Main Menu Options

From the Main Menu you can select seven different options. These options are described below and in more detail in the following chapters.

1. **Type or Edit** — allows you to edit the current document.
2. **Define Defaults** — allows you to change default values for various formatting options to print documents as you define them. It also lets you change editing defaults and define a set of alternate keys for your keyboard.
3. **Print** — allows you to print the current document and merge information from other files.
4. **Get** — allows you to retrieve an existing file on disk.
5. **Save** — allows you to save the current document to disk.
6. **Clear** — allows you to clear the working copy to create a new document.
7. **Utilities** — allows you to copy, erase, or rename a file, and to change the default drive or current directory.

Note the **key flags line** at the bottom of the screen. Throughout the DisplayWrite Assistant program, this line contains the most commonly used keys for the current screen.

Selecting Options

Throughout the DisplayWrite Assistant program, you can select options in the following methods:

1. Press ↑ or ↓ to highlight the option and press ← .
2. Type the number preceding the option.
3. Type the first character of the first word of the option.

If you use the second or third method, you needn't press ← ; DisplayWrite Assistant responds immediately after you type the number or the letter.

Important: When in the Backup/Install menus or the Quick Menu/Setup menus, use only the first or second method. When in any menu without numbered options, use only the first method.

Exiting from the Program

When you want to stop using DisplayWrite Assistant, follow the steps below, depending upon where you started the program.

If You Started from the Programs Menu

1. At the Main Menu, press Esc. A prompt is displayed, asking you to confirm that you want to exit DisplayWrite Assistant.
2. Press **y**. You are returned to the Programs Menu.
3. Press Esc. Another prompt is displayed, asking you to confirm that you want to leave the Quick Menu/Setup program.
4. Press **y**. You are returned to the DOS prompt.

If You Started from DOS

1. At the Main Menu, press Esc. A prompt is displayed, asking you to confirm that you want to exit DisplayWrite Assistant.
2. Press **y**. You are returned to the DOS prompt.

Protecting Your Data

By the time you have created a file and entered information into it, you will have invested a good deal of your time. To avoid losing the data stored in that file (and the time you have spent entering it), follow these guidelines:

- Store data only on the fixed disk or on separate data diskettes. **Never store data on the DisplayWrite Assistant program diskettes.**
- Never remove a data diskette or turn the computer system off unless you have exited DisplayWrite Assistant. If you do, your data file may be damaged.
- Use only high-quality, double-density diskettes.
- Always keep at least one backup copy of each file. See the backup recommendations that follow.
- Handle your diskettes carefully. Store them away from heat, sunlight, and devices with strong magnetic fields (TV's, diskette drives, and other electrical equipment).
- Print a copy of your files from time to time. See "Chapter 7. Printing" for instructions.

Recommended Backup Guidelines

- Back up your data files on a regular basis. If you update them daily, then back up daily. If you update less often, back up whenever you update.
- After you create a new data file, make two backup copies. Thereafter, alternate their use. The first time you back up, use the first diskette; the next, use the other diskette; and so on. If you follow this procedure and a problem develops while you are making a backup, you still have the other backup diskette.
- Use the Copy function of Utilities from the Main Menu to back up your files. See “Chapter 8. Utilities”.

Important: This function cannot be used to copy from one diskette to another diskette on a single drive system.

- If you encounter problems with a file, discard the diskette at once and use the backup diskette. Make a copy of the backup diskette immediately.

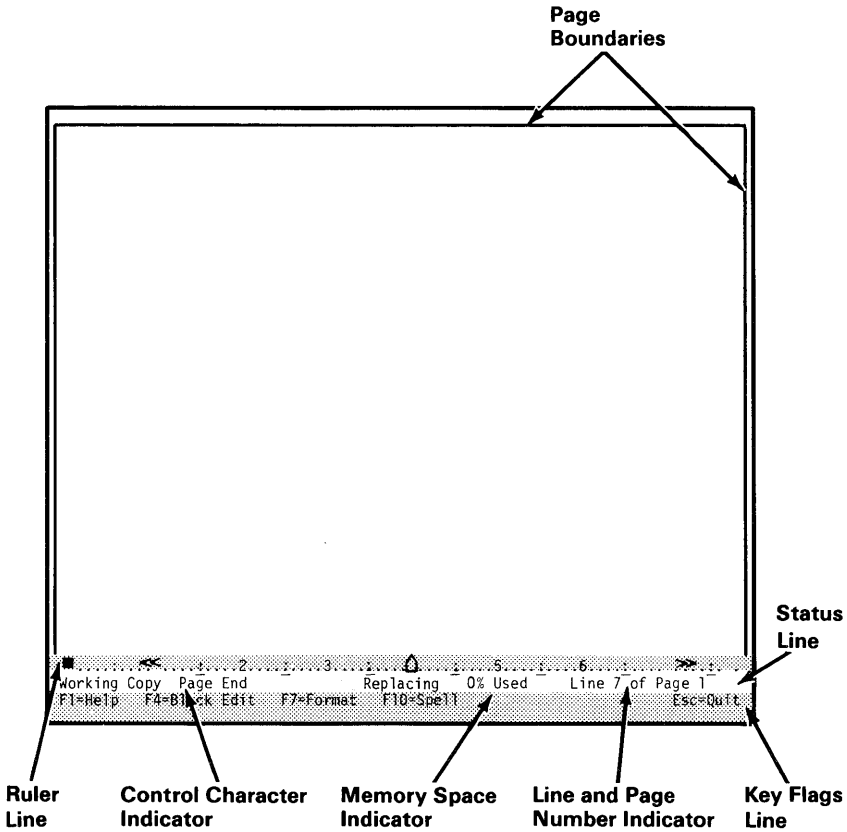
Chapter 3. Creating and Editing

This chapter helps you create and edit documents using IBM DisplayWrite Assistant. You can choose **Clear** at the Main Menu to create a new document. You can choose **Type or Edit** at the Main Menu to make changes to an existing document in the working copy. Also, you can choose **Get** at the Main Menu to edit an existing file on disk.

Creating a New Document

Important: DisplayWrite Assistant is shipped with page formatting defaults which you may want to change before creating a document. If you want to change these formats, see “Chapter 5. Formatting.”

When you choose **Clear** at the Main Menu, a screen is displayed on which you can type text. This screen is called the *typing frame*. DisplayWrite Assistant stores the text you type in the typing frame in a temporary area in your computer memory called the *working copy*.



Working Copy

The working copy is displayed on the typing frame screens which you can use like blank pieces of paper. As you can see, several items already appear on this screen:

- **Page boundaries** — the vertical lines from top to bottom and the horizontal lines across the top mark the area in which you can enter text. A default page is 66 lines long. The screen displays 22 lines at a time; as you enter text, lines 23 through 66 and the bottom page boundary appear.
- **Ruler line** — line 23 of the screen, has the following information fields:
 - The left and right page boundaries (■)
 - The left margin (<<) and the right margin (>>) settings
 - The default tab settings (–)
 - The current cursor column position (■)
 - The center of the page (□).
- **Status line** — line 24 of the screen, has the following information fields:
 - The name of the document on which you are working or the words **Working Copy** if you are starting a new document.
 - The control character indicator. This area will be blank if you have set Display Control Code Information to **n** in Edit Defaults. If you are starting a new document, the words **Page End** will display.
 - The emphasis indicator. This will appear only if the cursor is positioned on a character that has been emphasized, such as **bold**, **underlined**, or **color**. Also, an upward pointing arrow is displayed if the cursor is positioned on text in superscript format, while a downward pointing arrow is displayed for text in subscript format.
 - The word **Replacing**, indicating replace text mode. If you press Ins, the word **Inserting** is displayed, indicating insert text mode.

- The memory space indicator (shown as a percentage, %), showing the amount of memory space your document has used. When you add or delete text, this amount changes.
- The line and page number indicator. These numbers will reflect the current cursor position. The numbers will change as you move the cursor through the document.
- **Key Flags Line** — line 25 of the screen, displays the most commonly used keys while in the working copy. The active keys in the key flags line change depending on which screen is displayed. For example, any time **F1=Help** appears in this line, you can get online help by pressing **F1**.

Creating Your Document

As you enter the text of your document, you will notice that DisplayWrite Assistant automatically drops the cursor to the beginning of the next line when you reach the right margin. You needn't press ←↵ . This is known as **Auto Adjusting**.

When you need to end a paragraph or a short line or if you want a blank line between paragraphs, then press ←↵ to move the cursor to the beginning of the new line.

DisplayWrite Assistant also automatically scrolls down through the working copy as you type and begins a new page when you've filled the first page. The line and page number indicator on the status line shows you the cursor position at all times.

As you enter text, you can use DisplayWrite Assistant's cursor movement functions and control functions described later in this chapter to create certain formats (for example, indented columns), special characters (for example, overstrike characters or superscript text), or emphasis (for example, bold paragraph headings).

Editing a Document

To edit the current document in the working copy, select **Type or Edit** at the Main Menu. To edit a file previously saved to disk, select **Get** at the Main Menu and enter that file's name and data path when prompted to do so. "Chapter 4. Getting and Saving" explains the Get option in more detail.

When the document that you want to edit is displayed in the working copy, you can use DisplayWrite Assistant's editing functions and cursor movement functions to edit your document.

The following editing functions are available with DisplayWrite Assistant:





- Print (Shift+F1). See "Chapter 7. Printing."
- Align (Shift+F3). See page 3-9.
- Block Edit (F4). See page 3-10.
- Block Emphasis (Shift+F4). See page 3-14.
- Search and Replace (F5). See page 3-16.
- Repeat Search (Shift+F5). See page 3-18.
- Find (F6). See page 3-18.
- Get/Insert (Shift+F6). See "Chapter 4. Getting and Saving."
- Format/Margins/Tabs/Header/Footer (F7). See "Chapter 5. Formatting."
- Current Date (Shift+F7). See "Chapter 5. Formatting."
- Instructions (F8). See "Chapter 6. Merging."
- Page Numbering (Shift+F8). See "Chapter 5. Formatting."
- Error Correcting Backspace (←). See page 3-19.

- Single Character Delete (Del). See page 3-20.
- Delete Word (F9). See page 3-21.
- Delete Line (Shift+F9). See page 3-22.
- Insert/Replace (Ins). See page 3-22.
- Spelling (F10). See page 3-23.
- Go To Page (Shift+F10). See page 3-28.
- Cursor Draw (Alt+1 or F11). See page 3-29.
- Line Adjust (Alt+2 or F12). See page 3-30.
- Auto Adjust On/Off (Alt+3 or Shift+F11). See page 3-32.
- Page Adjust (Alt+4 or Shift+F12). See page 3-34.
- Exit/Quit (Esc). See page 3-35.
- Delete to End of Field (Alt+8). This editing key is only available when typing in menus in DisplayWrite Assistant.

The following cursor movement functions are available with DisplayWrite Assistant:

- Cursor Up (↑). See page 3-36.
- Cursor Down (↓). See page 3-36.
- Cursor Left (←). See page 3-36.
- Cursor Right (→). See page 3-37.
- Word Advance (Ctrl+ →). See page 3-37.
- Word Return (Ctrl+ ←). See page 3-37.
- Start of Line (Home). See page 3-37.
- End of Line (End). See page 3-37.
- Start of Page (Ctrl+Home). See page 3-38.
- End of Page (Ctrl+End). See page 3-38.
- Start of Document (Alt+9). See page 3-38.
- End of Document (Alt+0). See page 3-38.
- Page Left (Ctrl+PgUp). See page 3-39.
- Page Right (Ctrl+PgDn). See page 3-39.
- Page Up (PgUp). See page 3-40.
- Page Down (PgDn). See page 3-40.

The following control functions are also available with DisplayWrite Assistant:

- Required Carrier Return (). See page 3-41.
- Carrier Return (Ctrl+ ). See page 3-41.
- Tab (). See page 3-41.
- Bold On/Off (Ctrl+B). See page 3-42.
- Underline On/Off (Ctrl+U). See page 3-42.
- Center Text (Ctrl+C). See page 3-43.
- 1/2 Down (Ctrl+H). See page 3-44.
- 1/2 Up (Ctrl+Y). See page 3-45.
- Indent (Ctrl+T). See page 3-46.
- Page End (Ctrl+E). See page 3-47.
- Required Page End (Ctrl+R). See page 3-48.
- Required Space (Ctrl+V). See page 3-49.
- Syllable Hyphen (Ctrl+-). See page 3-49.
- Required Backspace (Ctrl+ ). See page 3-50.

Editing Functions

The editing functions available with DisplayWrite Assistant allow you to revise existing text.

Align

DisplayWrite Assistant lets you align a line of text in the following ways:

- **Left** — returns alignment to the default.
- **Center** — affects only the line on which the cursor is positioned; centers the line between the margins.
- **Right** — affects only the line on which the cursor is positioned; aligns so that the last character of the line is at the right margin.

Important: If you change the left or right margins, center or right aligned lines may no longer be properly aligned. Use the appropriate align function on the line to correct this.

To align a line of text, follow these steps:

1. Move the cursor to the line you wish to align.
2. Press Align (Shift+F3). The Align Line menu is displayed.
3. Select the option you want.
4. The line on which the cursor was positioned is aligned according to your choice.

Important: If you need to justify text within the margins, use Right Justify. See page 5-4.

Block Edit

You can manipulate blocks of text with DisplayWrite Assistant. The Block Edit (F4) function gives you the following options:

- Move
- Copy
- Delete
- Save to file
- Reuse.

Important: When you move the cursor to the beginning of a block, you may find your cursor on a control character that you do not wish to include in the block. Two control characters should not be moved or deleted when using Block Edit in order to avoid unexpected print results. These characters are:



- Page Format Change
- Line Format Change.

These characters are actually stored “on top” of each other, at the first character position in the document or at the beginning of a format change within a document. When the cursor is positioned on the characters, you can “see” them by looking at the status line. The status line indicates the cursor is on the **Page Format Change** character. Press → and the status line indicates the cursor is now on the **Line Format Change** character. Press → again and the first character in the document or changed section can be seen at the cursor position.

When moving blocks that contain these characters (for example, the first paragraph in a document), be sure to move the cursor past the control characters before moving or copying the block.


Move or Copy

The move and copy block edit functions operate similarly. To move or copy a block of text, follow these steps:

1. Move the cursor to the beginning of the block you want to move or copy.
2. Press **Block Edit (F4)**. The Block Edit menu is displayed.
3. Select **Move** or **Copy**. A panel is displayed, prompting you to move the cursor to the end of the text you want to move or copy.
4. Move the cursor to the end of the text you want to move or copy. The block is highlighted.
5. Press . A panel is displayed, prompting you to move the cursor to where you want the block of text moved or copied.
6. Move the cursor to where you want the block of text to appear.
7. Press . The highlighted block is either moved or copied to the area you chose.



Delete

To delete a block of text, follow these steps:

1. Move the cursor to the beginning of the block you want to delete.
2. Press **Block Edit (F4)**. The Block Edit menu is displayed.
3. Select **Delete**. A panel is displayed, prompting you to move the cursor to the end of the block of text you want to delete.
4. Move the cursor to the end of the block of text you want to delete. The block is highlighted.
5. Press . The highlighted block is deleted.

Save to File

To save a block of text as a DisplayWrite Assistant file, follow these steps:

1. Move the cursor to the beginning of the block of text you want to save to file.
2. Press Block Edit (F4). The Block Edit menu is displayed.
3. Select **Save to file**. A panel is displayed, prompting you to move the cursor to the end of the block you want to save to file.
4. Move the cursor to the end of the block of text you want to save. The block is highlighted.
5. Press  . The Save File panel is displayed.
6. Type the name of the file to which you want to save the block.
7. Press  . A panel is displayed, telling you the block has been saved to the file you named.

Reuse

DisplayWrite Assistant can recover the block of text you have most recently deleted, as long as you are still in the working copy. Once you exit the working copy, any deleted text is lost and can no longer be recovered.

To recover a block of text that you have deleted, follow these steps:

1. Move the cursor to where you want the deleted text to appear.
2. Press Block Edit (F4). The Block Edit menu is displayed.
3. Select **Reuse**. The recovered text appears at the cursor position.

Important: If the error message **Retained deleted block is No** is displayed, you cannot recover the deleted text. You must change the Retained deleted block default to **y** in the Edit Defaults at the Main Menu. See “Edit Defaults” in “Chapter 5. Formatting.”

Block Emphasis

With DisplayWrite Assistant, you can change the emphasis of text in the following ways:

- Plain
- Underline
- Bold
- Color.

You may have any number of emphases in your text or use more than one emphasis for a single word or section. Use the **Plain** option to remove all emphasis from a block of text.

Important: To remove a single emphasis from text with more than one emphasis, you must delete the control codes for that emphasis. See “Deleting Control Characters” on page 3-20.


Adding Emphasis

Follow these steps to add emphasis:

1. Move the cursor to the beginning of the text you want to emphasize.
2. Press Block Emphasis (Shift+F4). The Block Emphasis menu is displayed.
3. Select the emphasis you want.


If you chose **Color**, first a panel of seven color choices is displayed. Select the color you want. Another panel is displayed, prompting you to move the cursor to the end of the section you want to emphasize.

If you chose **Underline** or **Bold**, only the second panel is displayed.

4. Move the cursor to the end of the text you want to emphasize.
5. Press  . The text you wanted to emphasize is in your chosen emphasis.

Removing Emphasis

Follow these steps to remove all emphasis from a block of text:

1. Move the cursor to the beginning of the text from which you want to remove the emphasis.
2. Press **Block Emphasis (Shift+F4)**. The **Block Emphasis** menu is displayed.
3. Select **Plain**. Another panel is displayed, prompting you to move the cursor to the end of the section from which you want to remove the emphasis.
4. Move the cursor to the end of the section from which you want to remove the emphasis.
5. Press  . The text no longer has emphasis.

Search and Replace

Use the Search and Replace function to search for a word or phrase and replace it with a different word or phrase.

DisplayWrite Assistant allows you to be prompted to replace the word or phrase or to have the word or phrase replaced automatically. After the Search/Replace function is completed, DisplayWrite Assistant displays a panel that tells you how many changes took place.

Important: The Search and Replace function is similar to the Find function; however, Find is not able to replace.

To use the Search/Replace function, follow these steps:

1. Move the cursor so it is before the first occurrence of the word or phrase you want to replace.
2. Press Search/Replace (F5). The Search/Replace menu is displayed.
3. Enter the word or phrase for which you want DisplayWrite Assistant to search in the **Search for** field.
4. Press ↓ to move to the **Replace with** field and enter the word or phrase with which you want to replace the word or phrase in the **Search for** field.
5. Press ↓ to move to the **Automatic or prompted replace.. (a/p)** field and type **a** for automatic replacement or **p** for prompted replacement.

Automatic replace replaces every occurrence of the word or phrase in the **Search for** field with the word or phrase in the **Replace with** field throughout the document.

Prompted replace stops the search with the cursor on the **Search for** word or phrase and allows you to verify that you want to replace it before going on to the next occurrence of the word or phrase.

6. Press ↓ to move to the **Word or character match...(w/c)** field and type **w** for word match or **c** for character match.

Word match replaces the **Search for** field only if it is a complete word. For example, if you replaced “his” with “hers,” the word “this” would not be changed to “thers.”

Character match replaces the **Search for** field even if it is part of a word. For example, if you misspelled pneumonia as “neumonia,” you could replace “neu” with “pneu” using character match.

7. Press ← . DisplayWrite Assistant does the Search/Replace automatically or with your prompts, and a panel displays when the Search/Replace function is completed. This panel tells you how many changes were made.

You can also change control function characters using Search and Replace. Simply enter the functions in the **Search for** and **Replace with** fields. For example, enter “Ctrl+C” to search for the Center Text control character, and “Ctrl+T” to replace it with the Indent control character.

Important: Two control functions cannot be entered in these fields literally. To use Search and Replace to change a Required Carrier Return or Tab, enter the control characters as follows:

Ctrl+L — Required Carrier Return
Ctrl+Q — Tab.

You can cancel the Search and Replace function at any time by pressing Esc.

Repeat Search

The Repeat Search function repeats the last Search and Replace function or the last Find function you have performed.

To use the Repeat Search function, follow these steps:

1. Move the cursor so it is before the first occurrence of the word or phrase for which you want to repeat the search and replace or find.
2. Press Repeat Search (Shift+F5). DisplayWrite Assistant repeats the previous Search and Replace or Find function. A panel displays the number of matches found.

Find

Use the Find function (F6) to find control characters, words, numbers, or phrases in your document. Follow these steps:


1. Move the cursor to the beginning of the document or area of the document in which you want to find something.
2. Press Find (F6). The Find menu prompts you **Find what?**
3. Type the characters you wish to find.

Important: Two control functions cannot be entered in the **Find what?** field literally. To use Find to find a Required Carrier Return or Tab, enter the control characters as follows:

Ctrl+L — Required Carrier Return

Ctrl+Q — Tab.

Also, to find the next Page Format Change or Line Format Change, press **F7**. To find the next instruction (Join File, Join Graph, Insert Field, Page Numbering, Current Date, or Set Color), press **F8**.


4. Press . A panel is displayed, telling you **Search in progress**. When DisplayWrite Assistant finds the phrase you typed, that page is displayed with the cursor on the first character of the phrase.


If the phrase you want to find is not in the document in the working copy, a panel displays, telling you, **No match found**.

Important: If you are using Find (F6) to find words you want to replace, it may be quicker to use Search and Replace. See “Search and Replace” on page 3-16.

You can cancel the Find function at any time by pressing Esc.

Error Correcting Backspace

Use Error Correcting Backspace () to delete and retype a character or word.

When you type the wrong character in a word, simply press Error Correcting Backspace (). The cursor moves one character to the left, deleting that character. You can then retype the correct character in its place.

Single Character Delete

Press Single Character Delete (Del) to delete the character on which the cursor is positioned.


Press and hold Del to delete more than one character to the right of the cursor. The characters to the right of the cursor move toward the cursor position as they are deleted one by one.

Deleting Control Characters

Some control characters can be deleted by pressing Del when the cursor is positioned on the control character. However, many control functions produce characters that cannot be deleted by simply pressing Del.

Important: So you can see the characters you want to delete, make sure the **Display control code information** option in the Edit Defaults menu is set to **y**. See “Display Control Code Information” on page 5-16.

To delete a control character, follow these steps:

1. Position the cursor under the control character. The status line indicates the control character position (for example, “Begin Bold” is displayed when the cursor is on the bold emphasis control character).
2. Press Del. If possible, the control character is deleted. If not, a panel is displayed, prompting you to **Press Enter to delete this code**.
3. Press . The control character is deleted.

4. If the control character is one of a pair, also delete the “end” control character in the same manner.

For example, if you wish to remove superscript text control characters, you must first delete the Half Index Up control character at the beginning of the superscript text. Then you must delete the Half Index Down control character at the end of the superscript text.

Important: Two control characters cannot be deleted by this procedure:

- **Page Format Change**
- **Line Format Change.**

These characters are found at the beginning of a document or at the beginning of a format change within a document. They are actually stored “on top” of each other, at a text character position in the document. In order to change the content of a document, these characters may need to be deleted or moved.

When the cursor is positioned on the characters, you can “see” them by looking at the status line. The status line indicates the cursor is on the **Page Format Change** character. Press → and the status line indicates the cursor is now on the **Line Format Change** character. Press → again and the text character in the document can be seen at the cursor position.

To delete these two characters, you must use the delete option of Block Edit. See “Block Edit” on page 3-10.

Delete Word

To delete a word, follow these steps:

1. Move the cursor to the word you want to delete. The cursor can be on any character of the word.
2. Press Delete Word (F9). The word is deleted, and the text to the right of the deleted word moves to the left to fill the empty space.

Delete Line

To delete a line, follow these steps:

1. Move the cursor to the line you want to delete. The cursor can be on any position in the line.
2. Press Delete Line (Shift+F9). The line is deleted, and the text below the line moves up to fill the empty space.

Insert/Replace

Insert/Replace (Ins) allows you to toggle between insert text mode and replace text mode when typing and editing.

Insert Mode

Press Ins to enter insert text mode. “Inserting” is displayed in the status line.

Insert text mode causes any characters you type to be inserted to the left of the cursor position. Every character to the right of the cursor moves to the right to provide space for the inserted text.

Some people choose to type in insert mode at all times; you cannot type over existing text in insert mode.

Replace Mode

Press Ins again to enter replace text mode. “Replacing” is displayed in the status line.

Replace text mode causes typed characters to be placed at the exact cursor position. You can type over existing text in replace mode.

Spelling and Synonyms

DisplayWrite Assistant contains a dictionary of approximately 125,000 words. With the Spelling function, you can check the spelling of a single word or all the words in a document. If you have a word you commonly use that is not listed in DisplayWrite Assistant's dictionary, you can add it to a *Personal Dictionary*.

DisplayWrite Assistant's Spelling function also allows you to list the synonyms for many words.

To check for spelling or list synonyms, follow these steps:

1. Move the cursor to the word for which you want to check the spelling or list the synonyms. If you wish to check the spelling in an entire page or document, move the cursor to the beginning of the page or document.
2. Press Spelling (F10). The Spelling menu is displayed.
3. Select either **Check Spelling** or **Synonyms**.

Checking Spelling

- a. If you want to check spelling, select **Check Spelling** from the Spelling menu.
- b. The Check Spelling menu is displayed from which you can choose to check the spelling of the following:
 - **Word** — the word on which the cursor is positioned.
 - **Page** — the part of the page following the cursor position.
 - **Document** — the part of the document following the cursor position.
- c. Select one of the options above.

A panel is displayed, telling you DisplayWrite Assistant is loading the dictionary.

If the word is spelled correctly, a panel is displayed, telling you the word is spelled correctly.

If you are checking the spelling of an entire page or document, the words in the page or document will rapidly flash by in a panel as DisplayWrite Assistant checks each spelling.

d. If DisplayWrite Assistant finds a word that is spelled incorrectly or that it does not recognize, that word is highlighted, and the Prompted Spell menu is displayed. From this menu, you can choose the following options:

- **Skip word** — DisplayWrite Assistant skips the word and considers it spelled correctly as long as you are editing that document. DisplayWrite Assistant ignores the word if encountered again in the document.
- **Retype word** — A menu is displayed, allowing you to type the word again in a panel. Press **←** to replace the misspelled word with the retyped word. DisplayWrite Assistant then checks the new spelling.
- **List possible words** — The Possible Words menu is displayed, listing words that most closely resemble what you've typed. Select the word that you want. Then press **←** to replace the incorrect word with the word you've chosen. If you don't want any of the words listed, simply press Esc to return to the Prompted Spell menu.

If the word you've typed is misspelled so badly that DisplayWrite Assistant cannot find a word resembling it, a panel displays, telling you **No possible words found**. Press **Enter to continue**. Press **←**, select **Retype word**, and try again.

- **Add word to personal dictionary** — DisplayWrite Assistant stores the word in your Personal Dictionary on disk. Any time you edit a document, the word is recognized as being spelled correctly.

When all words have been checked, a panel is displayed, telling you **Spelling Check is complete**.

You can cancel the Spelling Check at any time by pressing Esc.

Listing Synonyms

- a. If you want to list synonyms for a word, select **Synonyms** from the Spelling menu.

A panel is displayed, telling you DisplayWrite Assistant is loading the dictionary. Then, the Synonyms menu is displayed, listing synonyms for the word.

- b. Select the synonym you want.

The synonym replaces the word in the document.

If you don't want any of the synonyms listed, simply press Esc to return to the Spelling menu.

Important: The meaning of a synonym is not *identical* to the selected word. Make sure when you replace a word with one of its synonyms that the new word does not change the meaning of your sentence.

Changing the Personal Dictionary

You may want to type unusual or nontypical words you often use directly into your Personal Dictionary. You may also want to remove from your Personal Dictionary a word you mistakenly added or no longer use. Additionally, you can erase your Personal Dictionary and begin a new one.

Creating or Editing Your Personal Dictionary

To create or edit your Personal Dictionary, follow these steps:

1. Select **Get** at the Main Menu.

The Get File menu is displayed.

2. Type **WORDPRF.ADL**. This is the default Personal Dictionary name.

You can name your Personal Dictionary something else when creating it or after editing it, but if you've added words to the Personal Dictionary before renaming it, the words will be stored in **WORDPRF.ADL**. You may have more than one Personal Dictionary, but each must have a different name.

Important: To use a Personal Dictionary other than **WORDPRF.ADL**, you must enter the new name in the Edit Defaults menu. See "Edit Defaults" in "Chapter 5. Formatting."

3. Press **←**. The Personal Dictionary is displayed.
4. Type the words you want in your Personal Dictionary, starting each word at the left margin, or delete any words you don't want.
5. After you have added or deleted all the words that you want or don't want in your Personal Dictionary, press **Esc** to return to the Main Menu.
6. Select **Save** at the Main Menu. The Save Options menu is displayed.
7. Select **ASCII**.

The name you entered in the Get File menu is displayed in the Save File menu. If you want to change the name of your Personal Dictionary, type the new name over the name displayed in the **File name..** field.

8. Press **←**. A panel is displayed, telling you the file has been saved.

Erasing Your Personal Dictionary


If you want to erase your Personal Dictionary, you must use the Erase function of the Utilities option at the Main Menu. See "Chapter 8. Utilities."

Go To Page

Press Go To Page (Shift+F10) to request a certain page. Follow these steps:

1. Press Go To Page (Shift+F10). The cursor can be anywhere in the page from which you are going.

The Go To Page menu is displayed.

2. Type the number of the page you want.
3. Press  .

DisplayWrite Assistant displays the page you entered with the cursor on the first typing line of the page.

If you enter a page number higher than the number of pages in your document, DisplayWrite Assistant goes to the end of the last page in the document.

If you want to go to the end of your document, use End of Document (Alt+0).

Cursor Draw

DisplayWrite Assistant allows you to draw or erase vertical and horizontal lines with the four cursor keys, ↑, ↓, ←, and →. To draw or erase lines, follow these steps:

1. Move your cursor to the page on which you want to draw lines.
2. Press Cursor Draw (Alt+1 or F11). The Cursor Draw menu is displayed.
3. Select **Draw with cursor** to draw lines. Select **Erase with Cursor** to erase cursor draw lines.

You are now able to draw or erase vertical and horizontal lines with the cursor keys.

Cursor Draw “toggles” between Draw with cursor and Erase with cursor; that is, by pressing Alt+1 or F11 while in the **Draw with cursor** option, DisplayWrite Assistant goes into the **Erase with cursor** option. By pressing Alt+1 or F11 while in the **Erase with cursor** option, DisplayWrite Assistant goes into the **Draw with cursor** option.

Important: DisplayWrite Assistant will not allow you to draw lines with Cursor Draw past page boundaries. Also, you should not draw across pitch changes with Cursor Draw; unexpected print results may occur.

4. Press Esc to exit the Cursor Draw function.

Line Adjust

DisplayWrite Assistant's Line Adjust function works like the Page Adjust function, except that it affects only the line on which the cursor is positioned.

Important: Auto Adjust must be set to **y** for Line Adjust to work. If Auto Adjust is set to **n** or Adjust line endings in the Line Margins and Spacing Defaults Menu is set to **n**, DisplayWrite Assistant displays **Adjust is off for this line** when you try to use the Line Adjust function.

To use Line Adjust, follow these steps:

1. Make sure Auto Adjust is on and Adjust line endings is set to **y** in the Line Margins and Spacing Defaults menu. See "Auto Adjust On/Off" on page 3-32.
2. Move the cursor so it is anywhere on the line you want to adjust.
3. Press Line Adjust (Alt+2 or F12). DisplayWrite Assistant adjusts the line to fit within the right margin.

Hyphenation

If you have a word that can't fit within the right margin after adjusting a line, a panel is displayed, prompting you to hyphenate the word. DisplayWrite Assistant places the cursor under the first character of the word you need to hyphenate. Follow these steps to hyphenate:

1. Press **→** to move the cursor to where you want DisplayWrite Assistant to place the hyphen.
2. Press **←|** . A hyphen appears where the cursor was positioned, and the remainder of the word begins a new line.

If you choose not to hyphenate the word that extends past the right margin, press **←|** . The entire word moves to the next line.

Auto Adjust On/Off

You can revise the text in your documents without worrying about misplaced carrier returns with DisplayWrite Assistant's Auto Adjust function. When you make changes to a paragraph, Auto Adjust automatically calculates the new space needed by the text and inserts or moves carrier returns where needed.

Auto Adjusting an Entire Document

To set DisplayWrite Assistant's Auto Adjust function on, follow these steps:

1. At the Main Menu, select **Define Defaults**. The Define Defaults menu is displayed with **Line Margins and Spacing defaults** highlighted.
2. Press $\leftarrow \downarrow$. The Line Margins and Spacing Defaults menu is displayed.
3. Press \downarrow to highlight the default for Adjust line endings. This default should be **y**. If the default is **n**, type **y** over the **n**.
4. Press $\leftarrow \downarrow$ to save this default.
5. At the Define Defaults menu, select **Edit defaults**. The Edit Defaults menu is displayed, with the default for Auto adjust highlighted. This default should be **y**. If the default is **n**, type **y** over the **n**.
6. Press $\leftarrow \downarrow$ to save this default.
7. Press Esc to return to the Main Menu. A panel is displayed, telling you **Default values have been saved**.

Now when you revise documents, the Auto Adjust function will automatically adjust your text.

Auto Adjusting Part of a Document

You may want Auto Line Adjust to be off when you are making minor revisions to part of a document. Then, you can use Auto Adjust On/Off (Alt+3 or Shift+F11) to set Auto Line Adjust off temporarily.

Auto Line Adjust toggles when the defaults are set to **y**; that is, the first time you press Alt+3 or Shift+F11, Auto Line Adjust sets to off. The next time you press Alt+3 or Shift+F11, Auto Line Adjust is set on again.



Important: To set the Auto Line Adjust function off for an entire document, use the procedure in “Auto Adjusting an Entire Document” to set the **Adjust line endings** and **Auto adjust** defaults to **n**. However, with these defaults set to **n**, the Auto Adjust On/Off toggle will not work.

Page Adjust

DisplayWrite Assistant's Page Adjust function adjusts the pagination of your document. Follow these steps to adjust pagination:

1. Move the cursor to the beginning of the document or section you want to adjust.
2. Press Page Adjust (Alt+4 or Shift+F12). DisplayWrite Assistant adjusts the first page of the document. You may need to choose how to hyphenate some words that are moved when the page is adjusted. Use the procedure in "Hyphenation" on page 3-31 to hyphenate.

When the page adjust for the first page is complete, a panel is displayed, telling you **Page has been adjusted**. Press **Enter to continue**. You may either accept this page end or create a different one. The cursor is now positioned on the first line of the next page.

1. To accept the DisplayWrite Assistant page end, go to step 4.
2. To create a different page end, press  to move the cursor to the previous page.
3. Place the cursor on the line on which you want to begin the next page.
4. Press  .

DisplayWrite Assistant adjusts the next page, and again, you have the option of accepting the page end or creating your own.

Continue in this manner until your document is adjusted. After the last page adjust, a panel is displayed, telling you **Document has been adjusted**.

You can cancel the Page Adjust function at any time by pressing Esc.

Exit/Quit

Exit/Quit (Esc) allows you to cancel a function in process, quit a screen (for example, leave the working copy and return to the Main Menu), or exit the DisplayWrite Assistant program.

Any time you see **Esc=Exit** or **Esc=Quit** in the lower right hand corner of the screen (in the key flags line), you can press Esc to exit the program or quit (cancel) the function.

A warning panel is displayed if you try to quit a screen when you have not saved changes you made to a document. This panel keeps you from losing changes. You must press **y** (yes, you want to quit) to quit the screen. If you press **n** (no, you don't want to quit), the panel disappears and the screen remains.

Similarly, if you press Esc to exit the DisplayWrite Assistant program, a panel asks you to verify that you want to leave the program. If you press **y**, you are returned to the DOS prompt. If you press **n**, the panel disappears, and you remain in the DisplayWrite Assistant program.

Cursor Movement Functions

DisplayWrite Assistant allows you to reach any point in a document with its many cursor movement functions.

Cursor Up

Press Cursor Up (↑) to move the cursor up one line.

Press and hold ↑ to move the cursor up line after line. The cursor will move all the way to the beginning of your document. However, a panel is displayed if you press ↑ when the cursor is on the first line of the document. This panel tells you **Cannot move past document boundary**.

Cursor Down

Press Cursor Down (↓) to move the cursor down one line.

Press and hold ↓ to move the cursor down line after line. The cursor will continue past the last page in your document for as long as you press and hold ↓, adding blank pages to the end of your document.

Cursor Left

Press Cursor Left (←) to move the cursor one character to the left.

Press and hold ← to move the cursor to the left character after character. The cursor will move all the way to the left page boundary, column 0.

Cursor Right

Press Cursor Right (→) to move the cursor one character to the right.

Press and hold → to move the cursor to the right character after character. The cursor will move all the way to the right, past the right page boundary, to column 254. If you press → when the cursor is at column 254, a panel is displayed, telling you **Cannot move past document boundary**.

Word Advance

Press Word Advance (Ctrl+ →) to move the cursor to the first character of the next word.

Press and hold Ctrl+ → to move the cursor to the first character of word after word to the end of the page.

Word Return

Press Word Return (Ctrl+ ←) to move the cursor to the first character of the previous word.

Press and hold Ctrl+ ← to move the cursor to the first character of word after word to the beginning of the page.

Start of Line

Press Start of Line (Home) to move the cursor to the beginning of the line on which the cursor is positioned.

End of Line

Press End of Line (End) to move the cursor to the end of the line on which the cursor is positioned.

Start of Page

Press Start of Page (Ctrl+Home) to move the cursor to the beginning of the page on which the cursor is positioned.

Press and hold Ctrl+Home to move to the beginning of page after page. The cursor will move all the way to the beginning of the first page of your document. However, a panel is displayed if you press Ctrl+Home when the cursor is on the first page of your document. This panel tells you **Cannot move past document boundary**.

End of Page

Press End of Page (Ctrl+End) to move the cursor to the end of the page on which the cursor is positioned.

Press and hold Ctrl+End to move to the end of page after page. The cursor will move all the way to the end of the last page of your document. However, a panel is displayed if you press Ctrl+End when the cursor is on the last page of your document. This panel tells you **Cannot move past document boundary**.

Start of Document

Press Start of Document (Alt+9) to move the cursor to the beginning of the document.

End of Document

Press End of Document (Alt+0) to move the cursor to the end of the document.

Page Left

Press **Page Left** (Ctrl+PgUp) to move the text displayed to the left. The column on which the cursor is positioned when you press Ctrl+PgUp becomes the new right screen edge.

If you press Ctrl+PgUp when the cursor is in the right-most column of the working copy, the page shifts 60 columns to the left.

If you press Ctrl+PgUp when the left page boundary is displayed (columns 0 to 80), DisplayWrite Assistant ignores the instruction.

Page Right

Press **Page Right** (Ctrl+PgDn) to move the text displayed to the right. The column on which the cursor is positioned when you press Ctrl+PgDn becomes the new left screen edge.

If you press Ctrl+PgDn when the cursor is in the left-most column of the working copy, the page shifts 60 columns to the right.

If you press Ctrl+PgDn when column 254 is displayed, DisplayWrite Assistant ignores the instruction.

Page Up

Press Page Up (PgUp) to move the displayed text in the following ways:

- When the cursor is on any line except the last line in a page or the typing frame, PgUp causes that line to become the last line in the typing frame.
- When the cursor is on the last line in a page or the typing frame, PgUp causes the first line in that typing frame to become the last line in the new typing frame.
- When the cursor is on lines 1 through 22, PgUp causes a panel to display, telling you **Cannot move past document boundary**.

Press and hold PgUp to move the displayed text up screen after screen.

Page Down

Press Page Down (PgDn) to move the displayed text in the following ways:

- When the cursor is on any line except the first line in a page or the typing frame, PgDn causes that line to become the first line in the typing frame.
- When the cursor is on the first line in a page or the typing frame, PgDn causes the last line in that typing frame to become the first line in the new typing frame.


Press and hold PgDn to move the displayed text down screen after screen.


Control Functions

DisplayWrite Assistant has a number of control functions that you can use while creating or editing documents.


Important: Many control functions produce control characters that must be deleted if you wish to change your document's format. For more information about deleting control characters, see "Deleting Control Characters" on page 3-20.

Required Carrier Return

Press Required Carrier Return () at the end of a sentence with which you want to end a paragraph or at the end of a line you don't want affected by Auto Adjust.


To change paragraph endings produced by , you must delete the control character. See "Deleting Control Characters" on page 3-20.


Carrier Return

Press Carrier Return (Ctrl+ ) at the end of a line that you wish to be able to change using Line Adjust (Alt+2 or F12).

Important: This carrier return is the type that DisplayWrite Assistant automatically enters as you type text past the right margin. Therefore, you can adjust text using Line Adjust after you enter it.

Tab

Press Tab () to move the cursor to the next tab stop where you wish to enter text.

To delete Tab controls, move the cursor to the first tab on the line you were going to format differently (represented by a ) and press Delete (Del). The line moves either to the next tab stop if you have more than one tab or to the left margin if you have only one tab.

Bold On/Off

To use the bold emphasis for text as you type, follow these steps:

1. Move the cursor to where you want to begin typing with the bold emphasis.
2. Press Bold On/Off (Ctrl+B).
3. Type the text. All text following the cursor position is bold.
4. Press Bold On/Off (Ctrl+B) again. The text you type now will not be bold.

To remove the bold emphasis, you must delete the Begin Bold and End Bold control characters. See “Deleting Control Characters” on page 3-20.

Underline On/Off

To use the underline emphasis for text as you type, follow these steps:

1. Move the cursor to where you want to begin typing with the underline emphasis.
2. Press Underline On/Off (Ctrl+U).
3. Type the text. All text following the cursor position is underlined.

Important: On an IBM Color Display, the underline emphasis is represented by colored characters.

4. Press Underline On/Off (Ctrl+U) again. The text you type now will not be underlined.

To remove the underline emphasis, you must delete the Begin Underline and End Underline control characters. See “Deleting Control Characters” on page 3-20.

Center Text

Use the Center Text function (Ctrl+C) to center lines between the margins or around the cursor position.

Important: If Center Text (Ctrl+C) is pressed when the cursor is at the left margin, that line, or any text entered thereafter, is centered between the left and right margins. If Ctrl+C is pressed when the cursor is at any other position, any text typed on that line after the control character is centered around that point.



To center existing text:

1. Move the cursor to the beginning of the line you want to center.
2. Press Center Text (Ctrl+C). The line moves so that it is centered between the margins. The cursor moves to the end of the line.

Another method for centering existing text is available with DisplayWrite Assistant. See the Center Align option in “Align” on page 3-9.

To center text as you type:

1. Press Center Text (Ctrl+C). If the cursor was at the left margin, the cursor moves to the center of the line. If the cursor was anywhere else, the cursor stays at that location.
2. Type the text. Note that the words automatically center around the cursor position.

Important: When you enter an entire line so that DisplayWrite Assistant inserts a carrier return, the Center Text function stops. This is also true when you press Required Carrier Return (), Tab (), or Indent (Ctrl+I). To continue the Center Text function, you must press Center Text (Ctrl+C) again.

To bring centered text back to the full page margins, use the Left Align option of “Align.” See page 3-9.

1/2 Down

Use the 1/2 Down function (Ctrl+H) to produce subscript text. This text prints half a line below typical text.

Important: The subscript function does not display on the screen.

To subscript existing text:

1. Move the cursor to the first character of text you want to print as subscript.
2. Press 1/2 Down (Ctrl+H). An arrow pointing down displays in the status line.
3. Move the cursor to the end of the text you want to print as subscript.
4. Press 1/2 Up (Ctrl+Y). The arrow no longer displays in the status line. All text between the 1/2 Down and 1/2 Up control characters will print as subscript.

To subscript text as you type:

1. Move the cursor to where you want to enter subscript text.
2. Press 1/2 Down (Ctrl+H). An arrow pointing down displays in the status line.
3. Enter the text.
4. Press 1/2 Up (Ctrl+Y). The arrow no longer displays in the status line. All text between the 1/2 Down and 1/2 Up control characters will print as subscript.

To remove subscript format from text, you must delete the 1/2 Down and 1/2 Up control characters. See “Deleting Control Characters” on page 3-20.

1/2 Up

Use the 1/2 Up function (Ctrl+Y) to produce superscript text. This text prints half a line above typical text.

Important: The superscript function does not display on the screen.

To superscript existing text:

1. Move the cursor to the first character of text you want to print as superscript.
2. Press 1/2 Up (Ctrl+Y). An arrow pointing up displays in the status line.
3. Move the cursor to the end of the text you want to print as superscript.
4. Press 1/2 Down (Ctrl+H). The arrow no longer displays in the status line. All text between the 1/2 Up and 1/2 Down control characters will print as superscript.

To superscript text as you type:

1. Move the cursor to where you want to enter superscript text.
2. Press 1/2 Up (Ctrl+Y). An arrow pointing up displays in the status line.
3. Enter the text.
4. Press 1/2 Down (Ctrl+H). The arrow no longer displays in the status line. All text between the 1/2 Up and 1/2 Down control characters will print as superscript.

To remove superscript format from text, you must delete the 1/2 Up and 1/2 Down control characters. See “Deleting Control Characters” on page 3-20.

Indent

Use the Indent function (Ctrl+T) to create a temporary left margin for sections of text.

To indent existing text:

1. Move the cursor to the beginning of the paragraph you want to indent.
2. Press Indent (Ctrl+T). The paragraph moves to the next tab stop according to your defaults. Press Ctrl+T as many times as you need to reach the margin you want.

To indent text as you type:

1. Move the cursor to the beginning of the paragraph on which you want to type.
2. Press Indent (Ctrl+T). The cursor moves to the next tab stop according to your defaults. Press Ctrl+T as many times as you need to reach the margin you want.
3. Type the text at the new left margin. As long as you type and DisplayWrite Assistant inserts the carrier returns, the indent is honored. However, if you press Required Carrier Return (←|), the cursor returns to the original left margin.

The following control characters also cause the indent to be cleared:

- Required Page End
- Page Format Change
- Line Format Change.

Page End

Use the Page End function (Ctrl+E) to end pages that you want Page Adjust to be able to change. Follow these steps:

1. Move the cursor to the end of the line with which you want to end a page.
2. Press Page End (Ctrl+E). The cursor moves to the next page. The line following the Page End control character is now the first line of the next page.

To change Page Ends, use the Page Adjust function (see “Page Adjust” on page 3-34) or delete the Page End control characters (see “Deleting Control Characters” on page 3-20).

Required Page End


Use the Required Page End function (Ctrl+R) to end pages that you always want ended at a certain point, such as short pages or the last page of a chapter. Follow these steps:

Important: Page Adjust does not affect Required Page Ends.

1. Move the cursor to the end of the line with which you want to end a page.
2. Press Required Page End (Ctrl+R). The cursor moves to the next page. The line following the Required Page End control character is now the first line of the next page.

The page that you ended now has ***New Page*** at the end of the last line.

To change Required Page Ends, you must delete the Required Page End control character (***New Page***). Follow these steps:

1. Move the cursor to the end of the line with which you ended the page so that the cursor is anywhere on ***New Page***.
2. Press Delete (Del). A panel prompts you to **Press Enter to delete this code.**
3. Press . The text that was on the next page moves to a new line at the end of the page on which the cursor is positioned. ***New Page*** is deleted.

Required Space

Use the Required Space function (Ctrl+V) to have DisplayWrite Assistant treat two words as a single word. Inserting a Required Space between two words makes sure those two words will never be split by a line ending. Follow these steps:

1. Move the cursor so it is between the two words you want to keep together.
2. Press Required Space (Ctrl+V).

To remove the Required Space so that two words can be split, simply type a space over the Required Space control character.

Syllable Hyphen

Use the Syllable Hyphen function (Ctrl+-) to insert in a word a hyphen that is only printed if that word is at the end of a line and needs to be split. The Auto Adjust function automatically splits a word where a Syllable Hyphen has been inserted if that word extends into the right margin.

To insert a Syllable Hyphen, follow these steps:

1. As you type a long word that will extend past the right margin, press Syllable Hyphen (Ctrl+-) in a proper location.

For example, if typing the word “displaying,” the Ctrl+- should be inserted between the “y” and the “i.”

2. The Syllable Hyphen control character does not display in the text unless the cursor is on the character position. If the word must be split, DisplayWrite Assistant splits it at the Syllable Hyphen.

To remove a Syllable Hyphen, you must remove the Syllable Hyphen control character. See “Deleting Control Characters” on page 3-20.

Required Backspace

Use the Required Backspace function (Ctrl+ ←) to overstrike characters. For example, use Required Backspace to produce special characters your keyboard doesn't support. Follow these steps:

1. Type the character over which you want another character to print.
2. Press Required Backspace (Ctrl+ ←). The cursor moves back to the first character.
3. Type the second character. Now only the second character displays.

You can move the cursor back and forth between the first character, the Required Backspace character, and the second character. However, when you continue to type in your document, only the second character displays.

To remove the overstrike character, you must delete the Required Backspace control character and the overstrike character. Follow these steps:

1. Move the cursor under the Required Backspace control character.
2. Press Delete (Del). The control character is deleted and the cursor is on the overstrike character.
3. Press Del again. The overstrike character is deleted. Only the original character is displayed and only that character will print.

Chapter 4. Getting and Saving

This chapter explains how to get and save files.

Getting

You have two ways to get files with IBM DisplayWrite Assistant:

- At the Main Menu
- With Get/Insert in the typing frame.

Getting a File at the Main Menu

You can get the following types of files with the Get function at the Main Menu:


- DisplayWrite Assistant files
- Revisable Form Text files
- ASCII files
- DisplayWrite 1 files
- Writing Assistant files.

Important: If an RFT file is over 32KB, DisplayWrite Assistant splits that file into multiple parts when you use the Get function to get it. These parts can be easily identified by their “001,” “002,” “003,” etc., filename extensions.

To get a file at the Main Menu, follow these steps:

1. Select **Get**. The Get File menu is displayed.
2. Enter the name of the file you want to get in the **File name..** field.

Important: You must also type the directory if the file is not in the current directory.

3. Press  . The document is in the working copy.

Getting a File with Get/Insert in the Typing Frame

You can get the following types of files with Get/Insert in the typing frame:


- DisplayWrite Assistant files
- ASCII files.

Important: If you want to join art or picture files, see “Using Graph” on page 6-5.

To get a file while in the typing frame, follow these steps:

1. Move the cursor to the location in the typing frame where you want the file to be inserted.
2. Press Get/Insert (Shift+F6). The Get/Insert File menu is displayed.
3. Enter the name of the file you want to get in the **File name..** field.

Important: You must also type the directory if the file is not in the current directory.

4. Press  . The information is inserted in your working copy at the cursor position.

Saving

You have two ways to use the Save function with DisplayWrite Assistant:

- At the Main Menu
- With Quick Save (F2) in the typing frame.

Saving a Document at the Main Menu



To save a document at the Main Menu, follow these steps:

1. While in the working copy, press Esc. The Main Menu is displayed.
2. Select **Save**. The Save Options menu is displayed.
3. Select one of these options:
 - DisplayWrite Assistant
 - Revisable Form Text (for interchange with DisplayWrite programs)

Important: If your document was originally an RFT file, be sure to overwrite the original file. Otherwise, formatting information that DisplayWrite Assistant does not support will not be saved.

- ASCII (such as BATCH files or your Personal Dictionary).

Important: The ASCII save option does not save headers, footers, page numbers, or any emphases. However, the Revisable Form Text does save headers, footers, page numbers, and emphases.


4. Press  . The Save File menu is displayed.
5. Enter the name of the file you want to save in the **File name..** field.
6. Press  . One of the following will be displayed:
 - A message telling you the file has been saved.

- A message telling you that you are about to save this file and overwrite the same file on disk. The prompt **Save and overwrite (y/n)?** is also displayed. Type **y** if you want to save and overwrite or type **n** if you do not want to save and overwrite.

Important: The file remains in the working copy even after you have saved it. You can select **Type or Edit** at the Main Menu to continue editing the same file, or you can select **Clear** at the Main Menu to start a new file.

Saving a Document with Quick Save in the Typing Frame

To avoid losing information, use DisplayWrite Assistant's Quick Save function (F2) frequently. To use the Quick Save function in the typing frame, follow these steps:

1. Press Quick Save (F2). The Quick Save menu is displayed.
2. Enter the name of the file you want to save in the **File name..** field.
3. Press . One of two things will be displayed:
 - A message telling you the file has been saved
 - A message telling you that you are about to save this file and overwrite the same file on disk. The prompt **Save and overwrite (y/n)?** is also displayed. Type **y** if you want to save and overwrite or type **n** if you do not want to save and overwrite.

You only have to name the file one time when using Quick Save. Any further Quick Saves will have the current name of the file displayed as the default.

Quick Save always saves the document as a DisplayWrite Assistant file. To save as an ASCII or RFT file, you must use the **Save** option from the Main Menu. See "Saving a Document at the Main Menu" on page 4-3.

Chapter 5. Formatting

This chapter explains how to change the page format of your documents with IBM DisplayWrite Assistant. You have two ways to change the page format:

- Formatting in the Typing Frame
- Defining Defaults at the Main Menu.

Formatting in the Typing Frame

The following steps describe how to change the page format in the typing frame.

Line Margins and Spacing

Line margins and spacing changed in the typing frame only change the document in the working copy. These changes are saved in a Line Format Change control character.

To change line margins and spacing in the typing frame, follow these steps:

1. Press Format (F7). The Format menu is displayed.
2. Select the **Line margins and spacing** option. The Line Margins and Spacing menu is displayed.

Line Margins and Spacing	
Pitch.....	[10]
Left margin.....	[10]
Right margin.....	[70]
Line spacing.....(1/2/3)	[1]
Right justify.....(y/n)?	[n]
Adjust line endings..(y/n)?	[y]

Use the Tab key to move to the next item.
Press ← to save changes.


The following sections describe how to change the options in the Line Margins and Spacing menu.

Pitch

The pitch is the number of characters per inch. The higher the pitch, the more condensed the characters in the text will be.

Important: Changing pitch automatically changes the margins so you will have the same amount of white space at the left and right of your document.


To set the pitch, follow these steps:

1. Press Tab to highlight the **Pitch** option.
2. Enter one of the following pitch options:
 - 5
 - 8
 - 10
 - 12
 - 15
 - 17
3. Press  to save the change or press Tab to move to the next option.

Left Margin

The left margin is the left-most print position for text.

To set the left margin, follow these steps:

1. Press Tab to highlight the **Left margin** option.
2. Enter the value for the left margin.
3. Press  to save the change or press Tab to move to the next option.

Right Margin

The right margin is the right-most print position for text. The right margin can be up to 255 spaces wide. The typing frame, however, is only 80 spaces wide. So if your document is wider than 80 spaces, part of each line will be off the screen. However, as you type a wide document, the right side moves into view.

To set the right margin, follow these steps:

1. Press **Tab** to highlight the **Right margin** option.
2. Enter the value for the right margin.
3. Press **←** to save the change or press **Tab** to move to the next option.

Line Spacing

Line spacing determines how many blank lines are between your lines of text when your document is printed.

Important: Line Spacing is not displayed on the screen; however, the spacing is indicated by the way the line number changes on the status line.

To set the line spacing, follow these steps:


1. Press **Tab** to highlight the **Line spacing** option.
2. Enter the value you want for line spacing: **1** (single-space), **2** (double-space), or **3** (triple-space).
3. Press **←** to save the change or press **Tab** to move to the next option.

Right Justify

Right justify allows you to print a document so that each line ends exactly at the right margin.

Important: Right Justify is not displayed on the screen.


To right justify a document, follow these steps:

1. Press Tab to highlight the **Right justify** option.
2. Type **y** to right justify a document or type **n** not to right justify a document.
3. Press  to save the change or press Tab to move to the next option.

Adjust Line Endings

This gives you the option to have lines automatically ended as you type beyond the right margin.

To adjust line endings, follow these steps:

1. Press Tab to highlight the **Adjust line endings** option.
2. Type **y** to adjust line endings or type **n** not to adjust line endings.
3. Press  to save the change or press Tab to move to the next option.

Page Layout and Paper Options

Page layout and paper options changed in the typing frame only change the document in the working copy. These changes are saved in a Page Format Change control character.

To change page layout and paper options, follow these steps:

1. Press Format (F7). The Format menu is displayed.
2. Select the **Page layout and paper options** option. The Page Layout and Paper Options menu is displayed.


Page Layout and Paper Options	
Top margin.....	[6]
Bottom margin.....	[6]
Page length.....	[66]
Page width.....	[78]
Paper source..(t/b/e/m)	[t]
Use the Tab key to move to the next item. Press ← to save changes.	

The following sections describe how to change the options in the Page Layout and Paper Options menu.

Top Margin

The top margin is the number of lines from the top of each page to the first line of text. The top margin can be up to 20 lines.


To set the top margin, follow these steps:

1. Press Tab to highlight the **Top margin** option.
2. Enter the value you want for the top margin.
3. Press  to save the change or press Tab to move to the next option.

Bottom Margin

The bottom margin is the number of lines at the bottom of each page after the last line of text. The bottom margin can be up to 20 lines.


To set the bottom margin, follow these steps:

1. Press Tab to highlight the **Bottom margin** option.
2. Enter the value you want for the bottom margin.
3. Press  to save the change or press Tab to move to the next option.

Page Length

The page length is the length of paper assumed when paginating or printing a document. Page length is determined by multiplying the length of the paper in inches by the number of lines per inch. For example, paper that is 11 inches long has a length of 66 lines. This represents 11 inches x 6 lines. The page length can be up to 255 lines.


To set the page length, follow these steps:

1. Press Tab to highlight the **Page length** option.
2. Enter the value you want for the page length.
3. Press  to save the change or press Tab to move to the next option.

Paper Width

The paper width is the width of paper assumed when printing a document. Paper width is determined by multiplying the width of the paper in inches by the number of 10-pitch characters per inch. For example, paper that is 8½ inches wide has a width of 85 characters. This represents 8.5 inches x 10 characters. The paper width can be up to 255 spaces wide.


To set the paper width, follow these steps:

1. Press Tab to highlight the **Paper width** option.
2. Enter the value you want for the paper width.
3. Press  to save the change or press Tab to move to the next option.

Paper Source

Paper source is the default paper source when printing a document when you have selected the **Automatic cut sheet paper** option in the Quick Menu/Setup program.

To set the paper source default, follow these steps:

1. Press Tab to highlight the **Paper source** option.
2. Enter one of the following values for the paper source:
 - **t** = top drawer
 - **b** = bottom drawer
 - **e** = envelope
 - **m** = manual feed.
3. Press  to save the change or press Tab to move to the next option.

Tabs

With DisplayWrite Assistant, six types of tabs are available:

- **Flush left tab** — flush left with the tab setting position.
- **Decimal tab** — aligns at a decimal point.
- **Center tab** — centers around the tab setting position.
- **Right align tab** — flush right with the tab setting position.
- **Comma align tab** — aligns at a comma.
- **Colon align tab** — aligns at a colon.

To set tabs, follow these steps:

1. Move the cursor to the line at which you want to set the tabs.
2. Press Format (F7). The Format menu is displayed.
3. Select **Tabs**. The Tabs menu is displayed.
4. Select the tab that you want as follows:
 - Flush left tab — Press Tab.
 - Decimal tab — Press the period key (.).
 - Center tab — Press Ctrl+C.
 - Right align tab — Press Shift+Tab.
 - Comma align tab — Press the comma key (,).
 - Colon align tab — Press the colon key (:).

To delete a tab, follow these steps:

1. Move the cursor to the tab location.
2. Press Del.

To clear all tabs, follow these steps:

1. Move the cursor to the left margin (<<).
2. Press Del.

Headers and Footers

Headers and footers are text, page numbers, or current dates that you can create in the top and bottom margins of your document respectively.

You can position and emphasize headers and footers using DisplayWrite Assistant. A header or footer can be up to 20 lines with 256 characters. Many of the same functions available in your document are also available in a header and footer. The following keys, however, are invalid in a header or footer:

- Page End
- Required Page End
- Quick Save
- Print
- Search/Replace
- Repeat Search
- Get
- Format
- Instructions
- Spelling
- Go To Page
- PgUp/PgDn
- Start/End of Document.

To add, position, or emphasize a header or footer, follow these steps:

1. Move the cursor to the page on which you want headers or footers to begin.
2. Press Format (F7). The Format menu is displayed.
3. Select **Header** or **Footer**. The cursor moves to the top or bottom of the page, depending upon which option you selected.

You can now add, position, or emphasize a header or footer.

4. Press Esc when you are finished with the header or footer. The Format menu is displayed.
5. Press Esc again to return to the working copy.


Page Numbering

You can select the starting page number you want printed for a page by using the Page Numbering function (Shift+F8) when the cursor is in the header or footer area.

Follow these steps:

1. After selecting **Header** or **Footer**, the cursor is in either the top or bottom margin.
2. Move the cursor to the location you want the page number to be printed.
3. Press Page Numbering (Shift+F8). The Page Numbering menu is displayed.
4. Type the starting page number in the menu.

You need only enter the first page as page 1 to get a sequential page numbering throughout your document.

5. Press  to save the number you entered.
6. Press Esc to return to the header or footer area.
7. Press Esc again to return to the Format Menu.


Current Date

You can select the format in which you want the date to be printed using the Current Date function (Shift+F7) when the cursor is in the header or footer area.

Follow these steps:

1. After selecting **Header** or **Footer**, the cursor is in either the top or bottom margin.
2. Move the cursor to the location you want the date to be printed.
3. Press Current Date (Shift+F7). The Current Date menu is displayed.

The following options can be selected:

- **Date format** — allows you to select the format in which you want the date to be printed.
 - **Separator character** — allows you to select the separator character for the date you wish to be printed.
 - **Expand month** — allows you to choose either to spell out the month (for example, “May” instead of “5”) by typing **y** or to print the numeric version by typing **n**.
4. Press  to save your choices.
 5. Press Esc to return to the header or footer area.
 6. Press Esc again to return to the Format Menu.

Important: The Current Date function prints the date entered through DOS, not necessarily the current date.

Defining Defaults at the Main Menu

The following steps describe how to change the page format with Define Defaults from the Main Menu.

Line Margins and Spacing Defaults

The Line Margins and Spacing defaults set by Define Defaults are in effect for any new document you create unless they are changed with the Format function (F7) in the typing frame.

The shipped default values for Line Margins and Spacing Defaults are:

- Pitch 10
- Left Margin 10
- Right Margin 70
- Line Spacing 1
- Right Justify n=No
- Adjust line endings y=Yes.

To change line margins and spacing defaults at the Main Menu, follow these steps:

1. At the Main Menu, select **Define defaults**. The Define Defaults menu is displayed.
2. Select **Line Margins and spacing defaults**. The Line Margins and Spacing Defaults menu is displayed.

Refer to page 5-1 for the specific options within the Line Margins and Spacing Defaults menu.

Page Layout and Paper Option Defaults

The page layout and paper option defaults set by Define Defaults will be in effect for any new document you create unless they are changed with the Format function (F7) in the typing frame.

The shipped default values for Page Layout and Paper Options Defaults are:

- Top margin 6
- Bottom margin 6
- Page length 66
- Paper width 78
- Paper source t=top drawer.

To change page layout and paper option defaults at the Main Menu, follow these steps:

1. At the Main Menu, select **Define Defaults**. The Define Defaults menu is displayed.
2. Select **Page layout and paper options defaults**. The Page Layout and Paper Options Defaults menu is displayed.

Refer to page 5-5 for the specific options within the Page Layout and Paper Options Defaults menu.

Edit Defaults

Use the Edit Defaults menu to make changes to the default values you want for your documents. Follow these steps:

1. At the Main Menu, select **Define Defaults**. The Define Defaults menu is displayed.
2. Select **Edit Defaults**. The Edit Defaults menu is displayed.

The following sections describe how to change the options in the Edit Defaults menu.

Auto Adjust

This option allows paragraphs to be readjusted after changes have been made. Setting this option to **n** forces paragraphs to be manually adjusted after changes.

To change the Auto adjust default, follow these steps:

1. At the Edit Defaults menu, press **Tab** to highlight the **Auto Adjust** option.
2. Type **y** to set Auto adjust to on or **n** to set Auto adjust to off.
3. Press **←|** to save the changes or press **Tab** to move to the next option.

Hot Zone Beep

This option lets you know with a beep when the cursor enters the “hot zone” (six characters from the right margin of the working copy).


To change the Hot zone beep default, follow these steps:

1. At the Edit Defaults menu, press **Tab** to highlight the **Hot zone beep** option.
2. Type **y** to set Hot zone beep to on or **n** to set this option to off.
3. Press **←|** to save the change or press **Tab** to move to the next option.

Display Control Code Information

This option allows the cursor movement keys to move to control characters and to display control characters at the cursor position and on the status line. Setting this option to **n** makes the cursor keys skip the control characters.


To change the Display control code information default, follow these steps:

1. At the Edit Defaults menu, press Tab to highlight the **Display control code information** option.
2. Type **y** to set this option to on or **n** to set this option to off.
3. Press  to save the change or press Tab to move to the next option.

Ruler Line at Top or Bottom

This option allows you to select whether you want the ruler line to appear at the top of the display or at the bottom of the display.

To change the Ruler line at top or bottom default, follow these steps:

1. At the Edit Defaults menu, press Tab to highlight the **Ruler line at top or bottom** option.
2. Type **t** to set the ruler line to the top of the display or **b** to set it to the bottom of the display.
3. Press  to save the change or press Tab to move to the next option.

Retain Deleted Block

This option allows DisplayWrite Assistant to save a block of text to disk when you delete using Block Edit. Setting this option to **n** keeps deleted blocks from being saved.

To change the Retain deleted blocks default, follow these steps:

1. At the Edit Defaults menu, press Tab to highlight the **Retain deleted block** option.
2. Type **y** to retain deleted blocks or **n** to not retain deleted blocks.
3. Press **←** to save the change or press Tab to move to the next option.

Personal Dictionary Name

This option allows you to select the name of your Personal Dictionary. The default name is WORDPRF.ADL.

To change the Personal Dictionary name default, follow these steps:

1. At the Edit Defaults menu, press Tab to highlight the **Personal Dictionary name** option.
2. Type in the name of your personal dictionary.
3. Press **←** to save the change or press Tab to move to the next option.

Keyboard Extension Definition

Using the Keyboard extension definition, you can redefine any of the Alt+alphabetic (A-Z) key combinations to produce special characters that are not directly supported by your keyboard.

First, determine the ASCII decimal value of the character you want. Follow these steps:

1. Use the following chart of ASCII character decimal values to find the character you want.

	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
120									ç	ü
130	é	â	ä	à	å	ç	ê	ë	è	ï
140	î	ì	Ä	Å	É	æ	Æ	ô	ö	ò
150	û	ù	ÿ	ö	ü	ç	£	¥	₪	₹
160	á	í	ó	ú	ñ	Ñ	á	o	í	ŕ
170	¬	½	¼	¡	<<	>>	⋮	⋮	⋮	
220					α	β	Γ	Π	Σ	σ
230	μ	τ	ϕ	θ	Ω	δ	∞	∅	ε	∩
240	≡	±	≥	≤	↑	↓	÷	≈	•	▪
250	-	√	∩	∩	■					

004=◆ 021=ζ 196=- 219=■

2. Determine the ASCII decimal number of the character by reading the three digit number at the beginning of the row that the character is in.
3. Replace the last digit of the three digit number with the number at the top of the column that the character is in.

For example, to redefine **Alt+A** as the character Π , you would press and hold the Alt key and type the number **227** using the numeric keypad. When you release the Alt key, the character Π is displayed in the menu.

To use this character in text, you would simply type **Alt+A**, and the character would be inserted into the document at the cursor position.

Once you have determined the ASCII decimal value of the character, follow these steps to redefine an Alt+alphabetic key:

1. At the Define Defaults menu, select **Keyboard extension definition**. The Keyboard Extension Definition menu is displayed, listing all 26 Alt+alphabetic keys and the default character definitions.
2. Press Tab or ↓ to highlight the key option you wish to change.
3. Press and hold the Alt key and type the three digit ASCII decimal value (using the numeric keypad) that represents the character you want.
4. Release the Alt key. The character is displayed in the menu.
5. Press ← to save all changes.

Notes:

Chapter 6. Merging

This chapter describes the IBM DisplayWrite Assistant Merge function. This function allows you to merge information from other types of documents into a DisplayWrite Assistant document when you print. Use the Instruction function (F8) in the working copy to specify where merged information is to be inserted at print time.

You can use the Merge function with the following file types:

- Filing Assistant files
- Personal Decision Series text files
- dBase II™ files
- DIF™ files
- SYLK™ files.

This chapter also describes the Join File and Join Graph functions. You can use Join File to include text files of the following types:

- Other DisplayWrite Assistant files
- ASCII files.

Important: If you want to join one of the following with DisplayWrite Assistant documents you must save them as DisplayWrite Assistant documents, and then use Join File.

- DisplayWrite family Revisable Form Text (RFT) files
- Writing Assistant files.

You can use Join Graph to insert files if the file is a graph created by Graphing Assistant or a drawing created by Drawing Assistant and if the file has been saved as a picture or art file.

Important: To print merged art and picture files, your printer must support printing these files. The following printers are supported by DisplayWrite Assistant, but do not support art or picture files:

Art files not supported:

- C. Itoh™¹ Model F10-55
- NEC™² Model 2050.
- IBM Wheelprinter 5216
- IBM Wheelprinter E 5223
- IBM Quietwriter 5201 Model 1

Picture files not supported:

- C. Itoh™ Model F10-55
- IBM Wheelprinter 5216
- IBM Wheelprinter E 5223
- NEC™ Model 2050
- Okidata™³ Models 84, 92, and 93
- Quadram Quadjet™⁴ Model QJ9000.
- IBM Quietwriter 5201 Model 1

Also, for any printer supported by selecting **Other** in Setup, DisplayWrite Assistant attempts to print art and picture files as if the printer were the IBM Graphics Printer 5152. See “Configuring for the New Printer” on page B-14.

¹ Trademark of C. Itoh Electronics, Inc.

² Trademark of Nippon Electronics Corporation.

³ Trademark of Okidata Corporation.

⁴ Trademark of Quadram Corporation.

Using Instructions

To merge a file when printing, you must use Instructions (F8) in the working copy. While the working copy is displayed, press Instructions (F8). The Instructions menu is displayed, giving four options:

Instructions
1. Join file 2. Graph 3. Insert field 4. Required page end


The following sections explain when and how you should use these options.

Using Join File

When printing, you may want to include several DisplayWrite Assistant and/or ASCII files with the current document you are creating. If you use Get/Insert, the entire file may be over the 32KB size limit. However, using Join File, you can merge any number of files when printing, as long as the sum of your DisplayWrite Assistant file and any one of the files you are merging is less than 32KB.

For example, if your DisplayWrite Assistant file is 20KB, you can merge four 10KB files when printing for a document sum of 60KB. However, you cannot merge a 15KB file because the sum of your DisplayWrite Assistant file and the 15KB file is not less than 32KB.

To use the Join File function, follow these steps:

1. While in the Working Copy, move the cursor to where you want to insert the file or files.
2. Press Instructions (F8). The Instructions menu is displayed.
3. Select **Join File**. The Join File panel is displayed.
4. Type the name of the file you want to include in the **Filename** field, including the drive and directory.
5. Press  . A Join File control character is inserted in the file. It will look something like the following: ***Join MYDOC***.

Special Considerations:

- Line endings of the joined file will not be adjusted. If the joined file is an ASCII print-ready file and it is formatted to print at the left edge of the paper, you may want to make a Line Format Change before the Join File control character and set the left margin to zero.
- The Join File control character is not resolved until print time. DisplayWrite Assistant doesn't prompt you to change diskettes if it cannot find your files. Therefore, you need to make sure your files are in the drive and directory specified in the **Filename** field.
- If you want the joined information to start on a new page, put a required page end before inserting the joined information.


Using Graph

You can include a graph or figure you've created with Graphing Assistant or Drawing Assistant in your document at print time, as long as the joined file has been saved as a picture or art file and your printer supports these files (see page 6-2).

To include a graph or figure, follow these steps:

1. While in the Working Copy, move the cursor to where you want to insert the graph or figure.

Important: If there is not enough room for the graph on a page, the graph will automatically be printed at the beginning of a new page.


2. Press Instructions (F8). The Instructions menu is displayed.
3. Select **Graph**. The Join Graph panel is displayed.
4. Type the name of the file you want to include in the **Filename** field, including the drive and directory.
5. Press . A Join Graph control is inserted in the document at the cursor position. It will be represented in the working copy by a box the correct dimensions of the graph to be joined at print time.

Using Insert Field

You may want to include information such as names and addresses in a form letter, or you may want to print labels. You may want to include spreadsheet information in your document. When printing, you can include the information from the following file types using the Insert Field control and the Merge File with Document menu:

- IBM Filing Assistant files
- IBM Personal Decision Series text files
- DIF™ files
- SYLK™ files
- dBase II™ files.

Follow these steps to use the Insert Field function:

1. While in the Working Copy, move the cursor to where you want to insert the information.
2. Press Instructions (F8). The Instructions menu is displayed.
3. Select **Insert Field**. The Insert Field panel is displayed.
4. Type the Field Name or Field Number of the field you want to insert information from. These are explained in “Special Considerations” on page 6-7.
5. Press . An Insert Field control character is inserted in the document at the cursor position.
6. To use this function, you must merge the file with your current document while printing. See “Using Merge File with Document” on page 6-7 for more information.

Special Considerations:

1. The first character of the Field Name must be alphabetic. The following characters may be alphabetic, numeric, underscores, spaces, or required spaces. The spaces and required spaces are stored as underscores.
2. The Field Number can be any number from 1 to 999. You can also start the number with an underscore.

Using Merge File with Document



When you have entered Insert Field control characters in your document, you must use Merge File with Document in the Print Options menu. Follow these steps:

1. At the Main Menu, select **Print**.
2. Press ←| . The Print Options menu is displayed. (For information about the other print options, see “Chapter 7. Printing.”)

Important: The only print options that can be used with Merge File with Document are:

- Lines per inch
 - Double strike.
3. Press Tab to highlight the **Merge file with document** option.
 4. Type y.
 5. Press ←| . The Merge File with Document menu is displayed with the following options:
 - IBM Filing Assistant file
 - IBM Personal Decision Series text file
 - DIF™ file
 - SYLK™ file
 - dBase II™ file.

See “Special Considerations” on page 6-8 for more information about these file types.

6. Select the file type you want to print with your current document.
7. Press  . The Data File panel is displayed.
8. Type the name, drive, and subdirectory of the file from which DisplayWrite Assistant can get the information to use in printing in the **Data file name** field.
9. Press  . DisplayWrite Assistant begins processing the document and the included file to produce your printed document. A message is displayed, telling you the merge is complete and giving the number of records merged.

Special Considerations

Using Merge File with Document, you need to be aware of special considerations for each of the file types. These considerations are listed in the following sections.

Filing Assistant Files

When you merge a Filing Assistant file, you will see a Search Spec screen. The Search Spec screen allows you to specify the specific entries you want to use from the Filing Assistant file. The Search Spec has the following rules:

- Only the first page of the search spec form will be used.
- If the first page contains more than 100 fields, only the first 100 fields will be used.
- A maximum of 256 characters may be entered in the Search Spec. If you attempt to type more than this, you will hear a beep as you type the additional characters.
- A search spec may include letters, numbers, spaces, and/or punctuation marks.
- If you will accept any character in a field, type a question mark (?).
- The character “/” means “not” for a search spec. Type it if you want to ignore a particular set of characters.
- If you type one of the following characters as the first in a field, a numeric comparison is performed. Otherwise, a character comparison is performed.
 - =
 - <
 - >
- You can use two periods (..) to indicate that any characters can occur before or after your search spec. For example, if you type `..tor`, any field ending in “tor” will be used.

Also, if you type two periods before or after the search spec, then any field in which the search spec occurs can be used.

Personal Decision Series Text Files

- Your Personal Decision Series file must be a text file. Otherwise, it cannot be processed, and a message is displayed, telling you the file is not text type.
- The file definition name must be identical to the data file name. If it is not, a message is displayed, telling you that it is not in the PDS library index.
- Personal Decision Series files should be in a subdirectory with these files:

BRADSLIB~LI (library index)
BRADSLIB~LB (library).

Both files should have an entry for the file definition corresponding to the data file you specified.

DIF™ and SYLK™ Files

- The first row of alphanumeric data must be the row of field names.
- The first column of DIF™ files must be blank.
- DIF™ files from Visicalc must be stored by column in the source program.
- Visicalc cells containing field names or character data must be formatted left-aligned in the spreadsheet. This avoids leaving blanks in the wrong places.

dBase II™ Files

- All the Insert Field instructions in your document must be in upper case because dBase II™ field names are all upper case.
- The dBase II™ logical fields are converted to character fields in DisplayWrite Assistant.

Chapter 7. Printing

This chapter explains how to print a document with IBM DisplayWrite Assistant and how to create a print file on disk that can be printed with DOS print.

You can print documents from two places:

- From the Main Menu
- In the Typing Frame.

DisplayWrite Assistant supports the following printers:

- C. Itoh™ Model F10-55
- Epson™¹ Models MX 100, FX 100 and RX 80
- IBM Color Printer 5182
- IBM Color Jetprinter 3852 Model 2
- IBM Compact Printer 5181
- IBM Graphics Printer 5152
- IBM Pageprinter 3812
- IBM 4201 Proprinter; IBM 4202 Proprinter XL
- IBM Quietwriter 5201, Models 1 and 2
- IBM PC Convertible Printer (IBM 5140 System Printer)
- IBM Wheelprinter 5216
- IBM Wheelprinter E 5223
- Mannesman Tally™² Printer Model 160
- NEC™ Model 2050
- Okidata™ Models 84, 92, and 93
- Quadram Quadjet™ Model QJ9000

If you have an unsupported printer, refer to “Appendix B. Printer Description Utility.”

¹ Trademark of Epson America, Inc.

² Trademark of Mannesman Tally Corporation.

Printing from the Main Menu

To print from the Main Menu, follow these steps:

1. Use the Get function to get the document you want to print into the working copy. See “Chapter 4. Getting and Saving.”
2. Press Esc. The Main Menu is displayed.
3. Select **Print**. The Print Options menu is displayed.

Print Options	
From page.....	[1]
Through page.....	[999]
Number of copies.....	[1]
Lines per inch.....(6/8/9)	[6]
Double strike.....(y/n)?	[n]
Print envelope.....(y/n)?	[n]
Merge file with document..(y/n)?	[n]
Output to printer or disk..(p/d)	[p]

Use the Tab key to move to the next item.
Press ← to begin printing.

The following options can be used when printing a document:

- **From page** — Specify the first page of the document you want to print (from 1 to 999).
- **Through page** — Specify the last page of the document you want to print (up to 999).
- **Number of copies** — Select the number of copies you want to print (from 1 to 99).
- **Lines per inch** — Select the number of lines per inch for the printed document. Type **6** or **9** for the IBM Compact Printer. Type **6** or **8** for all other supported printers.
- **Double strike** — Select to print the document with double strike (type **y**) or single strike (type **n**).

- **Print envelope** — Select to print an envelope from the inside address of a letter in the working copy (type **y**) or to print the document as it is (type **n**).

DisplayWrite Assistant prints the inside address from a letter beginning on the 11th line of the envelope and indented 35 spaces. The inside address is found by searching for the first line of text that does not begin with a space, tab, or indent or a format change preceding any of these characters. If the line ends with two numeric digits, the line is ignored, and the next line of text meeting these qualifications is found.

DisplayWrite Assistant then prints each line until a line is found that does not meet these qualifications.

- **Merge file with document** — Select to print a document and merge information from other files at print time (type **y**) or to print the document as it is (type **n**). See “Chapter 6. Merging.”
 - **Output to printer or disk** — Select to print to a printer (type **p**) or to create a print file on disk (type **d**).
4. Press **Tab** to highlight the Print options you want to change. Enter the Print options you want for the document.
 5. Press **←** to begin printing when your print options are correct.

Printing in the Typing Frame

To print a document in the typing frame, press Print (Shift+F1). The document is printed using the default print options in the Print Options menu.

Canceling Print

To cancel a print job, press Esc. You are returned to the working copy or to the Main Menu, depending upon where you invoked the print function.

Chapter 8. Utilities


This chapter explains how to use the IBM DisplayWrite Assistant's Utilities Menu.

You can select the following options for files from the Utilities menu:

- Copy
- Erase
- Rename
- Default Drive/Directory.

Copying a File

To copy a file using the Utilities menu, follow these steps:

1. At the Main Menu, select **Utilities**. The Utilities menu is displayed.
2. Select **Copy**. The Copy File menu is displayed.
3. Enter the name of the file to be copied and the new file name.
4. Press  . The file is copied.

If the file name already exists, a prompt is displayed, asking if you want to overwrite the file. If you want to overwrite the file, type **y**. A panel is displayed, telling you the file has been copied.

If you type **n**, you are returned to the Utilities menu and the file is not copied.

Erasing a File

To erase a file using the Utilities menu, follow these steps:

1. At the Main Menu, select **Utilities**. The Utilities menu is displayed.
2. Select **Erase**. The Erase File menu is displayed.
3. Enter the name of the file you want to erase.
4. Press **←**. A prompt is displayed, asking you to confirm that you want to erase the information.
5. Press **y**. A panel is displayed, telling you the file has been erased.

If you press **n**, you are returned to the Utilities menu, and the file is not erased.

Renaming a File

To rename a file, follow these steps:

1. At the Main Menu, select **Utilities**. The Utilities menu is displayed.
2. Select **Rename**. The Rename menu is displayed.
3. Type the old file name.
4. Press **Tab**.
5. Type the new file name.

Important: You cannot rename a file to a different drive.

6. Press **←**. A message is displayed, telling you the file has been renamed.

Changing the Default Drive/Directory

To change the default drive or directory using the Utilities menu, follow these steps:

1. At the Main Menu, select **Utilities**. The Utilities menu is displayed.
2. Select **Default drive/directory**. The Change Default Drive or Current Directory menu is displayed.
3. Enter the default drive and directory you want.
4. Press \leftarrow . A message is displayed, telling you the default drive and current directory.

Using the Directory

Press Directory (F3) at the Main Menu. The File Services panel is displayed, and the files are sorted by file name and extension. A directory can display up to 150 files.

File Services					
Drive	Directory	Filename	Size	Date	Time
A	<Previous >	DISPLAY .CLR	209	01/17/86	1:33 pm
C		DISPLAY .EXE	235,184	02/18/86	3:03 pm
		DISPLAY .HLP	35,633	02/18/86	12:18 pm
		DISPLAY .PRO	1,151	01/01/80	2:20 am
		DWA .BAT	112	02/06/86	3:02 pm

To select, use the Tab key and \uparrow or \downarrow . Then, press \leftarrow .

The File Services panel is divided into the following major sections, or columns:

- **Drive** — lists all of the drives connected to your system.
- **Directory** — lists any DOS subdirectories below the current directory. If the current directory is itself a subdirectory, the column includes an entry named **Previous**.
- **Filename** — lists the files in the specified drive and directory, including their size and the date and time of the last update.

To use the directory, follow these steps:

1. Press Tab to move from one column to another.
2. Press ↑ or ↓ to highlight an item within a column.
3. Press ← to select a Drive, Directory, or File. When you select a different drive or directory, the Filename column is updated to display the files at the specified location.

If you select **Previous** in the Directory column, the parent directory is built and displayed.

If the default drive has more files than you can see at one time, press PgDn to see the listings of additional files.

If a drive has no subdirectories or files, you cannot get into the Directory or Filename columns. “None” appears in these columns.

You can select any of the following functions from the directory if the cursor is in the Filename column:

- F4 = Sort
- F5 = Get
- F6 = Erase
- F7 = Copy
- F8 = Rename.

When one of these function keys is pressed (except F4), the file name indicated by the cursor is selected for the task.

For any task except the Erase task, the Directory panel is removed. After the task is completed, DisplayWrite Assistant will display the Directory panel, except when the Get task is selected. In this case, the Main Menu will be displayed.

When you press F4, the Sort Directory By menu is displayed.

When you select a sort item, the directory will be redisplayed, sorted by the selected item.

You have the following items to sort by:

- Name of document
- Extension
- Size
- Date revised.

When you select **Get** from the Main Menu, you can also list a subset of a directory by using the global file name characters “*” or “?” as explained in *Disk Operating System User's Guide*.

For example, ***.RFT** lists all files ending with the extension .RFT, and **FEB198?*** lists all files that have FEB198 as the first six characters of the name.

Notes:

Appendix A. Error Messages

IBM DisplayWrite Assistant displays a message when it encounters an error condition. The error message provides information designed to resolve the problem so that you can continue your work.

Important: This appendix does not list all error messages that might display.

Also, an error condition may not be accompanied by an error message. For example, if your printed documents drop characters, produce “garbage” characters, or if you have unexpected print results, you may be able to resolve the problem by following the “Action” under the error **Printer error. Print has been canceled** on page A-3.

The following messages occur at times when the program cannot provide help. You can remove the message by pressing Esc.

Insufficient Memory.

Cause: The system does not have enough memory available to load DisplayWrite Assistant. You are returned to DOS.

Action: Make sure you have 256Kb memory. If you have installed Memory Resident programs, press **Ctrl+Alt+Del**. If that does not fix the problem, add more memory to your system.

“DISPLAY.PRO” not found.

Cause: The system attempts to read the “DISPLAY.PRO” profile, but the profile cannot be read. You are returned to DOS.

Action: Copy the “DISPLAY.PRO” file from your original program diskette. Then run the Setup procedure again (see “Chapter 2. Getting Started”).

Program Error.

Cause: The system experiences an abnormal termination. The screen is blanked, and you are returned to DOS.

Action: Report the problem to your authorized dealer.

Error loading overlay from “DISPLAY.EXE.”

Cause: File or Disk Error occurred while attempting to load a program.

Action: Make sure you have the right DisplayWrite Assistant program diskette in the drive and that it's loaded correctly. Try reloading the diskette. If that fails, copy that program from the original DisplayWrite Assistant program diskette.

Program “@C” not found.

Cause: File Not Found error occurred for a program data file or another system program file where @C is the filename.

Action: Make sure you have the right DisplayWrite Assistant program diskette in the drive and that it's loaded correctly. Try reloading the diskette. If that fails, copy that program from the original DisplayWrite Assistant program diskette.

Disk error for program “@C.”

Cause: Disk Error occurred accessing a program data file or another system program file where @C is the filename.

Action: Make sure you have the right DisplayWrite Assistant program diskette in the drive and that it's loaded correctly. Try reloading the diskette. If that fails, copy that program from the original DisplayWrite Assistant program diskette.

Printer error. Print has been canceled.

Cause: The printer is unable to print the document.

Action: Make sure your printer is operating correctly and ready to print.

Maximum size reached; split document.

Cause: The document has reached the maximum size (32KB).

Action: Follow these steps:

1. Go to the beginning of the last page of the document.
2. Insert a Page Format Change and Line Format Change at the top of the page.
3. Use the Block Edit option Save to file to save the last page to another file.
4. Delete the last page from the original document.
5. Save the current document.
6. Continue editing your new document.

Notes:

Appendix B. Printer Description Utility

This chapter describes how to use the Printer Description Utility.

The Printer Description Utility is a separate program from IBM DisplayWrite Assistant. It allows you to:

- Change control functions for a particular printer that DisplayWrite Assistant supports.
- Specify character printing method in IBM Graphics Character Set 2.
- Edit Printer Description Tables describing supported printers.
- Create new Printer Description Tables for other compatible printers.
- Get help information about the Printer Description Utility menu items.

For more information about printers, refer to the Printers section of the *PC Technical Reference*.

User Prerequisites

You should only use the Printer Description Utility if you understand:

- Hexadecimal notation.
- Printer Setup.
- Your printer technical reference manual.

Hexadecimal Charts

For your convenience, the next two pages list the hexadecimal notation you need to use the Printer Description Utility.

Character	Decimal Value	Hex Equivalent
NUL	0	00
SOH	1	01
STX	2	02
ETX	3	03
EOT	4	04
ENQ	5	05
ACK	6	06
BEL	7	07
BS	8	08
HT	9	09
LF	10	0A
VT	11	0B
FF	12	0C
CR	13	0D
SO	14	0E
SI	15	0F
DLE	16	10
DC1	17	11
DC2	18	12
DC3	19	13
DC4	20	14
NAK	21	15
SYN	22	16
ETB	23	17
CAN	24	18
EM	25	19
SUB	26	1A
ESC	27	1B
FS	28	1C
GS	29	1D
RS	30	1E
US	31	1F

Character	Decimal Value	Hex Equivalent
SP	32	20
!	33	21
"	34	22
#	35	23
\$	36	24
%	37	25
&	38	26
'	39	27
(40	28
)	41	29
*	42	2A
+	43	2B
,	44	2C
-	45	2D
.	46	2E
/	47	2F
0	48	30
1	49	31
2	50	32
3	51	33
4	52	34
5	53	35
6	54	36
7	55	37
8	56	38
9	57	39
:	58	3A
;	59	3B
<	60	3C
=	61	3D
>	62	3E
?	63	3F

Character	Decimal Value	Hex Equivalent
@	64	40
A	65	41
B	66	42
C	67	43
D	68	44
E	69	45
F	70	46
G	71	47
H	72	48
I	73	49
J	74	4A
K	75	4B
L	76	4C
M	77	4D
N	78	4E
O	79	4F
P	80	50
Q	81	51
R	82	52
S	83	53
T	84	54
U	85	55
V	86	56
W	87	57
X	88	58
Y	89	59
Z	90	5A
[91	5B
\	92	5C
]	93	5D
~	94	5E
—	95	5F

Character	Decimal Value	Hex Equivalent
	96	60
a	97	61
b	98	62
c	99	63
d	100	64
e	101	65
f	102	66
g	103	67
h	104	68
i	105	69
j	106	6A
k	107	6B
l	108	6C
m	109	6D
n	110	6E
o	111	6F
p	112	70
q	113	71
r	114	72
s	115	73
t	116	74
u	117	75
v	118	76
w	119	77
x	120	78
y	121	79
z	122	7A
{	123	7B
:	124	7C
}	125	7D
~	126	7E
DEL	127	7F

Printer Description Tables

DisplayWrite Assistant has 16 Printer Description Tables for the printers it supports. These tables define the parameters DisplayWrite Assistant uses for printing documents on those printers. If you have one of the supported printers in the list below, a Printer Description Table already exists for it:

- C. Itoh™ Model F10-55 (PRINT001.PDT)
- Epson™ Models MX 100, FX 100, and RX 80 (PRINT002.PDT)
- IBM Color Printer 5182 (PRINT003.PDT)
- IBM Color Jetprinter 3852 Model 2 (PRINT004.PDT)
- IBM Compact Printer 5181 (PRINT005.PDT)
- IBM Graphics Printer 5152 (PRINT006.PDT)
- IBM Pageprinter 3812 (PRINTPP.PDT)
- IBM 4201 Proprinter; IBM 4202 Proprinter XL (PRINT007.PDT)
- IBM Quietwriter 5201, Models 1 and 2 (PRINT008.PDT)
- IBM PC Convertible Printer (IBM 5140 System Printer) (PRINT009.PDT)
- IBM Wheelprinter E 5223 (PRINT010.PDT)
- IBM Wheelprinter 5216 (PRINTWP.PDT)
- Mannesman Tally™ Model 160 (PRINT012.PDT)
- NEC™ Model 2050 (PRINT013.PDT)
- Okidata™ Models 84, 92, and 93 (PRINT014.PDT)
- Quadram Quadjet™ Model QJ9000 (PRINT015.PDT)

If you do not have one of these printers, you must create “PRINT016.PDT” on the Programs Disk to support your printer. See “Configuring for the New Printer” on page B-14 for more information.

Special Considerations

Because of the differences in printer capabilities, all DisplayWrite Assistant features and functions may not be available to you.

IBM Pageprinter 3812

If you have other applications that make special use of the Pageprinter, you may need to reset the printer to 5152 emulation mode before running DisplayWrite Assistant.

To do this, copy the file "PRINTPP.PRN" on the installation disk or on the DisplayWrite Assistant Diskette 2 to the printer (for example, to COM1).

Control Sequences

A control sequence can be one or more printer controls which set a specified mode when sent to the printer. To enter a control sequence, type two hexadecimal (hex) characters for each byte to be sent to the printer. After each pair of characters is typed, the cursor will skip a space automatically.

If your printer manual, for example, specifies the control sequence ESC E to initiate a printer function, you would type "1B 45", since 1B is the Hexadecimal equivalent for ESC and 45 is the hex value for the ASCII character E. If your printer manual uses decimal values, you must convert them to hex before entering into the table. For example, CHR\$(27) becomes hex 1B. Use the tables provided both on pages B-2 and B-3 and in the on-line Helps to perform the necessary conversions from ASCII or Decimal values to Hexadecimal. Printer manuals that provide values in hex may represent these in various ways; make sure you use only the hex digits. For example, 9AH would be entered as 9A.

Control Sequence with Variable N

Several of the control sequences will require that a variable N be entered as part of the control sequence. These control sequences are used to control printer functions which are determined at print time. For example, Page Length (inches or lines) is determined by DisplayWrite Assistant at the time the document is printed. The information is sent to the printer through use of a control sequence which contains a variable N.

The N in a control sequence represents either a 1-byte, 2-byte, or 3-byte number. The number of variable bytes is determined by the interactive print tests run by the program when you press ← for the menu.

A control sequence with a variable can have only one variable, and cannot begin with N. For example: 1B 41 N 1B 32. Your printer manual might describe this as:

ESC "A" n ESC "2"

or as

CHR\$(27); "A"; CHR\$(n); CHR\$(27); "2"

For control sequences which require a variable, you need to review your printer's manual and determine the following characteristics about the variable N.

Maximum Value

This is the maximum decimal value that the variable N can have for your printer. The maximum value is one of the determining factors for the type of variable.

Offset Added or Subtracted to N

The offset is the amount that your printer adds or subtracts to the variable N when it receives the control sequence. If your printer manual defines N (or N times a fraction) as the value used by the printer (for example $N/72$), then the offset is 0 (zero). If your printer manual states that the printer uses $N+1$ as the true value, the offset is 1 (one), and it is added to the variable by the printer. If your printer manual specifies to send a value of $N+1$ to the printer, the offset is 1 (one), and it is subtracted from the variable by the printer.

Add/Subtract Offset

Use this to specify whether the printer adds or subtracts the offset from the variable value of N sent to the printer.

Increment for N as a Fraction of an Inch

This number represents a scaling factor used to convert the value of the variable N to inches. For example, when the increment $X/Y = 1/72$, the variable represents units of $1/72$ inch. When $X/Y = 1/1$, the variable represents units of one inch. X/Y cannot be greater than one; therefore, $2/1$ or $144/72$ would not be valid.

The Printer Description Utility cannot directly support control sequences which contain more than one variable. However, in many cases, the control sequence can be converted to a single variable control sequence. Determine if one of the variables can (or should) be held constant. If this is possible, then substitute the constant value of that variable (in hexadecimal) into the control sequence.

Use the constant value for the variable which remains constant, and represent the variable portion of the control sequence with the variable N. For example, your printer might describe a control sequence ESC C;n;m to set the page length in inches. This would require two variables, both m and n. However, the printer manual also states that this command requires a value of 0 (zero) for n, and a value between 1 and 22 for m. You could enter this control sequence as follows:

```
1B 43 00 N
```

m is represented by the hexadecimal value of 0, which is 00.

The table entries for this example are as follows:

Maximum value for variable N = 22.

Offset added/subtracted by printer to the value of N = 0.

Add/subtract offset = "a" or "s" (since the value is 0).

Increment for N as a fraction of an inch = $1/1$ (since N represents inches).

Important: If the control sequence cannot be reduced to a single variable control, then DisplayWrite Assistant cannot support this function on your printer.

Valid Control Sequence Characters

When you create or edit Printer Description Tables, you enter new control sequences in hexadecimal for each of the parameters controlling printer operations. Following are the valid characters you can type:



- 0 - 9
- a - f
- A - F
- N, a variable place holder

Using the Printer Description Utility

This section describes how to load the Printer Description Utility program and how to use the five options on its Main Menu.

Loading

The following steps describe how to load the Printer Description Utility program:

1. If you have installed DisplayWrite Assistant on a fixed disk or a 1.2MB diskette, go to the next step. If you are using a two diskette drive system, insert DisplayWrite Assistant Diskette 1 in drive A and Diskette 2 in drive B.
2. At the DOS prompt (A > or C >), type **dwap** and press . The Printer Description Utility logo is displayed.
3. Press  again, and the Printer Description Utility loads. Then, the Printer Description Utility Main Menu is displayed.

Printer Description Utility Main Menu

The Printer Description Utility Main Menu has four options that operate the same way as the DisplayWrite Assistant Main Menu:

- **Edit.** See “Edit Printer Description Table,” below.
- **Get.** See “Get” on page B-12.
- **Save.** See “Save” on page B-13.
- **Clear.** See “Edit Printer Description Table,” below.

The fifth option, Function Selection Tests, allows you to run all of the printer tests or four partial tests. Also, whenever **F5=Print Test** is displayed on the key flags line, you can press F5 to perform a test of the control sequences you just entered.

Edit Printer Description Table

When you choose **Edit** or **Clear** at the Printer Description Utility Main Menu, the Edit Printer Description Table menu is displayed with the following options:

- Initialization and Reset
- Vertical/Horizontal spacing
- Highlighting
- Superscripts/Subscripts
- Paper handling
- Character sets
- Color selection (ribbon)

The following sections describe these options.

Initialization and Reset

These are the control sequences for initializing the printer at the start of a document and for resetting the printer at the end of the document.

Vertical/Horizontal Spacing

This option allows you to set the following control sequence options:

- Lines per inch
 - Set 6 lines per inch
 - Set 8 lines per inch
- Vertical line spacing (sets variable line spacing, not vertical tabs)
- Pitches
 - Set 5 pitch
 - Set 8.55 pitch
 - Set 10 pitch (pica)
 - Set 12 pitch (elite)
 - Set 15 pitch
 - Set 17.1 pitch
- Horizontal motion index (sets characters per inch, not horizontal tabs).

Highlighting

This option allows you to set control sequences for the following print operations:

- Begin bold
- End bold
- Begin underline
- End underline
- Begin double strike
- End double strike

Superscripts/Subscripts

This option allows you to set control sequences for the following print operations:

- Begin superscript
- End superscript
- Begin subscript
- End subscript
- Forward 1/2 index

Paper Handling

This option allows you to choose among the following:

- Paper handling — the control sequences for paper selection and feeding:
 - Bottom tray select and feed
 - Top tray select and feed
 - Envelope hopper select and feed
 - Eject feed — no paper feed
 - Accept manual paper insertion
- Paper positioning — the location of the first print position with three types of paper feed:
 - For continuous forms, first print position
 - For manual feed, first print position
 - For automatic feed, first print position
- Page length (inches) — the control sequences for determining paper length in inches from the first print position.
- Page length (lines) — the control sequences for determining paper length in lines from the first print position.

Character sets

The Character sets in the Printer Description Utility define the character mappings for your printer. The character set provided by the Printer Description Utility is the IBM Graphics Printer Character Set 2 (See the section on IBM Printers in the Hardware section of the Technical Reference for your PC).

Compare this character set to the character set supported by your printer. If the hexadecimal values of the print characters for your printer do not match the values defined in the character set, you can remap the characters to the values supported by your printer to achieve the desired character set support for your printer.

Color Selection

Color selection allows you to set the control sequences to change the following colors on a ribbon:

- Black
- Red
- Green
- Yellow
- Blue
- Magenta
- Cyan

Get

When you choose the **Get** option, the Get Table panel is displayed. It has one field, Table Name. Table Name allows you to specify a Printer Description Table file you want to edit.

Save

When you choose the **Save** option, the Save Table panel is displayed. It has one field, Table Name. Table Name allows you to specify the name of the file you want to save.

If a file of the same Table Name already exists, a panel is displayed, giving you the option of saving the file by overwriting the existing file, or canceling the Save. Type **y** if you want to save and overwrite or type **n** if you do not want to save and overwrite.

Important: Your newly created Printer Description Table must be saved as PRINT016.PDT to be recognized by the DisplayWrite Assistant program. You must also select **Other** as the printer type in the Quick Menu/Setup procedure.

Function Selection Tests

The Function Selection Tests option allows you to run all the printer tests or four partial tests. Also, whenever **F5=Print Test** is displayed on the key flags line, you can press F5 to perform a test of the control sequences you just entered.

Important: After you make any changes to your Printer Description Table, run the Function Selection Tests again.

The Function Selection Tests menu has the following options:



- Run all printer tests
- Superscript/Subscript
- Underline
- Bold
- Form feed (continuous paper only)

Configuring for the New Printer

To create a Printer Description Table for an unsupported printer, follow these steps **before** you run Quick Menu/Setup:

1. If using a fixed disk system, make sure the default directory is the directory where DisplayWrite Assistant is installed.

If using a two diskette drive system, insert DisplayWrite Assistant Diskette 1 in drive A and Diskette 2 in drive B.

2. At the DOS prompt (A > or C >), type **dwap** and press  . The Printer Description Utility logo is displayed.
3. Press  again, and the Printer Description Utility loads. Then, the Printer Description Utility Main Menu is displayed.
4. Create a Printer Description Table for your printer, as described in "Using the Printer Description Utility" on page B-8.
5. Save the new Printer Description Table as "PRINT016.PDT" in the directory where DisplayWrite Assistant is installed or on DisplayWrite Assistant Diskette 2.
6. When you run the Quick Menu/Setup program, specify your printer as **Other**.

Special Considerations

Printer attached to an IBM System/36 or IBM System/38

If your printer is attached to an IBM System/36 or IBM System/38, you need to modify the Printer Description Table for your printer. This may also involve modifying a system printer table. If you modify a system printer table, make sure you keep a copy of the original table. For example, if you have an IBM Graphics Printer attached to the IBM System/36 or IBM System/38, make a backup of PRINT006.PDT before modifying it.

Modify the Printer Description Table as follows:

1. If using a fixed disk system, make sure the default directory is the directory where DisplayWrite Assistant is installed.

If using a two diskette drive system, insert DisplayWrite Assistant Diskette 1 in drive A and Diskette 2 in drive B.

2. At the DOS prompt (A > or C >), type **dwap** and press **←**. The Printer Description Utility logo is displayed.
3. Press **←** again, and the Printer Description Utility loads. Then, the Printer Description Utility Main Menu is displayed.
4. Get the table for your printer.
5. Modify the Initialization and reset sequences as follows:
 - a. Initialization sequence: If a "1B 70" escape sequence is ignored by your printer and you will not be printing graphs, add "1B 70" at the beginning of the control sequence.
 - b. Reset sequence: Add "1B 6F" at the end of the control sequence.
6. Save the new Printer Description Table as the previous table's file name.

PC Support/36 or PC Support/38 Virtual Printer Facility

If the Virtual Printer Facility is used, you should **specify Time-Out value of 0**. To do this, consult the VIRTUAL PRINTER section of the *PC Support User's Guide*.

IBM Pageprinter 3812

If you plan to print to an IBM Pageprinter 3812, first follow these steps:

1. If using a fixed disk system, make sure the default directory is the directory where DisplayWrite Assistant is installed.

If using a two diskette drive system, insert DisplayWrite Assistant Diskette 2 in your default drive.

2. At the DOS prompt, copy **PRINTPP.PDT** to **PRINT016.PDT**.
3. When you run the Quick Menu/Setup program, specify your printer as **Other**.

IBM Wheelprinter 5216

If you plan to print to an IBM Wheelprinter 5216, first follow these steps:

1. If using a fixed disk system, make sure the default directory is the directory where DisplayWrite Assistant is installed.

If using a two diskette drive system, insert DisplayWrite Assistant Diskette 2 in your default drive.

2. At the DOS prompt, copy **PRINTWP.PDT** to **PRINT016.PDT**.
3. When you run the Quick Menu/Setup program, specify your printer as **Other**.

Appendix C. Tutorial

This appendix has two exercises:

- Creating and saving a document.
- Getting, editing, and printing a document.

These exercises have step-by-step instructions for creating and saving a sample document and getting a sample document from diskette and editing and printing it. A brief overview on the IBM DisplayWrite Assistant program is also included.

Overview

If you are new to the use of a word processor, there are certain functions that you should understand before creating a DisplayWrite Assistant document.

Starting DisplayWrite Assistant

Before you can begin this tutorial, you must start the DisplayWrite Assistant program. This information is contained in “Chapter 2. Getting Started.” If you have not started your program, go now to Chapter 2 and return to this tutorial when your screen is displaying the DisplayWrite Assistant Main Menu.

Typing Concepts

To create a new document with DisplayWrite Assistant, you choose the **Clear** option from the Main Menu. This produces a screen that resembles a piece of paper. You enter the text in this screen, known as the *typing frame*.

When you type a document with DisplayWrite Assistant, you don't need to press ←↵ when you near the right margin; DisplayWrite Assistant inserts the *carrier returns* automatically. This is known as **Auto Adjusting**. However, if you wish to end a short line and move to the beginning of a new line, or if you want a blank line between paragraphs, you then press ←↵ .

DisplayWrite Assistant also automatically scrolls down the screen and from page to page as you type. As you fill one page with text, the next page scrolls into view. You can tell which line and which page the cursor is on by the **line and page number indicator**, in the bottom right side of your typing frame. This indicator is on what is known as the **status line**. Other information is on this line, as well as on the line below it, called the **key flags line**. This line describes the function of certain keys while you are in the typing frame.

Saving and Printing a Document

After you have created a document, it resides only in the **working copy**, a temporary space in your computer's memory that stores the contents of the typing frame. In order to keep that information so that you can retrieve it later or print it, you must save the document to disk.

Go now to the two exercises in this tutorial.

Exercise 1 — Using Clear to Create a New Document

The following steps use the sample letter on page C-4. If you are using diskettes, you should have ready a blank, formatted diskette. You will use this diskette later to save the sample document you will create. If you do not know how to format diskettes, see your IBM DOS book for more information. Fixed disk and 1.2MB disk users should set up the disks as their default drive and path.

Creating the Document

When the Main Menu is displayed, use the following steps to create a sample document:

1. Select the Clear option on the Main Menu. You can do this by pressing \uparrow or \downarrow until that option is highlighted and then pressing \leftarrow , or you can press C or 6.

The typing frame is displayed. This is where you will type the sample document.

2. Type the document on the next page.

Important: Remember, you need not press \leftarrow when you near the right margin; let DisplayWrite Assistant insert carrier returns for you. When you finish a short line, such as the address in this letter, then press \leftarrow . A Required Carrier Return is inserted and the cursor moves to the next line. When you need to skip a line, press \leftarrow twice. Use Tab to align the columns of dates and events.

April 10, 1988

Mr. and Mrs. David E. Garnet
11659 Linn Dr.
Columbus, OH 43000

Dear Mr. and Mrs. Garnet,

We are pleased to tell you that you are now members of the "Friends of Ohio" social club. For the year of 1988, you are entitled to all the amenities associated with this organization.

You will soon be receiving a pamphlet describing the many events we hold annually. Unfortunately, this pamphlet will not arrive in time for you to plan for our April events. Therefore, please use the following list to plan for this month's events:

April 14, 1988	Columbus Zoo picnic day
April 21, 1988	Anniversary party for founders, George and Marilyn
April 25, 1988	Amish country day - Kidron, OH
April 29, 1988	Roscoe Village trip

Please contact our secretary, Genevieve Martin, for further information about these April events. We hope to see you at each and every one!

Sincerely,

3. When you have finished typing the letter, press **Alt+9** to go to the top of the document.
4. When you are at the top of the document, check your spelling by pressing **F10**. The Spelling Menu is displayed.
5. Press **1**, and the Check Spelling Menu is displayed.
6. Press **3**, and the Spelling program checks the spelling of your document.
7. Follow the prompts. Use the **Skip word** option to skip the proper nouns in the document.

The message **Spelling Check is complete** is displayed when you are finished.

8. Press **Esc**.


Now, you are ready to save your document in a file. Go to the next section to learn how to perform a Quick Save.

Saving the Document


After you create a new document, you need to save it. The exercise below tells you how to use Quick Save while you are in the typing frame.

If you are saving to diskette, be sure you have your blank, formatted diskette in the drive you are not operating DisplayWrite Assistant from:


1. While the document you typed is displayed, press F2. The Quick Save panel is displayed.
2. If you are saving to fixed disk, type **C:\assist2\mydoc.tx**.

Then, press  . When the save is complete, the message **“MYDOC.TX” has been saved.** is displayed.

3. If you are saving to 1.2MB disk, type **A:\assist2\mydoc.tx**.

Then, press  . When the save is complete, the message **“MYDOC.TX” has been saved.** is displayed.

4. If you are saving to diskette, type **B:mydoc.tx**.

Then, press  . When the save is complete, the message **“MYDOC.TX” has been saved.** is displayed.

Escaping the Working Copy

When the save is complete, you need to return to the Main Menu. Press Esc, and the message no longer is displayed.

Press Esc again. The Main Menu is displayed.

Exercise 2 — Getting, Editing, and Printing

The following steps use the sample file, **SAMPLE.TX**, from the DisplayWrite Assistant. If you're using a fixed disk or 1.2MB disk, this file will be in the `\ASSIST2` subdirectory. If you're using diskettes, you must specify the drive, path and file name in the steps below.

Getting the Document

1. At the Main Menu, select the Get option by using one of the following:

- Press **↑** or **↓** to highlight **Get**, and then press **←** .
- Press **G**.
- Press **4**.

The Get File panel is displayed.

2. If you are using a fixed disk or 1.2MB disk, type the default drive and path and the file name, **SAMPLE.TX**.

If you are using a 2-diskette system, make sure the DisplayWrite Assistant Diskette 1 is in drive B and type **B:SAMPLE.TX**

3. Press **←** . The Typing Frame is displayed, containing the document **SAMPLE.TX**. The file name, **SAMPLE.TX**, is displayed on the status line at the bottom of the typing frame.

You are now ready to edit the document.

Editing the Document

In this part of the exercise, you will edit several parts of the SAMPLE.TXT file. The steps below describe how to revise the document on your screen.

1. The first line (line 7) has a date on it, but the year should be 1988. Press → to move the cursor under the seven.
2. Type the eight (8), and it replaces the seven.
3. Press Home, and the cursor moves to the first space of the line.
4. Press ↓ to move to line 11. You want to change “Mr.” to “Dr.” Replace the M for D as you did in the steps above.
5. Change the Mr. to Dr. in line 15 also.
6. Press PgDn. The typing frame now displays the columns in the letter.
7. Press ↓ to move to line 29. (Note the tab control character, → .)
8. Press Del to move the line one tab to the left.
9. Press ↓ to move to the other column lines and move them one tab to the left in the same way.
10. Press ↓ to move to line 34.
11. Press Ctrl+ → to move the cursor word by word to “New England.”
12. Press Ins. You are now in Insert mode, as the status line indicates. Making changes in Insert mode keeps you from losing information.

13. Delete “New England” and type “Maine” in its place.

When deleting New England, the following message may display if you press Del too many times: **Press Enter to delete this code.** You do not need to remove this code, so do not press ← . Simply press Esc to get rid of the message.

You have completed this editing exercise.


Printing the Document

Now, you need to print the document you just edited. The steps below tell you how to do this.

1. Your document, SAMPLE.TXT, should still be displayed in the typing frame.
2. Press Esc to return to the Main Menu.
3. When the Main Menu is displayed, select the Print option by using one of the following methods:
 - Press ↑ or ↓ to highlight **Print** and then press ← .
 - Press **P**.
 - Press **3**.

The Print Options menu is displayed.

4. Press Tab until the cursor is under the one (1) in **Number of Copies**.
5. Type **2**. Be sure your printer is powered on and online before going on to the next step.

6. Press  . A panel is displayed, telling you SAMPLE.TXT is being printed.

Then another panel is displayed, telling you the print is complete.

7. Press Esc to remove the panel.

You should receive two copies of the document SAMPLE.TXT.

Returning to DOS

You have completed the exercises in this appendix. Now, to return to DOS, press Esc. When prompted, type y to leave the DisplayWrite Assistant program.

Press y to avoid saving the edited document so others can use the tutorial exercise.

Index

A

- adjust line endings 5-4
- adjusting
 - entire documents 3-31
 - page 3-34
 - part of a document 3-32
- aligning options
 - center 3-9
 - left 3-9
 - right 3-9
- art files 6-1, 6-5
- ASCII files 1-5, 4-1 - 4-3, 6-3, 6-4
- auto adjust 3-4, 3-31, 5-15
- auto adjust defaults 5-15
- auto adjust on/off 3-31

B

- Backup Install program 2-1
- backup, data diskettes 2-22
- BATCH files 1-5, 4-3
- begin bold 3-42
- begin underline 3-42
- block edit options
 - delete 3-12
 - move or copy 3-11
 - reuse 3-13
 - save to file 3-12
- block emphasis 3-14
- bold emphasis 3-14, 3-42
- bold on/off 3-42
- bottom page margin 5-6
- boundaries of page 3-3

C

- cancel 3-35, 7-3
- carrier return 3-41
- center align 3-9
- center of page 3-3
- center text 3-43
- changing the default drive
 - directory 8-3
- character sets B-12
- checking synonyms 3-25
- Clear option 2-18, 3-2
- color, choosing B-12
- color emphasis 3-14
- configuring for new printer B-14
- control character indicator 3-3
- control codes,
 - displaying 5-16
- control functions
 - bold on/off 3-42
 - carrier return 3-41
 - center text 3-46
 - deleting 3-20
 - indent 3-46
 - page end 3-47
 - required backspace 3-50
 - required carrier return 3-41
 - required page end 3-48
 - required space 3-49
 - syllable hyphen 3-49
 - tab 3-41
 - underline on/off 3-42
 - 1/2 down 3-44
 - 1/2 up 3-45
- control sequences
 - character sets B-12
 - color selection B-12
 - entering B-5
 - highlighting B-10
 - initialization/reset B-9
 - paper handling B-11
 - superscripts/
 - subscripts B-11
 - valid characters B-8
 - vertical/horizontal spacing B-10
 - with Variable N B-5
- copies, printing more than one 7-2
- copy block 3-11
- copying a file 8-1, 8-4
- correcting errors 3-19
- creating a document 3-2
- current date 5-12
- cursor column position 3-3
- cursor down 3-33
- cursor draw 3-27
- cursor left 3-34
- cursor movement functions
 - cursor down 3-36
 - cursor left 3-36
 - cursor right 3-37
 - cursor up 3-36
 - end of document 3-38
 - end of line 3-37
 - end of page 3-38
 - page down 3-40
 - page left 3-39
 - page right 3-39
 - page up 3-40
 - start of document 3-38
 - start of line 3-37
 - start of page 3-38
 - word advance 3-37
 - word return 3-37
- cursor right 3-37
- cursor up 3-36

D

- data protection
 - guidelines 2-21
- date, printing on
 - documents 5-12
- dBase II™ files 1-5, 6-1, 6-6, 6-7, 6-10
- default data path 2-14
- defaults
 - computer system 2-14
 - directory 8-3
 - drive 8-3
 - line margins 5-13
 - page layout 5-14
 - paper option 5-14
 - personal dictionary 5-17
 - printer 2-14
 - spacing 5-13
- define defaults 5-13
- Define Defaults option 2-18
- delete block 3-12
- delete line 3-22
- delete word 3-21
- deleting control
 - characters 3-20
- deleting single character 3-20
- dictionary, default name 5-17
- DIF™ files 1-5, 6-1, 6-6, 6-7, 6-10
- directory 8-3
- directory, sorting 8-5
- directory, subset 8-5
- disk error for program
 - “@C” A-2
- disk, printing to 7-4
- diskette backup guidelines 2-22
- display control code
 - information 5-16
- DISPLAY.PRO not found A-1

- DisplayWrite Assistant
 - files 3-12, 4-1 – 4-3, 6-3
- DisplayWrite 1 1-4, 4-1
- DisplayWrite 2 1-4
- DisplayWrite 3 1-4
- double strike print option 7-2
- draw lines with cursor 3-29
- Drawing Assistant 1-4, 6-1, 6-5

E

- edit defaults
 - auto adjust 5-15
 - display control code
 - information 5-16
 - hot zone beep 5-15
 - keyboard extension
 - definition 5-18
 - personal dictionary
 - name 5-17
 - retain deleted block 5-17
 - ruler line, top or
 - bottom 5-16
- editing a document 3-5
- editing functions
 - align 3-9
 - auto adjust on/off 3-31
 - block edit 3-10
 - block emphasis 3-14
 - cursor draw 3-29
 - delete line 3-22
 - delete word 3-21
 - error correcting
 - backspace 3-19
 - exit/quit 3-25
 - find 3-18
 - go to page 3-28
 - insert/replace 3-22
 - page adjust 3-34
 - repeat search 3-18

editing functions (*continued*)
 search and replace 3-16
 single character
 delete 3-20
 spelling 3-23
 synonym lister 3-25
emphasis indicator 3-3
end bold 3-42
end of document 3-38
end of line 3-37
end of page 3-38
end underline 3-42
envelopes, printing 5-8, 7-3
equipment needed 2-3
erase lines with cursor 3-29
erasing a file 8-2, 8-4
error correcting
 backspace 3-19
 error loading overlay from
 DISPLAY.EXE A-2
error messages
 disk error for program
 "@C" A-2
 DISPLAY.PRO not
 found A-1
 error loading overlay from
 DISPLAY.EXE A-2
 insufficient memory A-1
 maximum size
 reached 8-3
 printer error A-3
 program "@C" not
 found A-2
 program error A-1
escape 3-35
exit 3-35
exiting from the
 program 2-20

F

field, insert 6-6
Filing Assistant 1-4, 1-5
Filing Assistant files 6-1, 6-6,
 6-7, 6-9
find 3-18
footers 5-10
formatting
 define defaults 5-13
 in the typing frame 5-1
from page print option 7-2
function selection test B-13

G

Get option 2-18, 3-5, 4-1
Get/Insert 4-2
getting files
 at the Main Menu 3-5,
 4-1
 in the typing frame 4-2
go to page 3-28
graph, to merge 6-5
Graphing Assistant 1-4, 6-1,
 6-5

H

- headers 5-10
- Help 2-4
- hexadecimal notation
 - charts B-4
- highlighting B-10
- horizontal spacing B-9
- hot zone beep 5-15
- hyphenation 3-30, 3-49

I

- indent 3-46
- indicators
 - control character 3-3
 - emphasis 3-3
 - line/page number 3-4
 - memory space 3-4
- initialization B-9
- insert field, to merge 6-6
- insert/replace 3-22
- installation disk 2-6
- installing the program
 - on a two diskette drive system 2-8
 - on an installation disk 2-6, 2-7
- Instructions 6-1
- Instructions, to merge
 - graph 6-5
 - insert field 6-6
 - join file 6-3
- insufficient memory A-1

J

- join file, to merge 6-3
- join graph, to merge 6-5
- justify, right 5-4

K

- key flags line 2-18, 3-4
- keyboard extension 5-18

L

- learning DisplayWrite Assistant 2-1
- left align 3-9
- left margin 5-2
- line adjust 3-30
- line endings, adjusting 5-4
- Line Format Change 3-10, 5-1
- line margins defaults 5-13
- line/page number indicator 3-4
- lines per inch print option 7-2

M

- Main Menu 2-18
- Main Menu options
 - Clear 2-18, 3-2
 - Define Defaults 2-18, 5-13
 - Get 2-18, 3-5, 4-1
 - Print 2-18, 7-2
 - Save 2-18, 4-2
 - selecting options 2-20
 - Type or Edit 2-18, 3-5
 - Utilities 2-18
- making backup copies of the program 2-8
- margin settings 3-3
- margin, bottom 5-6
- margin, left 5-2
- margin, right 5-3
- margin, top 5-6
- memory space indicator 3-4
- Menu Maintenance 2-12
- Merge File with
 - Document 6-7, 7-4
- merging files
 - dBase II™ files 6-10
 - DIF™ files 6-10
 - Filing Assistant files 6-9
 - Personal Decision Series text files 1-5, 6-1, 6-6, 6-7, 6-10
 - SYLK™ files 6-10
 - with graph 6-5
 - with insert field 6-6
 - with instruction function 6-3
 - with join file 6-3
 - with Merge File with document 6-7
- messages A-1
- mode command for your printer 2-15
- move block 3-11

N

- number of copies print option 7-2
- numbering pages 5-11

O

- online help 2-4
- options, Main Menu 2-18
- options, print 7-2
- options, selecting 2-20
- other printer, table for B-14
- output, printer or disk 7-3

P

- page adjust 3-34
- page boundaries 3-3
- page down 3-40
- page end 3-47
- Page Format Change 3-10, 5-5
- page layout defaults 5-14
- page layout options 5-5
- page left 3-39
- page length 5-7
- page numbering 5-11
- page right 3-39
- page up 3-40
- pagination 3-34
- paper handling B-11
- paper option defaults 5-14

- paper options 5-5
- paper source 5-8
- Personal Decision Series text files 1-5, 6-1, 6-6, 6-7, 6-10
- personal dictionary
 - changing it 3-26
 - creating it 3-26
 - editing it 3-26
 - erasing it 3-27
- personal dictionary name
 - default 5-17
- picture files 6-1, 6-5
- pitch 5-2
- plain/remove emphasis 3-14, 3-15
- Planning Assistant 1-4
- print envelope print option 7-3
- Print option 2-18, 7-2
- printer description table, new printer B-14
- printer description tables
 - editing B-9
 - listing of B-4
- printer description utility B-1
- printer error A-3
- printer problems 2-15, A-3
- printer, unsupported B-4
- printing
 - canceling 7-4
 - envelopes 5-8, 7-3
 - from the Main Menu 7-2
 - in the typing frame 7-4
 - options 7-2
 - double strike 7-2
 - from page 7-2
 - lines per inch 7-2
 - merge file with
 - document 7-3
 - number of copies 7-2
 - output to printer or disk 7-3
 - print envelope 7-3
 - through page 7-2
 - to disk 7-3

- program “@C” not found A-2
- program error A-1
- programs needed to use DisplayWrite Assistant 2-3
- Project Assistant 1-4
- protecting data 2-21

Q

- Quick Menu/Setup program 2-2, 2-10
- Quick Save 4-4
- quit 3-35
- quitting the program 2-20

R

- removing the program from a fixed disk 2-9
- renaming a file 8-2, 8-4
- repeat search 3-18
- replace/insert 3-22
- replacing text 3-16
- Reporting Assistant 1-4
- required backspace 3-50
- required carrier return 3-41
- required page end 3-48
- required space 3-49
- reset B-9
- retain deleted block
 - default 5-17
- reuse block 3-13
- Revisable Form Text (RFT) files 1-4, 4-1, 4-3, 6-1

- right align 3-9
- right justify 5-4
- right margin 5-3
- ruler line
 - center of page 3-3
 - cursor column
 - position 3-3
 - margin settings 3-3
 - page boundaries 3-3
 - tab settings 3-3
- ruler line, choosing
 - location 5-16

S

- save block to file 3-12
- Save function 4-2
- Save option 2-18
- saving files
 - at the Main Menu 4-3
 - in the typing frame 4-4
 - Quick Save 4-4
- search and replace 3-16
- selecting options 2-20
- setting up your program 2-14
- Setup Menu 2-16
- single character delete 3-20
- sorting the directory 8-5
- spacing defaults 5-13
- special character
 - definitions 5-18
- spelling 3-23
- start of document 3-38
- start of line 3-37
- start of page 3-38

- starting DisplayWrite Assistant
 - from DOS 2-17
 - from the Programs Menu 2-17
- status line
 - control character indicator 3-3
 - emphasis indicator 3-3
 - file name 3-3
 - insert/replace 3-3
 - line/page number indicator 3-4
 - memory space indicator 3-4
 - subscript text 3-44
 - superscript text 3-45
 - SYLK™ files 1-5, 6-1, 6-6, 6-7, 6-10
 - syllable hyphen 3-49
 - synonym lister 3-25
 - synonyms 3-23

T

- tab 3-41
- tab settings 3-3, 5-9
- through page print
 - option 7-2
- top page margin 5-6
- Type or Edit option 2-18, 3-5
- typing frame 3-2

U

- underline emphasis 3-14, 3-42
- underline on/off 3-42
- using Assistant Series
 - programs together
 - Drawing Assistant 1-4
 - Filing Assistant 1-4
 - Graphing Assistant 1-4
 - Planning Assistant 1-4
 - Project Assistant 1-4
 - Reporting Assistant 1-4
 - Writing Assistant 1-4
- using Backup/Install 2-4
- using DisplayWrite Assistant
 - with other programs
 - BATCH files 1-5
 - dBase II™ files 1-5
 - DIF™ files 1-5
 - Filing Assistant 1-5
 - Personal Decision Series 1-5
 - SYLK™ files 1-5, 6-6, 6-7
- using DisplayWrite programs together
 - DisplayWrite 1 1-4, 4-1
 - DisplayWrite 2 1-4
 - DisplayWrite 3 1-4
- utilities
 - copy 8-1
 - default drive/
 - directory 8-3
 - erase 8-2
 - rename 8-2
- Utilities option 2-18

V

- Variable N B-5
- vertical line spacing B-9

W

- word advance 3-37
- word return 3-38
- working copy
 - key flags line 3-4
 - ruler line 3-3
 - status line 3-3
- Writing Assistant 1-4
- Writing Assistant files 4-1, 6-1

Numerics

- 1/2 down 3-44
- 1/2 up 3-45

Notes:

Notes:

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International Business
Machines Corporation
P.O. Box 1328-W
Boca Raton, Florida 33429-1328

Printed in the
United States of America

59X9851

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