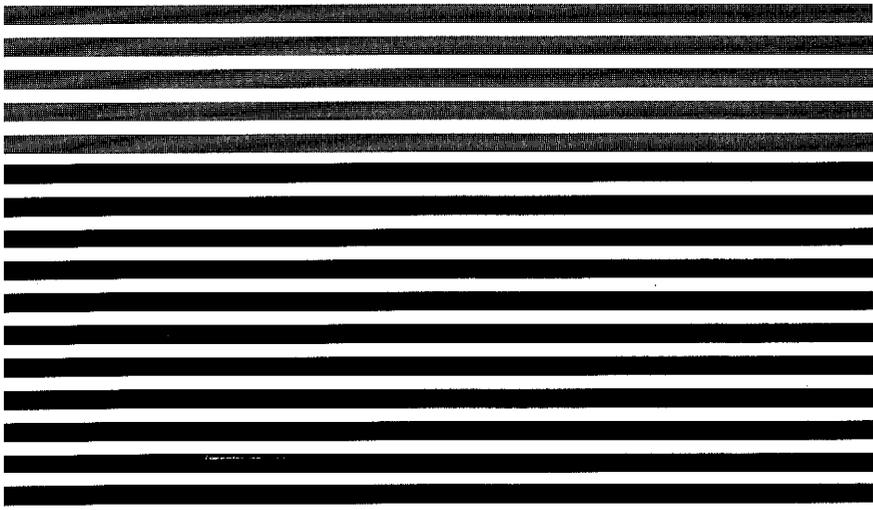


brother®

WORD PROCESSOR

WP-330MDS



Owner's Manual

US ENGLISH

Please read this manual carefully and keep it in a safe place for future reference. We recommend that you write the unit's model number and serial number in the blank space below. These numbers can be found on the rear panel of the word processor.

MODEL NO.:	SERIAL NO.:
------------	-------------

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FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment has been certified to comply with FCC standards, which are applied to the U.S.A. only. A shielded interface cable should be used according to FCC 15.27 (a). Changes or modifications not expressly approved by Brother International Corp. could void the user's authority to operate the equipment.

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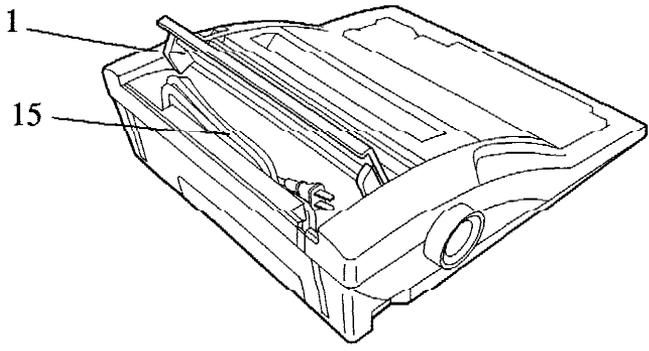
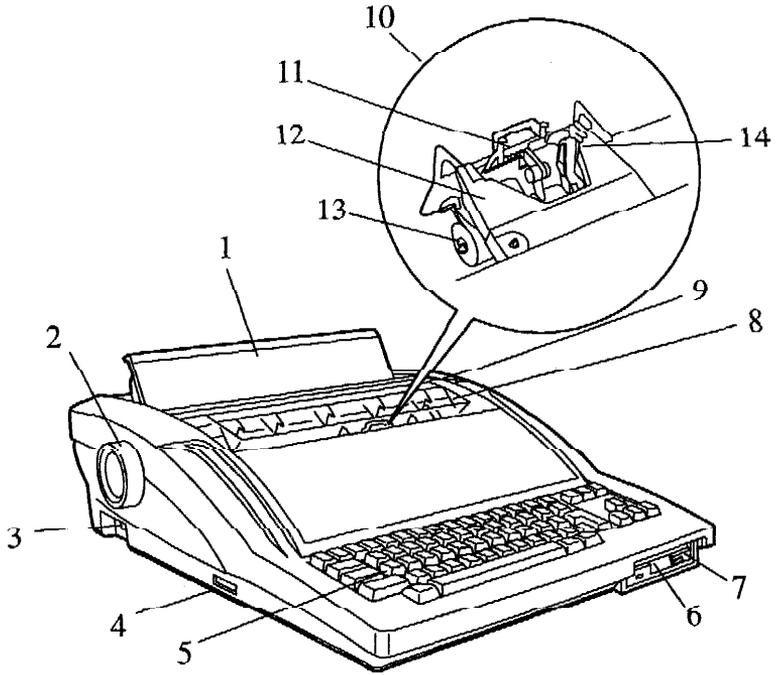
Getting Started

How to Use this Manual

You may use this manual as a reference guide or follow the step-by-step instructions to learn the processes. The last section, "Appendix", provides a quick reference guide for later reference, a glossary, and an alphabetic index.

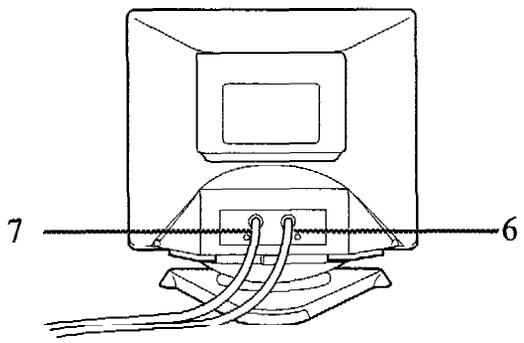
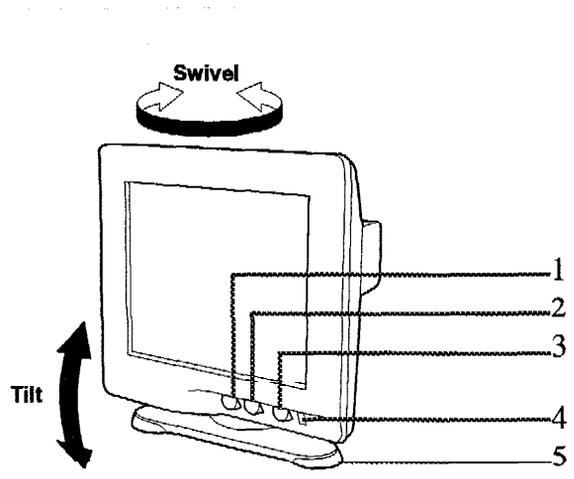
Part Names

Word Processor



- | | |
|-----------------------------------|--|
| 1 Paper Support | Supports paper for insertion / power cord compartment cover. |
| 2 Platen Knob | Feeds paper manually. |
| 3 Power Switch | Turns the word processor ON and OFF. |
| 4 Display Output Connector | Connect the signal cable attached to the display to this output connector. |
| 5 Keyboard | Character and function keys. |
| 6 Disk Drive | Data or program diskettes are inserted here. |
| 7 Disk Eject Button | Press this button to release an inserted diskette. |
| 8 Acoustic Cover | Suppresses printing sounds and protects the printing carriage. |
| 9 Paper Release Lever | Unlocks the platen for paper positioning. |
| 10 Carriage | Printing unit. |
| 11 Cassette Daisy Wheel | Can be changed when a different style of print is desired. |
| 12 Cassette Ribbon | Transfers the characters to the paper. |
| 13 Correction Tape | Used to erase characters. |
| 14 Daisy Wheel Lock Lever | Releases the cassette daisy wheel when pulled towards you. |
| 15 Power Cord Compartment | Holds the power cord when transporting the word processor. |

CRT Display



- 1 **Contrast Control** Turn this knob clockwise to increase the contrast, and counterclockwise to decrease it.
- 2 **Brightness Control** Turn this knob clockwise to increase the display brightness, and counterclockwise to decrease it.
- 3 **Power Switch** Turns the display ON and OFF.
- 4 **Power Indicator** Illuminates when the power is on.
- 5 **Stand** The stand allows the unit to be rotated 90° horizontally, and 17° vertically.
- 6 **Signal Cable** Connect this cable to the output connector on the word processor.
- 7 **Power Cord** Plug this cord into an AC outlet after the signal cable is connected.

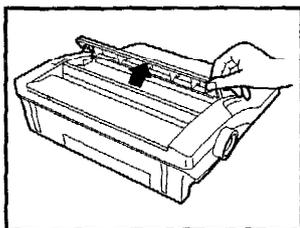
Setting Up

Removing the Packing Pieces

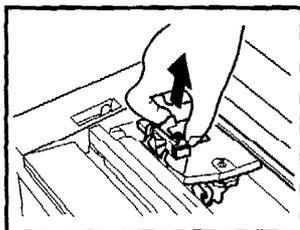
Before you plug in the word processor, open the acoustic cover and remove the yellow plastic pieces shown in the illustrations.

NOTES:

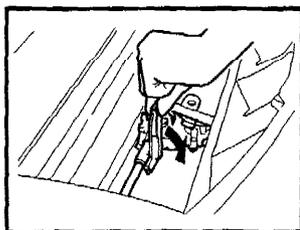
- If the plastic pieces are not removed, damage to the word processor may occur when the power is turned on.
- The yellow plastic pieces do not need to be re-installed unless you are transporting the word processor over a great distance.



Lift the acoustic cover.



Remove the yellow plastic pieces.



NOTE:

Be sure to reinstall the acoustic cover. The acoustic cover is equipped with a safety switch. Your word processor will not operate unless the acoustic cover is securely closed.

Installing the CRT Stand

Make sure that the CRT monitor is **not** connected to the AC outlet. Carefully set the monitor face-down with the underside facing you.

NOTE:

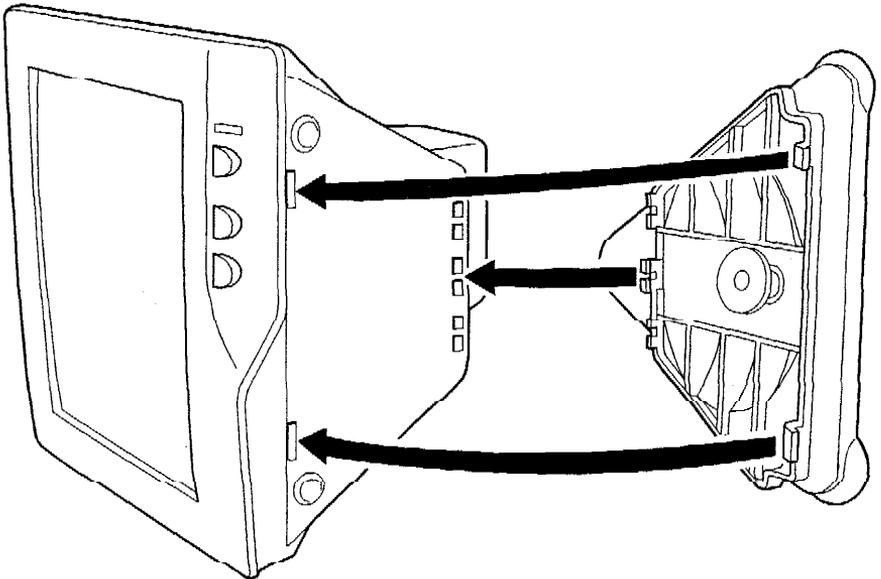
The CRT stand is of the tilt/swivel type. Once the stand is installed, you can turn the monitor laterally and vertically.

Installation

WARNING:

Please follow the steps below exactly. The base of the monitor can be easily damaged if these directions are not followed.

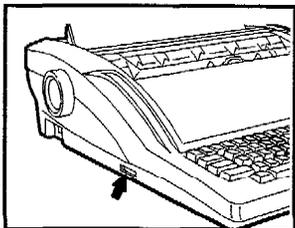
1. Align the hooks on the stand with the matching slots in the base of the monitor.
2. Insert the hooks into the slots.
3. Slide the stand toward the front of the monitor until the latch clicks into the locked position.



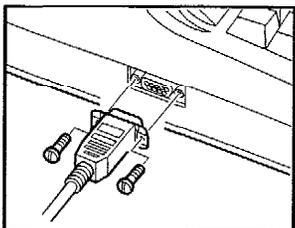
Connections

NOTES:

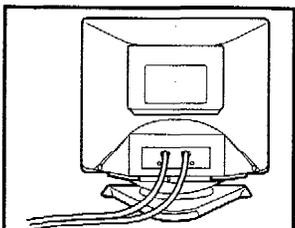
- *Please be sure both yellow plastic pieces have been removed from the unit before the power is turned on.*
- *Always be sure to connect the display to the word processor before plugging the word processor or display into an AC outlet.*
- *It is a good idea to disconnect both AC plugs when the word processor is not be used for a long period. **Always disconnect the power cords during thunderstorms.***



Connect the signal cable attached to the display to the word processor output connector located at the left side of the word processor.



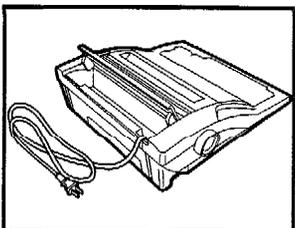
Make sure that the connector is pushed all the way in, and tighten the screws.



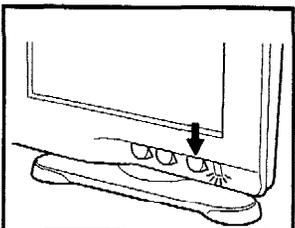
Plug the power cord of the monitor to an AC outlet.

NOTE:

Since the magnetic field of the display can cause disk drive malfunction, do not place the CRT display too close to the word processor.



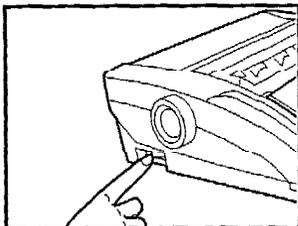
Open the power compartment cover of the word processor and plug the cord into an AC outlet.



Press the power switch of the display. The power indicator illuminates.

NOTE:

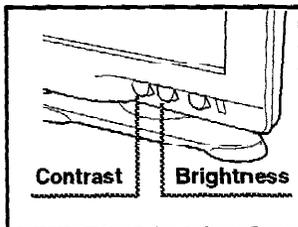
If the power indicator does not illuminate, check the power cord.



Turn on the power switch. The switch is located on the left side toward the rear of the word processor.

NOTE:

If the word processor does not respond, check the power cord and then make sure that the acoustic cover is securely latched.



Adjust the display brightness and contrast with the controls located below the screen.

A good setting of the contrast allows you to clearly distinguish bold characters from normal characters on the screen.

NOTE:

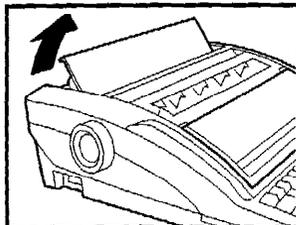
When you switch the word processor off, wait at least 10 seconds before switching it on again. Failure to wait 10 seconds may disrupt the start-up sequence, resulting in faulty operation and possible hardware damage.

Inserting Paper

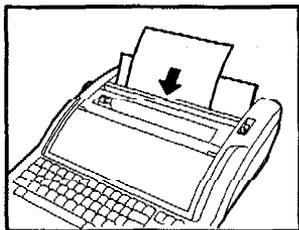
NOTE:

When using the word processor, you do not have to insert paper until you have finished editing your document and are ready to print.

Paper Support



Lift the paper support.



Insert paper as shown.

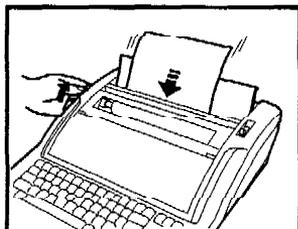
Automatic Insertion



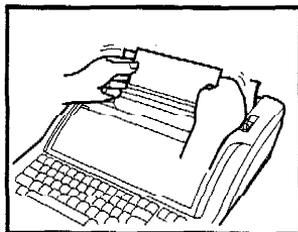
Press **P INS** to automatically advance the paper to the printing position (one inch from the top).

To change that position, use **CODE + P UP** or **CODE + P DOWN**.

Manual Insertion



Rotate the platen knob to advance the paper.



If the paper is not properly aligned, advance the sheet half way, push the paper release lever toward the rear and manually match the corners of the paper. Pull the paper release lever back to its original position and turn the platen knob until the paper is in the desired position.

Precautions

Although this word processor is ruggedly constructed, it should not be exposed to extreme conditions. To ensure many years of reliable operation, please follow these recommendations:

WARNING:

To reduce the risk of electric shocks, do not attempt to disassemble the unit. There is no user-serviceable parts inside. Some components inside the unit use high voltages that can be of sufficient magnitude to constitute a risk of electric shock to persons. Any servicing should be referred to qualified service personnel.

- In case of malfunction, overheating, or other problems, immediately disconnect the AC plug and consult your dealer.
- Do not attempt to disassemble the word processor. It has no user-serviceable parts inside.
- Do not tug on the power cords or on the signal cable. To disconnect, be sure to always grasp the plug itself.
- Avoid dropping the word processor.
- Avoid direct exposure to sunlight and other sources of heat.
- Avoid spills. If any liquid enters the word processor, immediately disconnect the AC plug and consult your dealer.
- Avoid locations subject to excessive moisture or dust.
- Do not use sprays in the vicinity of the word processor. Aerosols are extremely harmful to the disk drive.
- Disconnect the AC plugs during thunderstorms.
- Do not place heavy objects on the keyboard.
- Always keep the air vents free from obstruction to avoid overheating the word processor.
- Clean with a soft, dry cloth only. Avoid using chemicals, solvents and detergents.
- To avoid interference, do not place the word processor too close to a radio receiver or television. If the word processor is too close to a television set, the disk drive may not work properly. For the same reason, do not place the CRT display too close to the word processor.
- If you switch the word processor off, wait at least 10 seconds before switching it on again. Failure to wait 10 seconds may disrupt the start-up sequence, resulting in faulty operation and possible hardware damage.

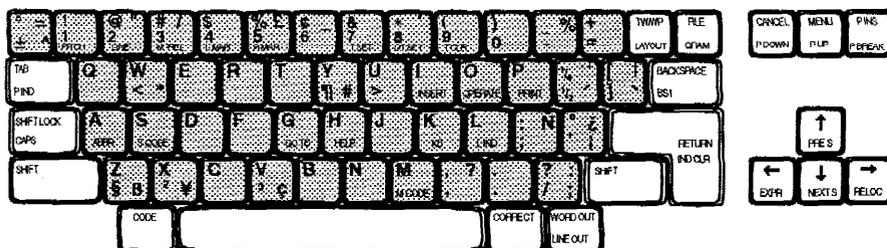
Keyboard Layout

This word processor has more keys than a common typewriter. In order to get a clear understanding of the keyboard, we will distinguish three classes of keys as described below. Most keys are auto-repeat; if you hold down the key, it repeats until you release the key.

In this Owner's Manual, **CODE + a second key** indicates that the **CODE** key must be held down while the second key is pressed.

The Character Keys

The character keys are used to type the actual text. They are very similar to the character keys of a common typewriter except that this word processor accepts different daisy wheels, and therefore makes available a greater number of characters.



NOTES:

- The characters available when the keyboard is set to I (standard) appear on the left of the key tops.
- The characters available when the keyboard is set to II (international) appear on the right of the key tops.
- The characters available when the keyboard is set to III (symbol) are not shown on the key tops.

The Keyboard Control Keys

The keyboard control keys are used to modify the effect of the other keys. Pressing **SHIFT** or **CODE** alone will not produce any effect. To modify the effect of another key, you must hold down **SHIFT** or **CODE** while pressing the key to be modified.

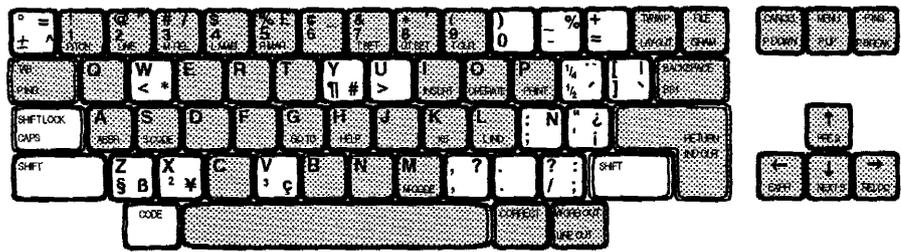
In this Manual, such a double keystroke will be symbolized by the “+” sign.



Key	Function
SHIFT + character key	Used to type an uppercase character.
CODE + another key	Used to type the character indicated in green on the key top, or to activate a function (see "Function Keys" below).
CAPS	Locks the keyboard in uppercase mode.
CODE + CAPS	Locks the keyboard in uppercase mode for letters, numbers remain the same.

The Function Keys

Many functions can be activated with **CODE + another key**. In contrast to the character keys, their effect does not depend on which daisy wheel is installed. The function keys that apply to all applications are indicated by green labeling. Other function keys are available. For more details, see "Function Keys" on page 266.



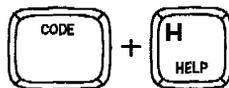
The Function Menu Key



For easy operation, most of the functions of this word processor are activated by selection from a menu.

Once you get acquainted with the word processor, however, you might find that selection from a menu is time consuming. For faster operation, many functions of the menus can also be activated by "short-cut" keys. A complete list of the function menus and available short-cut keys is given in the Appendix of this Manual.

On-Screen Help Information



Since this product is designed to last for many years, you may need to review the meaning of a function you have not used in a while. Press **CODE + H (HELP)**. Short definitions of the functions will appear on the screen. The different keys that you may use for scanning the information and to return to your work are also indicated on the screen.

NOTE:

Since the details of operation are not provided, the help information is not a replacement for careful reading of this Manual.

Diskettes

This word processor accepts only the following types of 3.5-inch diskettes:

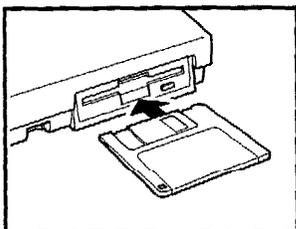
MF-2DD (Double Sided/Double Density/Double Track)

MF-2HD (Double Sided/High Density/Double Track)

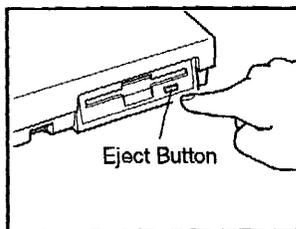
NOTE:

Your word processor recognizes both the "2DD" and "2HD" type diskettes. It will format the "2DD" diskettes to a DOS 720KB format and the "2HD" diskettes to a DOS 1.44 MB format. It is recommended that you use Brother brand diskettes.

Inserting and Removing a Diskette



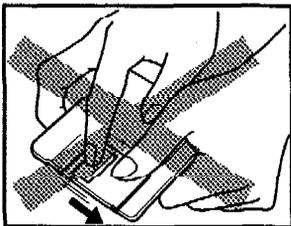
Insert the diskette as shown in the illustration. To remove the diskette, press the eject button.



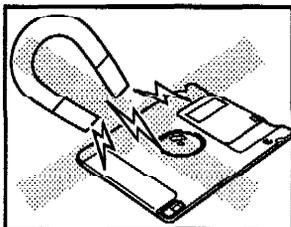
CAUTION – The diskette may be inserted and removed when the power is either on or off. It may also be left in the drive while transporting the word processor. **However, you should never insert or remove it while a message indicates that a diskette operation is in progress.**

Caring for Your Diskettes

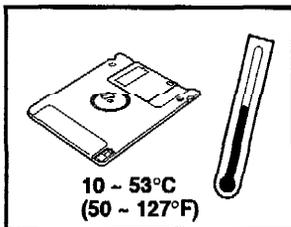
The sensitive material where the data is actually stored is very similar to the magnetic material used to make common cassette tapes. When a tape is damaged, this results in terrible background noises, but you can still hear some music. The slightest damage, such as a scratch, or a small amount of dust on the sensitive material, however, can easily spoil an entire file and make it unusable. The protective case of the 3.5-inch diskettes protects the sensitive disk surface. (The metallic shutter automatically opens and exposes this sensitive surface only when the diskette is inserted into the drive.) Additional precautions must be taken in order to ensure reliable maintenance of your files.



Never open the shutter of the diskette and never touch the surface directly.

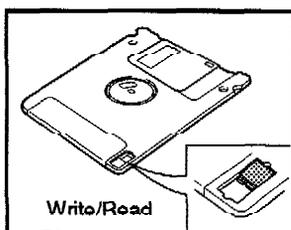


Do not use magnetic materials near the diskette.

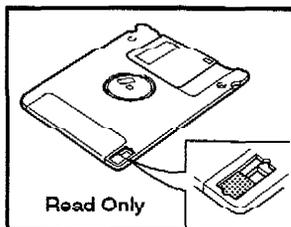


Never expose the diskette to extremely high or low temperatures.

Write-Protecting Your Diskettes



All 3.5-inch diskettes have a switch that protects their contents from accidental erasure. When the switch is in its READ ONLY position, you cannot erase old information or store new information on the diskette. Put the switch in the READ ONLY position to protect a diskette containing valuable information.



Initializing New Diskettes

A diskette can be used by a system only after being "formatted" – that is, initialized by the system for specific use by that system. One frequently used analogy is that the magnetic coating on the diskette is like a blank sheet of paper. Although you can write anything anywhere on the blank sheet, things are much more organized if you add ruled lines. The initializing program creates the electronic equivalent of ruled lines on the diskette. Different systems use different formats. Standards exist, but, in general, systems cannot share diskettes without special conversion of hardware or software.

This word processor can read and write diskettes formatted on a personal computer in the DOS 720 kilobyte and 1.44 megabyte formats. The word processor recognizes which type of diskette is inserted and formats the new diskette in the DOS 720 kilobyte or 1.44 megabyte format. The word processor does not read high density diskettes (1.44mb) formatted double density (720kb). The word processor can only read and write in the root directory. For that reason, personal computer files that you save on a diskette for further use with this word processor should always be saved in the root directory of the diskette.

When a diskette is accessed, the word processor checks the format of the diskette. If the diskette is unformatted or has a different format, the following prompt appears:

Initialize? Press RETURN (yes) or CANCEL (no).

WARNING:

Initializing a diskette erases any data that might be on it. If you initialize a diskette from a personal computer, for example, the files will be completely destroyed. Press CANCEL, if you do not wish to initialize, and insert another diskette.

If the diskette is new or contains unimportant data, press **RETURN** to format the diskette. The word processor asks for confirmation:

Delete all files on this disk? Press Y (yes) or N (no).

Press **Y** to format the diskette, or press **N** and insert another diskette.

Select the format type. Press **1** for Double density or **2** for High density.

Initializing disk... please wait.

NOTE:

This word processor can recognize and read data from diskettes that have been used with some other Brother Word Processors. For more details, please contact your dealer.

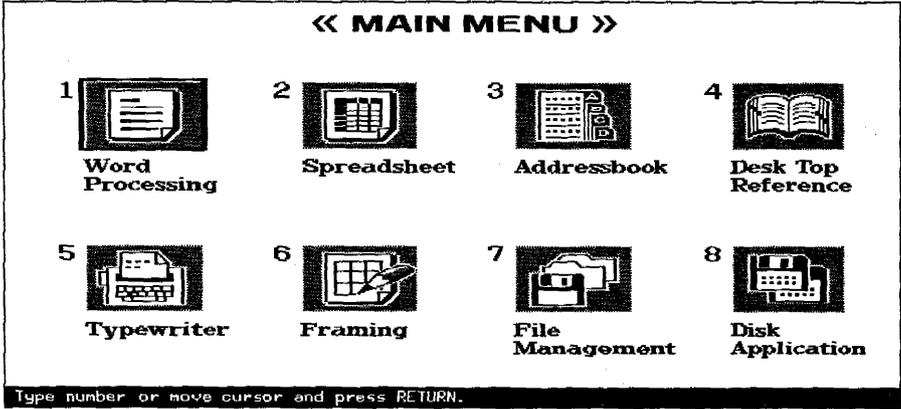
Backing up a Diskette

The best insurance against losing important data is to make backups (duplicate copies) of each important file. With this word processor, you can copy individual files of your choice to another diskette, or copy the entire contents of a diskette to another diskette.

Operation Overview

The Main Menu

When you switch the word processor on, the Main menu appears:



The Main Menu displays the list of the available applications in the form of icons. To start working with an application, use the cursor keys to select an icon, and press **RETURN**. You can also press the number key indicated on the upper left side of each icon (1 for Word processing, etc.).

The following applications are available:

Word Processing The Word Processing application (WP application) is used to type and format documents on screen. You can save the document on diskette or print it at any time.

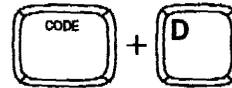
Spreadsheet This application is used to create and edit numeric tables and performing automatic calculations.

Addressbook This application is used to create lists of names, addresses, telephone numbers, etc. that can be used to automatically print labels. The data contained in an Address Book file can also be automatically merged in a Word Processing file.

- Desk Top Reference** The Desk Top Reference application is used to find information about a specified word. When available the information includes definition, hyphenation, and synonyms. If the specified word is misspelled, a list of candidates is displayed.
- Typewriter** In the Typewriter application (TW application), the word processor becomes an electronic typewriter with many advanced features normally available only on word processors. You will use the TW application most often for typing envelopes, short notes, and for filling in forms.
- Framing** The Framing application allows you to design nice tables. The frames can be saved on diskette and printed at any time. Once a frame is printed, you can use the TW application to fill it with text.
- File Management** This application is used to organize your files on diskette.
- Disk Application** This application allows you to start additional programs that come on diskettes.

Supplemental Programs

Self-Demonstration

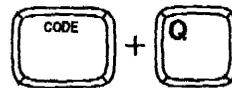


This built-in program shows you examples of what you can do with your word processor.

1. Turn the power on to display the Main menu.
2. Press **CODE + D**.
3. Proceed according to the instructions displayed on the screen. The following is a summary of available operations:

Key	Operation
RETURN	To advance one screen at a time.
CANCEL	To go back to the first screen of the self-demonstration.
FILE	To end the demonstration and return to the MAIN MENU.

Tutorial



This program teaches you to operate the word processor.

1. Insert the Tutorial diskette in the drive.
2. Turn the power on to display the Main Menu.
3. Select Disk Application and press **RETURN**, or simply press **8** or **CODE + Q** to display a menu of the programs contained in the diskette.
4. Select **TUTOR.APL** and press **RETURN**. The program starts.
5. Proceed according to the instructions displayed on the screen.
6. To terminate the program and return to the Main Menu, press **CANCEL**. This message will appear:

Cancel? Press RETURN (yes) or CANCEL (no).

Press **RETURN** to quit or **CANCEL** to continue.

Optional Software

All the following programs come on diskette with your word processor or can be purchased separately. To use one of these programs, insert the program diskette in the drive, select Disk Application on the Main menu to display the list of programs contained in the diskette. Select the desired program to start it.

Five-Language Translator

This program provides you five language translation dictionary (English, French, German, Dutch, Spanish).

Conversion Calculator

This program carries out numerical conversions between different unit systems (miles to km, etc.).

Element of Style

This program provides you with the principal rules of style for the English language.

Encyclopedia

This program provides you with useful information about almost any subjects.

Business Letter Template

This diskette contains examples of business letters that you can use with the Word Processing mode.

Conversion

This PC software is used for converting document files between different word processing programs and your Brother word processor.

Typing Tutor

This program helps you learn the keyboard and improve your typing skills.

Form Type

Used for making personalized forms.

Check Type

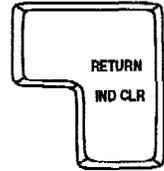
This program allows you to type your personal checks

Game Pack

This includes Tetris and Turnabout (Othello).

Differences between Word Processing and Typewriting

The Return Function



This word processor will go to the next line automatically at the end of each line because of a feature called “Word Wrap”. Words that do not fit on the line will “wrap” to the next line. When you want to start a new paragraph press **RETURN**. A little symbol ↵ appears. This symbol is never printed. It is your signal to the word processor that “paragraph ends here”.

The Cancel Function

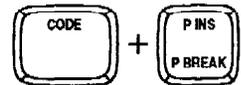


The **CANCEL** key allows you to cancel a selected function. It is handy when you have pressed the wrong key, or when you change your mind.

On-Screen Symbols

Special symbols appear in the text to remind you that you used a format function: e.g., the symbol ↵ that appears when you press **RETURN** to start a new paragraph. Such symbols are never printed on paper.

Automatic Page Breaks



The word processor automatically breaks your text up into pages according to your specifications. The position of these automatic page breaks is flexible and will be re-adjusted for you by the word processor if you modify the text.

To force the word processor to start a new page at any point, press **CODE + P BREAK**. This inserts a symbol ↓ in the text.

Caps Lock vs. Shift Lock

The caps lock function is not the same as the shift lock function on a common typewriter. Both eliminate the need to reach for **SHIFT** to type an uppercase (capital) letter, but they differ in their effect on other keys.

The Keyboard Shift Function



You already know that holding down **SHIFT** and pressing **1** gives you "!", the exclamation mark.

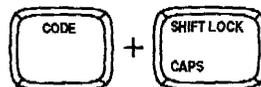
While **SHIFT** is pressed, the **SHIFT** indicator appears on the screen. The indicator disappears as soon as you release **SHIFT**.

The Shift Lock Function



If you press **SHIFT LOCK**, the **SHIFT** indicator is displayed permanently, and all the characters you type are uppercase (**A** = "A", **1** = "!"). To release this mode, press **SHIFT**.

The Caps Lock Function



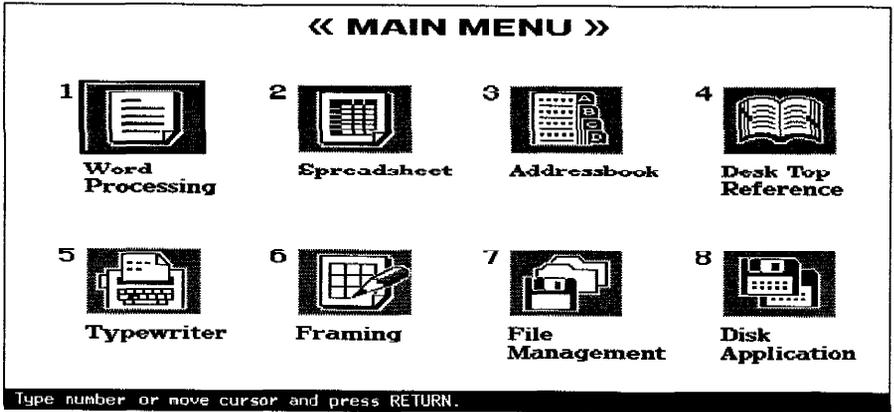
When you need to type long strings of both capital letters and numbers, such as "ACCT. NO. BC104", press **CODE** + **CAPS**. The **CAPS** indicator will appear on the screen to tell you that the keyboard is locked in capital mode (**A** = "A", but **1** = "1"). To release this mode, press **CODE** + **CAPS** again.

Comparing Two Documents on Screen

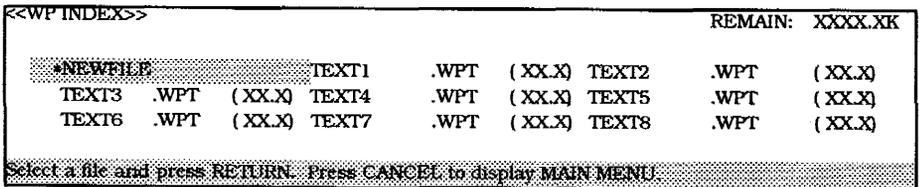
With this word processor, you will be able to split the screen in half and work simultaneously with two documents. This is useful, for instance, when you are working in one document and need to reference a second document.

Word Processing

Starting the Word Processing Application



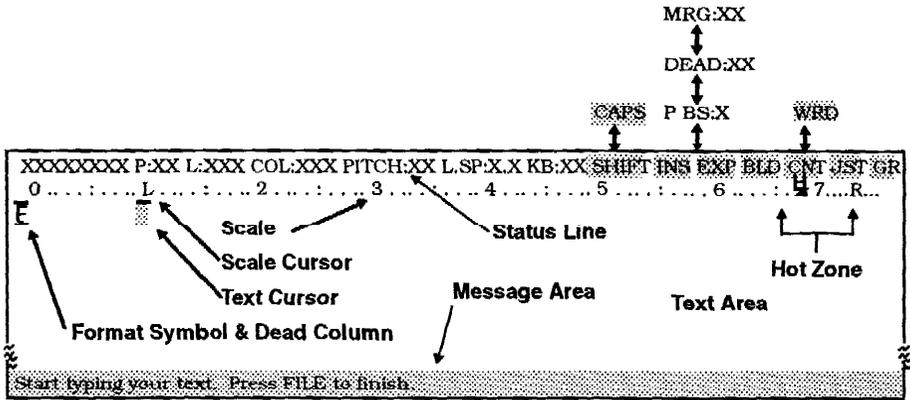
1. Switch the power on to display the Main menu.
2. Use the cursor keys (←, →, ↑, and ↓) to select the icon for Word Processing and press **RETURN**, or press **1**. The WP INDEX screen appears:



3. Use the cursor keys to select ***NEWFILE** and press **RETURN**. The WRITE/EDIT screen shown on the next page appears, and you can start creating your document.

WRITE/EDIT Screen

The WRITE/EDIT screen shown below appears when you start the WP application. This is the main display of your word processor. All text input and editing is done here.



The following reminder appears on the message line (and remains until you press any key):

Start typing your text. Press FILE to finish.

Scale Line

The status line reminds you where you are and how you have told the word processor to format your text. Most indicators are followed with a value (example: PITCH:10) and are always displayed. The ones on the right appear (in reversed color) only when the corresponding function has been activated because they are on/off indicators (example: BLD when the bold function is on). (For a complete list, see "Function Menus" on page 274.)

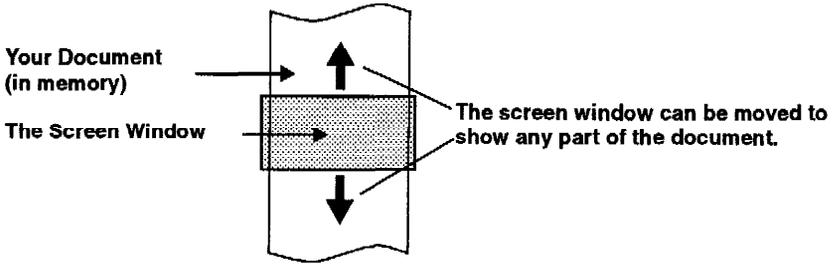
Scale

The scale on the screen of the word processor is the electronic equivalent of the scale on the top of a typewriter, which assists the operator in determining the position of characters on a page. The numbers indicate the position from the left edge of the paper. Other symbols remind you of some format settings (example: L and R indicate the position of the left and right margin). (For a complete list, see "Symbols Displayed on the Scale" on page 281.)

NOTE:

The scale can be disabled in order to get one additional line of text on the screen. For details, see the example under the title "Menu" on page 32.

Text Area



The bulk of the screen is your work area, a window into your document. Although it only shows a few lines of 79 characters at a time, if your document is longer or wider, you can move the window up, down, left, and right. The only part you cannot use is the "dead column" (to the left of column 0), which the word processor reserves for the "format change" symbol ¶. Other symbols appear in the text to remind you of the format functions that you used, but will not be printed. (For a complete list, see "Symbols Displayed in the Text" on page 281.)

NOTE:

The text area can be split in order to display two documents simultaneously. For details, see "Dual Screen" on page 91.

Text and Scale Cursors

A lighted square, the text cursor, indicates your current position in the text area. Another cursor, the scale cursor, is an underline that indicates your position relative to the left of the scale and follows horizontal movement of the text cursor.

Message Line

This line is reserved for guide messages (prompts) that ask you a question, give direction or display error messages that warn you when something is wrong. When no prompt and no error message are displayed, this line is used for your text.

NOTE:

For a list of error messages, see "Error Messages" on page 286.

Menu



When you press **MENU**, the upper line of the screen is temporarily replaced with a menu of functions. The following instructions will show you how to choose an item from the MENU. Example 1 will show you how to select Right Margin Flush, and Example 2 will show you how to turn off the scale.

1. To display the menu, press **MENU**. The leftmost function (**STYLE**) is automatically selected and appears in reversed color (we will call this the selection cursor).

```
STYLE BLOCK CTR/RMF GRAMMAR1 GRAMMAR2 SEARCH FORM PAGE PRINT
```

NOTE:

Pressing **CANCEL** allows you to return to the Main Menu.

2. Use ← or → to move the selection cursor to the right or the left.
3. When the selection cursor is on the desired function, press **RETURN** or ↓. A sub-menu appears below the selected function.

NOTES:

- The **PAGE PRINT** function is an exception: pressing ↓ produces a beep, and pressing **RETURN** executes the function without displaying a sub-menu.
- Once you get acquainted with the menu, use "accelerators" instead of steps (2) and (3). The accelerator key for each function is displayed in bold on the menu. Accelerators allow you to select and execute a function without first moving the selection cursor. For example, the accelerator for **CTR/RMF** is **C**. Typing **C** while the Main Menu is displayed immediately shows the **CTR/RMF** sub-menu regardless of the position of the selection cursor.

Example 1: You selected CTR/RMF

```
STYLE BLOCK CTR/RMF GRAMMAR1 GRAMMAR2 SEARCH FORM PAGE PRINT
          CENTERING
          RIGHT MARGIN FLUSH
```

NOTES:

- This sub-menu is used to center the text or to align it flush to the right margin. (For details see "Centering" on page 57, and "Right Margin Flush" on page 59.)

- **Bold characters indicate the accelerators for the functions of the sub-menu.** For example, to select and activate the right margin flush function, type **R**.
- Pressing **CANCEL** will return you to the Main Menu. However, when a sub-menu is displayed, you can select another sub-menu without returning to the Main Menu. Use ← and →.
- Instead of the menu process, you can access the right margin flush function by pressing **CODE + R** at the WRITE/EDIT screen. This quick access is called a "short-cut". Short-cuts are the common form of explanation in this manual. (See "Function Menus" on page 274 for a complete list of short-cut keys.)

Example 2: You selected FORM

STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
						PAPER SIZE	
						HEADER	
						FOOTER	
						SCALE LINE ON/OFF	
						DUAL SCREEN	
						CHANGE SCREEN	

This example will show how to turn the scale on/off.

1. Type **F** to select **FORM**.
2. Type **S** to select **SCALE LINE ON/OFF**. You are back to the WRITE/EDIT screen. If the scale was displayed, it is now disabled, and vice-versa.

When the scale is OFF

```
XXXXXXXX P:XX L:XXX COL:XXX PITCH:XX L.SP:X.X KB:XX
E
```

When the scale is ON

```
XXXXXXXX P:XX L:XXX COL:XXX PITCH:XX L.SP:X.X KB:XX
0 ..... 1 ..... 2 ..... 3 ..... 4 ..... 5 ..... 6 ..... 7...R...
E
```

Typing on the Display

Type your text just as you would on a typewriter. The text appears on the screen instead of being printed on paper.

If you make a mistake, use **BACKSPACE** or **CORRECT** to delete. For more details about corrections, see "Revising Text – Basic Functions" on page 37.

You can print your text after you have created it. See "Printing a Document" on page 76.

When your text is complete, see "Saving a File" on page 73.

Hot Zone

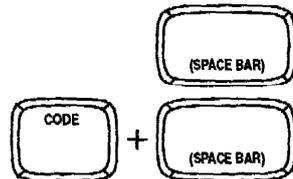
The last six columns before the right margin are defined as the "hot zone". The  symbol on the scale corresponds to the point at which a typewriter bell would ring to warn you that you are about to run into the right margin. The word processor knows how to break text so that it automatically "wraps" to the next line.

Word Wrap

The "word wrap" function allows you to type a paragraph continuously without being concerned about carriage returns. In the hot zone, a word extending beyond the right margin will be moved to the next line automatically. You need only to press **RETURN** to break a line and start a new paragraph.

The word wrap function is always active on the word processor. This feature permits continuous typing and helps build typing speed. The text cursor automatically moves to the next line whenever a space or hyphen is typed in the hot zone.

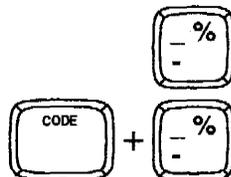
Space vs. Permanent Space



Spaces entered by pressing **SPACE BAR** are word separators called "soft" spaces. When entered in the hot zone, they force the cursor to move to the next line. In justify mode, the "soft" spaces are adjusted to produce an even right margin. (See "Automatic Justification" on page 60.)

Permanent spaces entered by pressing **CODE + SPACE BAR** are special spaces that link words together, protecting them from being separated on different lines. A permanent space is displayed with the symbol  and is considered part of the two words it links. Such a space is never adjusted by the automatic justification function, and does not cause the cursor to jump to the next line when entered in the hot zone.

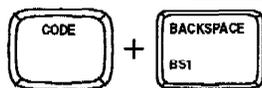
Hyphen vs. Permanent Hyphen



Typing a hyphen (-) in the hot zone automatically sends the cursor to the next line. This becomes a “soft” hyphen, displayed as a dotted hyphen, and will disappear if subsequent revisions or re-formatting moves the word out of the hot zone, i.e., a change of margins.

A permanent hyphen, entered with **CODE** + [-], is used with words that always require a hyphen (mother-in-law, for example). In the hot zone, a permanent hyphen does not send the cursor to the next line. Outside the hot zone, all hyphens are permanent, so it is not necessary to use **CODE**.

Superimposed Characters (Permanent Backspace)



It is possible to create characters that are not available on the keyboard (¥, for example) by superimposing two characters.

1. Type the first character (**Y** in our example).

NOTE:

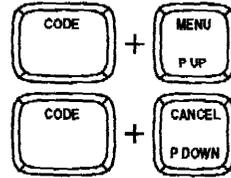
Enter the characters in either order, but start with the one you want to appear in the text area.

2. Press **CODE** + **BACKSPACE**. The first character appears now in reversed color, and the cursor moves next to the P BS indicator on the status line.
3. Type the second character (= in our example) on the status line. As soon as the second character is typed, the cursor moves back to the text area and you are ready to resume normal typing.

NOTES:

- When you move the cursor back to the first character (press ← at this point, for example), the second character re-appears next to the P BS indicator.
- To delete superimposed characters, delete the first character (use **BACKSPACE** or **CORRECT**).

Subscripts and Superscripts



The word processor allows you to enter and print subscripts and superscripts. The procedure parallels what you would do on a typewriter, except that instead of physically rotating the platen, you press **CODE + P DOWN** and **CODE + P UP**.

NOTES:

- Characters in subscript and superscript are displayed below or above the base line.
- The word processor prints subscripts and superscripts the same distance (1/12 inch) below or above the line, regardless of the current line spacing.

Try to enter "e=mc²".

1. Type "e=mc".
2. Press **CODE + P DOWN**.
3. Type 2.
4. Press **CODE + P UP**.

NOTES:

- To enter subscripts, proceed in the same way as above, but reverse the **CODE + P DOWN** and **CODE + P UP** keys.
- Each pair of keys (**CODE + P DOWN** and **CODE + P UP**) cancels the other, and the two pairs must always be used in combination. If you try to press one of the pairs more than once, the word processor beeps.

Extra Characters

The extra characters are those marked in green on your keyboard (for example, ">"). To enter such a character, hold **CODE** down and press the character key.

NOTE:

If a green character appears on the right of a key (for example **B**), it means that the character is available only with **KB II** (international keyboard).

Accents (“Dead” Keys)

This word processor’s multilingual keyboard supports the accented vowels of such languages as French, German, and Spanish.

1. When typing, you must press **CODE + KB (K)** to switch the **KB** indicator on the status line to **II** (international) or **III** (symbol). (See “Character Set” on page 64.)
2. When printing, you must have the appropriate daisy wheel. (See “Changing Daisy Wheel Cassette” on page 289.) Remember that the accented characters and other special characters on the international or symbol keyboards can be printed only if you install the appropriate daisy wheel.
3. Only the base character is entered in the text area. The accent is entered next to the indicator **DEAD** on the status line.

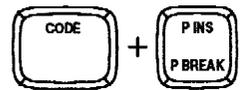
If you have ever used a typewriter, you already know the basic procedure: Type the accent and then the base character. Unlike regular keys, the accent keys are “dead”—that is, the cursor does not move afterward so the base character appears under the accent. Make sure that the keyboard is set to **KB:II** (international), and try the following example.

1. Type the accent “^”. The accent appears next to the indicator **DEAD**. The cursor is reversed and waits for a base character to be input. You are allowed to input a maximum of two dead characters. If you make a mistake, press **CANCEL** or **CORRECT** to delete the dead character(s) and retype.
2. Type the letter **o**. The letter with its accent **ô** now appears in the text area.

NOTES:

- *With some combinations of accents and base characters (such as Y and ^), the base character appears alone and in reversed color in the text area. When you subsequently move the cursor to the base character (press ← at this point, for example), the accent re-appears next to the **DEAD** indicator.*
- *To delete an accented character, proceed as you would for a normal character (use **BACKSPACE** or **CORRECT**).*

Automatic Page Breaks



The word processor automatically breaks your text up into pages according to your specifications. (See “Vertical Layout” on page 67.) The position of these automatic page breaks is flexible and will be re-adjusted for you by the word processor if you modify the text.

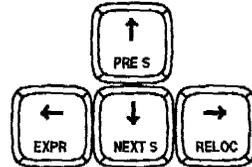
You may also decide to force the word processor to start a new page at any point by pressing **CODE + P BREAK**. This inserts a symbol **↓** in the text (and forces any text beyond that point to the next page).

Revising Text – Basic Functions

Moving the Text Cursor

To make a revision, you must first go to that part of the document. A word processor uses a text cursor to indicate your current position in the document.

Moving One Position at a Time

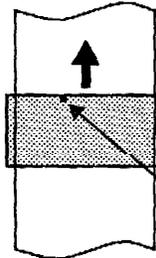


The cursor keys ←, →, ↑, and ↓ move the text cursor one position in the direction of the arrow on their key tops.

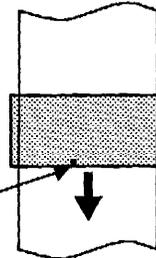
NOTES:

- ← and → will not move the cursor beyond the margins.
- Pressing → at the end of a line sends the cursor to the beginning of the next line; pressing ← then sends it back to the end of the previous line.
- If the cursor is at the top or bottom of the text area, cursor up and down keys, ↑ and ↓, automatically shift ("scroll") the text down or up to show you more text unless you are at the beginning or the end of the document.

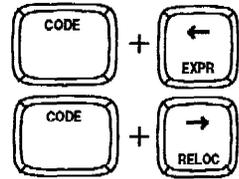
One Line Up



One Line Down



Jumping Left and Right

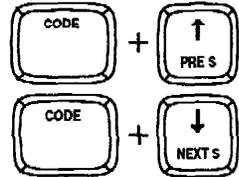


The Express Backspace and Relocation functions take you to the beginning and end of the current line of text, respectively.

NOTES:

- **CODE + EXPR** moves the cursor to the left margin. If you press **CODE + M REL** at the left margin position, the cursor goes all the way to the left edge. When you are in the middle of an indented paragraph (See "Paragraph Indent" on page 56), it goes back to the temporary left margin.
- **CODE + RELOC** moves the cursor to the end of the current line but does not jump past a symbol that signals the end of a paragraph (↵, ↲, and ↴). If you press **CODE + M REL** at the right margin position, the cursor goes all the way to the right edge.

Moving One Full Screen at a Time

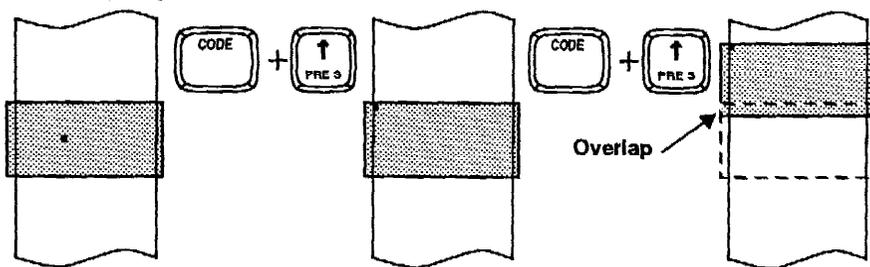
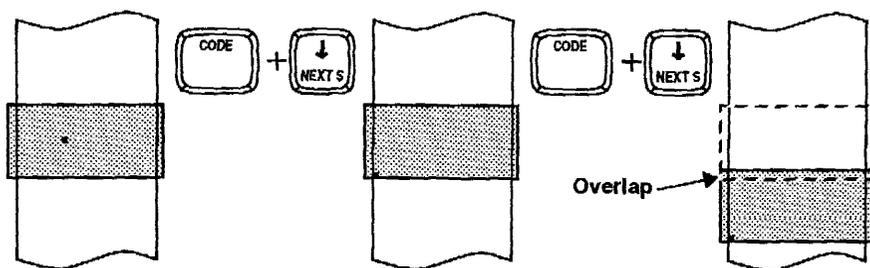
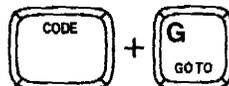


CODE + PRE S scrolls one full screen down (minus an overlap of one line). If the cursor is not on the first line, the first press of **CODE + PRE S** will take the cursor to the beginning of the first line of the current screen. Pressing the same keys from that point will scroll to the previous screen. Press the same keys again to scroll down one screen at a time.

CODE + NEXT S scrolls one full screen up (minus an overlap of one line). If the cursor is not on the last editable line of text, the first press of **CODE + NEXT S** will take the cursor to the beginning of the last editable line of the current screen. Pressing the same keys from that point will scroll to the next screen. Press the same keys again to scroll up one screen at a time.

NOTES:

- When no message is displayed, a line of text appears in the message area. However, the cursor cannot reach that line, so that the last editable line is the second line from the bottom of the screen.
- If there is no more text because you are at the beginning or the end of the document, the screen window does not scroll.

One Screen Up**One Screen Down****GOTO Page**

The GOTO Page function moves the cursor immediately to the beginning of any page of the document with a single operation.

1. Press **CODE + G (GO TO)**. The word processor asks you to type in the number of the page you wish to move the cursor to.

PAGE:

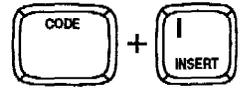
2. Type the desired page number, then press **RETURN** to move the cursor to that page.

NOTES:

- If you have mistakenly entered an incorrect page number, use **CORRECT**, or stop the operation with **CANCEL**.
- If you enter a page number that is higher than the number of the last page, the cursor will move to the last page.
- Instead of typing a page number, press one of the cursor keys just after pressing **CODE + G (GO TO)**:

CODE + GO TO, then	Function
↑	Moves the cursor to the beginning of the current page; moves to the beginning of the previous page when the cursor is at the beginning of the current page.
↓	Moves the cursor to the beginning of the next page.
←	Moves the cursor to the beginning of the document.
→	Moves the cursor to the end of the document.

Inserting Text



Pressing **CODE + I (INSERT)** switches the word processor between insert and overwrite modes, and turns the INS indicator on and off accordingly.

In overwrite mode (indicator INS off), each character you type replaces the current character. You type over the existing data and your new data replaces the old data. (Overwrite is the “default”. That is, every time power is turned ON, the word processor starts in Overwrite.)

In insert mode (indicator INS on), the characters you type appear in front of the cursor, the rest of the line automatically moves to the right and, if necessary, the last word moves to the next line.

NOTE:

Since deleting unnecessary characters is usually easier than retyping characters that have been deleted, it's a good idea to make sure that the word processor is in the insert mode before you start revising.

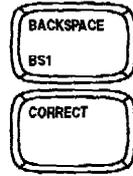
Deleting Text

You can delete text at four different levels:

- a character at a time
- a word at a time
- a line at a time
- a block at a time (See “Deleting a Block” on page 43.)

Whichever level you choose, the word processor automatically closes up the gap and reformats the text to fit the margins and the page length.

Deleting a Character

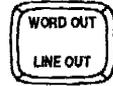


Press **BACKSPACE** or **CORRECT** to delete one character to the left of the cursor.

NOTE:

These keys also delete paragraph end symbols ↵, ¶, and ↓ except when these symbols are located just before a format symbol ¶ or a centering symbol ¶.

Deleting a Word

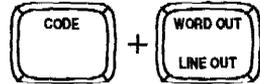


To delete a word, position the cursor on the space immediately following the word and press **WORD OUT**. Pressing **WORD OUT** removes any portion of a word to the left of the cursor, up to the previous blank space.

NOTE:

You will want to use this feature when you mistype a word in such a way that deleting it and typing it over is faster than otherwise correcting it.

Deleting a Line



To delete a line, position the cursor anywhere after the last character of the line and press **CODE + LINE OUT**. Pressing **CODE + LINE OUT** removes any portion of a line to the left of the cursor, up to the beginning of the line.

Splitting and Joining Paragraphs

1. Press **CODE + I (INSERT)** if the INS indicator is off.
2. Position the cursor at the point you want to split and press **RETURN** to insert a ↵ symbol.
3. Position the cursor at the beginning of the second paragraph, and press **BACKSPACE** or **CORRECT** to delete the ↵ symbol of the first paragraph.

NOTE:

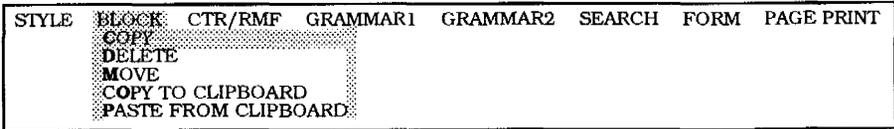
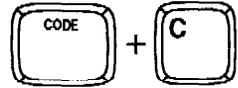
It is not possible to join two paragraphs that have two different formats (e.g. margin settings).

Revising Text – Advanced Functions

Block Operations

A block can be copied, deleted, or moved to another part of the document.
A block can also be copied into a different file.

Copying a Block within the Document



1. Position the cursor on the first character of the block you want to copy.
2. Press **MENU** to display the menu.
3. Type **B** to select **BLOCK**.
4. Type **C** to select **COPY**.
- **Short cut:** Instead of (2), (3) and (4), press **CODE + C**.

Move cursor to block end. Press RETURN or to store CLIPBOARD press CODE+T.

5. Move the cursor to the end of the block to be copied. As you move the cursor, the block is selected (reverse image). Move the cursor back toward the beginning of the block to deselect. All key combinations used to move the text cursor can be used when selecting a block. (See “Moving the Text Cursor” on page 37.)
6. When the block to be copied is selected, press **RETURN**.

Move cursor to destination for blocked text and press RETURN.

7. Move the cursor to the location where you want to insert the selected block and press **RETURN**. The selected block is automatically copied to that position and the document is reformatted to conform to the modified sections of the document. (See “Formatting the Page” on page 52.)

NOTES:

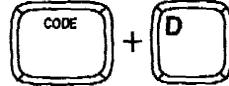
- The block is inserted regardless of the current mode (insert or overwrite). This means that the block will never overwrite text at the destination position.
- Press **CANCEL** at any step to cancel the function.

- Since the block copy operation increases the size of your document, the word processor may run out of memory. If this happens, the copy operation is cancelled and the following message appears:

Not enough memory remaining.

You must either first delete a portion of the document to free some space, or try to copy only a smaller block.

Deleting a Block



STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
	COPY						
	DELETE						
	MOVE						
	COPY TO CLIPBOARD						
	PASTE FROM CLIPBOARD						

1. Position the cursor on the first character of the block you want to delete.
 2. Press **MENU** to display the menu.
 3. Type **B** to select **BLOCK**.
 4. Type **D** to select **DELETE**.
- **Short cut:** Instead of (2), (3) and (4), press **CODE + D**.

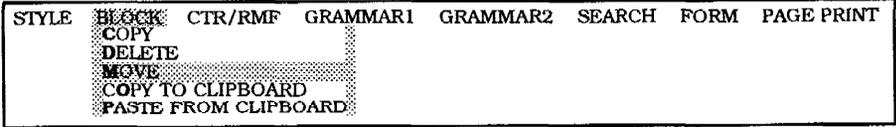
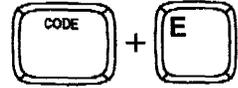
Move cursor to end of block to delete and press RETURN.

5. Move the cursor to the end of the block to be deleted. As you move the cursor, the block is selected (reverse image). Move the cursor back toward the beginning of the block to deselect. All key combinations used to move the text cursor can be used when selecting a block, (See "Moving the Text Cursor" on page 37.)
6. When the block to be deleted is selected, press **RETURN**. The word processor asks for confirmation:

Delete? Press RETURN(yes) or CANCEL(no).

7. If you press **RETURN**, the block (displayed in reversed color) is deleted, and any text following the block is formatted to the same style as the previous section. (See "Formatting the Page" on page 52.)

Moving a Block



1. Position the cursor on the first character of the block you want to move.
2. Press **MENU** to display the menu.
3. Type **B** to select **BLOCK**.
4. Type **M** to select **MOVE** and press **RETURN**.
 - **Short cut:** Instead of (2), (3) and (4), press **CODE + E**.

Move cursor to end of block to move and press RETURN.

5. Move the cursor to the end of the block to be moved. As you move the cursor, the block is selected (reverse image). Move the cursor back toward the beginning of the block to deselect. All key combinations used to move the text cursor can be used when selecting a block, (See "Moving the Text Cursor" on page 37.)
6. When the block to be moved is selected, press **RETURN**.

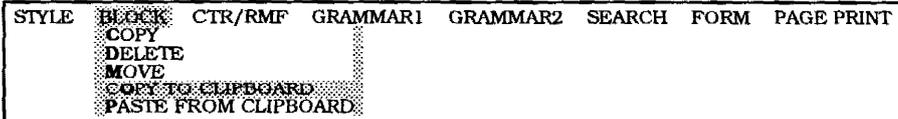
Move cursor to destination for blocked text and press RETURN.

7. Move the cursor to the location where you want to insert the selected block and press **RETURN**. The selected block is automatically transferred to that position and the document is reformatted to conform to the modified sections of the document. (See "Formatting the Page" on page 52.)

NOTES:

- The block is inserted regardless of the current mode (insert or overwrite). This means that the block will never overwrite text at the destination position.
- Press **CANCEL** at any step to cancel the function.

Copying a Block to the Clipboard



A portion of the memory, called the clipboard, allows you to store a block of the current document. Later, the contents of the clipboard can be recalled for insertion in the same document or in any other document you are working on.

You may copy a block stored in the clipboard as many times as you want. Each time you store a new block in the clipboard, you will erase the previous contents of the clipboard.

NOTES:

- The clipboard is erased when the power is turned off.
- The clipboard may contain up to 4K bytes (about 4,000 characters).

1. Position the cursor on the first character of the block you want to copy to the clipboard.
2. Press **MENU** to display the menu.
3. Type **B** to select **BLOCK**.
4. Type **O** to select **COPY TO CLIPBOARD**.

Move cursor to block end and press RETURN.

5. Move the cursor to the end of the block to be copied to the clipboard. As you move the cursor, the block is highlighted (reversed color). Move the cursor back toward the beginning of the block to deselect. All key combinations used to move the text cursor can be used when selecting a block.
6. When the block is selected, press **RETURN**.

NOTE:

Press **CANCEL** at any step to cancel the function.

If the clipboard is empty, the block is immediately copied to the clipboard.

If the clipboard already contains data, the current contents of the clipboard is displayed, and you are asked whether you want to proceed.

<< COPY TO CLIPBOARD >>

OK to delete current CLIPBOARD data?

PRESENT CLIPBOARD TEXT:
 (Example) The present clipboard text will be replaced by the selected text if YES is chosen. The text will not change if NO is chosen...

Use cursor to select and press RETURN.
 (YES) (NO)

Select (YES) and press **RETURN** to overwrite the contents of the clipboard with the selected block, or select (NO) and press **RETURN** to cancel the operation.

Pasting from the Clipboard

STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
	COPY						
	DELETE						
	MOVE						
	COPY TO CLIPBOARD						
	PASTE FROM CLIPBOARD						

The contents of the clipboard can be recalled and pasted into any WP file you are working on.

1. Position the cursor on the location where you want to insert the contents of the clipboard.
2. Press **MENU** to display the menu.
3. Type **B** to select **BLOCK**.
4. Type **P** to select **PASTE FROM CLIPBOARD**.
 - **Short cut:** Instead of (2), (3), (4) press **CODE + T**.

If there is no text in the clipboard, you will hear a beep.

If there is text in the clipboard, the text will be displayed, and you will be asked whether you want to paste it into the document.

<< PASTE FROM CLIPBOARD >>

Do you want to paste this in file?

(Example) The present clipboard text will be replaced by the selected text if YES is chosen. The text will not change if NO is chosen...

Use cursor to select and press RETURN.
 (YES) (NO)

Select (YES) and press **RETURN** to paste the contents of the clipboard into your document, or select (NO) and press **RETURN** to cancel the operation.

Searching for Text

In addition to using the cursor keys to move throughout your text, you can find any position in your file quickly by using the search function.

The word processor allows you to automatically scan the document for all occurrences of a specific piece of text (called a "string") and, at your option, replace all or some of those occurrences with another string. (See "Search and Replace" on page 49.)

A string may be up to 63 characters long, and may include "dead" and superimposed characters. (See "Defining a Search String" on page 48.)

Starting a Search

STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
					SEARCH		
					REPLACE		
					HYPHEN SCAN		

This function scans the text from the current text cursor position and pauses when the string is found, waiting for you to tell it whether to stop there or proceed to the next occurrence.

1. Position the cursor at the beginning of the section that you wish to scan. If you want to scan the entire document, for example, move the cursor to the beginning of the text.
2. Press **MENU** to display the menu.
3. Type **R** to select **SEARCH**.
4. Type **S** to select **SEARCH** and press **RETURN**.
5. Enter the text you are looking for and press **RETURN**.

Type search word(s). Press RETURN to start search.

SEARCH █ _____

6. Wait for the word processor to find the first occurrence. The following prompt will appear:

Press RETURN to search again, or press CANCEL to stop search.

7. If this is the place you are looking for, press **CANCEL** and do the necessary editing. If you wish to proceed to the next occurrence, press **RETURN** to continue the search.

NOTE:

When there are no more occurrences, the following message appears, and will automatically disappear when you hit a key.

Search and Replace

STYLE	BLOCK	CTR/RMF	GRAMMARI	GRAMMAR2	SEARCH	FORM	PAGE PRINT
					SEARCH		
					REPLACE		
					HYPHEN SCAN		

With the search and replace function, you can replace some or all occurrences with another text string. Applications include quick correction of a misspelled or mistyped word everywhere that it occurs (from "conveyer" to "conveyor" or vice-versa), replacement of key words (from "brother" to "sister"), and capitalizing key words for emphasis (from "word processor" to "WORD PROCESSOR").

The word processor automatically reformats your document if the replacement word is not the same length as the original.

1. Position the cursor at the beginning of the section that you wish to scan. If you want to scan the entire document, for example, move the cursor to the beginning of the text.
2. Press **MENU** to display the menu.
3. Type **S** to select **SEARCH**.
4. Type **R** to select **REPLACE**.

Type search and replace word(s). Press RETURN to start search.

SEARCH: _____
REPLACE: _____

5. Enter both the text that you wish to look for and the replacement text. Use \uparrow and \downarrow to shift between the two input areas and press **RETURN** when input is completed.

Global? Press RETURN (yes) or TAB (no).

6. If you press **RETURN**, all occurrences from the cursor position to the end of the document will be automatically replaced. When the function has been completed, the cursor will move to the end of the file and return to the normal edit mode. To stop the function in progress, press **CANCEL**.
If you press **TAB**, the word processor will stop at the first occurrence, and display the following message:

Press RETURN to replace word(s), TAB not to replace word(s), CANCEL to exit.

7. To replace this occurrence, press **RETURN**. The word processor carries out the change, then stops at the next occurrence and displays the above message again.

To search for the next occurrence without replacing, press **TAB**. The word processor stops at the next occurrence and displays the above message again. To stop searching and return to the normal edit mode, press **CANCEL**. If you mistakenly press this key, re-start from step (1). Since the search and replace strings remain in memory until you define others, you will not have to re-enter them in step (5).

NOTE:

When there are no more occurrences, the following message appears, and will automatically disappear when you hit any key.

Word(s) not found.

NOTE:

If you repeatedly replace strings with longer ones in a very long document, you may run out of memory. In such a case, the function is canceled and the following message appears:

Memory full.

The message will remain until you delete some portion of the document to free some memory space. After deleting part of the file, save it, and start a new file. (See Saving a File on page 73.)

Hyphen Scan

STYLE	BLOCK	CTR/RMF	GRAMMARI	GRAMMAR2	SEARCH	FORM	PAGE PRINT
					SEARCH		
					REPLACE		
					HYPHEN SCAN		

A problem arises with the word wrap function when the distance between margins is small, or when typing a text in languages like German using very long words. Since the word wrap function automatically transfers a word that cannot fit in the current line to the next line, excessively long blank spaces may appear, resulting in a poor layout. The hyphen scan function automatically detects such long blank spaces and gives you a chance to hyphenate the long words. It allows you to type your text without making any manual hyphenations (except, of course, a permanent hyphen).

1. After your text is typed, position the cursor at the beginning of the section that you wish to scan. If you want to scan the entire document, for example, move the cursor to the beginning of the text.
2. Press **MENU** to display the menu.
3. Type **R** to select **SEARCH**.

4. Type **H** to select **HYPHEN SCAN**.
5. The hyphen scan function will scan your text down from the cursor position and search for lines containing blank spaces longer than the six columns of the hot zone. The long word that has been transferred to the next line by the word wrap function is displayed in reversed color. The following message appears:

Move cursor, press RETURN to hyphenate, TAB to continue, CANCEL to exit.

6. If you want to hyphenate this word, position the cursor at the most suitable position and press **RETURN**. The word will be hyphenated and the portion of the word to the left of the hyphen will be transferred to the previous line. The hyphen scan function will search for the next occurrence of a long blank space. If you want to skip this occurrence and keep the word without a hyphen, press **TAB**. The whole word will be transferred to the next line, where it was originally, and the hyphen scan function will search for the next occurrence of a long blank space. Press **CANCEL** if you want to end the hyphen scan function.

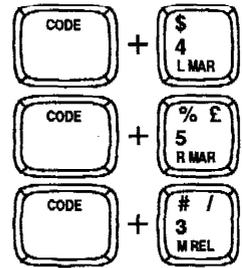
Formatting the Page

An important advantage to a word processor is that it allows you to change the left, right, top, and bottom margins, tabs, and other layout parameters on the screen without having to retype. The word processor automatically adjusts the text to fit the new width and page length.

Format Change Symbol

The word processor reserves the dead column of the text area (column 0) for the format change symbol £ . Each time you change the format, – that is, the left or right margin, tabs, justification, etc. – this symbol appears in the dead column at the beginning of the paragraph, and the word processor automatically adjusts the text to fit the new setting. These new settings affect not only the current paragraph, but also all subsequent text up to the next format change symbol. The text above the symbol remains unchanged.

Left and Right Margins



The left and right margins are set to columns 10 and 75 respectively each time you start with a *NEWFILE. Margins can be relocated at any time, before, during, or after typing the text. Each time you move the left or right margin, a £ symbol appears in the dead column of the first line of the current paragraph. A £ symbol always follows the \leftarrow , \rightarrow , or \downarrow symbols. The new setting affects the whole document from the current line up to the next £ symbol. If there is some text already input in the affected portion, it will automatically be readjusted to fit between the new margins. The text above the £ symbol remains untouched.

1. Move the cursor to the new position for the left or right margin while observing the scale. (See "Moving the Text Cursor" on page 37.) If the new position is beyond the current margins, press **CODE + M REL** when the cursor is on the margin to allow the cursor to move freely.
2. Press **CODE + L MAR** to set the new left margin, or **CODE + R MAR** to set the new right margin. The L or R symbol on the scale will move accordingly.

NOTES:

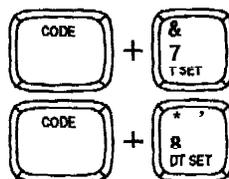
- If you mistakenly press **CODE + M REL** when there is no need to modify the margins, press **CANCEL** to resume normal editing.
- The minimum distance between margins is set to two inches. The maximum distance is nine inches (maximum printing width of the word processor) and, in terms of columns, depends on the pitch as indicated in the following table:

Pitch (characters per inch)	Distance Between Margins (columns)	
	Minimum # characters	Maximum # characters
10 (Pica)	20	90
12 (Elite)	24	108
15 (Micron)	30	135

Tabs and Decimal Tabs

If you have been using a typewriter, you already know how convenient tabs are for aligning text. Decimal tabs provide additional convenience when typing numbers. Decimal tabs automatically align a column of numbers at the decimal point instead of the first character. The scale indicates these two types of tabs with **T** for normal tabs, and **D** for decimal tabs.

Setting Tabs



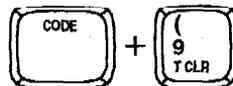
You may change tabs at any time – before, while, or after typing the text.

1. Move the cursor to the position where you want a tab. (See “Moving the Text Cursor” on page 37.)
2. Press **CODE + T SET** to set a normal tab, or **CODE + DT SET** to set a decimal tab at the current cursor position. The corresponding symbol **T** or **D** appears on the scale. Up to 30 tabs and decimal tabs can be set. Setting a tab where you already had a decimal tab replaces the **D** with a **T** and vice-versa.

NOTES:

- When the **NEWFILE* is opened, there are no tab set.
- Since the pitch determines the actual position on the printed page, the columns may appear at undesired positions if you change the pitch of a table formatted with tabs and decimal tabs.

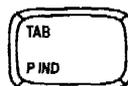
Clearing Tabs



1. To clear a single tab or decimal tab, move the cursor to that position and press **CODE + T CLR**.
2. To clear all tabs and decimal tabs, hold down **CODE + T CLR** until the following message appears:

All tabs cleared.

Using Tabs while Typing



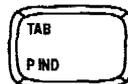
1. Press **TAB** to move the cursor to the next tab to the right. A symbol \rightarrow appears on the screen just before the new text cursor position to remind you that there is now a tab in the text.

NOTE:

If there is no tab to the right, the cursor moves to the right margin.

2. Type your text.
3. Repeat the above procedure for each column in your table.

Using Decimal Tabs while Typing



Decimal tabs are a convenient feature unique to word processors that allow you to align columns of numbers with decimal points. When you move the cursor there with **TAB**, the cursor remains fixed in that column, and each character that you type appears to the left of the tab. Once you type the decimal point, however, the point appears at the tab, and the cursor returns to normal operation.

1. Press **TAB** to move the cursor to the next decimal tab to the right. A symbol \rightarrow appears on the screen just before the new text cursor position to remind you that there is now a tab in the text.

NOTE:

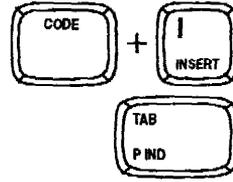
If there is no tab to the right, the cursor moves to the right margin.

2. Type the number.
3. Repeat the above procedure for each column in your table.

NOTE:

The cursor returns to normal operation if you press **RETURN** or **TAB**.

Inserting Tabs



You may type your number or text first, and then align the columns with tabs.

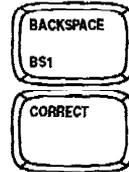
1. If the INS indicator is off, press **CODE + I (INSERT)** to switch to the insert mode.

NOTE:

If the insert mode is off, **TAB** will just move to the next tab without aligning the text.

2. Position the cursor on the beginning of the word that you want to align.
3. Press **TAB**. The word processor automatically adjusts the text to fit the margins and page length.

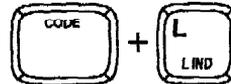
Removing Tabs



You may also remove a tabs in order to change tabulated text to a paragraph.

1. Position the cursor just after the tab symbol \rightarrow on the screen.
2. Press **BACKSPACE** or **CORRECT**. The word processor automatically adjusts the text to fit the margins and page length.

Line Indent



Pressing **CODE + L (L IND)** is the same as typing five permanent spaces. The primary application is indenting the first line of a paragraph.

NOTE:

If the word processor is not in insert mode, these five spaces overwrite the five characters at the cursor location.

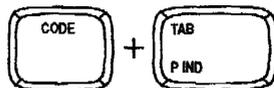
Line Indent

This letter was typed on this new Word Processor to show you some of the many outstanding feats it can perform.

Paragraph Indent

The paragraph indent function may be considered as a temporary left margin.

Setting the Temporary Left Margin



When you will need to indent text from the left margin, the paragraph indent feature indents text to a tab stop. When the indent is released, the cursor returns to the original left margin.

1. Set the tabs you will need for any of the indented paragraphs.

NOTE:

If your document has multiple levels of paragraph indentation, it is a good idea to set all the tabs when you start.

2. If you have text, such as a section number, that you wish outside the indented block, type that data.
3. Press **CODE + P IND** as many times as necessary to move the cursor to the tab setting you want to be the new temporary margin. The word processor displays a **→** symbol just before the new cursor position to remind you that the following text is indented.

NOTE:

*If you change your mind, use **BACKSPACE** or **CORRECT** to remove the paragraph indent symbol **→**.*

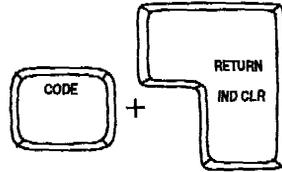
This letter was typed on this new Word Processor to show you some of the many outstanding feats it can perform.

In fact, you have seen some of these features in this letter: Centering has placed the title right in the center of the left and right margins, and



Paragraph Indent

Returning to the Original Left Margin



At the end of the indented paragraph, press **CODE + IND CLR** to restore the original left margin. The word processor marks the end of the indented paragraph with a **␣** symbol to indicate that the paragraph indent mode has been exited.

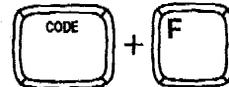
NOTE:

To indent a paragraph after it has been typed, position the cursor on the first character of the paragraph to be indented and press **CODE + P IND** to reposition it at the tab position. At the edge of the indented block, press **CODE + IND CLR** to restore the original left margin.

Centering

The centering function is used to center a line as characters are typed, or to center a line already typed. You can center text either between margins or between tabs.

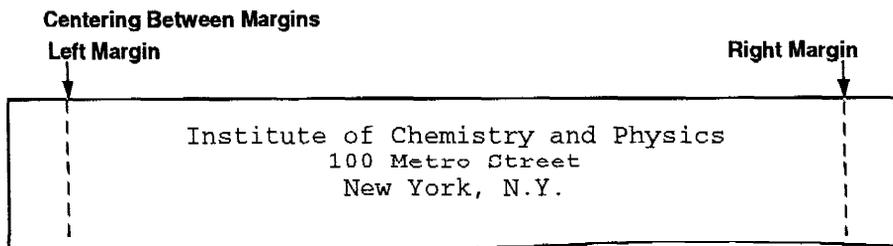
Centering Between Margins



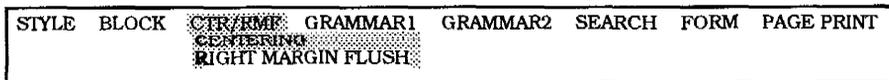
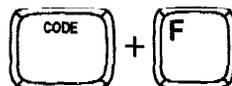
STYLE	BLOCK	CTR/RMP	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
		CENTERING					
		RIGHT MARGIN FLUSH					

When you center between margins, the position of the cursor in the line does not matter.

1. Press **MENU** to display the menu.
2. Type **C** to select CTR/RMF.
3. Type **C** to select CENTERING. The cursor moves to the center point between your margins. The symbol for centering between margins **¶** appears in the line. If the text has already been typed, it is automatically centered.
- **Short cut:** Instead of (1), (2), and (3), press **CODE + F**.
4. Type the text.
5. Press **RETURN** to finish the centering operation.



Centering Between Tabs

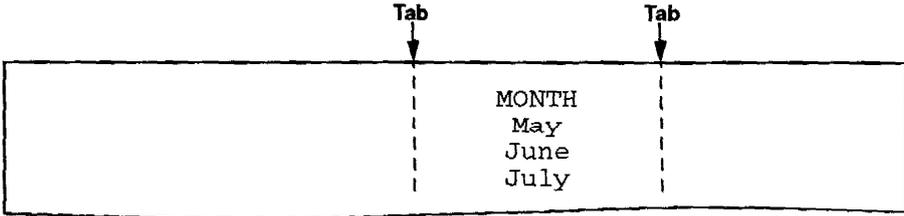


1. Press **TAB** as many times as necessary to reach the desired tab position (the position that will become the left edge of the centering range).
2. Press **MENU** to display the menu.
3. Type **C** to select CTR/RMF.
4. Type **C** to select CENTERING. The cursor moves to the center point between the tab position where the cursor was in (1) and the next tab to the right, or the right margin if there are no more tabs set. A centering symbol **¶** appears on the line. If the text has already been typed, it is automatically centered.
- **Short cut:** Instead of (2), (3), and (4), press **CODE + F**.
5. Type the text.
6. Press **RETURN** to finish the centering operation, or **TAB** to move to the next tab.

NOTES:

- Centering between a tab and the right margin is possible, but not between the left margin and a tab.
- Centering between a tab and a decimal tab is not possible.

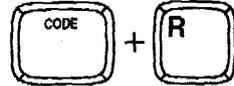
Centering Between Tabs



Undoing Centering

To exit the Centering function, press **CANCEL** (you may also select **CENTERING** from the menu, or press **CODE + F**). To bring centered text flush with the left margin of the centering range, position the cursor just after the centering symbol **H** or **¶** and press **BACKSPACE** or **CORRECT** to delete.

Right Margin Flush



STYLE BLOCK **CTR/RMF** GRAMMAR1 GRAMMAR2 SEARCH FORM PAGE PRINT
CENTERING
RIGHT MARGIN FLUSH

The right margin flush function is used to adjust a line automatically to end on the right margin.

1. If the text to be aligned flush with the right margin has not been typed yet, skip this step. If you want to align existing text, position the cursor on the first character of that text. If you want to align the whole line, position the cursor on the first character of the line.
2. Press **MENU** to display the menu.
3. Type **C** to select **CTR/RMF**.
4. Type **R** to select **RIGHT MARGIN FLUSH**. The cursor moves to the right margin. A right margin flush symbol **←** appears in the line. If the text has already been typed, it is automatically aligned flush with the right margin (any blank space at the end of the shifted line will be cut off).
- **Short cut:** Instead of (2), (3), and (4), press **CODE + R**.
5. Type the text. The cursor will not move, but the text that you type is scrolled to the left.
6. Press **RETURN** to finish the right margin flush operation and bring the cursor to the beginning of the next line.

Right Margin

May 26, 1995

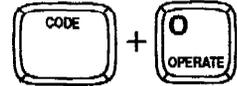
Undoing a Right Margin Flush Format

To exit the margin flush mode, press **CANCEL** (you may also select **RIGHT MARGIN FLUSH** from the menu, or press **CODE + R**). To undo an existing right margin flush format, delete the right margin flush symbol \leftarrow using **BACKSPACE** or **CORRECT**.

Automatic Justification

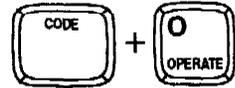
The justify function adjusts the spacing between words so that every complete line of text is aligned with both left and right margins.

Entering Justified Text

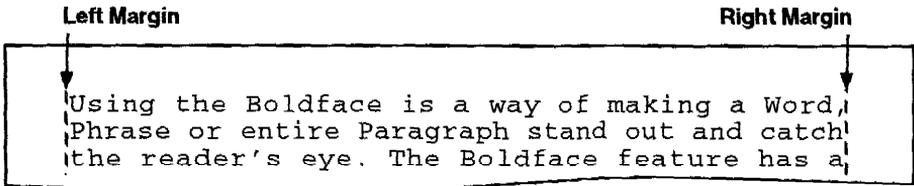


1. Press **CODE + O (OPERATE)** to turn the JST indicator on and start typing. When you type a space or a hyphen in the hot zone, the cursor moves to the next line and the current line is justified.
2. To resume normal typing, press **CODE + O (OPERATE)** again to turn the JST indicator off.

Justifying Existing Text



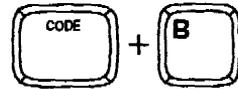
1. Position the cursor at the first paragraph that you want to justify.
2. Press **CODE + O (OPERATE)** to turn the JST indicator on. A ¶ symbol appears in the dead column of the first line of the paragraph and the text is automatically justified from this line down to the next ¶ symbol (if any exists) or down to the end of the document. If your document contains many ¶ symbols you will need to repeat these steps in order to justify the whole text.



Text Emphasis

You can add special emphasis to text in your document with bold face type, underlining, and the expand function which automatically inserts a blank space between each character.

Bold Face Characters



STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
BOLD	OFF						
UNDERLINE	OFF						
EXPAND	OFF						

1. If you want to turn the bold function on before typing, skip this step. If you want to change the type face of a portion of text already typed, position the cursor at the beginning of that portion.
2. Press **MENU** to display the menu.
3. Type **S** to select **STYLE**.
4. Type **B** to select **BOLD**.

NOTE:

You can turn the **BOLD** function ON/OFF by pressing the **SPACE BAR** or **B**.

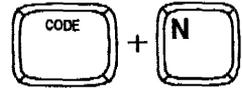
5. Press **RETURN**. The bold function is ON and the BLD indicator is displayed.
 - **Short cut:** Instead of (2), (3), (4), and (5), press **CODE + B** to switch the bold function ON/OFF.
6. The text you now type or the text you select by moving the cursor right/down is displayed in bold. If you move the cursor past the desired position, move back to deselect. To move the cursor one line at a time, use **↑** and **↓**.
7. To return to normal typing, repeat steps (2), (3), (4), and (5) to turn the bold function OFF, or press **CODE + B**.

NOTE:

To remove bold characters, position the cursor just after the last bold character, turn the bold function on, and move the cursor left/up. Turn the bold function off to remove bold emphasis.

Using the **Boldface** is a way of making a Word, Phrase or entire Paragraph stand out and catch the reader's eye. The **Boldface** feature has a

Underline



STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
BOLD	OFF						
UNDERLINE	OFF						
EXPAND	OFF						

1. If you want to turn the underline function on before typing, skip this step. If you want to underline a portion of text already typed, position the cursor at the beginning of that portion.
2. Press **MENU** to display the menu.
3. Type **S** to select **STYLE**.
4. Type **U** to select **UNDERLINE**.
5. Use **SPACE BAR** to select **CNT** (continuous underlining) or **WRD** (word underlining).
6. Press **RETURN**. The corresponding indicator is now on.
 - **Short cut:** Instead of (2), (3), (4), (5), and (6), press **CODE + N** to switch the underline function **CNT/WRD/OFF**.

NOTE:

If you select continuous underlining, all will be underlined, including blank spaces. With word underlining, blank spaces are not underlined.

7. The text you now type or the text you scan by moving the cursor right/down is underlined. If you move the cursor past the desired position, move back to remove the underline. To move the cursor one line at a time, use **↑** and **↓**.
8. To return to normal typing, repeat steps (2), (3), (4), (5) and (6) to turn the underline function off, or press **CODE + N**.

NOTE:

To remove underlining, position the cursor just after the last underlined character, select either CNT or WRD, and move the cursor left/up. Turn the underline function off to stop removing underlining.

Continuous Underline

Using the Underline is a way of making a Word, Phrase or entire Paragraph stand out and catch the reader's eye. The Underline feature has a

Word Underline

Using the Underline is a way of making a Word, Phrase or entire Paragraph stand out and catch the reader's eye. The Underline feature has a

Expand

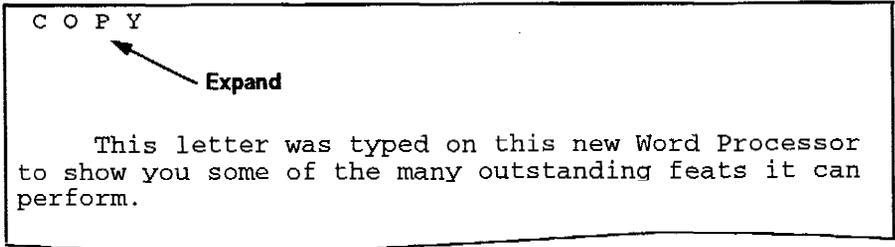
STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
BOLD	OFF						
UNDERLINE	OFF						
EXPAND	OFF						

he expand function is available only while entering text. You cannot use it to reformat text that has been typed.

1. Press **MENU** to display the menu.
2. Type **S** to select STYLE.
3. Type **E** to select EXPAND.
4. Press the **SPACE BAR** to turn the EXPAND function ON/OFF.
5. Press **RETURN**. The EXP indicator is now on.
6. The text you now type is expanded, with a permanent space automatically inserted after each text character (See also "Space vs. Permanent Space" on page 33.)
7. To return to normal typing, repeat steps (1), (2), (3), and (4) to turn the expand function OFF.

NOTE:

The permanent spaces inserted with the expand function cannot be removed automatically. To undo the expand format, delete the permanent spaces one by one using **BACKSPACE** or **CORRECT**.

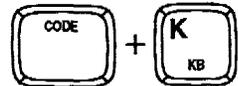


Character Set

The display on this multilingual word processor supports all European languages written with the Roman alphabet, Greek and mathematical symbols. To type English text, all you need is the standard daisy wheel which comes with your word processor. There are other styles and pitches available.

However, if you have to type French text, or text requiring mathematical symbols, you need the corresponding Daisy Wheel(s) to have all the special characters correctly printed.

Switching the Keyboard



While typing your text with the WP application, you must select the desired keyboard in order to have the characters properly displayed on the screen. This is done by pressing **CODE + K (KB)**. These keys switch the KB indicator through the following cycle:

KB: I → II → III → I

Keyboard Selection	Use
I (Standard)	For English text.
II (International)	For European languages using Roman alphabet.
III (Symbol)	For Greek letters and mathematical symbols.

NOTE:

For more details regarding the characters available in each keyboard, see "Character Keys" on page 264

Changing the Daisy Wheel

The word processor will remember which keyboard selection was used to enter your text, and will prompt you to insert the corresponding daisy wheel when you print your document. (For more details, see "Changing Daisy Wheel Cassette" on page 289.)

Horizontal Positioning

The display indicates the left margin and all other horizontal distances in terms of columns. On paper, however, the width of these columns depends on the selected pitch. This word processor supports three character widths:

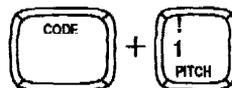
Name	Character Spacing
Pica	10 characters per inch (cpi)
Elite	12 cpi
Micron	15 cpi

Screen Width vs. Paper Width

The distance between the left and right margins must be smaller than the paper width. Suppose your paper is 8.5 inches wide and you are using Pica pitch (10 cpi). You can fit a maximum of 85 characters per line. The distance between margins should therefore be smaller than 85 columns on the screen (check the COL indicator on the status line). The following table indicates the maximum distance between margins for letter-size paper:

Width	Maximum Characters Between Margins		
Letter Size	10 (Pica)	12 (Elite)	15 (Micron)
8.5 inch	85	102	127

Changing the Pitch



The pitch is automatically set to 10 when the power is turned on. Pressing **CODE** + **PITCH** will cycle the PITCH indicator through the following values:

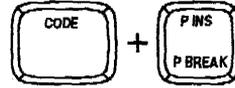
PITCH: 10 → 12 → 15 → 10

When the pitch is changed, a format symbol ¶ appears in the dead column of the first line of that paragraph. The text is automatically reformatted down from the format symbol.

Vertical Layout

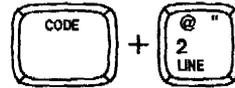
Just as the word processor formats your lines to fit within the desired left and right margins, it also automatically breaks your text up so that the maximum number of lines fit onto the page with the desired line spacings, top and bottom margins, and other formatting instructions that you specify.

Page Breaks



The text is always automatically formatted so that a maximum number of lines can fit on one page. Each time you want to start a new page, press **CODE + P BREAK**. A page break symbol ↓ will indicate that point, the cursor will move to the next line. The page count (P indicator) is incremented and the line count (L indicator) restarts from 1. If you change your mind, you can always erase this symbol (and eliminate the page break) with **BACKSPACE** or **CORRECT**.

Line Spacing



Pressing **CODE + LINE** cycles the L.SP indicator through the following values:

L.SP: 1.0 → 1.5 → 2.0 → 1.0

Line Spacing	Number of Lines per inch
1.0	6 lines/inch
1.5	4 lines/inch
2.0	3 lines/inch

To keep the maximum amount of text in view at all times, the word processor uses only single spacing on the screen. The number next to the L indicator, however, reflects the actual line count on paper. If you are at the top of your text with the cursor on line 1, for example, each time that you press ↓, the number that appears next to the L indicator depends on the line spacing as follows:

Line Spacing	Line Numbers
1.0	1, 2, 3, 4, 5, 6, 7,.....
1.5	1, 2 (2.5), 4, 5 (5.5), 7, 8 (8.5), 10,.....
2.0	1, 3, 5, 7, 9, 11, 13,.....

Paper Size Settings

STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
						PAPER SIZE	
						HEADER	
						FOOTER	
						SCALE LINE ON/OFF	
						DUAL SCREEN	
						CHANGE SCREEN	

The paper size function allows you to specify all vertical layout parameters except line spacing (which you may change anywhere on the page). This feature is used to adjust your top and bottom margins.

1. Press **MENU** to display the menu.
2. Type **F** to select **FORM**.
3. Type **P** to select **PAPER SIZE**.
4. The **PAPER SIZE** screen shown below appears.

```
XXXXXXXX P:XX L:XXX COL:XXX PITCH:XX L.SP:Y.X KB:XX

TOP MARGIN X
HEADER X
TOP SPACE X
TEXT AREA XXX
BOTTOM SPACE X
FOOTER X
BOTTOM MARGIN X

PAPER SIZE XXX (LINES)

Set each item and press ↑. Press RETURN to finish.
```

WORD PROCESSING

Settings	Definition
PAPER SIZE	The total length of the paper. The default, 66 lines, is suitable for letter-size paper.
TOP MARGIN	The distance between the top edge of the paper and the header (if present) or the top of the text (when there is no header). The default is 6 lines, which is one inch.
HEADER	An optional running header. (See "Header and Footer" on page 70.)
TOP SPACE	The distance between the header (if present) and the first line of the text. If you store a header, you must enter a number for this selection.
TEXT AREA	The number of lines reserved for the body of the text.
BOTTOM SPACE	The distance between the last line of the text and the footer (if present). If you store a footer, you must enter a number for this selection.
FOOTER	An optional running footer. (See "Header and Footer" on page 70.)
BOTTOM MARGIN	The distance between the footer (if present) or the last line of the text and the bottom edge of the paper. The default is 6 lines, which is one inch.

NOTE:

The text cursor cycles through only five of the eight fields on the screen. HEADER, FOOTER and TEXT AREA are automatically updated by the word processor. The numbers for HEADER and FOOTER are automatically set to 1 line if you store a header or footer, or 0 lines if there is no header or footer. The length of the TEXT AREA is defined as the PAPER SIZE less the lines reserved for TOP MARGIN, HEADER, TOP SPACE, BOTTOM SPACE, FOOTER, and BOTTOM MARGIN.

5. Press ↑ and ↓ until you reach the parameter that you wish to change.
6. Type the new value and press ↑ and ↓ to move to the next parameter that you want to change. Notice how the text area value will change to accommodate your selections.
7. When all the desired changes have been entered, press **RETURN**. Or, press **CANCEL** to return without saving the new settings.

NOTE:

*Your text will be divided into pages automatically according to the settings for the paper size. If you wish to begin a new page prior to reaching the line set by the paper size setting, press **CODE + P BREAK**.*

Header and Footer

STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
						PAPER SIZE	HEADER
						FOOTER	SCALE LINE ON/OFF
						DUAL SCREEN	CHANGE SCREEN

STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
						PAPER SIZE	HEADER
						FOOTER	SCALE LINE ON/OFF
						DUAL SCREEN	CHANGE SCREEN

A header is a title line and/or page number that will be automatically printed at the top of every page. A footer is a similar line at the bottom of the page.

1. Press **MENU** to display the menu.
2. Type **F** to select **FORM**.
3. Type **H** or **F** to select **HEADER** or **FOOTER**.
4. Type the header or footer and press **RETURN**. The text of the header or footer cannot exceed one line. It will disappear from the screen when **RETURN** is pressed, but will print on the line determined by the paper size setting when the text is printed. Pressing **CANCEL** at this step returns the system to the normal mode without entering the header or footer in memory.

NOTES:

- Entering a header or footer automatically updates the setting of the paper size screen.
- To have page numbering automatically included in the header or footer, type a number enclosed in double quotes. This number will be incremented for each page when printed. (The double quotes are not printed.) Begin with number 1 or with a different number if needed. This is useful if, for instance your document is the third chapter of a book. If chapter 3 starts at page 23, enter "23". Any number up to four digits in length (9999) is accepted.
- Example of a header and a footer with page numbering:

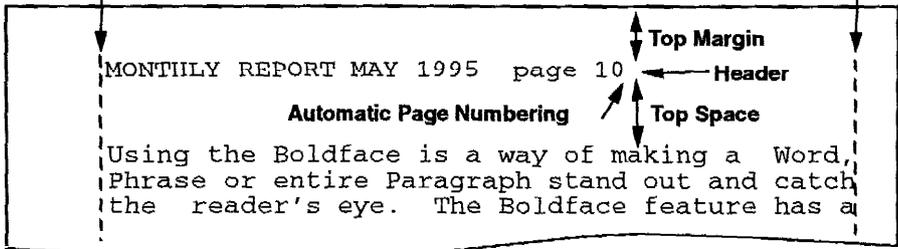
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- Printing effects (**BOLD** and **UNDERLINE**) can also be used with a header and footer. You can also center the header or footer or make it flush to the right margin.

Header

Left Margin

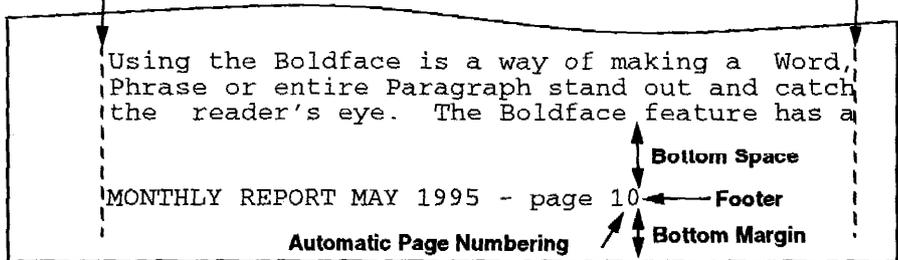
Right Margin



Footer

Left Margin

Right Margin



WORD PROCESSING

File Operation

The word processor stores each document in a separate "file" on a diskette and under an individual "file name" of up to eight characters that you choose when you store the document for the first time.

You are allowed to save your document at any moment during editing. Once your document is saved, you can start working with another document, or switch the word processor off. The next time you switch the word processor on, you can retrieve your document to complete editing. You may also decide to print a document that has been completed and previously saved, or the document you are working on.

This word processor also includes several File Utility functions such as file copy, delete, and rename that allow for easy maintenance of your text files.

Viewing the WP INDEX Screen



To view the list of your WP files on a particular diskette, switch from the WRITE/EDIT screen to the WP INDEX screen, insert that diskette, and press **FILE**.

The word processor assumes that you might wish to save the data that is currently displayed on the WRITE/EDIT screen.

The WP INDEX screen lists all the WP files on the current diskette. Example:

```
<<WP INDEX>>                                REMAIN: XXXX.XK
*NEWFILE      TEXT1      .WPT  (XX.X) TEXT2      .WPT  (XX.X)
TEXT3 .WPT  (XX.X) TEXT4      .WPT  (XX.X) TEXT5      .WPT  (XX.X)
TEXT6 .WPT  (XX.X) TEXT7      .WPT  (XX.X) TEXT8      .WPT  (XX.X)
Select a file and press RETURN. Press CANCEL to display MAIN MENU.
```

*NEWFILE is not a file stored on the diskette. This is an empty file that allows you to start from scratch.

The name of files actually stored on the diskette is followed with a file name extension that is automatically added by the word processor when you save a file. The extension for WP files is ".WPT". This extension allows the word processor to distinguish between the WP files and other files that may be stored on the diskette.

The numbers displayed in parentheses at the right of the file names indicate the size of the files (in kilobytes).

The number following the indicator REMAIN shows the remaining space on the diskette.

A file name can be selected by moving the block cursor (reverse display of the file name) with the cursor keys. If you have more files on the diskette than the amount that can be displayed on the screen, ↑ and ↓ will scroll the display. Use **CODE + PRE S** and **CODE + NEXT S** to scroll faster.

Saving a File

When you have completed typing and formatting a document, you will want to save it on the diskette.

Although the word processor allows you to type and print documents without saving them to diskette, saving is a good idea. You might, for example, find a mistake or change your mind just as you put the letter in the envelope. You can always delete unwanted documents later if you need more room. (See "Deleting a File" on page 83.)

Saving a New File



After creating a new file (the file name that appears on the upper-left corner of the screen is *NEWFILE), you have the options of saving or abandoning the file.

1. Press **FILE** to display the following prompt on the message line:

Save file? Press RETURN to save, CORRECT to abandon.

2. Press **RETURN** if you want to save the file, or **CORRECT** if the file is not worth saving.

NOTES:

- If you press **CORRECT**, the word processor switches to the **WP INDEX** screen without saving, and your work is lost. The old version of the file will remain untouched on the diskette.
 - Press **CANCEL** instead of **RETURN** or **CORRECT** to abandon saving and return to the **WRITE/EDIT** screen.
3. If you have pressed **RETURN**, the word processor asks you to input a file name:

Type filename and press RETURN.

FILENAME: .WPT

4. Type the file name (See "Entering a File Name" on page 75) and press. Type the file name and press **RETURN**. The word processor returns to the **WP INDEX** screen and you can confirm that the new file appears in the list.

Saving an Edited file

After editing an old file (the file name that appears on the upper-left corner of the screen is not *NEWFILE), you have the options of replacing the old version on the diskette with the new version (overwriting), abandoning the new version, or saving the new version under a separate file name.

1. After editing the file, press **FILE** to display the following prompt:

Save file? Press RETURN to save, CORRECT to abandon.

NOTE:

*If **FILE** is pressed without editing the document, the word processor proceeds directly to the WP INDEX screen without prompting you to save the file.*

2. Press **RETURN** if you want to save the file, or **CORRECT** if you do not want to save the new version of the file.
3. If you have pressed **RETURN**, the word processor asks you to enter a new file name:

Type filename and press RETURN.

FILENAME: XXXXXXXX WPT

4. If you want to keep both the old and new version of your file, type a new file name and press **RETURN**. The current version is saved under this new file name. If you want the current version of the file to replace the old one, press **RETURN** without modifying the file name. This message will appear:

Filename already exists. Type new filename and press RETURN.

FILENAME: XXXXXXXX WPT

NOTE:

The above message also appears if you type a file name already in use.

5. Press **RETURN** to overwrite (update) the old file. You can also type a new file name and press **RETURN** if you decide that you want to keep the old file.

Entering a File Name

When you are prompted to enter a file name, the WP INDEX screen shows only a list of the text files already saved on the diskette. The list of text files is displayed so that you can easily avoid entering a file name that is already used for another file. When typing a file name, please keep the following rules in mind:

1. A file name is made of up to eight characters. A beep sounds if you try to input more. The file name is followed with a period and a three character extension that is automatically created by the word processor. With the WP application, this extension is ".WPT".
2. The word processor accepts only the following characters in file names: upper and lower case letters of the alphabet (A-Z and a-z), the digits (0 to 9), and the hyphen (-). All others are refused and trigger a beep.
3. The word processor does not distinguish between upper and lower case letters. All letters are automatically converted into capitals.
4. To correct an error, use **BACKSPACE**, **CORRECT**, or **WORD OUT** to erase the preceding letter or use ← and → to move the text cursor back over the name and retype.
5. Check the list of file names to avoid typing a file name that already exists. If you have more files than can be displayed on the screen, use ↑, ↓, **CODE + PRE S**, and **CODE + NEXT S** to scroll the file names on the WP INDEX when typing a new file name.

Automatic Save Function

This word processor is equipped with an Automatic Save function that prevents the loss of a document if the power is accidentally turned off before you save the file.

When you have created a file and input up to 2,000 key strokes of data, your word processor will automatically create an AUTO SAVE FILE, which will be updated every 2,000 strokes. Thus, in the event of an accidental power outage, all but the last input of your file (those after the last updating of the AUTO SAVE FILE) are safe.

When you turn the power on with a diskette inserted in the drive, the system automatically searches for the AUTO SAVE FILE. If such a file exists, the system recognizes that a power loss occurred during the last session with that diskette, and the following message telling you how to recover the lost file will appear:

POWER FAILURE....recover AUTO SAVE FILE? Press RETURN (yes) or CANCEL (no).

Press **RETURN** to recover the contents of the file, or **CANCEL** to delete the AUTO SAVE FILE from the diskette.

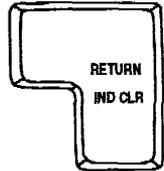
When you save a file, the AUTO SAVE FILE is deleted so that the next time you turn the power on, the AUTO SAVE FILE will not be found, and the above message will not appear.

Returning to the Main Menu

EXIT COPY DELETE RENAME CONVERT ALL DELETE PRINT

1. Press **MENU** to display the function menu.
 2. Type **E** to select **EXIT**.
- **Short cut:** Instead of (1) and (2), press **CANCEL**.

Retrieving a File



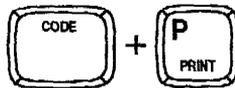
To retrieve an old file in order to complete typing or resume editing, you must first display the WP INDEX screen. The WP INDEX screen always appears when you select the WP application from the MAIN MENU. That screen also appears after you save a WP file, so that you can continue working with another file.

Once the WP INDEX screen is displayed, select the name of the file that you want to retrieve by moving the block cursor with ←, →, ↑, and ↓ to its name on the screen and pressing **RETURN**. The file will be loaded from the diskette into the word processor's memory and the beginning of the document will be displayed on the WRITE/EDIT screen.

Printing a Document

You can either print the page currently displayed on the WRITE/EDIT screen or print an entire file after saving it.

Starting Page Print

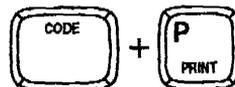


STYLE BLOCK CTR/RMF GRAMMAR1 GRAMMAR2 SEARCH FORM **PAGE PRINT**

When you print a single page from the WRITE/EDIT screen, all settings like header, footer, and keyboard changes are effective. The stop symbols, however, do not cause printing to stop, but instead are printed as blank spaces.

1. Insert a sheet of paper. (See "Inserting Paper" on page 9.)
2. Position the cursor on the page that you want to print.
3. Press **MENU** to display the menu.
4. Type **P** to select PAGE PRINT.
 - **Short cut:** Instead of steps (3) and (4), press **CODE + P (PRINT)**.
5. For next operation, see page 79.

Starting File Print



EXIT COPY DELETE RENAME CONVERT ALL DELETE **PRINT**

If you wish to print the entire document, you must use the WP INDEX screen.

1. Move the block cursor to the file that you want to print.
2. Press **MENU** to display the menu.
3. Type **P** to select PRINT. The print menu screen shown below appears.
 - **Short cut:** Instead of steps (2) and (3), press **CODE + P (PRINT)**.

```
<< PRINT MENU >>      PRINT FILE:XXXXXXXXX
STARTING PAGE          1
ENDING PAGE            999
NUMBER OF COPIES      1
HEADER PRINT          YES
FOOTER PRINT          YES
PAUSE FOR KB CHANGE   YES
MERGE PRINT           NO
DOUBLE COLUMNS       NO
SPACE BET. COLUMNS   5
~
Type number. Insert paper, press RETURN to start printing.
```

The definition of each setting is explained in the next table.

Option	Definition
STARTING PAGE	The page number of the file on which printing is to start. The setting must be greater than zero and less than 1000. The default is 1 (starting from the first page).
ENDING PAGE	The page number of the file on which printing is to end. Must not be lower than the STARTING PAGE number. If the number is higher than the total number of pages, printing stops after the last page. The default is 999.
NUMBER OF COPIES	The number of copies you want to print. Must be greater than zero and less than 100. The default is 1 (the pages are printed once).
HEADER PRINT	Use SPACE BAR to switch between YES and NO. If YES, any existing header will be printed on each page. If NO, no header will be printed, even if you have entered one.
FOOTER PRINT	Use SPACE BAR to switch between YES and NO. If YES, any existing footer will be printed on each page. If NO, no footer will be printed, even if you have entered one.
PAUSE FOR KB CHANGE	Use SPACE BAR to switch between YES and NO. If YES, pauses will be made for changing the daisy wheel when necessary. If NO, all pages will be printed out using the same keyboard that is used for the first character to be printed. However, if the character pitch had been changed during the WRITE/EDIT mode, pauses will be made for changing the daisy wheel even if NO is selected.
MERGE PRINT	This should be left as NO when printing ordinary document files. (See "Merge Printing" on page 95.)
DOUBLE COLUMNS	This should be left as NO when printing ordinary document files. (See "Double Column Printing" on page 90.)
SPACE BET. COLUMNS	This is used together with the above double columns printing and should be ignored when printing ordinary document files. (See "Double Column Printing" on page 90.)

NOTE:

The default values for **STARTING PAGE**, **ENDING PAGE**, and **NUMBER OF COPIES** are displayed each time the print menu screen is called up.

4. Move the cursor with ↑ and ↓ to any values you would like to change, and change using **SPACE BAR** for YES/NO setting, or by typing the desired value for the other options.
5. Insert a sheet of paper and press **RETURN**.

NOTES:

- Press **CANCEL** at any time to terminate selection and return to the **WP INDEX** screen.
- If there is a wrong setting, the following message appears and you have to correct it to the right setting.

Incorrect setting.

NOTE:

An error will occur if the setting for **STARTING PAGE** is greater than the last page of the document.

Incorrect page number. Press **CANCEL** to exit.

6. If this is the first time you are printing the file, or you have previously printed a file using a different pitch, you will be prompted to install the proper daisy wheel to match the pitch setting selected. Insert the correct wheel, if necessary, and press **RETURN**. As soon as printing starts, the following message is displayed:

Printing. Press **SPACE** to pause.

Pausing/Resuming Printing



Sometimes you may wish to temporarily interrupt printing – to adjust the paper position, for example.

1. Press **SPACE BAR** to stop the printer. A message indicating that the printer is paused will be displayed.

Printing paused. Press **SPACE** to continue.

2. Press **SPACE BAR** to restart the printer. The above message reappears:

Printing. Press **SPACE** to pause.

NOTES:

- Printing in progress can be terminated by pressing **CANCEL**.
- When printing is completed (or canceled with the **CANCEL** key), the system returns to the **WRITE/EDIT** screen (page printing) or to the **WP INDEX** screen (file printing).

Daisy Wheel Changes

Each time the word processor finds a pitch change in the file, and, if you have set the **PAUSE FOR KB CHANGE** option to **YES**, each time the word processor finds a keyboard change, printing is interrupted and a message similar to the following will appear:

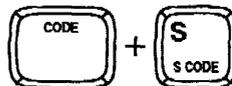
Change to KB:II 12 wheel and press RETURN.

This means that an international daisy wheel of pitch 12 is required at this point. Change the wheel and press **RETURN** to resume printing.

NOTE:

*If **PAUSE FOR KB CHANGE** is set to **NO** in the print menu screen, printing will stop for pitch changes, but not for keyboard changes.*

Stop Symbols



Stop symbols \boxtimes can be placed in your file to instruct the printing to stop at a particular point. When printing stops, your word processor automatically switches to the typewriter application and you are able to insert text at that position. This feature is primarily used for applications using form letters with minor changes. For example, if you need to send out two identical letters and the only information that is different is the name and address of the person the letter is being sent to, proceed as follows:

1. When creating the letter, press **CODE + S (S CODE)** to insert a stop code at the point where the name and address appears. During printing, you will be able to manually type in the appropriate name and address when the printing stops.
2. Save your file and start file printing as explained above.
3. When the word processor finds a stop code, printing is interrupted and the following message appears:

Stop code. Type text and press PRINT to continue.

4. Type your text (name and address in our example). This will not be stored in memory. The remainder of the file will, however, be reformatted to accommodate the inserted text.
5. Press **CODE + P (PRINT)** to resume printing.

NOTES:

- *Stop codes are ignored and replaced as a space if you select PRINT PAGE from the WRITE/EDIT Screen. They are only effective during file printing through the WP INDEX screen. You can print the file as many times as required, each time inserting different information.*
- *When printing has temporarily stopped after a stop code has been encountered, the printing mode may be canceled entirely by pressing CANCEL, at which time the display will return to the WP INDEX screen.*
- *When a stop code for direct typing is encountered at the end of the text area defined in the P SIZE setting (54 lines is default) and additional typing will exceed this setting, a beep will sound and the word processor will go into PAGE END status. The following message will appear on the display:*

Page end. Press CORRECT to type one more line.

NOTE:

In order to type one more line, press CORRECT and begin typing. Or press P INS to change to a new page.

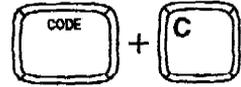
Diskette Utility Functions

To help you keep your document files in order, there are utility functions for discarding out-of-date files and making copies. (See also "Initializing New Diskettes" on page 17.)

NOTES:

- *The following descriptions all assume that you have saved your current document and are already at the WP INDEX screen. (See "Saving a File" on page 73.)*
- *The functions that are available in the WP INDEX screen are displayed when you press MENU.*

Copying a File



EXIT COPY DELETE RENAME CONVERT ALL DELETE PRINT

You can edit a file and keep both the old and new version on the diskette. (Make a copy of the file before editing it). You can also copy important files onto a different diskette to back up your work.

1. Move the block cursor to the file that you want to copy.
2. Press **MENU** to display the menu.
3. Type **C** to select COPY. The following message appears:

Insert destination disk and press RETURN.

- **Short cut:** Instead of (2) and (3), press **CODE + C**.
4. You can create this copy on the same diskette or on a different diskette. To copy on to the same diskette, just press **RETURN**. If you want to copy the file to another diskette, remove the source (original) diskette and insert the destination diskette and press **RETURN**. The following message appears:

Type filename and press RETURN.

FILENAME: XXXXXXXX WPT

5. Input the new file name and press **RETURN**. If you copy the file on a different diskette, you can use the same file name. The following message is displayed during the copy operation and disappears after completion. The system then returns to the WP INDEX screen, with the block cursor on *NEWFILE.

Copying the file....please wait.

NOTE:

If the specified new file name already exists on the inserted diskette when you press **RETURN** in step (5), the following message appears:

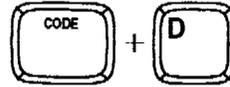
Filename already exists. Type new filename and press RETURN.

FILENAME: XXXXXXXX WPT

NOTE:

To overwrite the old file, type a new file name and press **RETURN**, or press **RETURN** without changing the file name.

Deleting a File



EXIT COPY **DELETE** RENAME CONVERT ALL DELETE PRINT

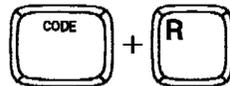
File deletion is useful when the diskette is full and saving cannot be carried out. You may delete unwanted files to make room for your new document.

1. Move the block cursor to the file that you want to delete.
2. Press **MENU** to display the menu.
3. Type **D** to select **DELETE**. The following message appears:

Delete? Press Y (yes) or N (no).

- **Short cut:** Instead of (2) and (3), press **CODE + D**.
4. Press **Y** to delete the file. The file is deleted and the block cursor moves back to the **WP INDEX** screen. If you press **N**, the message disappears and the system goes back to the **WP INDEX** screen without deleting the file. The cursor will be on the file which was to have been deleted.

Renaming a File



EXIT COPY DELETE **RENAME** CONVERT ALL DELETE PRINT

To change the name of a file, follow these steps.

1. Move the block cursor to the file that you want to rename.
2. Press **MENU** to display the menu.
3. Type **R** to select **RENAME**. The following message appears:

Type filename and press **RETURN**.

FILENAME: XXXXXXXX.WPT

- **Short cut:** Instead of (2) and (3), press **CODE + R**.
4. Input the new file name and press **RETURN**.

NOTES:

- If the specified new file name already exists when you press **RETURN** in step (4), the following message appears:

Filename already exists. Type new filename and press RETURN.

FILENAME: XXXXXXXX WPT

Type a new file name and press **RETURN**.

- Pressing **CANCEL** while a message is displayed cancels the operation and returns the system to the **WP INDEX** screen.

Using Your Brother Word Processing Files in a PC or Using a PC File in Your Brother Word Processor

You can transfer the word processing data created on your Brother Word Processor to a personal computer or vice versa. To do this, you must be sure that the files are compatible. This means that the files must be in ASCII format and that the files must be contained on a 720K or 1.44M DOS formatted diskette.

- **720K or 1.44M Formatted Diskettes**

The first step in making the data compatible is the diskette format. The Brother Word Processor recognizes the type of diskette (720K or 1.44M) and formats the diskette to the corresponding DOS compatible format. So, taking files from your Brother Word Processor to an IBM compatible PC is simple.

However, if you plan to move data from a PC to your Brother Word Processor, you must be sure that the diskette containing the file is formatted to a 720K or 1.44M DOS format. The file must also be stored in the root directory on the diskette.

You can format your diskettes on the PC or on your Brother Word Processor. Your PC manual should list the steps necessary to complete this operation. However, many PC users find it difficult to format diskettes on a PC. In that case, format the diskette on the Brother Word Processor, insert the diskette into the PC and save the ASCII file to the diskette. (Be sure to save in the root directory.)

- **Converting a File to ASCII Format**

Word Processors and computers do not store data in the same format. In order to transfer your text files from your word processor to a computer, or vice versa, the files must be converted to a standard text format that both units can understand. This standard format is called ASCII.

The CONVERT function transforms your text files from the word processing format to an ASCII format. It can also transform ASCII file format files that were created on a computer into the word processing format that your word processor uses.

- **What is an ASCII File**

An ASCII file, which contains text, is stored in a format called ASCII (American Standard Code for Information Interchange). It consists of printable data containing no special formatting codes for underlining, boldface, etc. These special formatting features, such as underlining, do not translate correctly between your word processor and a computer. Therefore, when a file is converted to ASCII, all special formats are eliminated. Once the file is transferred, the file must be reformatted and any special effects must be added.

Conversions to, or from ASCII files are carried out according to the IBM PC Code page 437. For details about code page switching, refer to your DOS manual (DOS command **mode device codepage**). A table on page 285 shows all characters that can be correctly converted. Characters which are not included in that table are converted into blank spaces.

• Operation

```
EXIT COPY DELETE RENAME CONVERT ALL DELETE PRINT
                             WP TEXT.WPT->ASCII.TXT
                             ASCII.TXT->WP TEXT.WPT
```

- Your Brother Word Processor can only read 720K or 1.44M DOS formatted diskettes. Be sure the ASCII file created on your personal computer is saved on this type of diskette.
 - When you save an ASCII file on diskette using your personal computer, be sure to save the file in the root directory of the diskette. Your Brother word processor cannot access sub-directories of a diskette.
 - Also, be sure to add the extension “.TXT” to the file name of any ASCII file created on your personal computer so that your Brother word processor can identify the file as an ASCII file.
1. Insert the diskette with the file to be converted in the drive.
 2. With the WP INDEX displayed, press **MENU** to display the menu
 3. Use ← and → to select **CONVERT**, and press **RETURN** or when convert is highlighted, press ↓ to display the sub-menu.
 4. Use ↑ and ↓ to select WP TEXT.WPT->ASCII.TXT or ASCII.TXT->WP TEXT.WPT and press **RETURN**. The CONVERT INDEX screen will show the list of source files (WP files if you selected WP TEXT.WPT->ASCII.TXT, or ASCII files if you selected ASCII.TXT->WP TEXT.WPT) and this message will appear:

Select a file to convert and press RETURN. Press CANCEL to exit.

5. Move the cursor to the file to be converted and press **RETURN**. You can also press **CANCEL** to exit.
6. When converting a WP file into an ASCII file, you have two options: **TEXT ONLY** and **TEXT WITH LAYOUT**. Use ← and → to select the option and press **RETURN**. The message shown below will appear. This message appears immediately after step (5) when converting an ASCII file into a WP text file. **TEXT ONLY** removes any formatting code from the file. When you import such a file into a personal computer word processing program, the text will automatically be adapted to the format of the PC word processing program.

TEXT WITH LAYOUT preserves the format of the file. A carriage return will be added at the end of each screen line. However, if the margins of your original file are unusually wide, additional carriage returns will be placed into the file and re-formatting will be necessary.

Insert destination disk and press RETURN.

7. Insert another diskette and press **RETURN**, or press **RETURN** if you want the converted file to be created on the same diskette. The word processor asks you for a file name.

Type filename and press RETURN.

8. Type a file name and press **RETURN**. During conversion, this message will appear:

Converting the file....please wait.

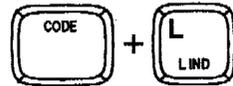
and will be replaced with the following message when the conversion is completed:

Converting completed. Insert original disk and press RETURN.

If you converted an ASCII file into a WPTXT.WPT file, you can now recall that file through your Brother Word Processing application. If you converted a WPTXT.WPT file into an ASCII file, you can now insert that diskette into your PC and recall the file for use.

9. Insert the original diskette back into the drive and press **RETURN**.

Deleting All Files



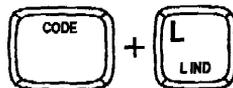
EXIT COPY DELETE RENAME CONVERT **ALL DELETE** PRINT

1. Press **MENU** to display the menu.
2. Type **A** to select **ALL DELETE**. The following message appears:

Delete all files on this index? Press Y (yes) or N (no).

- **Short cut:** Instead of (1) and (2), press **CODE + L**.
3. If you press **Y**, all the files on the WP INDEX are deleted, the message disappears, and the block cursor moves to *NEWFILE. Pressing **N** interrupts deleting and returns the system to the WP INDEX screen.

Disk Copy



EXIT COPY DELETE RENAME **DISK COPY** ALL DELETE PROTECT ON/OFF PRINT

This function allows you to copy all files contained on a diskette to another diskette.

WARNINGS:

- *The Disk Copy function erases the Temporary file from memory.*
- *Copying an entire diskette to another diskette destroys any data that may be on the destination diskette. Check the destination diskette before starting to ensure that there is no data that you want to save.*
- *Be sure that the destination diskette has been initialized.*

1. Press **MENU** to display the menu.
2. Type **O** to select DISK COPY. The following message appears:

Source disk: 720KB/2DD. Use the same format type for destination disk
Insert source disk and press **RETURN**.

or

Source disk: 1.44MB/2HD. Use the same format type for destination disk
Insert source disk and press **RETURN**.

3. Insert the source (original) diskette and press **RETURN**. The word processor will start reading files from the source diskette (Since the memory space is limited, the word processor may not be able to read all the files in one step).

Insert destination disk and press **RETURN**.

4. Insert the destination diskette and press **RETURN**. The word processor will transfer the files that have been read from the source diskette onto the destination diskette. If all the files on the source diskette have not been transferred, the word processor will prompt you to reinsert the source diskette, repeat steps (2) and (3) until all files have been transferred. This may happen several times until all files are transferred to the destination diskette.

NOTE:

The word processor recognizes the source diskette and the destination diskette. If you inadvertently insert the wrong diskette, one of the following messages will appear:

Diskette types not compatible. Insert 720KB/2DD diskette and press RETURN.

OR

Diskette types not compatible. Insert 1.44MB/2HD diskette and press RETURN.

NOTE:

*You may press **CANCEL** at any time (except during diskette access) to stop the DISK COPY operation.*

When the diskette is copied, the INDEX screen reappears.

Advanced Functions

This section deals with the most advanced functions available on this word processor with the WP application. These functions will enable you to further improve the overall quality of your documents and eliminate most of the mechanical tasks.

Double Column printing is used to automatically print a document in two columns.

The dual screen function allows you to work simultaneously on two different documents at the same time.

The layout function displays one full page of text at a time, in a compressed form so that you can have an idea of the general aspect of your document. You can also use this function to display an entire frame on screen.

The merge function is used to automatically print many copies of a document, each copy including individual changes such as names and addresses.

Double Column Printing

This function allows you to print your text in magazine style, with two columns across the page. A page on the screen will be printed as a column on paper. In other words, two pages will be printed on a single sheet of paper, the first page as the left column and the second page as the right column.

When formatting your document for double column printing, reduce the distance between margins so that both columns and the space between columns can fit on the paper. The margins for the document should be set for one column. Use 12 or 15 pitch in order to fit more text on a line.

NOTES:

- *Double column printing does not work with merge printing. Merge symbols as well as stop symbols are ignored during double column printing and replaced with blank spaces.*
 - *To ensure proper column alignment, the document must not contain any margin, pitch, or line-spacing changes. It may, however, contain any number of keyboard and tab changes.*
1. Proceed as you would to print a text file in standard format.
 2. When the print menu screen appears, set the **DOUBLE COLUMNS** to **YES**. If necessary, set the **SPACE BET(ween) COLUMNS** (the default is five blank spaces and the available range is from 1 to 50). You may change other settings on the menu as well, but you must not set the **MERGE PRINT** option to **YES**.
 3. Press **RETURN** to start printing.

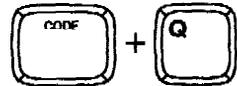
XXXXXXXX P:XX L:XXX COL:XXX PITCH:XX L.SP:X.X 0 L 2 3 4 5 6 ... H ... 7...R...
E
Text of the first file
XXXXXXXX P:XX L:XXX COL:XXX PITCH:XX L.SP:X.X KB:XX 0 L 2 3 4 5 6 ... H ... 7...R...
E
Text of the second file

5. You can now edit the document in the lower half of the screen exactly in the same way as in the usual full-size WRITE/EDIT screen. The only difference is that the text area is smaller.

NOTE:

It is possible to increase the text area by one line using the SCALE LINE ON/OFF function. (See "Example 2: You selected FORM" on page 32.)

Switching to the Other Document



STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
						PAPER SIZE	
						HEADER	
						FOOTER	
						SCALE LINE ON/OFF	
						DUAL SCREEN	
						CHANGE SCREEN	

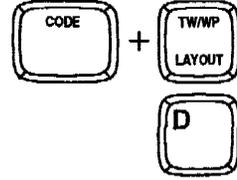
1. Press **MENU** to display the menu.
 2. Type **F** to select FORM.
 3. Type **C** to select CHANGE SCREEN. The cursor immediately moves to the text displayed on the upper half if it was in the lower half, and vice-versa.
- **Short cut:** Instead of (1), (2), and (3), press **CODE + Q**.

Returning to the Normal WRITE/EDIT Screen

To return to the normal WRITE/EDIT screen, you must save one of the two files that are displayed on the dual screen.

1. Use the CHANGE SCREEN function described above to position the cursor on the document that you want to save.
2. Press **FILE** and proceed to save or abandon the document. The document that was not selected for saving is now displayed on a full-size WRITE/EDIT screen.

Page Layout View Function



When a document is complete, you may want to check the layout in order to make final adjustments. You could try to print a page or the entire document. This word processor provides you with a method for checking the format that is faster and cheaper than printing. The page layout view function displays a full page of your document on the screen.

1. While editing a text file, press **CODE + LAYOUT** to switch to the preview screen.
2. Use the cursor keys \uparrow and \downarrow to move from one page to another.
3. To return to the WRITE/EDIT screen, press **RETURN, CANCEL, or CODE + LAYOUT**. The page that was selected in the preview screen appears now in the normal display. This feature is very convenient when you spot some layout defect in the preview screen. You can select that page number and immediately switch to normal display to correct the defective format.

NOTE:

The text is first displayed according to the setting of the **DOUBLE COLUMNS PRINTING** option on the **PRINT MENU** screen: a single column if the option is set to **NO**, or two columns per page if the option is set to **YES**. Press **D** to switch from one display mode to the other.

WORD PROCESSING

The screenshot shows the Page Layout View screen. At the top left, it says '<< LAYOUT >>'. At the top right, there is a small box containing the number '15'. Below the title, there is a table with the following data:

TOP MARGIN	6
HEADER	0
TOP SPACE	0
TEXT AREA	54
BOTTOM SPACE	0
FOOTER	0
BOTTOM MARGIN	6

To the right of the table is a large, empty rectangular area representing the preview of the page layout. At the bottom of the screen, there is a shaded bar with the text 'Press D to show COLUMN/NORMAL'.

Data Merge

The data merge function is useful when a similar letter is to be sent to numerous addresses, each letter to be typed with a different name and address and different contents. To save you from having to recall, edit, and print the same letter over and over, the merge file function does the job automatically. The following steps summarize the use of this function:

1. To use the data merge function, you must first create a file containing the data to be inserted in the letters (the Address Book file). For details, see "Address Book" on page 155. The data to be inserted into a single letter is called a record. A record is made of different labels (label 1, label 2, label 3, etc.) that correspond to the different pieces of information you need to insert in a single letter (name, address, etc.). You must organize your Address Book file logically: the same label of each record must contain the same type of information. For example, label 1 will contain a name, label 2 an address, label 3 a phone number, etc.
2. Next, you must create a Word Processing file containing the text that will be common to all letters (the master document). Wherever a piece of variable information has to be inserted in that text, you insert a "merge symbol" and input a label number.
3. When you print the master document, the text is printed until a merge symbol is encountered. At that point, the word processor compares the number that you have input with the merge symbol, and automatically replaces the merge symbol with the data contained in the corresponding label of the first record. When the whole document is printed, the word processor checks the Address Book file to see if there are more records. If there are no more records, merge printing is completed. Otherwise printing of the master document starts again, and this time, the next record of the Address Book file is used. The process is repeated until all records of the Address Book file have been used.

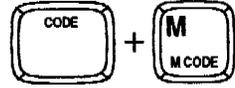
Creating the Address Book File

To use the Data Merge function, you must first create an Address Book file, which is a file containing the names, addresses or other data to be inserted into the document. You create that file using the Address Book program. For details, see "Address Book" on page 155, and specifically, "Preparing the Record for Merge Printing" on page 161.

You can create the Address Book file specifically for your merged document, or use an existing Address Book file. If you are using an existing file and there are records in the file that you do not want to include in merge printing, be sure to delete the asterisk that appear to the left of such records.

Also be sure to remember which label numbers (columns) in the Address Book file correspond to the different pieces of information you want to insert.

Creating a Document with Merge Symbols



Your next step is to create the master document with the Word Processing application.

1. Begin typing your document.
2. Once you reach a point in your document where data from the Addressbook file needs to be inserted, press **CODE + M (M CODE)**. A merge symbol **M** appears in the document. The MRG: indicator appears and the cursor rests to its right waiting for your input. The following message appears:

Type number and press RETURN.

3. Type the number of the label that you need at that position of the document. Using the above example, type **1** if you need a MR/MS, **2** if you need a last name, or **3** if you need a first name.
4. To resume normal operation, press **RETURN**. The cursor returns to the text area.
5. Continue typing your document, inserting merge symbols wherever you need variable data from the Addressbook file.

NOTE:

*A mistake when inserting a merge symbol can be corrected by pressing **CORRECT**, and retyping the correct number.*

6. Press **FILE** to finish the master document.

Merge Printing

When copies of the same letter must be sent to a number of people, the merge printing function extracts the different data, such as addresses and salutations, from the Addressbook file you want to use and incorporates it into the master letter. It then prints as many different copies as there are lines of data (records) with an asterisk in the Addressbook file. Proceed as follows:

1. Refer to "Starting File Print" on page 77 to print the master document.
2. When the print menu screen appears, set the **MERGE PRINT** option to **YES**. (See "Starting File Print" on page 77.) You may also change other settings on the menu as well. Pressing **RETURN** to exit the print menu screen when the **MERGE PRINT** option has been set to **YES** will display the **ADDRESSBOOK INDEX** screen, listing all the Addressbook files on the current diskette. If the Addressbook file you want to use is not on the current diskette, insert the correct diskette.

3. Select the Addressbook file that you want to use with the master document and press **RETURN** to start printing. Press **CANCEL** to return the system to the WP index screen. All the functions available during normal file printing are also available during merge printing.

NOTES:

- If there is no data in the Addressbook file corresponding to a merge symbol in the text file, a single space will be printed.
- Printing of merge data is done according to the mode (**NORMAL**, **BOLD**, **UNDERLINE**, etc.) in effect when the merge symbol was entered.

Business Letter Template Diskette

The Business Letter Template diskette is provided to help you write business letters. The sample letters stored on this diskette are divided into different categories. Each file contains several letters of the same category. After a file is displayed on the WRITE/EDIT screen, you are able to select the letter which fits your purpose. You can then edit that letter by changing names, addresses, dates, etc. You can also add new text. You can then print your letter and save it.

Operation

1. Insert the Brother Business Letters diskette in the disk drive.
2. Select Word Processing from the MAIN MENU. A list of the files stored on the diskette appears on the WP INDEX screen.
3. Select the file that you want to use and press **RETURN**. The file appears on the WRITE/EDIT screen. The titles of the letters in the file are displayed as the first page of the file.
4. Use **CODE + G (GO TO)** to jump to the desired letter.
5. Copy the letter to the clipboard.
6. Press **FILE** to return to the WP INDEX screen. Do not save the template file.
7. On the WP INDEX screen, select *NEWFILE and press **RETURN** to return to the WRITE/EDIT screen.
8. Paste the contents of the clipboard.

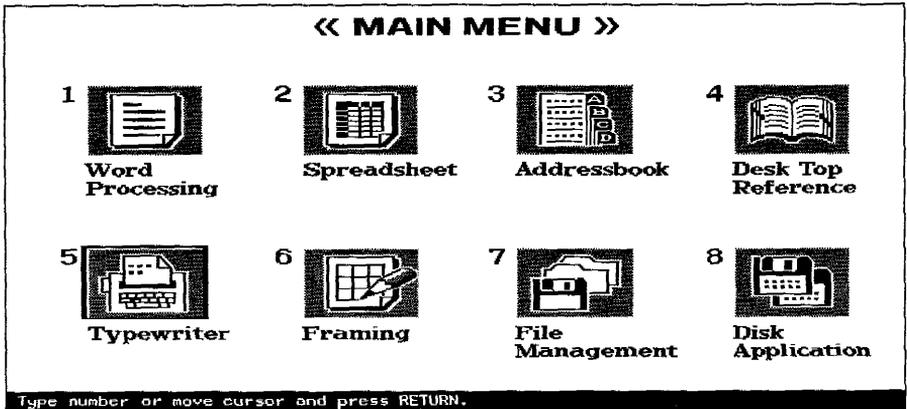
Your template letter is now displayed on the screen. You can edit, save, and print the file the same way you would do with another WP document.

Typewriting

When you start the Typewriter application, you will find that the word processor works just like an electronic typewriter. All your typing will be immediately printed on paper and will not affect the memory. The text you type is not stored in memory. If you already have some text in the memory (this is possible because you are allowed to switch to the typewriter application while editing a file), that text will not be changed by the operations done with the typewriter application. The typewriter is equipped with a separate line memory, allowing for easy correction of the current line of text. If a line has to be processed before printing (when centering, for example), the line is temporarily displayed on the screen, and is printed when you press **RETURN** or **TAB**.

Starting the Typewriter Application

From the Main Menu



1. Switch the power on to display the Main menu.
2. Use the cursor keys to select the icon for Typewriter and press **RETURN**, or simply press **5** or **TW/WP**. The Typewriter screen shown on the next page is displayed.

From the Word Processing Application



While using the Word Processing application, you can immediately switch to the Typewriter application by pressing **TW/WP**.

NOTE:

When the typewriter finds a stop symbol in a file during file printing, it switches automatically to the Typewriter application to allow you to manually add text in the document being printed.

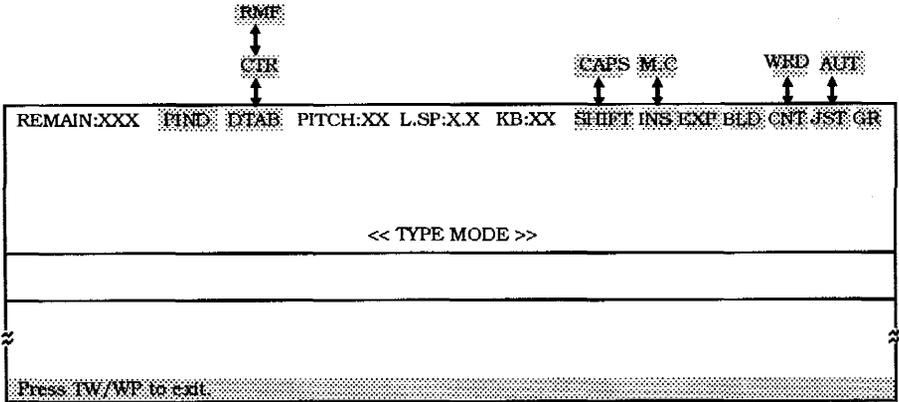
Settings such as left/right margins, tabs, etc. are independent in the Word Processing and Typewriter applications. That is, if you set the left margin to column 5 in Word Processing, then switch to the Typewriter and set the left margin to column 10, this does not modify your setting in Word Processing. If you switch the system back to the Word Processing, the left margin is still in column 5.

The typewriter application is divided into four modes: the normal mode, where all you type is printed directly, with no auto return; the auto mode, which is like the normal mode but with auto return; the line-by-line mode, which has a one-line memory displayed on the screen as well as auto return; and the justify mode, which also has a one-line memory (with screen display) in addition to justified right margins. These modes are switched by pressing **CODE + O (OPERATE)** in the sequence shown below.

TYPE → TYPE (Auto) → L/L (Auto) → L/L (Justify) → TYPE

The Typewriter Application Screen

The following screen appears when you switch the system to the typewriter application. This screen displays the value of various settings, and a line of text when the line in question has to be processed before printing, or when you want to use the line-by-line mode.

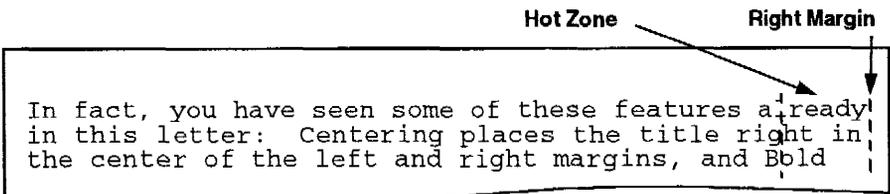


Status Line

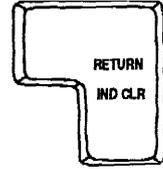
The status line indicators show you where you are and what settings are selected. (For a complete list of the indicators, see "Indicators" on page 283.)

The Hot Zone

The hot zone starts six spaces before the right margin. The typewriter will beep when the carrier enters that zone. The REMAIN indicator tells you the number of characters that you can still type on the current line.

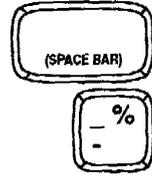


Manual Return



Pressing **RETURN** advances the paper by the current line space and moves the carriage to the left margin.

Automatic Return

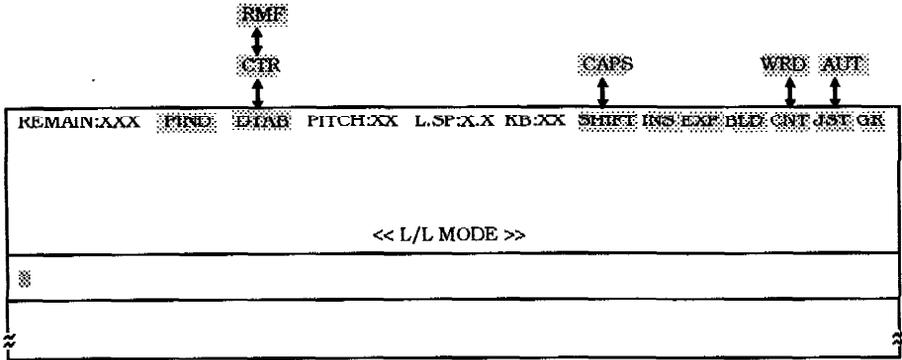
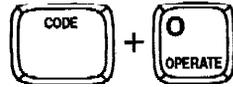


Pressing **CODE + O (OPERATE)** sets the typewriter in the auto mode. The carriage is automatically returned to the left margin if you type a space or a hyphen within the hot zone.

NOTES:

- If you do not want the carriage to return when you type a space (the next word can still fit in the hot zone), press **CODE + SPACE BAR** instead of **SPACE BAR**.
- If you don't want the carriage to return when you type a hyphen (the hyphen is part of the word and the characters following this hyphen can still fit in the hot zone—example: "built-in"), press **CODE + [-]** instead of [-].
- If you reach the right margin, the typewriter stops. Press **RETURN** to move the carriage to the left margin, or **CODE + M REL** to continue typing beyond the margin.

Line-by-Line Mode



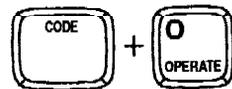
You can enter the line-by-line mode and switch between the other sub-modes with **CODE + O (OPERATE)**.

1. Press **CODE + O (OPERATE)** while in the auto mode of the type mode to display the L/L mode screen. A text area limited to a single line appears in the middle of the screen.

NOTES:

- In L/L mode, automatic return is always activated.
 - If you need to justify your text, press **CODE + O (OPERATE)** again to activate the justify function and display the JST indicator.
2. Type your text. The text is displayed on the screen and the carriage moves as you type, although nothing is printed. If you press a dead key, the carriage does not move until you have pressed the base character.
 3. To print what you have typed, press **RETURN, TAB, CODE + P IND, CODE + L (L IND),** or **CODE + IND CLR**. Printing will also be done automatically after you type a character following a hyphen or a space in the hot zone.

Justification Mode

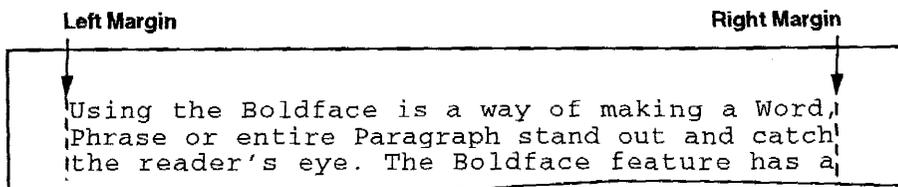


The Justification mode allows you to print text aligned to both left and right margins.

1. Press **CODE + O (OPERATE)** until the JST indicator appears.
2. Type your text. The text is displayed on the screen first and the carriage moves simultaneously as you type. If you type a space in the hot zone, justified text is printed and the carriage is automatically returned. Typing a hyphen in the hot zone justifies after typing the next character.

NOTES:

- Pressing **RETURN** aligns the line with the left margin only.
- The carriage will not return automatically if you type a space when the last entered character of a word reaches the right margin. In this case, you must press **RETURN**.



Basic Typing

Inserting Paper

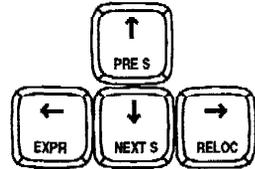


Insert a sheet of paper and press **P INS**. Paper is automatically fed. You can start typing at approximately one inch from the top of the paper. Since the carriage is positioned at the center after automatic insertion, press **RETURN** to move the carriage to the left margin.

NOTES:

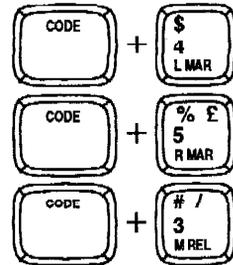
- Paper cannot be inserted this way while in display mode (centering, right margin flush, decimal tab mode).
- Paper can be inserted this way in L/L mode only before entering text on the screen.

The Cursor Keys



The cursor keys can be used to move the carriage (except when the text of the line is temporarily displayed). ← and → move the carriage one character pitch to the left or the right. ↑ and ↓ move the carriage up or down by 1/12 of an inch (the paper moves), except when the text is displayed on the screen.

Setting Margins



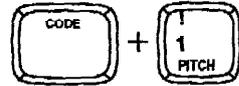
1. Move the carriage by using **SPACE BAR** or **TAB** (to move to the right) or **BACKSPACE** or **CODE + EXPR** (to move to the left).
2. If you want to set the new margins beyond the old ones, press **CODE + M REL** when the carriage reaches the current margin.

3. To set a margin at the carriage position, press **CODE + L MAR** or **CODE + R MAR**.

NOTES:

- Margins cannot be set while in display mode (centering, right margin flush, decimal tab) or in L/L mode.
- There must be at least two inches between margins.
- The margin settings are reset to their default values when you switch the power off, then on.

Selecting the Pitch



Pressing **CODE + PITCH** changes the pitch through the following cycle:

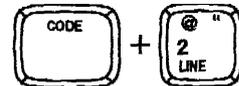
PITCH:10 → 12 → 15 → 10

Pitch	Number of Characters per inch
10 (PICA)	10 characters per inch
12 (ELITE)	12 characters per inch
15 (MICRON)	15 characters per inch

NOTES:

- The pitch cannot be changed while in display mode (centering, right margin flush, decimal tab mode).
- The pitch can be changed in L/L mode only before entering text on the screen.
- The pitch setting is reset to its default value when you switch the power off, then on.

Selecting the Line Space



Pressing **CODE + LINE** changes the line space through the following cycle:

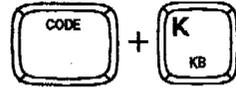
L.SP:1.0 → 1.5 → 2.0 → 1.0

Line Spacing	Number of Lines per inch
1.0	6 lines per inch
1.5	4 lines per inch
2.0	3 lines per inch

NOTE:

The line space setting is reset to its default value when you switch the power off, then on.

Changing the Keyboard



If you need to print characters that are not available on the current daisy wheel, change the daisy wheel and press **CODE + K (KB)**.

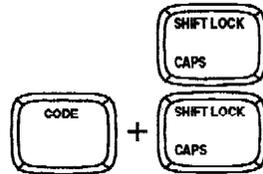
KB:I → II → III → I

Keyboard Selection	Use
I (Standard)	English text
II (International)	Languages using extra characters
III (Symbol)	Mathematical symbols and Greek characters

NOTES:

- Please refer to "Character Keys" on page 264 for details.
- The keyboard setting cannot be changed while in display mode (centering, right margin flush, decimal tab mode).
- The keyboard setting can be changed in L/L mode only before entering text on the screen.
- The keyboard setting is reset to its default value when you switch the power off, then on.

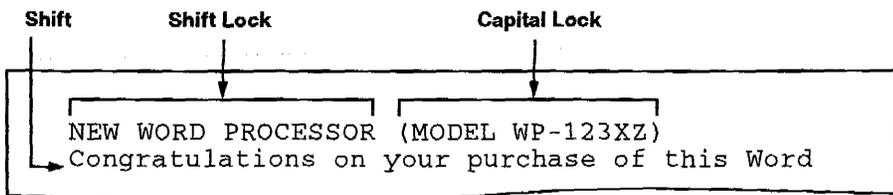
Using Shift Lock and Capital Lock



Uppercase characters will be printed if you hold **SHIFT** down while pressing any character key.

To type an entire string of uppercase characters, press **SHIFT LOCK** once. The **SHIFT** indicator appears and all characters you type will be uppercase characters. To cancel, press **SHIFT**.

If you want to enter strings of capital letters in combination with numbers, press **CODE + CAPS**. The **CAPS** indicator will appear and all alphabetic keys will type capitals while other keys produce lower case characters. To cancel, press **CODE + CAPS** again. When the **CAPS** indicator is on, holding down **SHIFT** temporarily changes the **CAPS** indicator to the **SHIFT** indicator. Pressing **SHIFT LOCK** in the same circumstance switches to **SHIFT**. Pressing **SHIFT** switches back to **CAPS**.



Backspacing

There are four types of backspace keys: normal, fractional, permanent, and express.

Normal Backspace

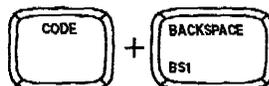


Pressing **BACKSPACE** moves the carriage one space to the left. Hold the key down for quick movement to the left.

NOTES:

- When the text is displayed, **BACKSPACE** deletes the character to the left.
- If the carriage is positioned in the middle of a character, pressing **BACKSPACE** moves the carriage to the beginning of the current character.
- If **BACKSPACE** is pressed when the carriage is on the left margin or on the left end, the typewriter beeps. Pressing **CODE + M REL** allows the carriage to go beyond the left margin.
- **BACKSPACE** is used in type mode to combine two characters like **O** and **/** to create **Ø**. Type the first character, press **BACKSPACE**, and finally type the second character. This will not work once the text is displayed. (See "Permanent Backspace" on page 107.)

Fractional Backspace



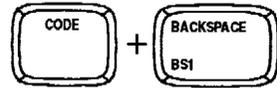
CODE + BS 1 moves the carrier back by 1/60 inch and allows you to precisely position the carrier for corrections when you have to reinsert your draft or when you want to correct a previous line with uneven spaces between words. This key is also useful to line up your carrier exactly on a point on a preprinted form. The following table relates the 1/60 inch backspace with the selected pitch. You can also use this function to type Roman numerals (which need unusually small spaces between characters).

Pitch	Relative Amount of Backspace
10 (PICA)	1/6 of a character
12 (ELITE)	1/5 of a character
15 (MICRON)	1/4 of a character

NOTES:

- If **CODE + BS 1** is pressed when the carrier is on the left margin or on the left end, the typewriter beeps. Pressing **CODE + M REL** allows the carrier to go beyond the left margin.
- When the text is displayed (centering, right margin flush, decimal tab or L/L mode) **CODE + BS 1** is used to superimpose characters. (See "Permanent Backspace" next.)

Permanent Backspace



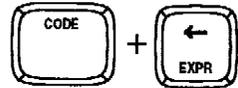
The permanent backspace function is used to print superimposed characters in the display mode (centering, right margin flush, decimal tab, and L/L mode). For example, "0" and "∅" are used to produce a "strike-over" zero (∅), or "Y" and "¥" to produce a Japanese Yen currency symbol (¥).

1. Type the base character "Y".
2. Press **CODE + BACKSPACE**. The cursor will move one space to the left.
3. Type the character which is to be imposed "¥". The base character "Y", a permanent backspace symbol ←, and the character to be imposed "¥" will be displayed side by side.

NOTE:

In type mode, you do not need to press **CODE**. Pressing **BACKSPACE** alone moves the carrier back to the last character allowing you to superimpose another character.

Express Backspace



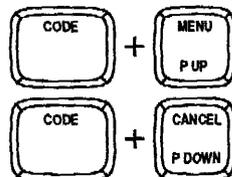
Pressing **CODE + EXPR** moves the carrier all the way to the left margin. If you press **CODE + M REL**, the carrier moves all the way to the left end.

NOTES:

- When you have a paragraph indent and the carrier is located at its right, pressing **CODE + EXPR** once moves the carrier to the paragraph indent; pressing the same keys again moves the carrier to the left margin.

- If **CODE + EXPR** is pressed when the carrier is on the left margin or on the left end, the typewriter will beep.
- Pressing **CODE + EXPR** moves the cursor to beginning of the line in the display mode.

Subscripts and Superscripts



To type subscripts, press **CODE + P UP**. In the type mode, this will move the paper up 1/12 inch, and in the L/L mode, will move the cursor to the lower portion of the line on the screen being typed. All the characters you type from now on will be printed lower than the previous characters. To cancel this function, press **CODE + P DOWN**.

Superscripts are created similarly, except that you have to start with **CODE + P DOWN** and cancel with **CODE + P UP**.

NOTE:

If either **CODE + P UP** or **CODE + P DOWN** are pressed twice in a row in type mode, the auto correction function will be disabled. If this is done in the L/L mode after the data has been input, a beep will sound.

Accents and Special Symbols ("Dead" Keys)

The multilingual keyboard supports the characters with accent marks of such languages as French, German, and Spanish, as well as special symbols.

1. Switch the KB indicator to **II** (International) or **III** (Symbol) using **CODE + K (KB)**. (See "Changing the Keyboard" on page 105.)
2. Install the appropriate print wheel. (See "Changing Daisy Wheel Cassette" on page 289.)
3. Type the dead character. (See "Character Keys" on page 264.)
4. Type the base character.

NOTE:

In display mode, the dead character and the base character are displayed side by side (Example: [^]a).

Corrections

This typewriter has a one line correction memory that makes it possible to erase any character or word automatically. This function, however, works only with the current line.

Automatic Correction

Correcting One Character



To correct a character on the current line, use **BACKSPACE** to move the carrier to the mistyped character, press **CORRECT** to erase, then retype the correct character.

NOTES:

- Pressing **CORRECT** on a space moves the carrier back.
- Pressing **CORRECT** deletes the character positioned left of the cursor while in centering, right margin flush, decimal tab, and L/L modes.

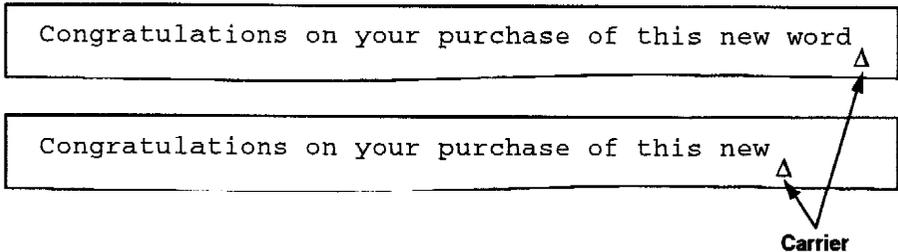
Erasing One Word



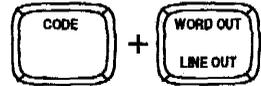
To erase an entire word, position the carrier next to the right of last character on the word and press **WORD OUT**. The entire word is erased and you can retype.

NOTES:

- Automatic erasing in progress can be stopped by pressing **CORRECT**.
- Position the cursor to the space immediately to the right of the word to be deleted while in centering, right margin flush, decimal tab, and L/L modes.



Erasing One Line



To erase an entire line, position the carrier to the right of the last character on the line and press **CODE + LINE OUT**. The entire line is erased and you can retype.

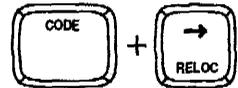
NOTES:

- *Automatic erasing in progress can be stopped by pressing **CORRECT**.*
- *Position the cursor to the space immediately to the right of the last character to be erased while in centering, right margin flush, decimal tab, and L/L modes.*

Congratulations on your purchase of this new word △

△

Relocation of the Carrier

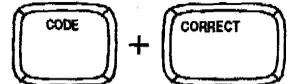


After a correction is made in the middle of the current line, pressing **CODE + RELOC** moves the carrier to the position next to the last character.

NOTE:

*Pressing **CODE + RELOC** moves the cursor to the space immediately to the right of the last data while in the centering, right margin flush, decimal tab, and L/L modes.*

Manual Corrections



When a correction is required above the current line, or if you have to reinsert the paper, the memory correction does not work because the line memory is cleared each time the paper is fed more than 1/12 inch.

NOTE:

This function cannot be executed while in the centering, right margin flush, decimal tab or L/L mode.

1. Use **CODE + P DOWN** or the platen knob to position the carrier where a correction is required. Move the carrier to the character to be corrected with **BACKSPACE** or **SPACE BAR**. If necessary, use **CODE + BS 1** to accurately position the carrier.

Congrstulations on your purchase of this new word
△

2. Press **CODE + CORRECT**. The M.C indicator appears.
3. Retype the same character again. The character is erased and the M.C indicator disappears.

Congr tulations on your purchase of this new word
△

4. Type the desired character.

Congratulations on your purchase of this new word
△

Formatting the Page

On-Screen Editing

When using the functions listed below, the text that you input appears on the screen but is not actually typed until you press **RETURN** or **TAB**. These functions are the following:

- Decimal Tab
- Centering
- Right Margin Flush

This is because your typewriter needs to know the whole text before it is able to calculate its position on the paper.

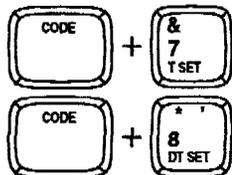
While your text is displayed on the screen, you can edit it using the following keys:

Key	Function
BACKSPACE CORRECT WORD OUT CODE + LINE OUT	To delete the character(s) at the left of the cursor and pull the rest of the text to the left.
← →	To position the cursor.
CODE + EXPR	To move the cursor back to the beginning of the line.
CODE + RELOC	To move the cursor to the end of the line.
CODE + I (INSERT)	To switch the insert mode on/off. When the INS indicator is on, typing a character over a ([Key: I]) previously typed character will not replace the old character. It will instead display the new character at the cursor position, then push the rest of the text one position to the right.

Tabs and Decimal Tabs

You can set a total of 30 tabs or decimal tabs. Tabs and decimal tabs make it easy to position the carrier at preset positions and have a text arranged in columns. Decimal tabs are used to automatically align the decimal point of numbers with preset positions.

Setting Tabs and Decimal Tabs

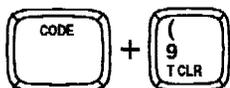


Move the carrier to the desired position and press **CODE + T SET** to set an ordinary tab, or **CODE + DT SET** to set a decimal tab.

NOTES:

- *Tabs and decimal tabs cannot be set in the display mode.*
- *The tab settings are erased when you switch the power off.*

Clearing Tabs

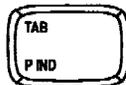


To clear a tab, move the carrier to that position and press the **CODE + T CLR**.

To clear all tabs, hold down the same keys until this message appears:

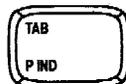
All tabs cleared.

Typing with Tabs



To move the carrier to the next tab to the right, press **TAB**. If there are no more tabs or decimal tabs to the right, the carrier moves to the right margin. When the carrier is on the desired tab stop, start typing. Press **RETURN** to move the carrier back to the left margin and feed paper, or **TAB** to move to the next tab

Typing with Decimal Tabs



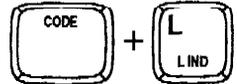
When you press **TAB** to move the carrier to the next decimal tab, the DTAB indicator appears. When this indicator is on, you can type a number. This will be displayed on the screen. When you type the decimal point, however, all that you have typed will be printed with the decimal point aligned at the decimal tab. You can then enter the fractional part of the number, which is printed as you type it. The carrier then moves to the left margin if you press **RETURN**, or to the next tab or decimal tab if you press **TAB**.

Tab	Decimal tab
May	129.84
June	34.97
July	7864.81

NOTES:

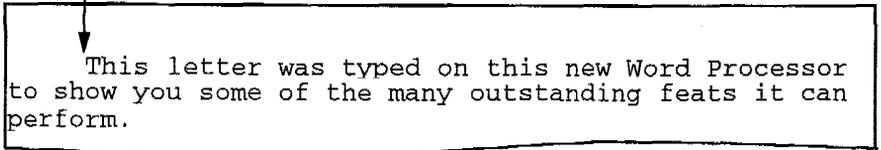
- Pressing **CANCEL** or **CORRECT** before you type anything deactivates the decimal tab function and returns you to normal typing. This is useful when you press **TAB** to move to the next tab and reach a decimal tab instead.
- You cannot use the decimal tab function when the centering or right margin flush function is activated

Line Indent

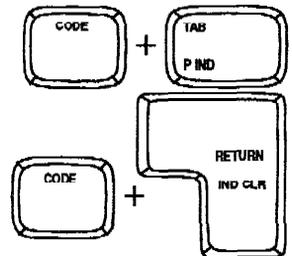


Pressing **CODE + L (L IND)** is the same as typing five spaces. The primary use is in indenting the first line of paragraphs.

Line Indent



Paragraph Indent



Paragraph indent works like a temporary left margin. The most common application is numbered paragraphs.

First set a tab at the desired indent position and press **RETURN**, to move back to the left margin. Press **CODE + P IND**. The PIND indicator appears. From now on the carrier will return to that temporary left margin. To cancel this, press **CODE + IND CLR**.

This letter was typed on this new Word Processor to show you some of the many outstanding feats it can perform.

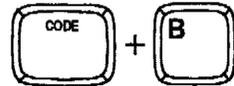
In fact, you have seen some of these features in this letter: Centering has placed the title right in the center of the left and right margins, and

Paragraph Indent

Text Emphasis (Style)

The style function allows you to highlight an important part of your text using boldface characters, underlining, or expand (a space is automatically inserted between the characters). These functions can be used together in any combination.

Bold



STYLE	CTR/RMF	GRAMMAR
BOLD	OFF	
UNDERLINE	OFF	
EXPAND	OFF	

1. Press **MENU** to display the menu.
2. Type **S** to select **STYLE**.
3. Type **B** to select **BOLD**.

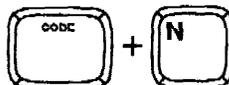
NOTE:

You can turn the **BOLD** function ON/OFF by pressing the **SPACE BAR** or **B**.

4. Press **RETURN**. The bold function is ON and the **BLD** indicator is displayed.
5. Type your text. The characters are automatically bolded.
 - **Short cut:** Instead of (1), (2), (3), and (4), press **CODE + B** to switch the bold function ON/OFF.
6. To return to normal typing, repeat steps (2), (3), (4), and (5) to turn the bold function OFF, or press **CODE + B**.

Using the **Boldface** is a way of making a Word, Phrase or entire Paragraph stand out and catch the reader's eye. The **Boldface** feature has a

Underline



STYLE	CTR/RMF	GRAMMAR
BOLD	OFF	
UNDERLINE	OFF	
EXPAND	OFF	

1. Press **MENU** to display the menu.
2. Type **S** to select **STYLE**.
3. Type **U** to select **UNDERLINE**.
4. Use **SPACE BAR** to select **CNT** (continuous underlining) or **WRD** (word underlining).
5. Press **RETURN**. The corresponding indicator is now on.
 - **Short cut:** Instead of (1), (2), (3), (4), and (5), press **CODE + N** to switch the underline function **CNT/WRD/OFF**.

NOTE:

If you select continuous underlining, all will be underlined, including blank spaces. With word underlining, blank spaces are not underlined.

6. Type your text. The characters are automatically underlined.
7. To return to normal typing, repeat steps (2), (3), (4), (5) and (6) to turn the underline function off, or press **CODE + N**.

Continuous Underline

Using the Underline is a way of making a Word, Phrase or entire Paragraph stand out and catch the reader's eye. The Underline feature has a

Word Underline

Using the Underline is a way of making a Word, Phrase or entire Paragraph stand out and catch the reader's eye. The Underline feature has a

Expand

STYLE	CTR/RMF	GRAMMAR
BOLD	OFF	
UNDERLINE	OFF	
EXPAND	OFF	

1. Press **MENU** to display the menu.
2. Type **S** to select **STYLE**.
3. Type **E** to select **EXPAND**.
4. Press the **SPACE BAR** to turn the **EXPAND** function ON/OFF.
5. Press **RETURN**. The **EXP** indicator is now on.
6. The text you now type is expanded, with a permanent space automatically inserted after each text character.
7. To return to normal typing, repeat steps (1), (2), (3), (4), and (5) to turn the expand function OFF.

NOTE:

*The permanent spaces inserted with the expand function cannot be removed automatically. To undo the expand format, delete the permanent spaces one by one using **BACKSPACE** or **CORRECT**.*

C O P Y

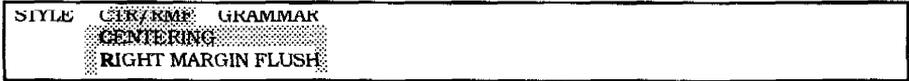
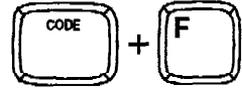
Expand



This letter was typed on this new Word Processor to show you some of the many outstanding feats it can perform.

Centering and Right Margin Flush Functions

Centering Between Margins or Between Tabs



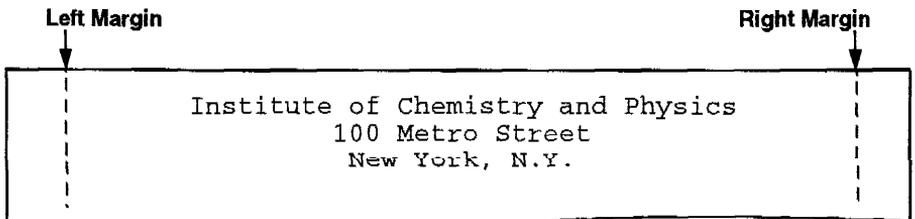
The centering function is used to center text between the margins. It can also be used to center items of a table between two tab stops.

1. To center between margins, position the carriage on the left margin. To center between tabs, press **TAB** to move the carriage to the first tab of the centering range. The text will be centered between that tab and the next tab (or the right margin if there are no more tabs).
2. Press **MENU** to display the menu.
3. Type **C** to select CTR/RMF.
4. Type **C** to select CENTERING. The CTR indicator appears.
 - **Short cut:** Instead of (2), (3), and (4), press **CODE + F**.
5. Type your text. The text is temporarily displayed on the screen and you can edit your text.
6. Press **RETURN** or **TAB**. The text is printed.

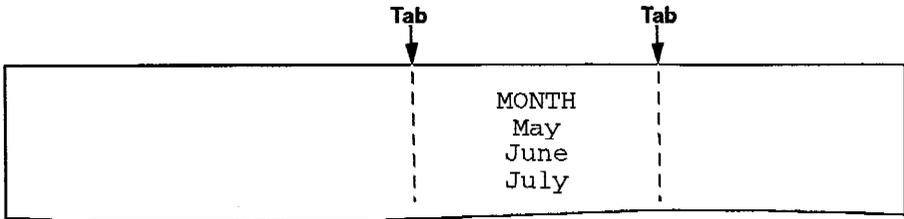
NOTES:

- Pressing **CANCEL** before any data has been input switches back to the normal mode.
- The centering function cannot be executed while in the decimal tab or right margin flush mode.
- The centering function cannot be executed if the carriage is not first positioned on the left margin or on a tab.

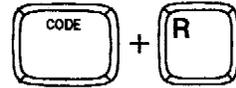
Centering Between Margins



Centering Between Tabs



Right Margin Flush (RMF)



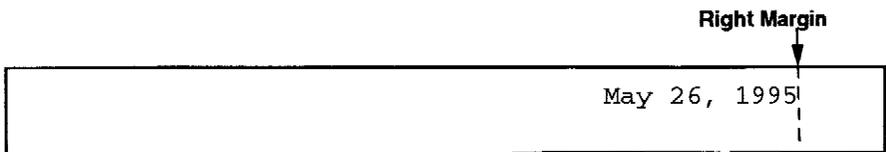
STYLE **CTR/RMF** GRAMMAR
CENTERING
RIGHT MARGIN FLUSH

The right margin flush function is used to position the last character of a line exactly on the right margin.

1. Press **MENU** to display the menu.
2. Type **C** to select CTR/RMF.
3. Type **R** to select RIGHT MARGIN FLUSH. The RMF indicator appears.
 - **Short cut:** Instead of (1), (2), and (3), press **CODE + R**.
4. Type your text. The text is temporarily displayed on the screen and you can edit your text.
5. Press **RETURN** or **TAB**. The text is printed.

NOTES:

- Pressing **CANCEL** before any data has been input switches back to the normal mode.
- The right margin flush function cannot be executed while in the decimal tab or centering mode.



Grammar Check[®] System

This word processor is equipped with a powerful grammar check system that automatically detects misspelled and redundant words, as well as punctuation errors. A user dictionary can be created to store foreign words or brand names that are not standard English. A separate word count function working together with the Thesaurus provides an easy way to replace a word that appears frequently with adequate synonyms. An additional function, the abbreviated phrase function, allows you to store long strings of words and recall them by typing a simple abbreviation.

Description of the Grammar Check System

The function menu of the WP application displays two separate options: GRAMMAR1 and GRAMMAR2.

GRAMMAR1 (WP Application)

STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
			GRAMMAR CHECK				
			GRAMMAR CHECK SET MENU				
			DESK TOP REFERENCE				
			USER DICTIONARY MAINTENANCE				
			USER DICTIONARY LOAD				
			USER DICTIONARY SAVE				

- GRAMMAR1 is used for automatic detection of errors. Two independent functions can be activated: the Spell Checker which checks for misspelled or redundant words, and the Punctuation Alert which checks for punctuation errors as well as missing brackets or quotation marks. This option also includes the tools you need to work with personal "user dictionaries" (DESK TOP REFERENCE" can be activated from this option). The Spell Checker can be used in the ALL mode to check the entire document, or in the ONE WORD mode to check the words one by one while you are typing.

GRAMMAR2 (WP Application)

STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
				WORD COUNT			
				EDIT THESAURUS			
				TYPE THESAURUS			
				ABBREVIATED PHRASE MAINTENANCE			
				ABBREVIATED PHRASE LOAD			
				ABBREVIATED PHRASE SAVE			

- GRAMMAR2 is used to improve the style of your document and your typing speed. Two thesaurus functions are available: the EDIT THESAURUS which provides synonyms for a word already typed, and the TYPE THESAURUS which provides synonyms for a word that you specify. The EDIT THESAURUS can be used together with the WORD COUNT function (which counts the occurrences of each word) to replace with synonyms those words that appear too frequently in your document. The GRAMMAR2 option also includes function that allow you to create and retrieve a list of "phrases" – that is, combinations of words often used in your document. Once created, these phrases can be quickly inserted into your document by typing a simple abbreviation.

With the TW application, all the functions of the Grammar Check system are available in the GRAMMAR option.

GRAMMAR (TW Application)

STYLE	CTR/RMF	GRAMMAR
		GRAMMAR CHECK
		USER DICTIONARY MAINTENANCE
		USER DICTIONARY LOAD
		USER DICTIONARY SAVE
		EDIT THESAURUS
		TYPE THESAURUS

- With the TW application, since only the contents of the current line are stored in the memory, the Spell Checker function will always work in the **ONE WORD** mode and the Punctuation Alert will be disabled. The Spell Checker is however able to recheck words already typed as long as you do not switch to the next line. The **EDIT THESAURUS** and the **TYPE THESAURUS** are both available, but the **EDIT THESAURUS** can be activated only when the text is temporarily displayed on the screen.

Spell Checker (Word Spell)

The Spell Checker comes with a built-in dictionary of about 95,000 English words. When checking your text, the Spell Checker automatically compares each word with the contents of the built-in dictionary. If a word is not found in the built-in dictionary, the word processor assumes that the word in question is misspelled and warns you.

The built-in dictionary contains only standard English words, and will consider words like brand names, people's names, or foreign language words as misspelled words, even if those words are correct. If you frequently use such words in your document, you should create a "User Dictionary" and store those words in that dictionary. The user dictionary is kept in the memory for as long as the power is on. When a word cannot be found in the built-in dictionary, the Spell Checker will scan the user dictionary and warn you only if the word cannot be found there.

When a word cannot be found in either dictionary, the Spell Checker gives you a menu of options:

- You can **IGNORE** the warning and keep the suspect word unchanged.
- You can ask for **SUGGESTIONS**. In this case, the Spell Checker will supply possible replacement word(s) for the suspect word.
- You can also directly **RETYPE** the word correctly. This option is used when the error is evident and easy to correct, or when the system cannot provide the correct suggestion.
- You can **ADD** the suspect word to the user dictionary. This is useful when the suspect word, although correct, is not a standard English word. Once the word is stored in the user dictionary, the Spell Checker will not warn you the next time the same word is found.

The Spell Checker also detects double words (you typed the same word twice). When this happens, a menu of options appears:

- You can **IGNORE** the warning and keep the repeated word in the text.
- You can automatically **ERASE** the **SECOND WORD**.

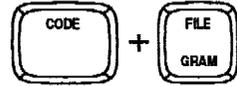
NOTE:

This system is not a replacement for careful proofreading of your documents. It has no way of knowing, for example, whether words are missing or whether a given word is appropriate for the current context. If you type "teh" instead of "the", the spell checker alerts you because "teh" is not a valid English word, but if you type "one" instead of "on", it does not consider it a mistake.

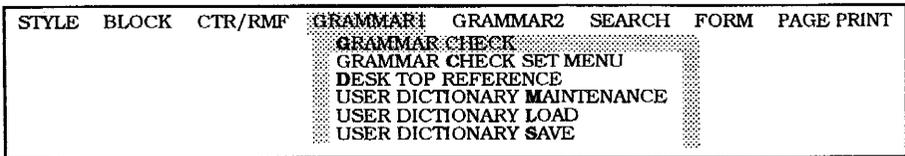
Checking Existing Text (WP Application)

With the WP application, you can automatically scan the entire document for problems. The scan is one-directional – that is, it starts at the word where the cursor is located and works toward the end of the document.

Starting the Spell Checker



GRAMMAR1 (WP Application)



1. Position the cursor at the location in the document where you want to start checking. For example, if you want to check the entire document, position the cursor on the first word of the document.
2. Press **MENU** to display the function menu.
3. Type **1** to select GRAMMAR1.
4. Type **G** to select GRAMMAR CHECK. The following menu appears:

Use cursor to select. Press RETURN.

ALL ONE WORD

- **Short cut:** Instead of (2), (3), and (4), press **CODE + GRAM**.
5. Use ← and → to select ALL and press **RETURN**. Spell Check starts scanning your text for misspelled word and displays the message:

Checking...

While Checking (Suspect & Repeated Words)

When a suspect or redundant word is found, the above message disappears and is replaced with a menu of options. The suspect word is highlighted in the text.

Example 1

Let's suppose that you have typed "The quick broen fox..." ("broen" is suspect)

The quick broen fox...

Use cursor to select. Press RETURN.
SUSPECT WORD: broen
▶MENU◀ IGNORE SUGGESTION RETYPE ADD

Use ← and → to select an option and press **RETURN**.

1. If you select **IGNORE**: the system start searching for the next suspect word. The word "broen" will not be corrected.
2. If you selected **SUGGESTION**: a menu of possible replacement words appears.

The quick broen fox...

Use cursor to select. Press RETURN.
SUSPECT WORD: broen
SUGGESTIONS : brown broken brawn bruin brain brine borne boron

Use ← and → to select the replacement word and press **RETURN**. The word will automatically replace the one in the text, and the system starts searching for the next suspect word. If the correct word does not appear in the suggestion menu, press **CANCEL** to return to the first menu and select **RETYPE** as explained below.

3. If you select **RETYPE**: an input area appears so that you can type the correct word:

The quick broen fox...

Type word and press RETURN.
SUSPECT WORD: broen
WORD: █

You can immediately type the correct word and press **RETURN**. The correct word replaces the one in the text, and the system starts searching for the next suspect word.

You can also press ↓ first. This will display the suspect word in the input area so that you can correct it in a few keystrokes. Press **RETURN** when the word is corrected.

4. If you select **ADD**: the suspect word is added to the user dictionary. (From now on, it will not be considered “suspect” any more.) The following message appears:

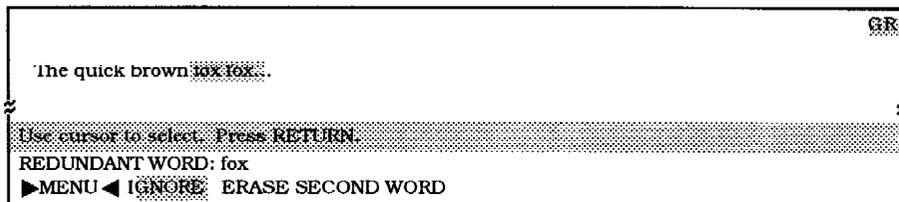
Word added to user dictionary.

NOTE:

If you add words to the user dictionary, you will have to save the user dictionary onto a diskette before turning the power off. (See “Saving the User Dictionary” on page 134.)

Example 2

Let's now suppose that you have typed “The quick brown fox fox...” (the second “fox” is a double word)



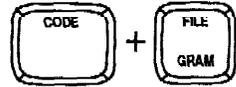
Use ← and → to select an option and press **RETURN**.

1. If you select **IGNORE**: the word is kept in the text and the system starts searching for the next suspect or double word.
2. If you select **ERASE SECOND WORD**: the word is deleted and the system starts searching for the next suspect word.
The process repeats to the end of the document (a message will tell you that you reached the end of the document) or until you press **CODE + GRAM** or **CANCEL** to turn Spell Check off.

Checking While Typing (WP or TW Application)

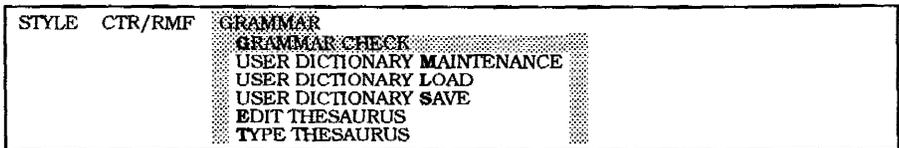
The Spell Checker can be used to check each word as you type. You can do this either in the WP or TW applications.

Starting the Spell Checker



If you are working with the WP application, refer to "Starting the Spell Checker" on page 125. The only differences between the "One Word" procedure and the "All" procedure are: 1) position the cursor at the location where you are going to type, and 2) when the option menu "ALL ONE WORD" appears, select ONE WORD. The Spell Checker will be automatically activated.

If you are working with the TW application, proceed as follows:



1. Press **MENU** to display the function menu.
2. Type **G** to select GRAMMAR.
3. Type **G** to select GRAMMAR CHECK.
 - **Short cut:** Instead of (1), (2), and (3), press **CODE + GRAM**.

Once Spell Check is started, the GR indicator appears on the screen. The words you type are checked for spelling or redundancy. If an error is found, the system interrupts your typing and displays a menu of options. In type mode, when you select a suggested word, or when you retype a replacement word, the old word is automatically erased and the system prints the replacement word.

NOTES:

- In the TW application, when you move the carriage or the cursor over existing text, the system will detect errors even if it was started after typing that text. (This feature is limited to the current line).
- To disable Spell Check, press **CODE + GRAM**.

Setting the System (WP Application)

With the WP application, the system is also able to check for punctuation errors in addition to spelling mistakes and redundancies. (See "Punctuation Alert (WP Application Only)" on page 135.)

Before you check an existing text (ALL option), you are free to switch the Spell Checker or the Punctuation Alert on/off as described below.

GRAMMAR1 (WP Application)

STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
			GRAMMAR CHECK				
			GRAMMAR CHECK SET MENU				
			DESK TOP REFERENCE				
			USER DICTIONARY MAINTENANCE				
			USER DICTIONARY LOAD				
			USER DICTIONARY SAVE				

1. Press **MENU** to display the function menu.
2. Type **1** to select GRAMMAR1.
3. Type **C** to select GRAMMAR CHECK SET MENU. The following display appears:

<< GrammarCheck SET MENU >>	
CHECK ALL WORDS	
SPELL CHECK	<input checked="" type="checkbox"/> ON
PUNCTUATION ALERT	<input type="checkbox"/> OFF
Select item and press SPACE to change setting. Press RETURN to finish.	

4. Use **↑** and **↓** to select a function, and press **SPACE BAR** to toggle the selected function ON/OFF. To activate the Punctuation Alert function, move the cursor to PUNCTUATION ALERT and press **SPACE BAR**.

NOTES:

- One of the options must be ON or the word processor beeps.
 - The Punctuation Alert function is explained on page page 135.
5. Press **RETURN** to save the new setting, or press **CANCEL** to return to the normal screen without saving it.

The User Dictionary

How the User Dictionary Works

A user dictionary is created automatically when you select the **ADD** function to add a word to the dictionary. This dictionary is held in memory for as long as the word processor is on. If you add words to the user dictionary and would like to use the same dictionary for checking other files, you must **SAVE** the user dictionary onto a diskette before switching your unit off. (See "Saving the User Dictionary" on page 134.) Later, when you want to use that same dictionary, you must **LOAD** it from the diskette to use it. (See "Loading a User Dictionary" on page 133.)

NOTES:

- Each diskette can hold only one user dictionary. If you save a user dictionary onto a diskette that already contains a user dictionary, the dictionary previously on the diskette will be overwritten by the new user dictionary.
- The memory of the word processor can hold only one dictionary. If you create a dictionary in the memory, and then load a dictionary from a diskette, the dictionary currently in the memory will be overwritten by the loaded dictionary.

Maintaining the User Dictionary

Beside the **ADD** option that allows you to add a suspect word to the user dictionary, the Spell Checker system provides you with tools for editing the user dictionary.

GRAMMAR1 (WP Application)

STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
			GRAMMAR CHECK				
			GRAMMAR CHECK SET MENU				
			DESK TOP REFERENCE				
			USER DICTIONARY MAINTENANCE				
			USER DICTIONARY LOAD				
			USER DICTIONARY SAVE				

TW Application

STYLE	CTR/RMF	GRAMMAR		
		GRAMMAR CHECK		
		USER DICTIONARY MAINTENANCE		
		USER DICTIONARY LOAD		
		USER DICTIONARY SAVE		
		EDIT THESAURUS		
		TYPE THESAURUS		

1. Press **MENU** to display the function menu.
2. Type **1** to select GRAMMAR1 (WP application), or type **G** to select GRAMMAR (TW application).

GRAMMAR CHECK

- Type **M** to select USER DICTIONARY MAINTENANCE. The following display appears:

<< USER DICTIONARY >>		TOTAL WORDS:XXX
Alfred	Benoit	
Cathy	Packard	
WP	XTY123	
To add, type word. Press MENU for other options. Press FILE to finish.		
ADD: █		

- To add a new word, type it and press **RETURN**. The new word will be inserted in the list in alphabetical order. The system will tell you if you try to input a word that already exists in the user dictionary.

NOTES:

- On the User Dictionary screen, the keyboard is automatically set to KB: I.
 - If you have added words to the user dictionary, you must save the user dictionary onto a diskette before turning the power off.
- To return to normal typing, press **FILE**.

Using the Function Menu



EXIT	DELETE	ALLDELETE	LOAD	SAVE
Alfred	Benoit			
Cathy	Packard			
WP	XTY123			
Select from menu and press RETURN.				

- To select a word, use \uparrow , \downarrow , **CODE + PRE S**, or **CODE + NEXT S**.
- To find a specific entry faster, press **CODE + G (GO TO)** to go closer to the word that you want to select. A message will ask you to enter the first letter of the word:

Type letter to move cursor.

Type the letter.

- From the USER DICTIONARY screen, press **MENU** to display a menu of function:
- Type **E** to select EXIT.
- Short cut:** To exit without displaying the menu, press **FILE**.

3. To delete a word, select the word from the user dictionary screen.
4. Press **MENU** and type **D** select DELETE. The following message appears:

Delete the word from user dictionary? Press RETURN(yes) or CANCEL(no).

- **Short cut:** To enable the DELETE function without displaying the menu, press **CODE + D**.
5. Press **RETURN** to delete, or **CANCEL** to keep the word in the user dictionary.
 6. To delete all words, type **A** select ALL DELETE. The following message appears:

Delete all words in user dictionary? Press RETURN(yes) or CANCEL(no).

7. Press **RETURN** to delete, or **CANCEL** to keep the user dictionary unchanged.
8. To load a different user dictionary file from a different diskette, insert the diskette in the disk drive, type **L** select LOAD.

NOTE:

Remember that loading a user dictionary file will overwrite the user dictionary currently in memory.

9. To save the user dictionary, insert a diskette in the drive, type **S** select SAVE.

NOTE:

Remember that turning the power off clears the user dictionary in memory, and that saving the user dictionary onto a diskette which already contains a user dictionary file will overwrite that file on the diskette.

Loading a User Dictionary

The Spell Checker system allows you to have several user dictionaries, but you cannot store more than one on the same diskette. This feature is very useful when you are dealing with different kinds of documents. For example, if the documents you have to create most frequently are letters (containing people's names) and sales reports (containing company's names) you can store these two kinds of documents on different diskettes, and create the corresponding user dictionary on each diskette.

NOTE:

If you are using the Spell Checker for the first time, your diskette does not contain any user dictionary and you will not be able to load anything.

If you want to reuse an existing user dictionary, first insert the corresponding diskette in the disk drive.

GRAMMAR1 (WP Application)

STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
			GRAMMAR CHECK				
			GRAMMAR CHECK SET MENU				
			DESK TOP REFERENCE				
			USER DICTIONARY MAINTENANCE				
			USER DICTIONARY LOAD				
			USER DICTIONARY SAVE				

TW Application

STYLE	CTR/RMF	GRAMMAR					
			GRAMMAR CHECK				
			USER DICTIONARY MAINTENANCE				
			USER DICTIONARY LOAD				
			USER DICTIONARY SAVE				
			EDIT THESAURUS				
			TYPE THESAURUS				

1. Press **MENU** to display the function menu.
2. Type **1** to select GRAMMAR1 (WP application), or type **G** to select GRAMMAR (TW application).
3. Type **L** to select USER DICTIONARY LOAD. The user dictionary is now in the word processor memory.

Saving the User Dictionary

When the power is turned off, the user dictionary in memory is deleted. If you want to reuse the same user dictionary to check other documents, do not forget to save it before you turn the power off. The current contents of the user dictionary in memory will replace the user dictionary file on the diskette.

GRAMMAR1 (WP Application)

STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
			GRAMMAR CHECK				
			GRAMMAR CHECK SET MENU				
			DESK TOP REFERENCE				
			USER DICTIONARY MAINTENANCE				
			USER DICTIONARY LOAD				
			USER DICTIONARY SAVE				

TW Application

STYLE	CTR/RMF	GRAMMAR	
		GRAMMAR CHECK	
		USER DICTIONARY MAINTENANCE	
		USER DICTIONARY LOAD	
		USER DICTIONARY SAVE	
		EDIT THESAURUS	
		TYPE THESAURUS	

1. Press **MENU** to display the function menu.
2. Type **1** to select GRAMMAR1 (WP application), or type **G** to select GRAMMAR (TW application).
3. Type **S** to select USER DICTIONARY SAVE. This message will appear:

Press RETURN to save.

4. Press **RETURN** to save the user dictionary on the diskette.

Punctuation Alert (WP Application Only)

Unlike Spell Check, this function does not look at words, but at the character sequences between them. It checks, for example, redundant punctuation, the number of spaces before and after punctuation marks, whether parentheses are balanced, and even whether a new sentence starts with a capital letter. It highlights the suspect sequence, states the rule being violated, and, in most cases, automatically suggests a replacement that you can insert by selecting REPLACE.

You should be aware, however, that the Punctuation Alert will only review certain aspects of punctuation. Please review the "Punctuation Rules" on page 130 for a better understanding of the items the Punctuation Alert is capable of checking.

The Punctuation Alert function is available only when the Punctuation Alert diskette that comes with your word processor is inserted, when you are working with the WP application and when you select the ALL option. This function can be used together with Spell Check—or separately

Checking the Punctuation

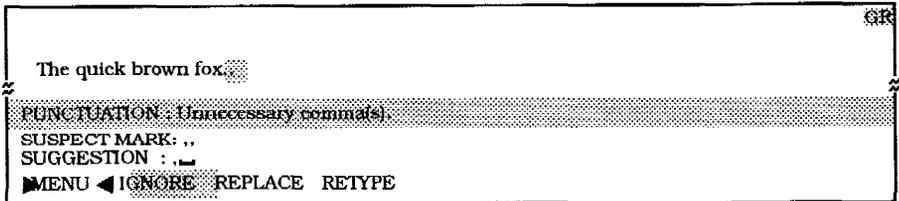
1. Set PUNCTUATION ALERT to ON at the Grammar Check Set menu. See "Setting the System (WP Application)" on page 129.
2. Insert the Punctuation Alert diskette.
3. Activate the system by pressing **CODE + GRAM** and select ALL. The system loads the program and the Punctuation Alert starts.

NOTE:

If RETURN is pressed without inserting the Punctuation diskette, the following message appears:

Punctuation alert has not been activated.

4. When an error is detected, a menu of options appears. Suppose you have typed "The quick brown fox,,".

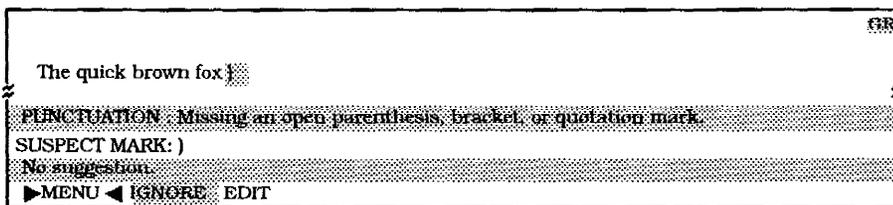


5. Use ← and → to select an option and press **RETURN**.

- If you select **IGNORE**: the system starts searching for the next punctuation error.
 - If you select **REPLACE**: the suggested mark replaces the suspect one and the system starts searching for the next punctuation error.
 - If you select **RETYPE**: an input area appears and you can retype the correct mark (instead of retyping, you can press ↓ first to bring the suspect mark into the input area, then edit the mark). When you press **RETURN**, the typed or edited mark replaces the suspect one and the system starts searching for the next punctuation error.
6. The process repeats until the end of the document, or until you press **CODE + GRAM** or **CANCEL** to turn the Grammar Check system off.

NOTE:

If the word processor suspects an error but can make no suggestion as to replacement, a screen similar to the one shown below will be displayed, and you will be asked to type in a correction.



Select **IGNORE** to proceed to the next suspect area or select **EDIT** to correct the error. The word processor will return to WP application. The cursor will move to the position after the error and the following message will appear:

Edit the error. Move cursor to starting point and press **GRAM** to check.

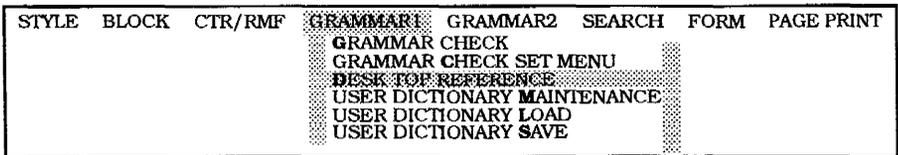
Punctuation Rules

The following are considered punctuation rules.

1. Two spaces after periods, exclamation points, and question marks.
Exceptions: Periods used in abbreviations such as "U.S.A." and "a.m."
2. Sentences must begin with a capital letter.
3. Ellipses are composed of three periods separated by spaces.
4. A single space after commas.
Exception: Commas used in numbers such as "100,000" or "\$2,500"
5. Only one space after colons and semicolons.
Exception: colons used in times, such as "12:40 p.m."
6. No space or only a single space before and after hyphens and dashes.

7. No spaces immediately inside parentheses or brackets.
8. No period, comma, exclamation point, or question mark following a quotation mark.
9. No colon or semicolon in front of a quotation mark.
10. No period, comma, colon, or semicolon after an open parentheses or bracket.
11. No comma in front of an open parenthesis and bracket.
12. Unmatched parentheses, brackets or quotation marks cause an error.
13. Two or more consecutive question marks or exclamation points (such as "!!" or "??") cause an error.
14. Consecutive commas cause an error.

Desk Top Reference (WP Application)



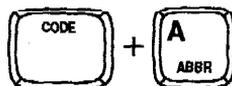
The Desk Top Reference application is used to find information about a specified word. When available, the information includes definitions, hyphenation, and synonyms. If the specified word is misspelled, the application tries to provide a list of correct candidates.

To start the "Desk Top Reference":

1. Press **MENU** to display the function menu.
2. Press **1** to select GRAMMAR1.
3. Press **D** to select DESK TOP REFERENCE. See "Desk Top Reference" on page 233 for details.

Abbreviated Phrases (WP Application)

Increasing Your Typing Speed



The abbreviated phrase function is provided to help you increase your typing speed when you have to frequently type long strings of words ("phrases"). You can store the phrases in the abbreviated phrase memory, along with a short abbreviation (the "name" of the phrase). For instance, you can store the phrase "United States of America" together with the name "USA". Once this has been done, all you have to do to enter "United States of America" in your document is to type "USA" and press **CODE + A (ABBR)**. "USA" will automatically be replaced with "United States of America". If you type a name that does not exist in the abbreviated phrase memory, and press **CODE + A (ABBR)**, you will hear a beep.

The abbreviated phrase memory can store a maximum of 30 phrases and names. Each phrase can consist of up to 67 characters, while a name is limited to 8 characters. The total amount of data in the abbreviated phrase memory may not exceed 1,000 characters.

The abbreviated phrase memory can be saved on diskette and, of course, retrieved from the diskette. You can create as many abbreviated phrase files as you want, but you may have only one abbreviated phrase file on a diskette.

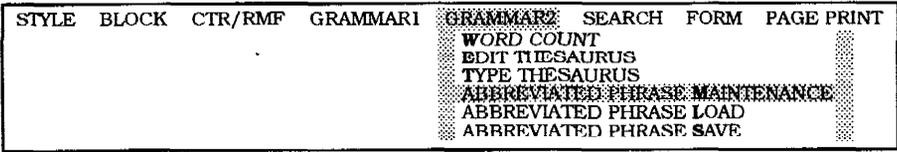
Understanding the Abbreviated Phrase Memory

The abbreviated phrase memory is stored in the word processor for as long as the unit remains on. If you have created phrases and would like to use these phrases in other files you will be creating later on, you will need to **SAVE** this phrase memory onto a diskette. (See "Saving the Abbreviated Phrase Memory" on page 141.) Later, when you want to use the phrases that are stored on a diskette, you can **LOAD** the file into the memory of the unit. (See "Loading an Abbreviated Phrase File" on page 141.)

NOTES:

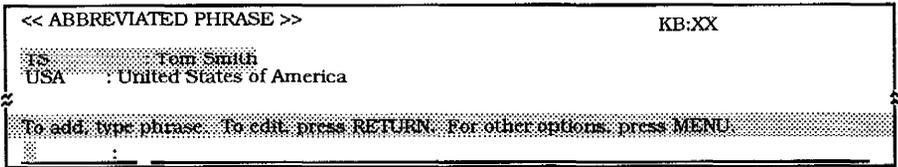
- *Each diskette can hold only one abbreviated phrase file. If you save an abbreviated phrase memory onto a diskette that already contains an abbreviated phrase file, that file will be overwritten by the new abbreviated phrase file.*
- *The memory of the word processor can hold only one abbreviated phrase memory. If you create an abbreviated phrase memory, and then load an abbreviated phrase file from a diskette, the abbreviated phrase memory will be overwritten by the loaded file.*

Abbreviated Phrase Maintenance



This section explains how to input and edit data in the abbreviated phrase memory.

1. Press **MENU** to display the function menu.
2. Type **2** to select GRAMMAR2.
3. Type **M** to select ABBREVIATED PHRASE MAINTENANCE. The following display appears:



4. To enter new data, type the name, press **TAB** to switch to the phrase area, then type the phrase and press **RETURN**.

NOTE:

Use only letters, numbers and periods for the name.

5. To edit an existing line of data, select the line and press **RETURN**. The data will appear in the input area. Edit the data, then press **RETURN** again.
6. To return to the WP screen and resume typing, press **FILE** or press **MENU** to display the menu and select **EXIT**.

NOTE:

If you have added phrases, you will need to save the abbreviated phrase memory onto the diskette.

Using the Function Menu for Other Options



```
EXIT PRINT DELETE LOAD SAVE
In      : Tom Smith
USA    : United States of America

Select from menu and press RETURN.
```

1. From the ABBREVIATED PHRASE screen, press **MENU** to display a menu of functions:

NOTES:

- To return to the input screen shown in step (3) above, press **CANCEL**.
 - To select a function from the menu, use ← and → or type the letter displayed in bold.
 - When the menu is displayed, it is not possible to select a line of data.
2. To exit the abbreviated phrase maintenance screen and return to the input screen, type **E** to select **EXIT**.
 - **Short cut:** To exit without displaying the menu, press **FILE**.
 3. To print the list of phrases and names, type **P** to select **PRINT**.
 - **Short cut:** To print without using the menu, press **CODE + P (PRINT)**.
 4. To delete a line of data, you must select the data before you display the function menu. When the data to be deleted is selected, press **MENU**, then type **D** to select **DELETE**. A message will ask for confirmation:

Delete? Press RETURN (yes) or CANCEL (no).

- **Short cut:** To delete without using the menu, press **CODE + D**. Press **RETURN** to delete the line or **CANCEL** to keep it in memory.
5. To load an abbreviated phrase file, insert the diskette, type **L** to select **LOAD**. Remember that loading an abbreviated phrase file will overwrite the abbreviated phrase memory.
 6. To save the abbreviated phrase memory, type **S** to select **SAVE**. Remember that turning the power off clears the abbreviated phrase memory, and that saving the abbreviated phrase memory into a diskette that already contains an abbreviated phrase file will overwrite the file on that diskette.

Loading an Abbreviated Phrase File

```
STYLE  BLOCK  CTR/RMF  GRAMMARI  GRAMMAR2  SEARCH  FORM  PAGE PRINT
WORD COUNT
EDIT THESAURUS
TYPE THESAURUS
ABBREVIATED PHRASE MAINTENANCE
ABBREVIATED PHRASE LOAD
ABBREVIATED PHRASE SAVE
```

1. Insert the diskette that contains the abbreviated phrase file that you want to use
2. Press **MENU** to display the function menu.
3. Type **2** to select GRAMMAR2.
4. Type **L** to select ABBREVIATED PHRASE LOAD. The abbreviated phrase file is loaded into the abbreviated phrase memory and you can now use the abbreviated phrases as explained above.

NOTE:

If you had already input data in the abbreviated phrase memory, that data will be overwritten when you load a file. To avoid this, first save the current abbreviated phrase data.

Saving the Abbreviated Phrase Memory

```
STYLE  BLOCK  CTR/RMF  GRAMMARI  GRAMMAR2  SEARCH  FORM  PAGE PRINT
WORD COUNT
EDIT THESAURUS
TYPE THESAURUS
ABBREVIATED PHRASE MAINTENANCE
ABBREVIATED PHRASE LOAD
ABBREVIATED PHRASE SAVE
```

Since the abbreviated phrase memory is cleared when the power is turned off, you should always save its contents before you switch the power off.

1. Insert the diskette in which you want to save the abbreviated phrase memory.
2. Press **MENU** to display the function menu.
3. Type **2** to select GRAMMAR2.
4. Type **S** to select ABBREVIATED PHRASE SAVE. This message will appear:

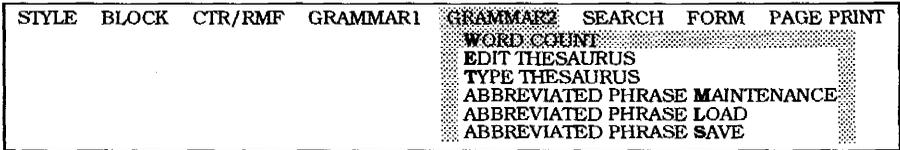
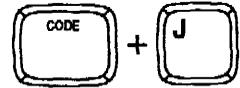
```
Press RETURN to save.
```

5. Press **RETURN** to save the abbreviated phrase memory on the diskette.

NOTE:

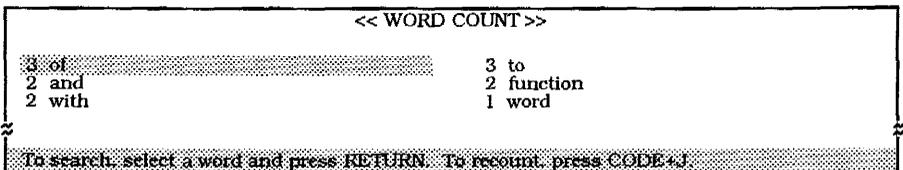
Since the system accepts only one abbreviated phrase file per diskette, saving the file will overwrite any old abbreviated phrase file on diskette.

Word Count (WP Application)



This function scans your text in the WP application and tells you how many times a given word has been used in the current file. It also allows you to search for each occurrence of any word used. Words are displayed in descending order of frequency, with words of the same frequency listed alphabetically (capital letters first). The scan proceeds toward the end of the document. The occurrence of up to 2,000 different words can be counted. About 55 words (averaging seven characters each) are displayed at a time.

1. Position the cursor at the head of the paragraph in the text where you want to start counting.
2. Press **MENU** to display the function menu.
3. Type **2** to select GRAMMAR2.
4. Type **W** to select WORD COUNT. A message indicating that counting is in progress will appear on the screen. When counting is completed, a screen (the Word Count screen) similar to the one which follows will appear:



- **Short cut:** Instead of (2), (3), and (4), press **CODE + J**.

NOTES:

- Underlining, bold, superscript, subscript, and dead keys are ignored when scanning words. This means that "book", "book", and "book" are counted as identical words.
- However, capital letters are taken into account. This means that "book", "Book", and "BOOK" are counted as different words.
- Up to 255 occurrences of a single word can be counted.

5. If you want to search for each occurrence in the text of a particular word, position the block cursor on the word and press **RETURN**. You can scroll the list with ←, →, ↑, ↓, **CODE + PRE S**, and **CODE + NEXT S**.

NOTE:

*Pressing **CANCEL** during the search will return you immediately to the **WRITE/EDIT** screen.*

6. To search for the next occurrence of the word, press **CODE + J** again. The block cursor will be on the word sought previously on the **Word Count** screen. Then, press **RETURN**. If there are no further occurrences, the following message will be displayed and the system will return to the **WRITE/EDIT** screen.

Word(s) not found.

NOTES:

- *Words which have been searched for can be replaced with synonyms using the **Thesaurus** functions described in the next section.*
- *To recount the words when the **WORD COUNT** screen is still displayed, press **CODE + J***

Thesaurus

The Thesaurus is a useful feature that allows you to search for synonyms for the word you specify, and replace the selected word with a synonym if you desire. This Thesaurus contains 45,000 words.

There are two ways to enter the Thesaurus mode: **EDIT THESAURUS** gives synonyms for the word the cursor is on, while **TYPE THESAURUS** waits until you type a word and then gives a list of synonyms for that word.

- *The THESAURUS function can be activated only if the THESAURUS diskette is inserted.*

Edit Thesaurus

With the TW application, the **EDIT THESAURUS** is available only when the text is temporarily displayed on the screen.

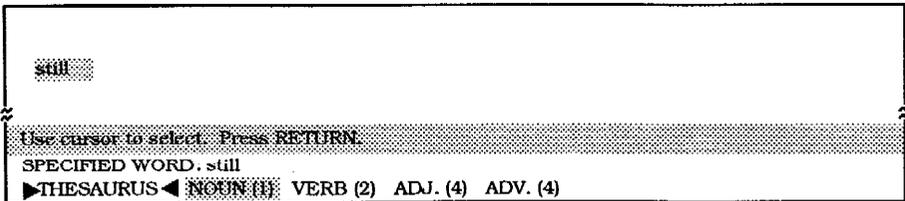
WP Application

STYLE	BLOCK	CTR/RMF	GRAMMARI	GRAMMAR2	SEARCH	FORM	PAGE PRINT
				WORD COUNT			
				EDIT THESAURUS			
				TYPE THESAURUS			
				ABBREVIATED PHRASE MAINTENANCE			
				ABBREVIATED PHRASE LOAD			
				ABBREVIATED PHRASE SAVE			

TW Application

STYLE	CTR/RMF	GRAMMAR	
		GRAMMAR CHECK	
		USER DICTIONARY MAINTENANCE	
		USER DICTIONARY LOAD	
		USER DICTIONARY SAVE	
		EDIT THESAURUS	
		TYPE THESAURUS	

1. Insert the Thesaurus diskette in the disk drive.
2. Position the cursor on the word that you want to replace with a synonym. (Let's assume that the word the cursor is on is "still".)
3. Press **MENU** to display the function menu.
4. Type **2** to select **GRAMMAR2** (WP application) or type **G** to select **GRAMMAR** (TW application).
5. Type **E** to select **EDIT THESAURUS**.

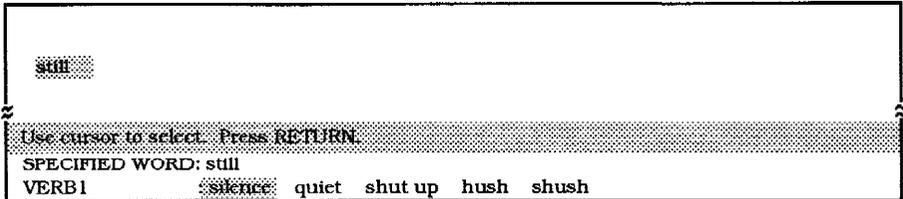


NOTES:

- This menu means that the system found synonyms for the word "still" in four syntactic categories (nouns, verbs, adjectives, and adverbs). The same categories will, of course, not necessarily be displayed with any specified word. The number at the right of each category indicates the number of semantic classes into which that category is subdivided. For instance, VERB (2) means that you will find two lists of verbs that are synonyms of the word "still". By definition, synonyms are words with (almost) the same meaning. You will find, however, that words belonging to the same semantic class are closer to each other than words from different semantic classes in the same syntactic category.
- If there is no synonym for the specified word, the following message appears:

Synonym not found.

6. Use ← and → to select the category and press **RETURN**, or press **CANCEL** to exit the function. Let's assume that you selected VERB (2). The following menu appears:



7. Use ← and → to select a word. If the complete list cannot fit in the display, the same keys will scroll the list. If there are more than one semantic class, use ↑ and ↓ to display the other classes.

still

Use cursor to select. Press RETURN

SPECIFIED WORD: still

VERB2 : settle compose calm soothe quiet lull allay

Press **RETURN** to replace the specified word with the selected synonym, or press **CANCEL** to return to the first menu and select another syntactic category—or exit the function without replacing the specified word by pressing **CANCEL** again.

If you select a synonym and press **RETURN**, the synonym replaces the current word.

Type Thesaurus

WP Application

STYLE	BLOCK	CTR/RMF	GRAMMAR1	GRAMMAR2	SEARCH	FORM	PAGE PRINT
				WORD COUNT			
				EDIT THESAURUS			
				TYPE THESAURUS			
				ABBREVIATED PHRASE MAINTENANCE			
				ABBREVIATED PHRASE LOAD			
				ABBREVIATED PHRASE SAVE			

TW Application

STYLE	CTR/RMF	GRAMMAR
		GRAMMAR CHECK
		USER DICTIONARY MAINTENANCE
		USER DICTIONARY LOAD
		USER DICTIONARY SAVE
		EDIT THESAURUS
		TYPE THESAURUS

1. Press **MENU** to display the function menu.
2. Type **2** to select GRAMMAR2 (WP application) or type **G** to select GRAMMAR (TW application).
3. Type **T** to select TYPE THESAURUS. The system asks you to type the word for which a synonym is needed:

Type word and press RETURN

SPECIFIED WORD: _____

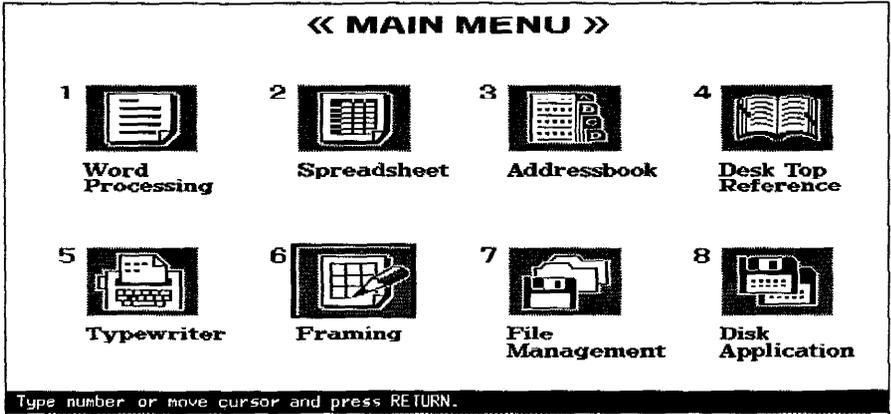
4. Type the word and press **RETURN**.

From this point, proceed as you would do with the EDIT THESAURUS option (See "Edit Thesaurus" on pages 139-140).

Framing

The Framing application allows you to design tables on screen and save the data as a file. Files can be retrieved for further editing or printing. After printing a frame, you can use the TW application to fill in text.

Starting the Framing Application



1. Switch the power on to display the Main Menu.
2. Use the cursor keys to select the icon for Framing and press **RETURN**, or press **6**. The **FRAMING INDEX** screen appears and shows a list of the Framing files (extension ".FRM").
3. Use the cursor keys to select ***NEWFILE** and press **RETURN**. The **FRAMING** screen appears, and you can start creating a new frame.

Creating or Editing a Framing File

The framing function allows you to create and edit horizontal and vertical lines on the screen. The framing file can be saved, retrieved, and printed. As shown in the example below, a frame is made of single or double horizontal lines and single vertical lines.

NOTES:

- An International or Symbol daisy wheel is necessary to print frames containing horizontal double lines and all vertical lines.
- There is no page or margin control. The number of columns cannot be changed, even if the PITCH setting is altered.
- **The framing function is completely separate from the text function, and is only for the purpose of creating lines on the screen and printing them. Because of this, text and lines may not be displayed nor printed at the same time. Once your frame is printed, use the TW application to type the text.**

Operation Modes

The editing functions are divided into three different modes: MOVE, ADD, and DEL (delete). The shape of the cursor changes according to the mode.

Mode & Cursor Shape	Use this mode to...
MOVE (■)	Freely move the cursor without drawing.
ADD (✎)	Draw vertical and horizontal lines by moving the cursor in the appropriate directions.

Mode & Cursor Shape	Use this mode to...
DEL ()	Delete vertical or horizontal lines by moving the cursor along existing lines in the appropriate directions. The cursor must be moved along the line in the same direction in order to remove it, i.e., a portion of a vertical line may not be removed by moving the cursor horizontally through it, nor may a portion of a horizontal line be removed by moving vertically through it.

Keys and Functions

When the framing screen is displayed, the following functions are available:

Key	Function
CORRECT	Switches between the MOVE, ADD and DEL modes in the following sequence, and displays a message to indicate the current mode: MOVE → ADD → DEL → MOVE
(CODE +) ← → ↑ ↓	Each press of the cursor keys moves the cursor one column or line across the screen. In any of the MOVE, ADD or DEL modes, when CODE is held down and a cursor key pressed, the cursor will move to the next line in that direction, without creating an additional line. When there is no line for the cursor to stop at, the cursor will proceed to column 1 or line 1, or column 135 or line 73.
SPACE BAR	Toggles between single and double horizontal line. The LINE indicator on the message line will indicate the current status of this function with “_” or “=”.
RETURN	Moves the cursor in any mode (MOVE, ADD or DEL) to the left end of the following line.
CODE + T SET, T CLR	Sets or clears a tab at the cursor position. A framing tab stop  will appear at the corresponding position on the scale line. Up to 30 tabs can be set.
TAB	Moves the cursor in any mode (MOVE, ADD, or DEL) to the next tab stop to the right. If there is no tab set to the right of the cursor, the cursor moves to the right end (the 135th column).

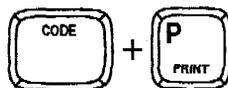
Drawing the Frame

1. While in **MOVE** mode, move the cursor to the starting point of a vertical or horizontal line.
2. Use **CORRECT** to switch to the **ADD** mode.
3. Move the cursor to draw the line and stop when you arrive at the desired end of the line. For a horizontal line, use **SPACE BAR** to switch between a single and double line.
4. Use **CORRECT** to switch to the **MOVE** mode and repeat steps (1) to (3) to draw all the lines you want in your frame.

NOTE:

To delete a line, switch to the **MOVE** mode, position the cursor on the line to be deleted, then switch to the **DEL** mode and move the cursor along the line. Switch back to the **MOVE** mode when the line is deleted.

Printing the Frame



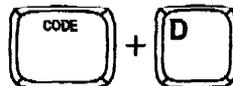
NOTE:

In order to print the frame properly, you must insert an International or Symbol daisy wheel to print vertical and double horizontal lines. The keyboard should be set to **KB:11** or **KB:111** to match the daisy wheel.

PRINT ALL DELETE

1. Press **MENU** to display the menu.
2. Type **P** to select **PRINT**.
 - **Short cut:** Instead of steps (1) and (2), press **CODE + P (PRINT)**.
3. Follow the instructions given in the message line.

Deleting All Lines



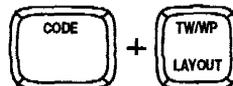
PRINT ALL DELETE

1. Press **MENU** to display the menu.
2. Type **A** to select ALL DELETE. The following message appears:

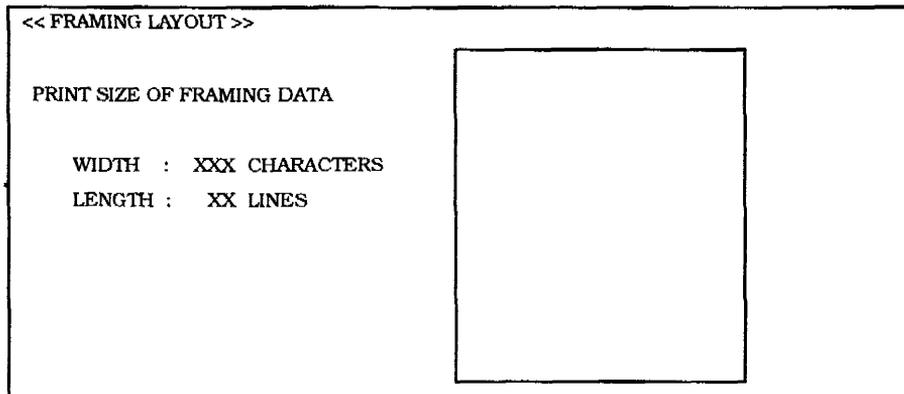
Delete? Press RETURN (yes) or CANCEL (no).

3. Press **RETURN** to delete or **CANCEL** to quit.
 - **Short cut:** Instead of steps (1) and (2), press **CODE + D**.

Previewing a Framing File



1. While editing a framing file, press **CODE + LAYOUT** to switch to the preview screen. The frame is displayed on the screen in reduced scale.



2. To return to the framing screen, press **RETURN**, **CANCEL**, or **CODE + LAYOUT**.

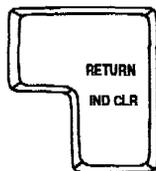
File Operation

Saving the Framing File



When the frame is complete, press **FILE** and proceed to save or delete the framing file as you would with a text file. (See "Saving a File" on page 73) The framing file will be handled in the same way as ordinary text files. Framing files are given the file name extension ".FRM".

Retrieving a Framing File



To edit an existing framing file (a file with the ".FRM" file name extension), select the file on the FRAMING INDEX screen and press **RETURN**. The frame is displayed and its file name appears at the upper-left corner of the screen.

Printing Framing Files

1. Proceed as you would with a text file. The following message appears:

Insert paper. Select pitch. Move carriage to starting position, press RETURN.

2. Insert paper.
3. Use **CODE + PITCH** to select the pitch.
4. Use **SPACE BAR**, **BACKSPACE**, **CODE + BACKSPACE**, **CODE + P UP**, and **CODE + P DOWN** to position the carriage on the paper at the point where you want the frame to start (the upper-left corner of the frame).
5. Press **RETURN**. The following message appears:

Change to KB:I (or II, III) 10 (or 12, 15) wheel and press RETURN.

NOTE:

You must use an International or Symbol daisy wheel and use the KB:II or KB:III setting to print double horizontal lines properly. If you try to print a frame with the keyboard set to I, vertical lines will be printed using periods (.), and, double horizontal lines will be printed as single lines.

6. Press **RETURN** after the daisy wheel has been changed. Printing starts.

NOTE:

If the carrier is in a position which would extend the frame beyond the right end of the printer when printing, the following message will appear on the message line:

Unable to print. Press CANCEL to exit or press RETURN to print.

NOTE:

*Press **CANCEL** to return to the FRAMING INDEX screen. If you press **RETURN** instead, the following message will appear:*

Select pitch. Move carriage to starting position, press RETURN.

Follow the same procedures as described in steps (2) through (6).

Using the Function Menu

The functions that are available on the function menu have already been explained in the "File Operation" section of the WP application. The only difference is that, when required to enter a file name, the extension ".FRM", instead of ".WPT", will be created by the word processor.

Here is a list of the available functions:

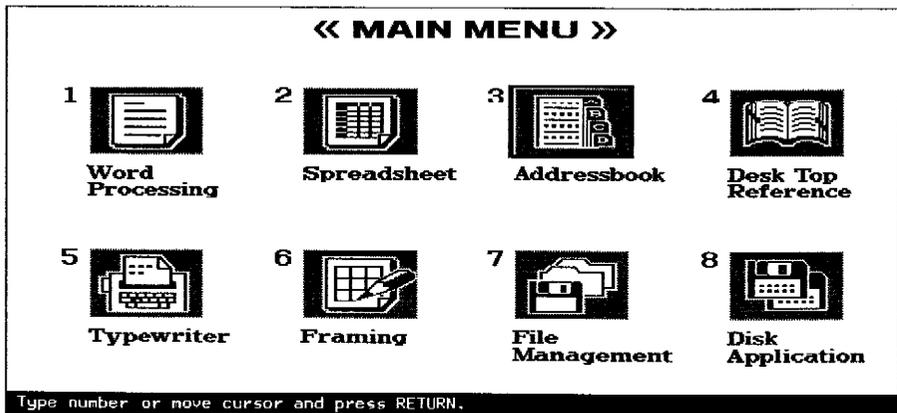
Function	Description
EXIT	To return to the Main menu. You can also press CANCEL .
COPY	To copy a Framing file on the same diskette or to another diskette. The word processor allows you to enter a new file name for the copy. See "Copying a File" on page 82.
DELETE	To delete a Framing file. See "Deleting a File" on page 83
RENAME	To rename a Framing file. See "Renaming a File" on page 83.
ALL DELETE	To delete all Framing files from the diskette. See "Disk Copy" on page 88.

Address Book

The Addressbook application is used to input and organize data such as a list of names, addresses, telephone and fax numbers. Each entry is called a record and will be displayed as a single row divided into several items. On the top of the list, labels identify each item. The list can be edited, sorted, and printed. Parts of the list can be selected according to specific conditions, and saved as a different file.

When you save an ADDRESSBOOK file, the system adds automatically the extension “.MRG” to the file name. Files with that extension can be used for merge printing with the WP application.

Starting the Address Book Application

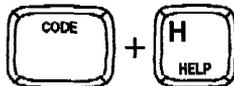


1. Switch the power on to display the Main menu.
2. Use ←, and → to select the icon for Disk Application and press **RETURN**, or press **3**. The ADDRESSBOOK INDEX screen appears and shows a list of the Address Book files (extension ".MRG").
3. Use the cursor keys to select *NEWFILE and press **RETURN**. The DATA INPUT screen shown on page 158 appears, and you can start creating a new file. (If you select an existing file, the ADDRESS BOOK screen shown on page 160 appears first.)

NOTES:

- After you have completed a work, insert a diskette in the drive and press **FILE** to save the file on a diskette. For details, see "Saving the Address Book File" on page 172.
- After saving your work, you will see an updated list of your Addressbook files on the screen. To return to the Main menu, press **CANCEL**, or press **MENU** to display the function menu, select **EXIT** and press **RETURN**.

Help Menus



Several functions of the Address Book Program can be activated by pressing **CODE** + a letter key. The key tops do not necessarily indicate the function of those keys. Before you remember all these special keys, the help menu will provide you with an easy way to activate the functions. A help menu displays the list of functions that are available at the moment you call it. Two different help menus can be displayed: one from the ADDRESS BOOK or DATA INPUT screen, and one from the ADDRESS BOOK INDEX screen.

1. To display a help menu, press **CODE + H (HELP)**. The list of functions available at that moment – and the list of the corresponding keys – will appear on the screen.
2. Press **CODE** + the indicated letter key to activate the desired function. The help menu will disappear and the function will be activated.

NOTE:

Press **CANCEL** or press **CODE + H (HELP)** again to cancel the help menu without activating a function.

ADDRESS BOOK and DATA INPUT Screens

COPY	: CODE+C	GOTO	: CODE+G
DELETE	: CODE+D	PRINT	: CODE+P
MOVE	: CODE+E	NEW RECORD	: CODE+N
SORT	: CODE+O	LABEL LONGER	: CODE+T CLR
SELECT	: CODE+L	LABEL SHORTER	: CODE+T SET
INSERT	: CODE+I	CHANGE SCREEN	: CODE+RETURN

ADDRESS BOOK INDEX Screen

COPY	: CODE+C	ALL DELETE	: CODE+L
DELETE	: CODE+D	PRINT	: CODE+P
RENAME	: CODE+R		

The DATA INPUT Screen

*NEWFILE	RECORD: XX	KB:XX	REMAIN:XX.XK
MR/MS	█		
LAST NAME	_____		
FIRST NAME	_____		
TELEPHONE	_____		
FAX NO.	_____		
TITLE	_____		
COMPANY	_____		
ADDRESS	_____		
CITY	_____		
STATE	_____		
ZIP	_____		

Type data. Press CODE+RETURN to display view screen, or FILE to finish.

NOTE:

The labels shown on the left side of the screen are the default labels that will always appear when you start with a *NEWFILE. These labels can be changed on the ADDRESS BOOK screen. For details, see "Label Input/Editing" on page 165.

To Edit a Record

When the ADDRESSBOOK screen is displayed, you can select a record in order to edit its contents:

1. Use \uparrow and \downarrow to move the cursor to the record that you want to edit.
2. Press **RETURN**. The contents of the selected record is displayed on the DATA INPUT screen and you can start editing.
3. Type or edit the data in each entry field. You may leave some items empty.

NOTES:

- To correct, use **BACK SPACE**, **CORRECT**, **WORD OUT**, and **CODE + LINE OUT**.
 - To move the cursor within a field, use \leftarrow , \rightarrow , **CODE + EXPR**, and **CODE + RELOC**.
 - Use **CODE + I (INSERT)** to switch the insert mode on/off.
 - Use **CODE + BACKSPACE** or the dead keys to superimpose characters or to enter accented letter. If necessary, use **CODE + K (KB)** to switch the keyboard.
4. To move the cursor vertically from one item to another, use \uparrow and \downarrow . Use **RETURN** to move to the beginning of the next item.
 5. If an entry field is too narrow or too wide, move the cursor to any position in the field, press **MENU** to display the function menu, and select **LABEL**.

NOTES:

- To make the field longer, select **LABEL LONGER** and press **RETURN**.

- To make the field shorter, select LABEL SHORTER and press RETURN.
- **Short cut:** Instead of (5), press CODE + T CLR (longer) or CODE + T SET (shorter).
- 6. To save the new or edited record and return to the ADDRESSBOOK screen, press MENU to display the function menu. select CHANGE SCREEN and press RETURN.
- **Short cut:** Instead of (6), press CODE + RETURN.

NOTE:

If you want to edit other records, you do not need to return to the ADDRESSBOOK screen. Press CODE + NEXT S to display the next record, or CODE + PRE S to display the previous one. Press CODE + G (GO TO), then ↑ or ↓ to display the first or last record of the file.

The ADDRESS BOOK Screen

ADDRESS1			KB:XX	REMAIN:XX.XK		
:1.	:2.	:3.	:4.	:5.	:6.	
* :MR/MS	:LAST NAME	:FIRST NAME	:TELEPHONE	:FAX NO.	:TITLE	
* :Mr.	:Anderson	:John	:	:	:	
* :Mr.	:Bennet	:William	:	:	:	
* :	:	:	:	:	:	

You may retype label and press RETURN. Press FILE to finish.

The ADDRESS BOOK screen displays the list of records. The contents of the records cannot be edited here, but you can perform editing at a larger scale, like copying or moving records.

Moving the Cursor

Use ← and → to move the cursor horizontally across the labels. Use ↑ and ↓ to move the cursor vertically across the records. To move faster and scroll the screen, use **CODE + NEXT S**, **CODE + PRE S**, **CODE + RELOC**, and **CODE + EXPR**.

Editing the Labels

The labels are the column headings. You can make changes to the label names.

1. Use the cursor keys to move the cursor to the desired label. Change the label name by retyping.

NOTE:

Move the cursor to the desired by pressing **TAB**, ←, or →. To correct a label name, press **BACKSPACE**, **CORRECT**, **WORD OUT**, or **CODE + LINE OUT**.

2. To return to the data area, press ↓ or **RETURN**.

Preparing the Record for Merge Printing

The WP application allows you to prepare master documents that contain merge symbols associated with a label number (see “Creating a Document with Merge Symbols” on page 95). When you print such a master document, you will get as many copies as you have “active” records in the Address Book file (see below to learn how to make a record active or inactive). In the first copy, the word processor will merge the data of the first active record. In the second copy, the word processor will merge the data of the second active record, and so on. Each merge symbol in the master file will be automatically replaced with the data under the label specified by the merge symbol. For example, if you entered a merge symbol followed with “1” in the master document, that merge symbol will be replaced with the data under the first label of the Address Book file. When creating the master file, you should remember what kind of data you have in each column – or refer to a printout of the Address Book file.

An asterisk (*) to the left of a record indicates that the record is active. You can select particular records for merge printing. A new record is automatically active. To make a record inactive, press **SPACE BAR**. The asterisk of the selected record disappears. Pressing **SPACE BAR** again will re-active the record.

NOTE:

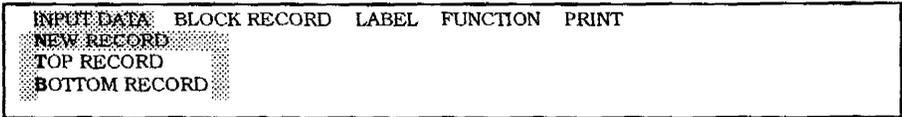
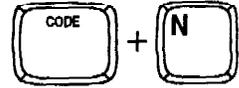
The asterisks can also be used to select records that you want to print when you print the Address Book file (see “Printing the Current Address Book File” on page 173).

Using the Function Menu (ADDRESS BOOK Screen)

Record Input/Editing

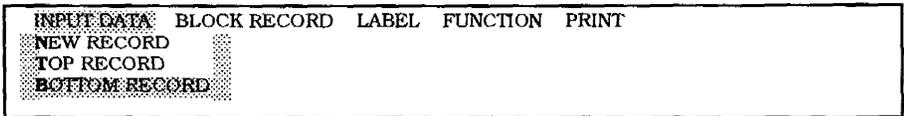
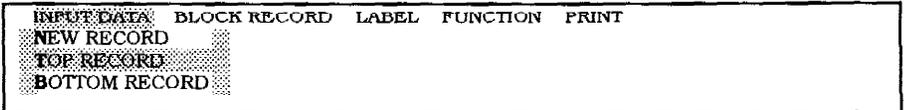
The following functions will help you when editing your records.

Adding a New Record



1. Press **MENU** to display the function menu.
 2. Type **I** to select INPUT DATA.
 3. Type **N** to select NEW RECORD. The word processor displays the DATA INPUT screen and you can start entering data for the new record. The new record will be at the bottom of the list when you return to view the ADDRESSBOOK screen.
- **Short cut:** Instead of (1), (2), and (3), press **CODE + N**.

Jumping to the Top or Bottom Record

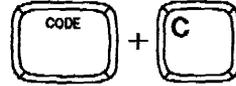


1. Press **MENU** to display the function menu.
2. Type **I** to select INPUT DATA.
3. Type **T** to select TOP RECORD or type **B** to select BOTTOM RECORD. The cursor jumps to the DATA INPUT screen for the top (first) bottom (last) record of the file.

Block Operations

The BLOCK RECORD function allows you to copy, move or delete a block of contiguous records.

Copying Records



INPUT DATA	BLOCK RECORD	LABEL	FUNCTION	PRINT
	COPY			
	DELETE			
	MOVE			

1. To copy records, position the cursor on the first record to be copied.
2. Press **MENU** to display the function menu.
3. Type **B** to select **BLOCK RECORD**.
4. Type **C** to select **COPY**. The following message appears:

Highlight line(s) to be copied and press RETURN.

- **Short cut:** Instead of (2), (3), and (4), press **CODE + C**.
5. Use **↑** or **↓** to mark the records that you want to copy and press **RETURN**. This message will appear:

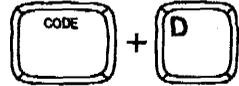
Move cursor to destination for blocked text and press RETURN.

6. Move the cursor to the destination position and press **RETURN**. The marked records are inserted at the destination position.

NOTE:

Press **CANCEL** at any time to cancel the operation and return to the **ADDRESSBOOK** screen.

Deleting Records



INPUT DATA	BLOCK RECORD	LABEL	FUNCTION	PRINT
	COPY			
	DELETE			
	MOVE			

1. To delete records, position the cursor on the first record to be deleted.
2. Press **MENU** to display the function menu.
3. Type **B** to select **BLOCK RECORD**.
4. Type **D** to select **DELETE**. The following message appears:

Highlight line(s) to be deleted and press RETURN.

- **Short cut:** Instead of (2), (3), and (4), press **CODE + D**.
5. Use \uparrow or \downarrow to mark the records that you want to delete and press **RETURN**. This message will appear:

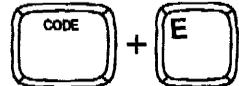
Delete? Press RETURN(yes) or CANCEL(no).

6. Press **RETURN** to delete the marked records, or **CANCEL** to quit.

NOTE:

Press **CANCEL** at any time to cancel the operation and return to the **ADDRESSBOOK** screen.

Moving Records



INPUT DATA	BLOCK RECORD	LABEL	FUNCTION	PRINT
	COPY			
	DELETE			
	MOVE			

1. Position the cursor on the first record to be moved.
2. Press **MENU** to display the function menu.
3. Type **B** to select **BLOCK RECORD**.
4. Type **M** to select **MOVE**. The following message appears:

Highlight line(s) to be moved and press RETURN.

- **Short cut:** Instead of (2), (3), and (4), press **CODE + E**.
5. Use ↑ or ↓ to mark the records that you want to move and press **RETURN**. This message will appear:

Move cursor to destination for blocked text and press RETURN.

6. Move the cursor to the destination position and press **RETURN**. The marked records are inserted at the destination position.

NOTE:

Press **CANCEL** at any time to cancel the operation and return to the **ADDRESSBOOK** screen.

Label Input/Editing

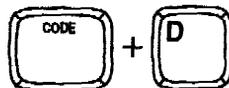
The LABEL functions allow you to add a new label, delete an existing label along with the data of the same column, and modify the width of a column.

Adding a New Label

INPUT DATA	BLOCK RECORD	LABEL	FUNCTION	PRINT
		NEW LABEL		
		DELETE LABEL		
		LABEL LONGER		
		LABEL SHORTER		

1. Move the cursor to the label row.
2. Press **MENU** to display the function menu.
3. Type **L** to select LABEL.
4. Type **N** to select NEW LABEL. The word processor adds a blank column to the right of the last one. The cursor rests on the blank label so that you can start entering the new label.

Deleting one Column



INPUT DATA	BLOCK RECORD	LABEL	FUNCTION	PRINT
		NEW LABEL		
		DELETE LABEL		
		LABEL LONGER		
		LABEL SHORTER		

1. To delete one column, position the cursor on the label of the column to be deleted.
2. Press **MENU** to display the function menu.
3. Type **L** to select LABEL.
4. Type **D** to select DELETE LABEL. The following message appears:

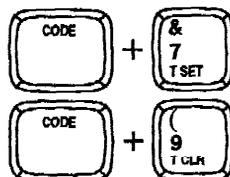
Delete? Press RETURN(yes) or CANCEL(no).

- **Short cut:** Instead of (2), (3), and (4), press **CODE + D**.
5. Press **RETURN** to delete the column, or **CANCEL** to quit.

NOTE:

Press **CANCEL** at any time to cancel the operation and return to the ADDRESSBOOK screen.

Changing the Width of a Column



INPUT DATA	BLOCK RECORD	LABEL	FUNCTION	PRINT
		NEW LABEL		
		DELETE LABEL		
		LABEL LONGER		
		LABEL SHORTER		

INPUT DATA	BLOCK RECORD	LABEL	FUNCTION	PRINT
		NEW LABEL		
		DELETE LABEL		
		LABEL LONGER		
		LABEL SHORTER		

As we have seen on page 158, column widths can also be changed on the DATA INPUT screen. To make a column larger or shorter, on the ADDRESS BOOK screen, proceed as follows:

1. Move the cursor to the label of the column that you want to modify.
 2. Press **MENU** to display the function menu.
 3. Type **L** to select LABEL.
 4. Type **L** to select LABEL LONGER to increase the width, or type **S** to select LABEL SHORTER to decrease the width. The width of the selected column is increased or decreased by eight characters.
- **Short cut:** Instead of (2), (3), and (4), press **CODE + T CLR** to increase, or **CODE + T SET** to decrease.

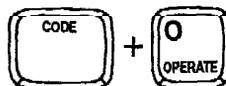
NOTES:

- The width of a single column must be in the range of between seven and 71 characters. The word processor does not allow you to make a column narrower than the largest data already entered in that column.
- The maximum width of a record is 244 characters.

Reorganizing Your File

The **FUNCTION** option of the menu allows you to sort your data using two different sort keys, or to select records which satisfy specified conditions. The selected records can then be saved on diskette as a separate Address Book file. This option also allows for inserting blank columns or records.

Sorting the Data



NOTE:

Since the sort operation is irreversible, it is a good idea to save your file before sorting.

INPUT DATA	BLOCK RECORD	LABEL	FUNCTION	PRINT
			SORT	
			SELECT	
			INSERT	

1. Press **MENU** to display the function menu.
2. Type **F** to select **FUNCTION**.
3. Type **S** to select **SORT**. The following message appears:

Move cursor to primary sort label and press RETURN.

- **Short cut:** Instead of (1), (2), and (3), press **CODE + O**.

- Use ← or → to select the label used as the primary sort key and press **RETURN**. For example, if you want the data to be sorted in alphabetic order of the last names, position the cursor on the label "LAST NAME" and press **RETURN**. This message will appear:

Move cursor to secondary sort label and press RETURN.

- Use ← or → to select the label used as the secondary sort key and press **RETURN**. For example, if you want the data for people having the same last name to be sorted internally in alphabetic order of the first names, position the cursor on the label "FIRST NAME" and press **RETURN**. If you do not want this internal sort to take place, leave the cursor on "LAST NAME" and press **RETURN**. This message will appear:

Use cursor to select. Press RETURN.

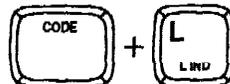
ASCENDING DESCENDING

- Use ← and → to select ASCENDING (natural alphabetic order) or DESCENDING (reverse alphabetic order) and press **RETURN**. The data is sorted and the result of the operation appears on the screen.

NOTES:

- Press **CANCEL** at any time to cancel the operation and return to the ADDRESSBOOK screen.
- Accented letters and superimposed characters are sorted according to the base character.

Selecting Records



INPUT DATA	BLOCK RECORD	LABEL	FUNCTION	PRINT
			SORT	
			SELECT	
			INSERT	

- Press **MENU** to display the function menu.
- Type **F** to select FUNCTION.
- Type **L** to choose SELECT. The SELECT screen, similar to the DATA INPUT screen appears:

<< SELECT MENU >>		KB:XX
MR/MS	█	_____
LAST NAME		_____
FIRST NAME		_____
TELEPHONE		_____
FAX NO.		_____
TITLE		_____
COMPANY		_____
ADDRESS		_____
CITY		_____
STATE		_____
ZIP		_____
Type select condition. Press TAB to start select.		

- **Short cut:** Instead of (1), (2), and (3), press **CODE + L**.

The SELECT screen allows you to input the selection conditions. You may enter more than one condition. For example, if you want to select the records of people living in Atlanta and working for a company called "XYZ INC.", type "Atlanta" in the entry field CITY, and "XYZ INC." in the entry field COMPANY. People working for XYZ INC, but living in Portland will not be selected. People living in Atlanta, but working for a different company will not be selected.

NOTE:

For this function to work correctly, you should be careful to use consistent formats when you enter your records and the selection conditions. Be careful about the capitalization. For this word processor, "Atlanta", "ATLANTA", and "atlanta" are different strings.

4. Enter your conditions. Proceed as when entering data on the DATA INPUT screen. For details, see "To Edit a Record" on page 158.
5. Press **TAB** to start the operation. After a while, the ADDRESSBOOK screen displays the selected data.

NOTE:

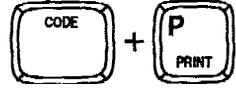
If the word processor could not find records satisfying your conditions, this message will appear:

Record(s) not found.

Once the selected data is displayed, you have several options:

- Press **CANCEL** to display the original data again.
- You can print the selected data. For details, see "Printing the Selected Data" on page 170.
- You can save the selected data on diskette. For details, see "Saving the Selected Data on Diskette" on page 170.

Printing the Selected Data



PRINT SAVE

1. With the selected data displayed, press **MENU** to display the function menu. Only two functions are available: PRINT and SAVE.
2. Type **P** to select PRINT.
 - **Short cut:** Instead of (1) and (2), press **CODE + P (PRINT)**.

Saving the Selected Data on Diskette



PRINT SAVE

1. Insert a diskette in the drive.
2. With the selected data displayed, press **MENU** to display the function menu. Only two functions are available: PRINT and SAVE.
3. Type **S** to select SAVE. The ADDRESSBOOK INDEX screen appears and you are requested to enter a file name.
 - **Short cut:** Instead of (2) and (3), press **FILE**.
4. Type a file name and press **RETURN** to save the data.

NOTE:

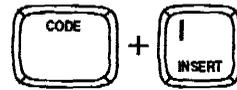
If the file name already exist, this message will appear:

Filename already exists. Type new filename and press RETURN.

FILENAME: XXXXXXXX.MRG

Press **RETURN** if you want to overwrite the existing file. If you want to keep the existing file, type a new file name and press **RETURN**. You can also press **CANCEL** to return to the display of the selected data without saving.

Inserting a Blank Column or Record



INPUT DATA	BLOCK RECORD	LABEL	FUNCTION	PRINT
			SORT	
			SELECT	
			INSERT	

1. To insert a blank column, position the cursor on the label where you want to insert a blank column.
To insert a blank record, position the cursor on the record where you want to insert a blank record.
2. Press **MENU** to display the function menu.
3. Type **F** to select **FUNCTION**.
4. Type **I** to select **INSERT**. The insertion takes place immediately.
 - **Short cut:** Instead of (2), (3), and (4), press **CODE +I (INSERT)**.

When you insert a blank column, the column which was initially selected and all columns to the right are pushed to the right. A blank column of 15 characters and an empty label appear. The cursor rests on the blank label so that you can immediately input a new label.

When you insert a blank record, the record which was initially selected and all records below are pushed down. The cursor rests on the blank record so that you can immediately press **RETURN** and enter the data on the **DATA INPUT** screen.

File Operation

Saving the Address Book File



The following procedure saves the current Address Book file or a portion you have selected using the Select function. The selected data, instead of the current file will be saved if you start the procedure below when the selected data is displayed. Otherwise, the entire file will be saved.

1. Press **FILE** from the ADDRESSBOOK or DATA INPUT screen. The following message appears.

Save file? Press RETURN to save, CORRECT to abandon.

2. Insert a data diskette and press **RETURN** if you want to save the file. Press **CORRECT** to abandon (erase) the file. If you press **RETURN**, the word processor asks you to enter a file name.

FILENAME: █ .MRG

3. Enter a file name and press **RETURN** to save the file. If you have saved an entire Addressbook file, the updated ADDRESSBOOK INDEX screen appears. If you have saved a part of the file using **SELECT**, the ADDRESSBOOK screen appears. Press **CANCEL** to return to the ADDRESSBOOK screen and work on the same file again, or load a file from the diskette.

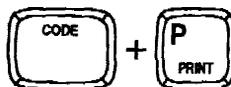
NOTE:

*When the ADDRESSBOOK INDEX screen is displayed, you can press **TW/WP** or use the **EXIT** option on the menu to return to the **MAIN MENU**.*

Retrieving an Address Book File

1. Display the ADDRESS BOOK INDEX screen and insert the diskette containing the file you want to retrieve.
2. Move the cursor to the file you want to retrieve and press **RETURN**. The file appears on the ADDRESSBOOK screen.

Printing the Current Address Book File



INPUT DATA BLOCK RECORD LABEL FUNCTION PRINT

This word processor offers two methods for printing the data of the Address Book file: label or list.

- LABEL printing allows you to print formatted data (for example, first and last name on the first line, company on the second line, and address on the third line, then, city, state, on the fourth line). The default format is set to match the size of the window on an envelope, but can be modified to fit other purposes.
- LIST printing is used to print a continuous list of data under selected labels.

NOTE:

When you print labels or the list of records, only active records will be selected for printing. For details about how to make a record active or inactive, see "Preparing the Record for Merge Printing" on page 161.

1. Press **MENU** to display the function menu.
2. Type **P** to select PRINT. The ADDRESS PRINT MENU screen appears:

```
<< PRINT MENU >>          PRINT FILE:XXXXXXXXX
PRINT APPLICATION         LABEL
PRINT RECORDS             ALL
PITCH                     10
PAUSE FOR KEYBOARD CHANGE YES
LABEL SIZE                3 1/2 X 15/16
NUMBER OF LABELS ACROSS  1
Press SPACE to change setting. Press RETURN.
```

- **Short cut:** Instead of (1) and (2), press **CODE + P (PRINT)**.
- 3. Use **↑** and **↓** to select a parameter, and **SPACE BAR** to set the selected parameter. Press **RETURN** to finish or **CANCEL** to return to the ADDRESSBOOK screen. The meaning of each setting is explained in the following table:

Parameter	Options
PRINT APPLICATION	LABEL: To print formatted labels. LIST: To print a continuous list of data under selected labels.
PRINT RECORDS	ALL: To print all records. SELECTABLE (*): To print only enabled records.
PITCH	10, 12, or 15: Selects the pitch.
PAUSE FOR KEYBOARD CHANGE	YES: The printer stops to allow daisy wheel change when a keyboard change is found in the file. NO: Keyboard changes are ignored.
LABEL SIZE	3 1/2 X 15/16, or 4 X 1 7/16 Width x Height of the printout window. <i>This setting is ignored when you are printing a continuous list.</i>
NUMBER OF LABELS ACROSS	1, or 2 This setting determines the number of column printed on a page. <i>This setting is ignored when you are printing a continuous list.</i> <i>If the selected size is 4 X 1 7/16, you can print only one column.</i>

The next operation depends on your choice for the first parameter (LABEL or LIST).

Printing Labels

If you selected LABEL on the PRINT MENU, the POSITION SET PRINT MENU screen appears:

<< POSITION SET PRINT MENU >>

<ul style="list-style-type: none"> *a. MR/MS *b. LAST NAME *c. FIRST NAME d. TELEPHONE e. FAX NO. f. TITLE *g. COMPANY *h. ADDRESS *i. CITY *j. STATE *k. ZIP 	<p>acb g h ijk</p>
--	--------------------------------

Use cursor to select label name and press SPACE to set. CORRECT to clear.
Press RETURN to start printing.

On this screen, you can specify which Address Book data will be printed in label format and the position of each data item. The data items are represented by the letters a through k (default), as shown on the left side of the screen (the items marked with an asterisk will be printed). The position of these letters in the label area on the right of the screen determine the position of the items when they are printed in label format.

The illustration above shows the default positions. For example, "ba" on the first line indicates that the **FIRST NAME** (b) will be printed first, followed by the **LAST NAME** (a). A space is automatically inserted between each item. To print punctuation marks, such as a comma between city and state, you must include the punctuation mark when you enter the data on the **DATA INPUT** screen.

If you do not want to change the default label printing position, press **RETURN** to start printing.

To change the default label printing positions:

1. On the left side of the screen, move the block cursor to the data item you want to move or add. Press **SPACE BAR**. A second cursor appears in the label area on the right side of the screen.
2. Move the cursor to the position where you want the data item and press **RETURN**. The letter that represents the data item appears in the position you have selected in the label area, and the second cursor disappears from the right side of the screen.
3. Repeat steps 1 and 2 to reposition other data items.
4. To remove an item from the label area, move the cursor to that item on the left side of the screen and press **CORRECT**.
5. When you have completed the position changes, press **RETURN** to start printing. The leftmost label on the first line of the label area is printed from position "0" on paper scale.

NOTE:

The total number of lines and maximum number of characters that you can print on a single line of a label are shown in the following table.

Printing Window Size	Number of Lines	Pitch	Maximum Length
3 1/2 X 15/16	5	10	34
		12	41
		15	51
4 X 1 7/16	8	10	39
		12	47
		15	59

NOTE:

Please be sure to place the labels directly behind the word processor. They should be properly aligned to feed easily into the unit. You may need to interrupt printing at some point to straighten the label alignment.

Printing a List

If you selected LIST on the PRINT MENU, the LABEL SET PRINT MENU appears:

<< LABEL SET PRINT MENU >>					
:1.	:2.	:3.	:4.	:5.	:6.
* :MR/MS	:LAST NAME	:FIRST NAME	:TELEPHONE	:FAX NO.	:TITLE
* :Mr.	:Anderson	:John	:	:	:
* :Mr.	:Bennet	:William	:	:	:
* :	:	:	:	:	:

Use cursor to select label name and press SPACE to set. RETURN to print.

This screen allows you to select data to be printed.

- To select a label for printing, position the cursor over the label using ← and → and press **SPACE BAR**. The same key is used to deselect. To switch all labels on, press **CODE + SPACE BAR**.

NOTE:

If the total length of the selected data exceeds the maximum length of a printable line, this message will appear:

Too wide to print.

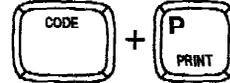
- Press **RETURN** to start printing or **CANCEL** to return to the PRINT MENU screen.

During Printing



To cancel printing, press **CANCEL**.

Printing a File



1. With the ADDRESS BOOK INDEX screen displayed, insert the diskette containing the file you want to print. When the file list appears, move the cursor to the file you want to print.
2. Press **MENU** to display the function menu.

EXIT COPY DELETE RENAME ALL DELETE **PRINT**

3. Type **P** to select PRINT. The PRINT MENU appears. Proceed as explained on page 173.

NOTE:

Printing will start from position "0" on paper scale.

- **Short cut:** Instead of (2) and (3), press **CODE + P (PRINT)**.

Using the Function Menu



The other function that are available on the function menu have already been explained in the "File Operation" section of the WP application. The only difference is that, when required to enter a file name, the extension ".MRG", instead of ".WPT", will be created by the word processor.

Here is a list of the available functions:

Function	Description
EXIT	Return to the Main menu. You can also press CANCEL .
COPY	To copy an Address Book file on the same diskette or on another diskette. The word processor allows you to enter a new file name for the copy.
DELETE	To delete an Address Book file.
RENAME	To rename an Address Book file.
ALL DELETE	To delete all Address Book files from the diskette.

Spreadsheet

The Spreadsheet application is used to create and edit data arranged in a table format. The file can include both text and numerical data. Arithmetic calculations on numerical data can be carried out automatically.

Introduction

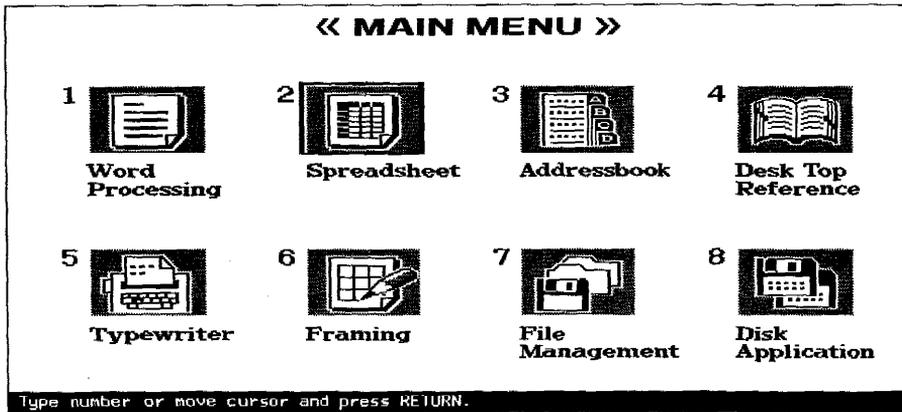
What is a Spreadsheet?

In the past, financial records for any type of business or other organization were always kept by hand in bound form, hence the term “keeping the books”. A sales ledger, for instance, might be laid out as a graph, with the months of the year across the top, and the names of sales personnel or merchandise down the left column. This type of accounting tool had another name; it was called a “Spreadsheet”.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	»	TOTAL
A)Household Items											
Mortgage/Rent	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000		12,000
Heat/Water	110	110	100	80	70	70	60	60	60		960
Gas & Electric.	35	35	35	30	25	25	25	25	30		350
Phone	35	35	35	35	35	35	35	35	35	»	420

Even with an electronic calculator, bookkeeping is still a difficult task, especially when revisions or corrections are to be made. This is the major advantage of the electronic spreadsheet—the ability to make changes and corrections at any time, and have all the calculations made for you, quickly and easily. The Brother Spreadsheet combines for you the ease of the electronic calculator and the convenience of an electronic spreadsheet, all packed into the word processor you use everyday!

Starting the Spreadsheet Application



1. Switch the power on to display the Main menu.
2. Use the cursor keys to select the icon for Spreadsheet and press **RETURN**, or press **2**. The SPREADSHEET INDEX screen appears and shows a list of the Spreadsheet files (extension ".SPR").
3. Use the cursor keys to select *NEWFILE and press **RETURN**. The SPREADSHEET INPUT/EDIT screen shown on page 183 appears, and you can start creating a new file.

NOTES:

- After you have completed a work, insert a diskette in the drive and press **FILE** to save the file on a diskette. For details, see "Saving Your Work" on page 221.
- After saving your work, you will see an updated list of your Spreadsheet files on the screen. To return to the Main menu, press **CANCEL**, or press **MENU** to display the function menu, select **EXIT** and press **RETURN**.

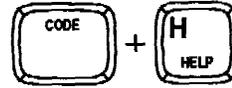
IMPORTANT: You have a choice of creating your own spreadsheets or of using one of the pre-formatted templates. At the INPUT/EDIT screen, press **FILE** while the Template diskette is in the drive to view the available pre-formatted templates.

In order to use the templates effectively, you must first understand how to use the spreadsheet functions. Review the following sections for complete details on the spreadsheet features and capabilities. This information can be applied to your own spreadsheets that you create, as well as the pre-formatted spreadsheets provided.

Input/Edit Mode and Command Mode

There are two different modes for creating and formatting your spreadsheets. The Input/Edit mode permits you to insert and change data within individual cells. The Command mode allows you to format and modify an entire range of cells at one time.

Help Menus



Several functions of the Spreadsheet application can be activated by pressing **CODE** + a letter key. The key tops do not indicate the function of those keys. You don't need to remember all these special keys, because the help menu will provide you with an easy way to activate the functions. A help menu displays the list of functions that are available at the moment you call it. Three different help menus can be displayed: one in the command mode of the INPUT/EDIT screen, one in the input mode of the same screen, and one on the SPREADSHEET INDEX screen.

1. To display a help menu, press **CODE + H (HELP)**. The list of functions available at that moment—and the list of the corresponding keys—will appear on the screen.
2. Press **CODE** + the indicated letter key to activate the desired function. The help menu will disappear and the function will be activated.

NOTE:

Press **CANCEL** or press **CODE + H (HELP)** again to cancel the help menu without activating a function.

Command Mode of the INPUT/EDIT Screen

CTR	:	CODE+F	COPY	:	CODE+C	PITCH	:	CODE+I
RMF	:	CODE+R	DELETE	:	CODE+D	PRINT	:	CODE+P
BOLD	:	CODE+B	MOVE	:	CODE+E	INSERT	:	CODE+I
UNDER	:	CODE+N	LOCK	:	CODE+L	GOTO	:	CODE+G
EDIT	:	TAB						

Input/Edit Mode of the INPUT/EDIT Screen

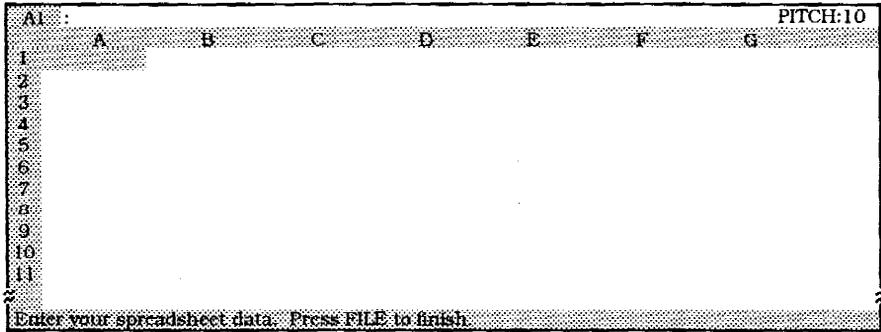
CTR	:	CODE+F
RMF	:	CODE+R
LOCK	:	CODE+L

SPREADSHEET INDEX Screen

COPY	:	CODE+C	CONVERT	:	CODE+O
DELETE	:	CODE+D	PRINT	:	CODE+P
RENAME	:	CODE+R	ALL DELETE	:	CODE+L

The Input/Edit Mode

The SPREADSHEET INPUT/EDIT Screen

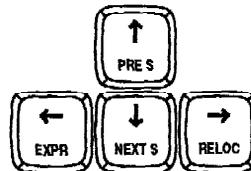


WARNING:

There is a possibility that the word processor may run out of memory before filling the entire Spreadsheet with data, depending on the types of data you enter. The system will warn you of this with the message "Memory full." At this point, you may no longer enter data, only delete data. We recommend that you save your file to the diskette and continue with a new spreadsheet file. Each spreadsheet file may contain about 15kb of memory.

The SPREADSHEET INPUT/EDIT screen is your electronic spreadsheet. This screen is used to input and edit the data of your spreadsheet. It is divided into cells, designated by their positions on the grid, so that the cell at the top left of the sheet becomes A1, the cell diagonally to the right and below it B2, etc.

Moving Around the Screen



When you call up the INPUT/EDIT screen, the cursor will be in cell A1, ready for input. The cursor can be moved with ←, →, ↑ and ↓ to highlight any cell and to tell the Spreadsheet application where you wish to input. You will notice that only a portion of the Spreadsheet is shown on the screen. The Spreadsheet extends far beyond what the screen is able to display at one time – you can input data into as much as 20 columns (A through T), and 65 rows (1 through 65).

SPREADSHEET

It is also possible to move the cursor faster: **CODE** + a cursor key moves the cursor to a border of the screen and **CODE + G (GO TO)** + a cursor key moves the cursor to an edge of the entire spreadsheet. In both cases, the cursor moves vertically or horizontally in the direction of the cursor key arrow mark.

Key	Function
← → ↑ ↓	Move the cursor to the next cell in the direction of the keytop arrow.
CODE + ← CODE + → CODE + ↑ CODE + ↓	Move the cursor to the screen edge in the direction of the keytop arrow.
CODE + GO TO + ← CODE + GO TO + → CODE + GO TO + ↑ CODE + GO TO + ↓	Move the cursor to the spreadsheet edge in the direction of the keytop arrow.

The Input Area

With a paper spreadsheet, you write the data directly in the cells of the sheet. With this electronic spreadsheet, you always type or edit the data of each cell on the top line of the screen, which is called the "Input Area".

There are basically two ways to input data: direct input, and formula input. Direct input means that you directly type what will appear in the highlighted cell. Formula input means that you type a formula in the Input Area. In that case, the result of the formula is displayed in the cell.

When you move the cursor across the grid to highlight (select) a particular cell, the contents of that cell are always displayed in the Input Area on the top line of the screen, the way you typed them. What you see in the Input Area may often differ from what is displayed in the cell:

NOTES:

- If you typed a formula, the formula—not the result—will appear in the Input Area. This feature allows for easy editing when a formula is wrong.

- Even in the case of direct input, the data may look slightly different in the Input Area and in the cell. This is because this word processor allows you to control the layout of the data in the cells. For example, you may decide that a cell will be displayed in bold. The data will appear in bold in the cell, and in normal face in the Input Area.

AT : (1+1)							PITCH:10	
	A	B	C	D	E	F	G	
1		Z						
2								
3								
4								

Entering and Editing Data

To enter data in an empty cell, select that cell and type the data. A small cursor—the input cursor—will appear in the Input Area. Press **RETURN** when you have finished. The data will appear in the cell.

Proceed exactly in the same way to replace old data with new data. The old data will disappear from the Input Area as soon as you start typing. The new data will appear in the cell when you press **RETURN** after retyping.

NOTE:

If you type a character key while moving through the grid, the word processor will switch to the Input/Edit mode, clear the contents of the Input Area and display the character that you typed. If you press **RETURN** at this step, the old data will be replaced with the character. To avoid this, press **CANCEL** instead of **RETURN**. This will restore the original data and return the word processor to the Command mode.

To edit old data without deleting it, press **TAB**. The cursor appears in the Input Area and you can edit the data. Press **RETURN** when the data is edited.

NOTES:

- After typing or editing in the Input Area, press \rightarrow , \uparrow , or \downarrow instead of **RETURN**. These keys enter the data, return to the Command mode, and move the cursor one position in the direction of the arrow mark on the grid.
- In Input/Edit mode, use \leftarrow and \rightarrow to move the cursor across the data in the Input Area. However, \rightarrow will enter the data, as explained above, if you try to move past the last character. Use **CODE + EXPR** to move to the first character, or **CODE + RELOC** to move to the last one.

To type and correct data	Function
Character keys	To type the data.
BACKSPACE or CORRECT	To delete the character to the left of the cursor.
WORD OUT	To delete the word to the left of the cursor.
CODE + LINE OUT	To delete all characters from the Input Area.
CODE + I (INSERT)	To toggle the insert/overwrite modes.
←	To move one position to the left.
→	To move one character to the right. If the cursor is to the right of the last character, this key enters the data and selects the next cell to the right.
CODE + EXPR	Moves the cursor to the first character.
CODE + RELOC	Moves the cursor to the last character.

To enter data and return to the command mode	Function
RETURN	To enter the data.
→	To enter the data and select the next cell to the right (only when the cursor is past the last character of the Input Area).
↑ and ↓	To enter data and return to command mode.
CANCEL	Restores the old data.

Alphanumeric Data

Alphanumeric data is any combination of characters (letters, digits, and other characters) used as a label to identify the entries of the spreadsheet. It is usually as a column heading, such as "JAN." or "12th Region". This data is not to be calculated.

Format Marks

If the label data begins with an alphabetic letter, it is assumed that this data is not to be calculated. In this case, the data is placed flush left in the cell unless a flush right or centering format mark is used.

If the label begins with any of the following:

+ - (@ 1 2 3 4 5 6 7 8 9 0 .

it is assumed that this data is to be calculated. In this case, a format mark must be used in order to identify this data as a label and not as a number to be used in a calculation.

Format Mark	Position of the Data
'	Flush left
"	Flush right (CODE + R) – see "Help Menus" on page 182)
^	Centering (CODE + F) – see "Help Menus" on page 182)

Format marks are displayed in the input area only. They never appear in the cell. The above characters are considered as format marks only when they are entered in the first position of the input area. If they are entered in the middle of the data, they are considered as common characters and will appear in the cell.

NOTES:

- **To make sure that alphanumeric data such as a date (e.g. 10-12-1989) or a phone number (e.g. 231-638-7520) is not calculated, always use a format mark.**
- **Instead of typing the format marks for right alignment (") or centering (^), press CODE + R or CODE + F. If you press these keys while in command mode, the word processor switches to the Input/Edit mode and the corresponding mark appears in the Input Area.**

Maximum Length of Alphanumeric Data

The maximum length of alphanumeric data is 55 characters (the total length of the input area). If the data cannot fit in the cell, it will use the next cells of the grid unless these cells are already occupied. This convenient feature is used for long titles, when you do not want to disturb the layout of the spreadsheet by increasing the width of a column. It should be noted that entering many long alphanumeric data may cause the memory to become full before all cells are occupied. Also, adjusting the width of many columns to display long alphanumeric data may cause truncation of the rows in the printout.

Numeric Data

Numeric data are direct numbers or formulas and are to be calculated. When data is not recognized as alphanumeric, the word processor will interpret it as numeric data. In that case, the word processor will check whether or not the data is valid.

NOTES:

- If the data is valid, the result (a number) is calculated. If the number can fit in the cell, it is automatically right-justified. If the number cannot fit in the cell, a string of asterisks (*) will fill the cell. The correct number is however kept in the memory, and will be displayed if you adjust the width of the column.
- If the data is not valid, ERROR will be displayed in the cell, and a message such as one of the following messages will inform you as to what is going wrong.

Example 1: If a denominator is zero.

Division by zero.

Example 2: If a result is positive and contains more than 13 digits.

Numeric overflow.

Example 3: If a result is negative and contains more than 13 digits.

Numeric underflow.

Example 4: If a number contains characters other than numerics and decimal point (e.g. 1,000, 100\$, 1A2).

Invalid entry.

Direct Numbers

A direct number is digits, and possibly a decimal point. Other characters will make the data invalid. The maximum number of digits is 13 (zeroes preceding other digits are not counted). Here are some examples of valid and invalid direct numbers:

Valid	Invalid
1234	1,000 (comma is invalid)
0.94956	125\$ (\$ is invalid)
00001	12a12 (a is invalid)
000000000000001 (zeroes are discarded)	9999999999999 (more than 13 digits)

Formulas

A formula is made of operators, operands, and possibly pairs of parentheses to change the order of calculation.

Operators

The operators that are recognized by the word processor are, in order of precedence:

Symbol	Operator
+ -	Positive and negative sign
#	Exponentiation
* /	Multiplication, division
+ -	Addition, subtraction

- The + and - operators are considered as the sign of the following operand when they come first in a formula, immediately after a left parenthesis or another operator.
- The # operator performs only integer exponentiation. If the exponent (the next operand after #) has a decimal value, it will be rounded to the closest integer before exponentiation is performed. Therefore, this operator cannot be used to calculate roots (although roots can always be written as a decimal exponent in math). Zero with any positive exponent gives zero. Zero with a negative exponent gives "Invalid entry."
- Division by zero is invalid.
- A sequence of three or more operators makes a formula invalid ($2+*-1$ is invalid).
- A sequence of two operators is valid only if the second operator is a sign + or - ($5*-2$ is valid and gives -10 while $1-*2$ is invalid).

Operands

An operand can be a valid number, the address of a cell containing numeric data, a function, or a valid formula included in a pair of parentheses.

Examples of valid operands	
123	direct number
A1 or a1	cell address; A1 must contain numeric data
@SUM(A1..B6)	valid function
(A1+5*@SUM(B1..B12))	valid formula included in a pair of parentheses

NOTES:

- A cell address can be written using either small or capital letters.
- When a cell address has to come first in a formula, it must be preceded with a + or - sign, or by a left parenthesis. Otherwise, the formula will be considered alphanumeric data and will not be calculated. Therefore, instead of $A1+A2$, enter $+A1+A2$, $(A1+A2)$, or $(A1)+A2$.
- If a cell referred to contains alphanumeric data, the formula is invalid, and **ERROR** will be displayed. An empty cell, however, is valid and assumed to contain zero.

Using Simple Formulas

In order to familiarize yourself with the formulas, try the following examples.

1. Enter 1+2 in cell A1. (Position the cursor on A1, type 1+2, and press **RETURN**.)

	A	B	C	D	E	F	G
1	3						
2							
3							
4							

The calculation is made automatically, and the result displayed in A1. The formula as you typed it, however, will remain, and appear in the input area whenever the cursor is placed on cell A1.

As you already know, inputs such as this do not always have to be numbers. They may also be formulas that direct the system to calculate the result of an operation on numbers already input into the spreadsheet, using cell addresses rather than direct numbers. This function allows you to create a mathematical relationship between desired cells that remains unchanged, regardless of the content of those cells.

2. Enter 10 in cell A2, then enter 2 in cell B2.

	A	B	C	D	E	F	G
1	3						
2	10	2					
3							
4							

3. Enter $+A2+B2$ in cell C2 (the + sign is used here because a formula cannot begin with a letter).

	A	B	C	D	E	F	G
1	3						
2	10	2	12				
3							
4							

4. Enter +A2-B2 in cell D2.

D2: +A2-B2							PITCH:10
	A	B	C	D	E	F	G
1	3						
2	10	2	12	8			
3							
4							

5. Enter +A2*B2 in cell E2.

E2: +A2*B2							PITCH:10
	A	B	C	D	E	F	G
1	3						
2	10	2	12	8	20		
3							
4							

6. Enter +A2/B2 in cell F2.

F2: +A2/B2							PITCH:10
	A	B	C	D	E	F	G
1	3						
2	10	2	12	8	20	5	
3							
4							

7. Enter +A2#B2 in cell G2.

G2: +A2#B2							PITCH:10
	A	B	C	D	E	F	G
1	3						
2	10	2	12	8	20	5	100
3							
4							

8. Now try changing the value in A2 to 20.

A2: 20							PITCH:10
	A	B	C	D	E	F	G
1	3						
2	20	2	12	8	20	5	100
3							
4							

Nothing changes because you have not yet asked the word processor to carry out recalculation.

9. To recalculate, press **MENU**, use ← and → to select **RECALC**, and press **RETURN**. All the results that depend on the value of A2 are now updated.

A2: 20							PITCH:10
A	B	C	D	E	F	G	
1	3						
2	20	2	22	18	40	10	
3						400	
4							

Order of calculation of a formula

Calculation of a formula is performed in the order of precedence of the operators: the + or - sign is first attributed to the operand directly to the sign's right, next exponentiations are carried out, then multiplication and divisions, and finally, additions and subtractions.

Example 1: $2 \# 3 * 4 - 2$

$$8 * 4 - 2$$

$$32 - 2$$

$$30$$

When two or more operators have the same order of precedence (multiplication and divisions, or addition and subtraction), calculation is carried out from left to right.

Example 2: $1 + 3 + 4 - 2$

$$4 + 4 - 2$$

$$8 - 2$$

$$6$$

$2 \# 3 \# 2$

$$8 \# 2$$

$$64$$

Use of parentheses to change the order of mathematical operations. The formula in parentheses is calculated first.

Example 3: $1 + 3 * 4$

$$1 + 12$$

$$13$$

$(1 + 3) * 4$

$$4 * 4$$

$$16$$

Parentheses can be nested. Calculation proceeds from the innermost pair of parentheses.

Example 4: $((3 * 4 + 1) * 4 + 3) * 4 - 12$

$$(13 * 4 + 3) * 4 - 12$$

$$55 * 4 - 12$$

$$220 - 12$$

$$208$$

NOTES:

- Up to 6 pairs of parentheses can be nested. Using more than 6 pairs of nested parentheses makes the formula invalid. The formula will also be invalid if parentheses do not come by pairs.
- Parentheses can be used for the simple purpose of making the data numeric. $(A1+A2)$ or $(A1)+A2$ can be used instead of $+A1+A2$.

Maximum Length of a Formula

The maximum length of a formula is 55 characters (the total length of the input area). If a formula is longer, try to simplify it by using functions. It should be noted that entering many long formulas may cause the memory to become full before all the cells are occupied.

Math Functions

Functions are made by the @ character, followed with a valid function name in capital or small letters (see list below), and a pair of parentheses containing the argument(s) of the function.

Arguments are the numeric data that the function will process to return a result. Valid arguments are numbers and/or cell addresses separated with commas, or a range defined by the addresses of two opposite corners, separated with two periods (..).

Example 1: @SUM(1,A1,4,B6)

returns the sum $1+A1+4+B6$

@SUM(A1..B4)

returns the sum $A1+B1+A2+B2+A3+B3+A4+B4$

Some functions like @INT accept only one argument. In that case, using more than one argument or using a range makes the formula invalid.

A range cannot be used simultaneously with numbers or addresses.

Example 2: @SUM(1,A1..B4) and @SUM(A23,A1..B6) are invalid.

Although a function is a valid operand of a formula, a formula is not a valid argument of a function.

Example 3: $1+A1+@SUM(B2..C5)$ is a valid formula

$@SUM(1+2)$, $@SUM(+A1)$, and $@SUM(1+A1)$ are all invalid

What is a Range of Cells?

A range is no more than a group of cell enclosed in a rectangle, and therefore, can be specified by the addresses of two opposite corners. When using math functions, you specify a range using the notation A1..C3, for example. You could also specify the same range with A3..C1, C1..A3, or C3..A1.

A1	A	B	C	D	E	F	G	PITCH:10
2	Range A1..C3, A3..C1, C1..A3, or C3..A1			This is not a range				
3								
4								

Easy Input of a Range

Rather than typing in the cell address at each corner of the range, you are able to mark and highlight the range to be used. The spreadsheet will automatically define the top left and bottom right corners of the range.

Suppose you want to calculate the sum of the range A1..E2 and display the result in G1.

G1	A	B	C	D	E	F	G	PITCH:10
1	1	2	3	4	5			
2	6	7	8	9	10			
3								
4								

1. Move the cursor to G1 and type @SUM(. As soon as you type the left parenthesis of the function, the following message appears:

Enter cell specification.

2. Instead of typing A1, move the cursor to A1 and press **CODE + L** (see "Help Menus" on page 182). @SUM(A1.. is now displayed in the input area.

A1	A	B	C	D	E	F	G	PITCH:10
@SUM(A1..	1	2	3	4	5			
	6	7	8	9	10			

3. Move the cursor to the opposite corner of the range (E2).

E2	A	B	C	D	E	F	G	PITCH:10
1	1	2	3	4	5			
2	6	7	8	9	10			
3								
4								

4. Press **RETURN**. The cursor is back on G1 and the result is calculated.

G1	A	B	C	D	E	F	G	PITCH:10
1	1	2	3	4	5			
2	6	7	8	9	10			
3								
4								

5. Press **RETURN** again. The result, 55, appears in cell G1.

G1	A	B	C	D	E	F	G	PITCH:10
1	1	2	3	4	5		55	
2	6	7	8	9	10			
3								
4								

List of Functions

Some functions can process only one argument. Arguments may include not only direct number inputs, but cell addresses as well.

The most sophisticated function of the spreadsheet can process multiple arguments. Arguments may be written individually, separating each with a comma, or, if all the arguments belong to a range, the range can be specified by the addresses of two opposite corners, using two periods as a separator. Arguments may be defined as a range or may consist of any combination of direct numbers and cell addresses.

1. Functions Using a Single Argument

@ABS

Gives the absolute value of the argument. If the argument is positive, or zero, the same value is returned; if the argument is negative, the opposite of the argument is returned.

@ABS(5) gives 5

@ABS(-5) gives 5

@INT

Gives the integer part of the argument. The decimal point and subsequent decimal digits are removed without being rounded off; an integer will remain untouched.

@INT(5) gives 5

@INT(0.9) gives 0

@INT(1.1) gives 1

@SQUARE

Gives the square of the argument. The argument multiplied by itself is returned; the result is always a positive number.

@SQUARE(5) gives 25

@SQUARE(-5) gives 25

@SQUARE(0) gives 0

@SQRT

Gives the square root of the argument. The result multiplied by itself is equal to the argument. The argument may not be negative.

@SQRT(25) gives 5

@SQRT(2) gives 1.41421

@SQRT(-25) is invalid

@ROUND

Rounds off the argument to the number of specified decimal places. Two data entries are required between the parentheses: the argument itself, and a direct number that specifies the number of decimal places. If that number is not an integer, it is first rounded off to the closest integer.

@ROUND(1.66666,2) gives 1.67

@ROUND(1.66666,3) gives 1.667

@ROUND(1.66666,2.1) gives 1.67

@ROUND(1.66666,2.5) gives 1.667

2. Functions Using Multiple Arguments

@AVG

Gives the average value of the arguments. The sum of the arguments is calculated, then that sum is divided by the total number of arguments.

@AVG(1,2,3,4) gives $(1+2+3+4)/4 = 2.5$

@AVG(175) gives $175/1 = 175$

@COUNT

Gives the number of non-blank cells. This function is an exception to the general rules in that: 1) the arguments **MUST** be cell addresses, and 2) the cell referred to may contain alphanumeric or numeric data.

@COUNT(A1,A2,A3,A4) gives 3 if A1 contains 5 (numeric), A2 contains your name (alphanumeric), A3 contains ERROR (this is not a blank cell), and A4 is empty.

@MAX

Gives the greatest argument (maximum). Remember that a positive argument is always greater than a negative one.

@MAX(1,234) gives 234

@MAX(1,-99999) gives 1

@MIN

Gives the smallest argument (minimum). Remember that a negative argument is always smaller than a positive one.

@MIN(1,234) gives 1

@MIN(-1,99999) gives -1

@SUM

Gives the sum of the arguments. This function is very useful in shortening long sums when the arguments belong to a range.

@SUM(1,2,3,4,5) gives 15

@SUM(A1,A2,A3,B1,B2,B3) is equivalent to @SUM(A1..B3)

@TSUM

Gives the total sum of a range of cells, and also the sum of each row and column of the range if they contain data. This function is an exception to the general rules in that: 1) the argument **MUST** be a range, and 2) results are displayed not only in the selected cell (total sum), but also in the column to the right and in the row below the range. You must therefore be sure that the column to the right and the row below the range is empty. See below for an example.

2. Functions Using Multiple Arguments

@IF

This special function checks whether or not a specified condition is verified, and displays a value that depends on the result of that check. The general form of this function is @IF(condition, argument1, argument2), and can be read in plain English as: if the "condition" is satisfied, then display "argument1". If the condition is not satisfied, then display "argument2". The "condition" is usually an arithmetic comparison, using two values (number or cell address) and one of the following comparison operators:

- = equal to
- < less than
- > greater than
- <= less than or equal to
- >= greater than or equal to
- <> not equal to

@IF(A1>100,100,50) gives 100 if A1 is greater than 100, and 50 if A1 is equal to 100 or smaller than 100

@IF(A1>100,100,A1) gives 100 if A1=200 and 60 if A1=60

- "Argument2" can be omitted. In that case, the function returns "argument1" when the condition is satisfied, and zero when the condition is not satisfied.

@IF(A1=50,100) is equivalent to @IF(A1=50,100,0)

- If "argument1" and "argument2" are both omitted, the function returns 1 when the condition is satisfied, and zero when the condition is not satisfied.

@IF(A1=50) is equivalent to @IF(A1=50,1,0); 100 * @IF(A1=50) is equivalent to @IF(A1=50,100)

- The "condition" can be a cell address. In that case, "argument1" and "argument2" must be omitted. The function returns 1 if the cell contains a numeric data, and zero if the cell contains alphanumeric data.

@IF(A1) gives 1 if A1=50 and gives 0 if A1 contains a label.

The following example shows how to use the @TSM function.

1. Enter the numbers shown below in the range A1..C3, then enter @TSM(A1..C3) in D4.

D4: @TSM(A1..C3)	PITCH:10						
	A	B	C	D	E	F	G
1	1	2	3				
2	4	5	6				
3	7	8	9				
4							

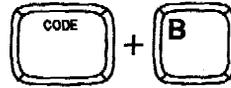
2. Press RETURN. The results appear as follows:

D4: @TSM(A1..C3)	PITCH:10						
	A	B	C	D	E	F	G
1	1	2	3	6			
2	4	5	6	15			
3	7	8	9	24			
4	12	15	18	45			

The Command Mode

The Command mode permits formatting and modification of an entire range of cells. The Command mode is used to improve the layout of your spreadsheet.

Bold



1. Move the cursor to a corner of the range that you want to bold.
2. Press **CODE + B** (see "Help Menus" on page 182). The following menu appears:

MENU: BOLD ON BOLD OFF

3. Use ← and → to select **BOLD ON** and press **RETURN**. The following message appears:

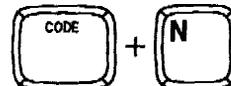
Mark range to be bolded. Press RETURN when done.

4. Move the cursor to the opposite corner of the range and press **RETURN**. The cells of the range that already contain data appear in bold-face characters. Empty cells are unchanged, but if you input data in one of them, the data will be bolded.

NOTE:

To unbold a range of cells, proceed in the same way as above, but select **BOLD OFF** in step (3).

Underline



1. Move the cursor to a corner of the range that you want to underline.
2. Press **CODE + N** (see "Help Menus" on page 182). The following menu appears:

MENU: UNDERLINE ON UNDERLINE OFF

3. Use ← and → to select **UNDERLINE ON** and press **RETURN**. The following message appears:

Mark range to be underlined. Press RETURN when done.

4. Move the cursor to the opposite corner of the range and press **RETURN**. The cells of the range (even empty cells) are underlined.

NOTE:

To remove underlining from a range of cells, proceed in the same way as above, but select **UNDERLINE OFF** in step (3).

Absolute and Relative Addresses

Whenever the layout of your spreadsheet is altered, and the data within a cell has been copied, the cell reference in the formulas are updated accordingly.

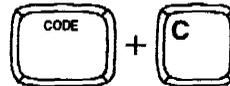
However, there may be times that you do not wish the cell address in the formula updated.

If a cell has a relative address, it is always updated to reflect any layout change.

If a cell has an absolute address, it is never updated to reflect any layout change.

All cell addresses are considered relative, unless a "\$" (dollar sign) is placed at the beginning of the cell address in the formula. The dollar sign designates the cell address as being absolute.

Copying a Range of Cells



1. Position the cursor on a corner of the range that you want to copy.
2. Press **CODE + C** (see "Help Menus" on page 182). This message will appear:

Mark range to be copied. Press RETURN when done.

3. Move the cursor to the opposite corner of the range and press **RETURN**. This message will appear:

Move block cursor to destination and press RETURN.

4. Move the cursor to the upper-left corner of the destination range and press **RETURN**. The range is copied to the destination.

NOTES:

- The copy operation replaces the old data with the new data.
- Relative addresses are automatically updated.

Example 1:

1. Enter 3 in A1, 1 in A2, 2 in A3, then enter the formulas $2 * A2 + \$A1$ in B2 and $2 * A3 + \$A1$ in B3. The addresses A2 and A3 are relative while the address \$A1 is absolute. Relative addresses are updated when copied. Absolute addresses are never updated.

	A	B	C	D	E	F	G
1		3					
2		1					
3		2					
4							

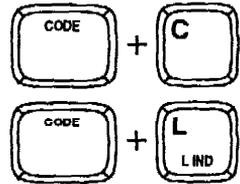
2. Now copy the range B2..B3 to C2. Note that the formulas of C2 and C3 are $2 * B2 + \$A1$ and $2 * B3 + \$A1$. Because $\$A1$ is an absolute address, it was not changed when copied. (See "Absolute and Relative Addresses" on page 201.)

NOTE:

Use the **RECALC** function to update the results.

	A	B	C	D	E	F	G
1		3					
2		1	5				
3		2	7				
4							

Copying one Cell to Many Other Cells



1. Position the cursor on the cell that you want to copy.
2. Press **CODE + C** (see "Help Menus" on page 182). This message will appear:

Mark range to be copied. Press RETURN when done.

3. Press **RETURN** without moving the cursor. This message will appear:

Move block cursor to destination and press RETURN.

4. Move the cursor to the upper-left corner of the destination range and press **CODE + L** (not **RETURN**).
5. Move the cursor to the lower-right corner of the range and press **RETURN**. The cell is copied to the destination range.

NOTES:

- Relative addresses are automatically updated. (See "Copying a Range of Cells" on page 201 and "Absolute and Relative Addresses" on page 201.)
- This variation of the copy function is very useful for automatic input of formulas.

Example:

1. Enter the data shown below in A1..E1, then enter @SQUARE(A1) in A2.

A2	@SQUARE(A1)					PITCH:10	
	A	B	C	D	E	F	G
1	1	2	3	4	5		
2	1						
3							
4							

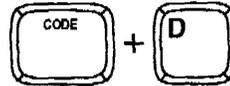
2. Now copy the A2 to the range B2..E2.

NOTE:

Use the RECALC function to update the results.

B2	@SQUARE(B1)					PITCH:10	
	A	B	C	D	E	F	G
1	1	2	3	4	5		
2	1	4	9	16	25		
3							
4							

Deleting Rows and Columns



1. Press **CODE + D** (see "Help Menus" on page 182). This menu will appear:

MENU: ROWS COLUMNS

2. Select **ROWS** to delete rows (or **COLUMNS** to delete columns), then press **RETURN**. This message will appear:

Position block cursor. Press RETURN when done.

3. Position the cursor anywhere in the first row (or column) to be deleted. The word processor asks you to specify the number of rows (or columns) to delete, for example:

Number of rows to delete: 1

4. Type the number and press **RETURN**. The specified number of rows (or columns) are deleted. Existing data past the deleted rows (columns) are pulled up (to the left) and any moved formula is updated.

Example 1:

1. Enter the data shown below in the range A1..B3, then enter the formula @SUM(A1..B3) in cell C5.

C5	@SUM(A1..B3)						PITCH:10
	A	B	C	D	E	F	G
1	1	4					
2	2	5					
3	3	6					
4							
5			21				

2. Now delete row 2 and use the RECALC function to update the results.

C4	@SUM(A1..B2)						PITCH:10
	A	B	C	D	E	F	G
1	1	4					
2	3	6					
3							
4			14				
5							

NOTE:

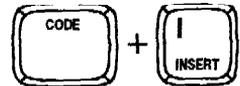
When a function is defined on a range, like in the above example, you are not allowed to delete a row or a column that contains a corner of the range.

Example 2:

1. Using the same initial data as in the above example, delete row 1.

C4	@SUM(?..B2)						PITCH:10
	A	B	C	D	E	F	G
1	2	5					
2	3	6					
3							
4			ERROR				
5							

Inserting Blank Rows and Columns



1. Press **CODE + I (INSERT)**. This menu will appear:

MENU: ROWS COLUMNS

2. Select **ROWS** to insert blank rows (or **COLUMNS** to insert blank columns), then press **RETURN**. This message will appear:

Position block cursor. Press RETURN when done.

3. Position the cursor anywhere in the first row (or column) where you want the new rows (columns) inserted. The word processor asks you to specify the number of rows (or columns) to insert, for example:

Number of rows to insert

4. Type the number and press **RETURN**. The specified number of blank rows (or columns) are inserted. Existing data beyond the inserted rows (columns) are pushed down (to the right).

Example 1:

1. Enter the data shown below in the range A1..B2, then enter the formula @SUM(A1..B2) in cell C3.

	A	B	C	D	E	F	G
1	1	3					
2	2	4					
3			10				
4							
5							

2. Now insert a blank row between row 1 and row 2.

	A	B	C	D	E	F	G
1	1	3					
2							
3	2	4					
4			10				
5							

Example 2:

With the same initial data as in Example 1, insert a blank row between row 2 and row 3.

	A	B	C	D	E	F	G
1	1	3					
2	2	4					
3							
4			10				
5							

Example 3:

1. Enter the data shown below in the range A2..B2, then enter the formula (A2*B2) in C2.

C2 : (A2*B2)		PITCH:10					
	A	B	C	D	E	F	G
1							
2	300	0.8	240				
3							
4							

2. Now insert a blank column between column A and column B.

D2 : (A2*C2)		PITCH:10					
	A	B	C	D	E	F	G
1							
2	300		0.8	240			
3							
4							

Example 4:

With the same initial data as in Example 3, insert a blank column between column B and column C.

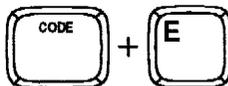
D2 : (A2*B2)		PITCH:10					
	A	B	C	D	E	F	G
1							
2	300	0.8		240			
3							
4							

NOTE:

If the insertion you wish to make will exceed the limitations of the spreadsheet, the data in the rows or columns on the far edge will be lost. The system will warn you of this, and allow you to choose whether to quit the insertion or allow the data to be lost with this message:

Insert will result in data loss. RETURN to insert or CANCEL to quit.

Moving a Range of Cells



1. Position the cursor on a corner of the range that you want to move.
2. Press **CODE + E** (see "Help Menus" on page 182). This message will appear:

Mark range to be moved. Press RETURN when done.

3. Move the cursor to the opposite corner of the range and press **RETURN**. This message will appear:

Move block cursor to destination and press RETURN.

4. Move the cursor to the upper-left corner of the destination range and press **RETURN**. The range is moved to the destination, and the range that you marked in steps (1), (2), and (3) is cleared.

NOTE:

The move operation replaces the old data with the new data.

Example:

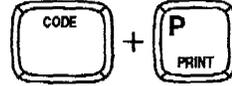
1. Enter the data shown below, then enter the formula @SUM(A1..B2) in A4.

A4	@SUM(A1..B2)						PITCH:10
	A	B	C	D	E	F	G
1	1	3					
2	2	4					
3							
4	10						

2. Now move the cell A4 to D1.

D1	@SUM(A1..B2)						PITCH:10
	A	B	C	D	E	F	G
1	1	3		10			
2	2	4					
3							
4							

Printing a Range



Printing a range of cells is often a useful step when you are editing a spreadsheet. It allows you to see how your work will actually look on paper. Remember that the application also allows you to print an entire spreadsheet file from the **SPREADSHEET INDEX** screen.

Before you print, use **CODE + PITCH (1)** to adjust the pitch to 10, 12, or 15 characters per inch.

You can split your spreadsheet manually by inserting page break symbols (↓) with the **CODE + P BREAK** keys.

1. Move the cursor to a corner of the range that you want to print and press **CODE + P (PRINT)**. This message will appear:

Mark range to print. Press RETURN when done.

2. Move the cursor to the cell in the opposite corner of the range and press **RETURN**. This message will appear:

Insert paper and press RETURN.

3. Insert paper and press **RETURN**. If the spreadsheet is too wide, you may need to insert the sheet of paper horizontally. The word processor now asks you to match the daisy wheel to the selected keyboard and pitch:

Change to KB:I 10 wheel and press RETURN.

4. Make sure that the daisy wheel installed matches the message specifications, and press **RETURN**. Printing starts.

NOTE:

*To pause during printing, press **SPACE BAR**. Press the same key to restart printing. To cancel printing, press **CANCEL**.*

Using the Function Menu



1. To display the function menu, press **MENU**.

MENU **COLUMN** FORMAT RECALC SORT CLEAR CONVERT

2. To select a function, use ← and → and press **RETURN**.

Adjusting the Width of the Columns

The default width of the columns is 10 characters. However, you can adjust the width of your column to accommodate the data that you will input (or the data that is already in the cell). While a maximum of 55 characters (the maximum length of the input area) may be put into a cell, only a portion of that data may be viewed if there is interfering data in the cells to the right. It will still remain resident in that cell and may be viewed on the Input Area when the cursor is in that cell. It is not possible to change the width of an individual cell without changing the width of the entire column.

1. Position the cursor anywhere within the column you wish to change and press **MENU**. The function menu appears:

MENU **COLUMN** FORMAT RECALC SORT CLEAR CONVERT

2. Select **COLUMN**, and press **RETURN**. This menu will appear:

MENU **WIDTH** FILL FREEZE RELEASE

3. Select **WIDTH** and press **RETURN**. The letter of the column will appear in the Input Area, followed with a number indicating its current width, and this message will appear:

Column: A Width: 10

Mark columns for width change. Press **RETURN** when done.

4. Use ← or → to mark the columns that you want to change, and press **RETURN**. The marked columns are indicated in the Input Area (for example, A-C if you marked columns A, B, and C),

New width A-C: █

and this message will appear:

Enter new column width and press RETURN.

5. Type the new width in the Input Area (maximum 55 characters) and press **RETURN**. The width of the marked columns is adjusted.

Filling a Range with Numbers

This function is useful when you want to quickly number rows or columns, or when you need numbers in a range in order to check how math functions are working. As an example, we are going to show how to create a calendar (let's limit it to June 1990).

1. Enter the data shown below and adjust the width of the columns as desired.

AG	SAT						PITCH:10
	A	B	C	D	E	F	G
1	June						
2							
3	SUN						
4	MON						
5	TUE						
6	WED						
7	THU						
8	FRI						
9	SAT						

2. Move the cursor to B3 and press **MENU** to display the function menu.

MENU COLUMN FORMAT RECALC SORT CLEAR CONVERT

3. Select **COLUMN** and press **RETURN**. This menu will appear:

MENU WIDTH **FILL** FREEZE RELEASE

4. Select **FILL** and press **RETURN**. This message will appear:

Mark range to be filled. Press RETURN when done.

5. Move the cursor to F9 to mark the range B3..F9. The word processor asks you to enter a starting value.

NOTE:

The fill function will fill the marked range from the upper-left corner down, then starting from the top of the second column, and so on. Three values are necessary: starting, jumping, and ending values. The starting value is written in the upper-left corner. Next numbers are calculated by adding the jumping value to the previously written value. Filling stops when the calculated value exceeds the ending value or when the marked range is filled, whichever comes first.

6. Since June First is Friday, enter -4 for the starting value. The word processor will ask you to enter the jumping value and the ending value. Enter 1 for the jumping value and 30 for the ending value. The range will be automatically filled when you press **RETURN** to enter the ending value.

B3	-4.00000						PITCH:10
	A	B	C	D	E	F	G
1	June						
2							
3	SUN	-4	3	10	17	24	
4	MON	-3	4	11	18	25	
5	TUE	-2	5	12	19	26	
6	WED	-1	6	13	20	27	
7	THU	0	7	14	21	28	
8	FRI	1	8	15	22	29	
9	SAT	2	9	16	23	30	

7. Delete the contents of cells B3, B4, B5, B6, and B7.

Freezing and Releasing Leftmost Columns on the Screen

Because this spreadsheet is wider than the display screen, you might find at some point that you wish to keep the first column(s) where you can see them while editing the rightmost columns.

Freezing

1. Press **MENU** to display the function menu.

MENU: COLUMN FORMAT RECALC SORT CLEAR CONVERT

2. Select **COLUMN**, and press **RETURN**. This menu will appear:

MENU: WIDTH FILL **FREEZE** RELEASE

3. Select **FREEZE** and press **RETURN**. The system asks you to indicate the columns to be frozen. This message will appear:

Move block cursor to right of columns to be frozen and press RETURN.

- Freezing will always affect the first columns, from column A to the column just before the column that you choose at this step. Position the cursor and press **RETURN**. An indicator will tell you which columns are frozen, for example, if you positioned the cursor on column C:

	A	B	C	D	E	F	G
1	June						
2							
3	SUN		3	10	17	24	
4	MON		4	11	18	25	
5	TUE		5	12	19	26	

NOTE:

The names of frozen columns are displayed in reverse colors with increased brightness.

- Now, if you move the cursor to the rightmost columns, you will still see the frozen columns on screen.

NOTE:

Only one group of columns can be frozen at a time. Rows cannot be frozen.

Releasing

When you want to release the frozen columns (you must do that to be able to move the cursor into the frozen columns for editing), proceed as for freezing, but select **RELEASE** in step (2). A message will tell you that the frozen columns have been released:

Frozen columns have been released.

Changing the Format of Numeric Data

This system is quite capable of handling fractional numbers, though it displays the result in decimal notation. Fractional numbers may even be typed in the Input Area as fractions, but they will still be displayed on the grid as decimals. The system correctly stores their values.

The word processor is **not** set to display decimal digits by default. However, you can modify this using the format function to display up to five digits. This function also allows you to display dollar figures with a dollar symbol and two decimal places. It also can display percentage data with the percentage symbol to a specified number of decimal places, again, up to five.

To use the format function, proceed as follows:

- Position the cursor on a corner of the range to be formatted and press **MENU**.

The function menu appears:

MENU: COLUMN **FORMAT** RECALC SORT CLEAR CONVERT

2. Select **FORMAT** and press **RETURN**. Specify the range and press **RETURN** again. The **FORMAT** menu appears:

MENU: **FIXED** CURRENCY PERCENT NO DISPLAY

3. Select an option and press **RETURN**. The following operations depend on the option that you selected.

Changing the Number of Decimal Places

1. Select **FIXED** from the **FORMAT** menu to set the number of decimal places that you wish to display and press **RETURN**.

MENU: 0 1 2 3 4 5 **Select number of decimal places**

2. Select the number of decimal places and press **RETURN**. This menu will appear:

MENU: **NO COMMAS** COMMAS

3. Select **COMMAS** if you want commas to separate the thousands or **NO COMMAS** if you do not. Press **RETURN**.

Displaying Currency Symbols

MENU: **FIXED** **CURRENCY** PERCENT NO DISPLAY

1. Select **CURRENCY** from the **FORMAT** menu to display numbers with two decimal places and a currency symbol, then press **RETURN**. This menu will appear:

MENU: **ZERO DISPLAY** NO ZERO DISPLAY

2. Select **ZERO DISPLAY** if you want zeroes to be displayed, or **NO ZERO DISPLAY** if you do not. Press **RETURN**. This menu will appear:

MENU: **NO COMMAS** COMMAS

3. Select **COMMAS** if you want commas to separate the thousands or **NO COMMAS** if you do not. Press **RETURN**.

Displaying Percentages

MENU: FIXED CURRENCY PERCENT NO DISPLAY

1. Select PERCENT from the FORMAT menu to display percentages (the result will be multiplied by 100 will be followed with a percentage symbol).

MENU: 0 1 2 3 4 5 Select number of decimal places

2. Select the number of decimal places and press RETURN.

Hiding Numeric Data

MENU: FIXED CURRENCY PERCENT NO DISPLAY

1. Select NO DISPLAY from the FORMAT menu and press RETURN. This menu will appear:

MENU: DISPLAY NO DISPLAY

2. Select NO DISPLAY to hide data (or select DISPLAY to display data that have been hidden) and press RETURN.

Hidden data will still be in memory but will not be displayed on the grid. For example, you might have to split complex calculations in more simple steps. In that case, you do not need to display or print intermediate results.

Recalculation

When you input or edit numeric data, the result is automatically displayed in the selected cell. However, if other cells use this data in a formula, these are not automatically updated. In order to have all results match the new data you must recalculate.

1. Press MENU to display the function menu.

MENU: COLUMN FORMAT RECALC SORT CLEAR CONVERT

2. Select RECALC, and press RETURN.

IMPORTANT: If you are using formulas referencing to cells that are themselves referencing to other cells, it might sometimes happen that the system cannot give the correct results with a single call of the recalculation function. In such cases, call the recalculation function again until a further call does not change any result.

Organizing Your Data

It is important to realize that you can create files of textual information as well as numbers and formulas. The next example will illustrate this.

Sorting a Range

When you update a file of names, addresses and phone numbers, you usually add data at the end of the file. To facilitate later reference, however, you need some logical organization. Alphabetical order is commonly used. The sorting feature shown here will save you time and effort in the organization of your data. To prepare:

1. Enter the data shown in the illustration.

A1:	Marsh							PITCH:10
	A	B	C	D	E	F	G	I
1	Marsh	Henry	Miamiburg	OH	45342			
2	Anderson	John	Denver	CO	82222			
3	Jackson	Howard	Stanford	CA	56904			
4	Bennet	William	Westfield	NJ	28854			
5	Higgins	Ruth	Cambridge	MA	11000			
6	Carter	David	Dallas	TX	76021			
7	Bender	William	Freeport	VT	66622			
8	Higgins	Joyce	Atlanta	GA	30341			
9	Fox	Terry	Fremont	CA	94537			
10	Lee	Kevin	Bedford	TX	76021			
11								

2. If you wish, make several copies of the data (using the copy function **CODE + C**) so that you will be able to try several different types of sorts.

You are now ready to go on with the first example:

1. Position the cursor on A1 and press **MENU** to display the function menu.

MENU COLUMN FORMAT RECALC **SORT** CLEAR CONVERT

2. Select **SORT** and press **RETURN**. This menu will appear:

MENU **SORT** SELECT SORT & SELECT

3. Select **SORT** and press **RETURN**. This message will appear:

Mark range to be sorted. Press RETURN when done.

You are going to rearrange the data in alphabetical order according to the last names (column A). It is important that you mark all the columns so that all data will move together with the names.

4. Move the cursor to E10 to mark the range A1..E10, and press **RETURN**. The system will ask you to enter the name of the column that the column will be sorted by (primary key).

Primary key

This message will also appear:

Enter column of primary sort key and press RETURN.

This system allows for double sorting—primary and secondary. You wish the data to be sorted according to the last names (column A). This is the “primary key”. The primary key must always be in the marked range.

5. Type A and press **RETURN**. The system will ask you to enter the name of the column that will be used for secondary or internal sorting.

Secondary key

This message will also appear:

Enter column of secondary sort key and press RETURN.

If two or more persons have the same last name, you will require secondary sorting to maintain proper organization. Use the first name (column B) for secondary sorting.

NOTE:

*When you do not wish a secondary sort to take place, press **RETURN** without entering anything.*

6. Type B and press **RETURN**. This menu will appear:

MENU ASCENDING DESCENDING

If you select ASCENDING, the data will be arranged in natural alphabetical order. DESCENDING will place it in the reverse order.

7. Select ASCENDING and press **RETURN**. The last menu will appear.

MENU ALPHABETIC NUMERIC

8. Since the data is alphanumeric, select ALPHABETIC and press **RETURN**. Your data will be alphabetically arranged, automatically.

A1:	Anderson					PITCH:10		
	A	B	C	D	E	F	G	H
1	Anderson	John	Denver	CO	82222			
2	Bender	William	Freeport	VT	66622			
3	Bennet	William	Westfield	NJ	28854			
4	Carter	David	Dallas	TX	76021			
5	Fox	Terry	Fremont	CA	94537			
6	Higgins	Joyce	Atlanta	GA	30341			
7	Higgins	Ruth	Cambridge	MA	11000			
8	Jackson	Howard	Stanford	CA	56904			
9	Lee	Kevin	Bedford	TX	76021			
10	Marsh	Henry	Miamiburg	OH	45342			
11								

You can use both alphabetic and numeric, ascending and descending sorts to organize the data. You can also use different primary and secondary keys (such as by city and first name) to put your data in the order most convenient to your purpose.

Selecting Data From a Range

The **SELECT** option in the **SORT** menu allows you to print rows of data that match a specified condition. However, you may only select numeric data. With the **SALES** template, for instance, you might wish to print a list of sales persons whose sales are lower than expected. In the example used previously, the only numeric data was the zip code, so you can use this data here.

1. Position the cursor on a corner of the range you want to select from, then press **MENU**. The function menu appears:

MENU COLUMN FORMAT RECALC **SORT** CLEAR CONVERT

2. Select **SORT** and press **RETURN**. This menu will appear:

MENU SORT **SELECT** SORT & SELECT

3. Choose **SELECT** and press **RETURN**. This message will appear:

Mark range to select from. Press **RETURN** when done.

4. Move the cursor to the opposite corner of the range and press **RETURN**. The system will ask you to enter the name of the column to be used.

Select Column A-E:

This message will also appear:

Enter the select column and press RETURN.

5. Type a letter (E in this example) and press **RETURN**. A menu of matching conditions will appear:

MENU: EQUAL NOT EQUAL LESS GREATER BETWEEN NOT BETWEEN

If you select **EQUAL**, **NOT EQUAL**, **LESS**, or **GREATER**, the system will ask you to enter a numeric value (equal or not equal to what, etc.). If you select **BETWEEN** or **NOT BETWEEN**, you are requested to enter the limit values of the bracket.

6. Select **EQUAL** and press **RETURN**. The system will ask you to enter the value.

Equal to

We want the list of people whose zip code is 76021.

7. Type 76021 and press **RETURN**. You are now requested to insert paper.

Insert paper and press RETURN.

8. Insert paper and press **RETURN**. Change the daisy wheel as required and press **RETURN** again. The printout will look as follows:

Carter	David	Dallas	TX	76021
Lee	Kevin	Dedford	TX	76021

Sorting & Selecting Data from a Range

MENU: COLUMN FORMAT RECALC SORT CLEAR CONVERT

MENU: SORT SELECT SORT & SELECT

This third option (**SORT & SELECT**) allows you to sort and select in one operation. This is useful when you want the printout to be sorted. To try out this option, use a copy of the data in the previous example.

After you select **SORT & SELECT**, the word processor first sorts the data and then selects according to the specified criteria. Follow the instructions for the option **SORT**, then the instructions for the option **SELECT**.

Clearing a Range

The CLEAR option of the function menu allows you to quickly clear a range.

1. Position the cursor on a corner of the range to be cleared and press **MENU**.

MENU COLUMN FORMAT RECALC SORT **CLEAR** CONVERT

2. Select **CLEAR** and press **RETURN**. This message will appear:

Mark range to be cleared. Press RETURN when done.

3. Move the cursor to the opposite corner of the range and press **RETURN**. The range is cleared.

NOTE:

Attributes (bold, underline) and format (currency, percentage, etc.) are all cleared.

Converting a Range

You may sometimes wish to include data from the spreadsheet into a document. To do this, first type the spreadsheet data and convert it into a WP file as explained below. You will then be able to retrieve that file in WP mode and add text.

1. Position the cursor on a corner of the range that you wish to convert and press **MENU**. The function menu appears:

MENU COLUMN FORMAT RECALC SORT CLEAR **CONVERT**

2. Select **CONVERT** and press **RETURN**. This message will appear:

Mark range to convert. Press RETURN when done.

3. Move the cursor to the opposite corner of the range and press **RETURN**. This message will appear:

Insert destination disk and press RETURN.

4. Insert a diskette and press **RETURN**. A list of the WP files stored on the diskette will appear. The word processor asks you to input a file name for the converted file:

Type new filename and press RETURN.

FILENAME: XXXXXXXX WPT

5. Type a file name and press **RETURN**. This message will appear while the file is converted:

Converting the file....please wait.

and will be replaced with this message when the process is completed:

Converting completed.

You are now in command mode of the Input/Edit screen, and the message will disappear as soon as you hit a key.

File Operation

The SPREADSHEET INDEX screen allows you to copy a file onto another diskette, delete or rename a file, convert a spreadsheet file into a word processor file, and print a file. Each of these functions can be called either with the function menu or with the special keys listed in the help menu.

Saving Your Work



1. When your spreadsheet is complete, press **FILE**. The following message appears:

Save file? Press RETURN to save, CORRECT to abandon.

NOTE:

If this is the first time you are using the data diskette, you will need to initialize (format) the diskette before saving.

2. If you do not want to save, press **CORRECT**. The SPREADSHEET INDEX appears.
If you want to save your file, insert a diskette, and press **RETURN**. The SPREADSHEET INDEX screen appears and displays the list of the spreadsheet files already stored on the diskette. You are prompted to enter a file name:

Type filename and press RETURN.

FILENAME: .SPR

3. Type a file name and press **RETURN**. The file is saved on the diskette and the SPREADSHEET INDEX screen list is updated.

NOTES:

- A file name may be composed of capital and small letters, numbers and hyphens. No other characters are allowed.
- To correct an error while typing a file name, use **BACKSPACE** or **CORRECT**, **WORD OUT**, **CODE + LINE OUT** or move the cursor with ← and → and retype the file name. Pressing **CANCEL** allows you to escape.
- If you type a file name that exists already, the word processor asks you if you want to overwrite the old file:

Filename already exists. Type new filename and press RETURN.

FILENAME: XXXXXXXX.SPR

If you want to overwrite the old version of the file, press **RETURN**.

If you do not want to overwrite the file, but wish to save the new version separately, input another file name and press **RETURN**.

If you press **CANCEL**, the same message as in step (1) reappears.

- If there is not sufficient space remaining on the diskette to contain the file you wish to save, the system will inform you and prompt you to insert a new diskette with this message:

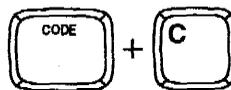
Disk is full, please try again with new disk. Press RETURN.

Insert another data diskette and press **RETURN**.

Retrieving a Spreadsheet File

1. Start the Spreadsheet application, or press **FILE** to display the SPREADSHEET INDEX screen.
2. Select the file using ←, →, ↑ and ↓. (Select *NEWFILE to create a new file.)
3. Press **RETURN** to switch to the INPUT/EDIT screen where the file can be edited.

Copying a File on Diskette



1. With the SPREADSHEET INDEX screen displayed, insert the diskette containing the file you want to copy. The list of the files contained on that diskette appears.
2. Use ←, →, ↑ and ↓ to select the file, then press **MENU** to display the function menu.

MENU EXIT **COPY** DELETE RENAME CONVERT ALL DELETE PRINT

3. Select **COPY** and press **RETURN**. This message will appear:

Insert destination disk and press RETURN.

- **Short cut:** Instead of (2) and (3), press **CODE + C** (see "Help Menus" on page 182).
4. Insert a data diskette and press **RETURN**. After a few seconds, the SPREADSHEET INDEX screen of the diskette appears and you are prompted to enter a new file name:

NOTE:

You may copy a file on the same diskette. Leave the current diskette in the drive when prompted to insert the destination diskette.

Type new filename and press RETURN.

FILENAME: XXXXXXXX .SPR

5. Type a new file name (one that does not already exist on the diskette), and press **RETURN**. If you enter a file name that is already used on the diskette, this message will appear:

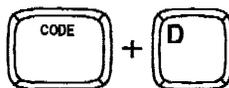
Filename already exists. Type new filename and press RETURN.

FILENAME: XXXXXXXX .SPR

6. If you want to overwrite the file, press **RETURN**. If you do not want to overwrite the file, but want to copy the file under a separate file name, input a new file name and press **RETURN**. The system tells you when the operation is completed. You can also press **CANCEL** to return to the SPREADSHEET INDEX without copying.

Copying completed.

Deleting a File on Diskette



1. With the SPREADSHEET INDEX screen displayed, insert the diskette containing the file you want to delete. The list of the files contained in that diskette appears.
2. Use ←, →, ↑ and ↓ to select the file, then press **MENU** to display the function menu.

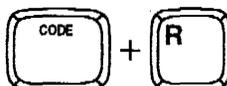
MENU EXIT COPY **DELETE** RENAME CONVERT ALL DELETE PRINT

3. Select **DELETE** and press **RETURN**. This message will appear:

Delete? Press Y(yes) or N(no).

- **Short cut:** Instead of (2) and (3), press **CODE + D** (see "Help Menus" on page 182).
4. Press **Y** to confirm. The file is deleted and the index updated.

Renaming a File on Diskette



1. With the SPREADSHEET INDEX screen displayed, insert the diskette containing the file you want to rename. The list of the files contained in that diskette appears.

2. Use ←, →, ↑ and ↓ to select the file, then press **MENU** to display the function menu.

MENU EXIT COPY DELETE **RENAME** CONVERT ALL DELETE PRINT

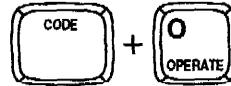
3. Select **RENAME** and press **RETURN**. This message will appear:

Type new filename and press RETURN.

FILENAME: XXXXXXXX SPR

- **Short cut:** Instead of (2) and (3), press **CODE + R** (see "Help Menus" on page 182).
4. Type a new file name (one that does not already exist on the diskette), and press **RETURN**.

Converting a Spreadsheet File



The system allows you to change a spreadsheet file into a text file. You should create the spreadsheet file first. After the spreadsheet file is saved, convert it into a text file as explained below. Then switch to the WP mode and retrieve the converted file. You are now free to add any text to the file.

To convert a spreadsheet file:

1. With the **SPREADSHEET INDEX** screen displayed, insert the diskette containing the file you want to convert. The list of the files contained in that diskette appears.
2. Use ←, →, ↑ and ↓ to select the file, then press **MENU** to display the function menu.

MENU EXIT COPY DELETE **RENAME** CONVERT ALL DELETE PROTECT ON/OFF PRINT

3. Select **CONVERT** and press **RETURN**. This message will appear:

Insert destination disk and press RETURN.

- **Short cut:** Instead of (2) and (3), press **CODE + O** (see "Help Menus" on page 182).
4. To store the converted file on the current diskette, press **RETURN**. To store the converted file to a different diskette, insert the new diskette and press **RETURN**. The word processor asks you to input a file name:

Type new filename and press RETURN.

FILENAME: XXXXXXXXX WPT

5. Type a file name and press **RETURN**. While the file is being converted, the following message is displayed

Converting the file...please wait.

and will be replaced with this message when the operation is completed:

Converting completed.

Deleting All Spreadsheet Files

1. With the SPREADSHEET INDEX screen displayed, insert the diskette containing the files you want to delete. The list of the files contained in that diskette appears.
2. Press **MENU** to display the function menu.

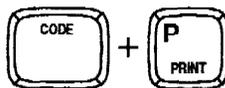
MENU EXIT COPY DELETE RENAME CONVERT **ALL DELETE** PROTECT ON/OFF PRINT

3. Select **ALL DELETE** and press **RETURN**. This message will appear:

Delete all files on this index? Press Y (yes) or N (no).

4. Press **Y** to delete all Spreadsheet files on the diskette, or **N** to quit without deleting. Files other than Spreadsheet files are not erased from the diskette.

Printing a File



1. With the SPREADSHEET INDEX screen displayed, insert the diskette containing the file you want to print. The list of the files contained in that diskette appears.
2. Use ←, →, ↑ and ↓ to select the file, then press **MENU** to display the function menu.

MENU EXIT COPY DELETE RENAME CONVERT ALL DELETE PROTECT ON/OFF **PRINT**

3. Select **PRINT** and press **RETURN**. This message will appear:

Insert paper and press RETURN.

- **Short cut:** Instead of (2) and (3), press **CODE + P (PRINT)**.
4. Insert a sheet of paper and press **RETURN**. The system now prompts you to insert a standard daisy wheel (KB I) of the appropriate pitch. Install the wheel and press **RETURN**, or press **RETURN** if the correct daisy wheel is already installed.
 5. During printing, press **SPACE BAR** to pause and resume printing, or **CANCEL** to quit.

NOTES:

- *If the data exceeds the printing capabilities, the data will be truncated (cut off). It is not possible to change the pitch in SPREADSHEET INDEX screen. If the spreadsheet is too wide, try inserting paper horizontally. If it is still too wide, go back to the INPUT/EDIT screen and select a higher pitch or print only a range of the spreadsheet.*
- *Remember that the system allows you to input page break symbols (⚡) to signal the typewriter to stop printing for a paper change.*

The Templates

You can use any of the pre-formatted templates or create spreadsheets of your own.

For all templates, just remember, you enter the data in the blank cells only. Never enter data into the cells that contain a formula.

Listed below are the templates that we have already designed for your use. These files come with an easy-to-use format. All you need to do is enter your data. The cells which are supposed to display a result already contain the appropriate formulas and format. Never enter data in the cells that already contain a formula. After you have completed your work on the template spreadsheet, you can give your template a file name and save it to a data diskette. Each time you recall a template from the Template diskette, a new blank file appears. In order to recall a template that you previously worked with, recall it from the data diskette by the file name you assigned.

Description of the Templates

INTRO - This template is actually an overview file that contains a reading introduction to the Spreadsheet. This template discusses some of the features and capabilities of the Spreadsheet application.

TELEPHONE AND ADDRESS DIRECTORY - This template allows you to keep an organized listing of names and addresses. With the sort capability, you are able to rearrange this file alphabetically after each addition or edit.

CHECKBOOK - This Checkbook template resembles the ledgers that you receive from your bank. It calculates the balance after you input your deposits and withdrawals. After entering your deposits and withdrawals, select **RECALC** from the function menu to process the balance column. If you later make changes or additions to the data you entered in the checkbook, use the **RECALC** function to determine the new balance.

MONTHLY BUDGETING - This template helps you keep your personal finances in order. It outlines your monthly expenses for you.

Once your expenses are itemized, use the **RECALC** function to determine your budget results. Later, if you make changes or additions to the budget, use the **RECALC** function to determine the new totals.

SALES ANALYSIS - This template helps monitor actual versus projected sales results by sales persons. Enter the data for all the cells with the exception of the cells containing formulas (zeros). After you have entered the information for each sales person, use the **RECALC** function to determine the results. Later, if you make changes or additions to the template, use the **RECALC** function to see the new results.

ANNUAL YIELD (COMPOUND) - This template figures annual yield according to the annual interest rate. Type in the annual interest rate. Use the **RECALC** function to see the results.

SAVING PLANNER - This template calculates your savings over a specified period of time. Enter the requested data. Use the **RECALC** function to determine the results.

MONTHLY PAYMENT OF LOAN - This template calculates your monthly payments and lists the amount of interest and principal paid per month, for one year. Enter the requested data. Use the **RECALC** function to see the results for one year.

Retrieving a Template

1. Insert the Template diskette and start the Spreadsheet application. The Templates are stored on the Template diskette. When the **SPREADSHEET INDEX** screen appears, the list of the Templates is displayed.
2. Select the desired template with the cursor and press **RETURN**. The spreadsheet appears on the screen. As you can see, the format has been set up for you already. Move your cursor around the screen. You can see that some columns have formulas already set up for calculations.

A Practice Exercise

For practice, recall the template **SALES** and follow these steps to enter data.

1. Move your cursor to the right of **COMPANY** and type **DONNLIN SALES COMPANY**. Press **RETURN**.
2. Move the cursor down to the right of **DIVISION** and type **WESTERN**. Press **RETURN**.
3. Move the cursor down to the right of **DATE** and type **'5/31/90** (do not forget the format mark). Press **RETURN**.

NOTE:

Each time an alphanumeric data looks like a number or a formula, type a single quote mark at the beginning to tell the word processor that this data is not to be calculated. The single quote is called a "format mark". Other format marks are available.

4. Move the cursor down under **SALESPERSON NAME** and type **James Elliott**. Press **RETURN**.
5. Move the cursor under **PROJECTED UNITS** and type **17000**. Press **RETURN**.
6. Move the cursor under **PROJECTED SALES** and type **75000**. Press **RETURN**.
7. Enter amounts for **ACTUAL UNITS** and **ACTUAL SALES**.

NOTE:

The remaining cells to the right display "0" or "100,00%", this indicates that a formula has been entered in these cells. Do not enter data in these cells. If data is entered, the formulas will be deleted.

8. Continue to enter data for each row, remembering not to enter data in the cells with formulas already set up.

Practice Recalculation

Formulas are used to automatically display a result that depends of the contents of other cells.

1. Press **MENU** to display the function menu.
2. Use ← and → to select **RECALC** and press **RETURN**. This automatically updates all formulas.

Practice Printing

This systems provides two methods for printing spreadsheets: from the INPUT/EDIT screen or from the SPREADSHEET INDEX screen.

From the INPUT/EDIT Screen

While you are editing your spreadsheet in the INPUT/EDIT screen, press **CODE + P (PRINT)**. The word processor will ask you to mark the range that you want to print. This feature is very convenient when you have a very wide spreadsheet, and need to print only a part of it. Another advantage of this method is that, in INPUT/EDIT screen, you are free to select the pitch.

From the SPREADSHEET INDEX Screen

After saving your spreadsheet file, you can print the entire file from the SPREADSHEET INDEX screen by pressing the same **CODE + P (PRINT)** keys.

Practice Saving the File

For complete instructions regarding file saving, please refer to "Saving Your Work" on page 221.

1. Press **FILE**. This message will appear:

Save file? Press RETURN to save, CORRECT to abandon.

2. Insert a diskette and press **RETURN**. This message will appear:

Type filename and press RETURN.

3. Give your file a name, then press **RETURN** to save it to the diskette and display the Spreadsheet Index.

NOTE:

If this is the first time you are using the data diskette, you will need to initialize (format) the diskette before saving.

Using Lotus[®] 1-2-3[®] File

Lotus[®] 1-2-3[®] files can be converted into Brother Spreadsheet files and used on your word processor. In addition, you can create spreadsheet files on your Brother unit and then convert them into Lotus[®] 1-2-3[®] files.

WARNING:

When converting Lotus[®] 1-2-3[®] files into Brother Spreadsheet files, be sure to store the files on the root directory on the diskette. Your Brother word processor can only read the root directory of a DOS diskette.

Conversions to or from ASCII files are carried out according to the IBM PC Code page 437. For details about code page switching, refer to your DOS manual (DOS command **mode device codepage**). A table on page 265 shows all characters that can be correctly converted. Characters which are not included in that table are converted into blank spaces.

Your word processor comes with a conversion program that can be used on a personal computer to convert files.

1. Insert the diskette containing the conversion program into the "A" or "B" drive of the PC.
2. If necessary, type "A:" and press the Enter key to display the "A:>" prompt. If the diskette is in drive "B", type "B:" and press the Enter key to display the "B:>" prompt.
3. Type the conversion program name, "SCONV" and press the Enter key. The conversion program starts and displays this message:

Insert data disk and press Enter.

4. Remove the conversion program diskette, insert a data diskette in drive A, and press the Enter key. The word processor asks you to select a conversion direction.

```
A: BROTHER SPREADSHEET (.SPR) -> LOTUS 1-2-3 (.WK1)
B: LOTUS 1 2 3 (.WK1) > BROTHER SPREADSHEET (.SPR)
```

5. Type "A" or "B" and press the Enter key. "A" will convert a Brother Spreadsheet file into a Lotus[®] 1-2-3[®] file. "B" will convert a Lotus[®] 1-2-3[®] file into a Brother Spreadsheet file.

The word processor asks you to enter the name of the file to convert:

Type source filename and press Enter.

6. Type the file name (without extension) and press the Enter key. The word processor asks you to enter a name for the converted file.

Type new filename and press Enter.

7. Type a file name (without extension) and press the Enter key. This message appears:

Converting the file....please wait.

After conversion is complete, this message appears:

Convert completed.

8. The word processor then asks you whether you want to convert other files:

Continue to convert? [Y/N]

9. Type "N" to exit the program, or "Y" to return to step (3) and start converting another file.

Sometimes the program will be unable to convert a cell of a source file. When this happens, the entire file is converted, but the cells that causes problem are slightly different from the original. A message will indicate the number of such cells and the cause of the conversion errors following the message "Convert completed".

Convert completed.
Syntax or format error XXX cells
Formula error XXX cells
Function error Data loss XXX cells
Please check data before using.

Syntax or format error: This may occur when a cell in a Lotus® 1-2-3® file contains more than 55 characters. In this case, only the first 55 characters of the cell will appear in the converted file. This may also happen when a Brother spreadsheet file contains a page break symbol. The page break symbol is converted into a blank space.

Formula error: This error occurs, for example, when the result of a formula in a Lotus® 1-2-3® file is beyond the range of this word processor.

Function error Data loss: This may occur, for instance, when a function available with Lotus® 1-2-3® is not recognized or has a slightly different format (e.g. @SUM(A2..A5,B1..B3) or @COS(45 *PI/180)). This also happens when the length of a formula in the Lotus® 1-2-3® file exceeds 55 characters. Please check the Lotus® 1-2-3® file and make sure that only function and formats available on your word processor are used.

Remember that the above messages do not mean that the file cannot be converted. They only mean that some cells cannot be converted properly.

When a file **cannot** be converted, one of these messages will appear while the message "Converting the file....please wait" is displayed.

Data full. Unable to convert.

The Lotus® 1-2-3® file is too large.

Cell extend beyond range. Unable to convert.

A cell in the Lotus® 1-2-3® file is beyond the range of 65 rows or 20 columns.

Incorrect file. Unable to convert.

The source file is not recognized.

Password is already set. Unable to convert.

A password restricts access to the Lotus® 1-2-3® file.

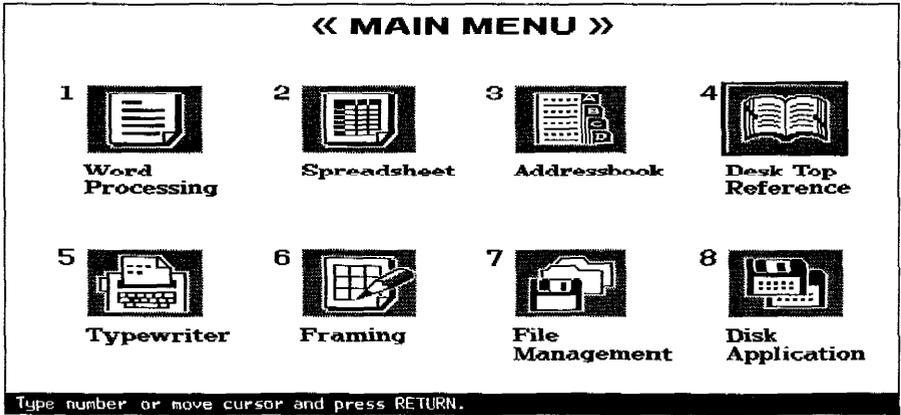
Too many errors. Convert cancelled.

This happens when more than 130 cells are lost.

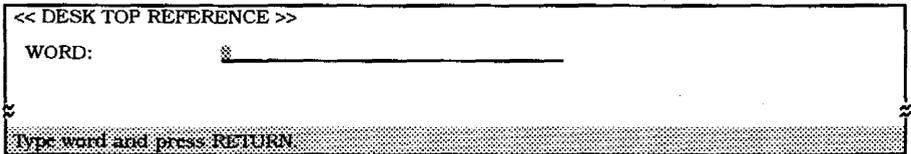
Desk Top Reference

The Desk Top Reference application is used to find information about a specified word. When available, the information includes definitions, hyphenation, and synonyms. If the specified word is misspelled, the application tries to provide a list of correct candidates.

Starting the Desk Top Reference Application



1. Switch the power on to display the Main menu.
2. Use the cursor keys to select the icon for Desk Top Reference and press **RETURN**, or press 4. The DESK TOP REFERENCE screen appears.

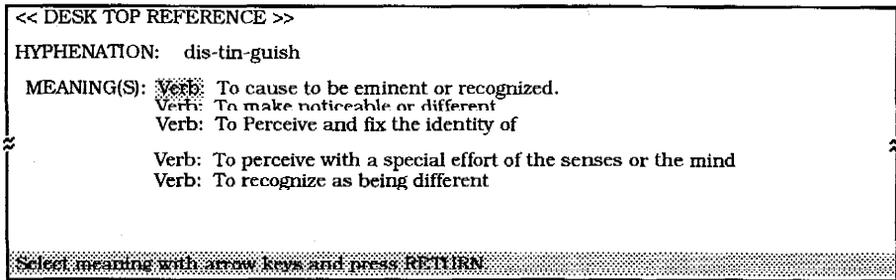


Getting Information About a Word

To search for a word, type the word in the entry field **WORD** and press **RETURN**. The word processor starts searching for the specified word. What happens next depends on whether the word is found in the dictionary.

When the New Word is Found

When the word specified on the **DESK TOP REFERENCE** screen is found in the dictionary, the **INFORMATION** screen appears. This screen shows the correct hyphenation position(s) for the word and, when available, a list of definitions.



HYPHENATION: This line displays the specified word with hyphens inserted to show where the word should break at the end of a line. Standard capitalization is also shown.

NOTE:

(NOT AVAILABLE) appears in the **HYPHENATION** line if the hyphenation information is not available.

MEANING(S): This area displays one or more definitions for the specified word (if available). A definition is made up of two parts:

1. Part of speech (verb, noun, adj., adv.).
2. Meaning of the word.

The same word can often be used as a verb, noun or other parts of speech.

In addition, the same part of speech, "Verb", for instance, can appear more than once in the **MEANING(S)** area. This happens when a word has different meanings even when used as the same part of speech. For example, *enclose*, as a verb, can mean "To shut in on all sides" or "To surround and advance on".

You can select a meaning to see corresponding synonyms by using the cursor and pressing **RETURN**. You can use the function menu for other options. See "Using the Function Menu" on page 238.

- The arrow up and arrow down symbols indicate that there is more information available than appears on the screen.
- If the word is not present in the built-in Thesaurus this message will be displayed:

No meanings or synonyms available.

Press CANCEL to edit word.

When one of the meanings is selected, a list of synonyms for the selected meanings is displayed.

```

<< DESK TOP REFERENCE >>
HYPHENATION: dis-tin-guish
MEANING(S): Verb: To cause to be eminent or recognized.
              Verb: To make noticeable or different.
              Verb: To Perceive and fix the identity of.
              Verb: To perceive with a special effort of the senses or the
              Verb: To recognize as being different.
SYNONYM(S): honor  elevate  exalt  signalize  ennoble
Select another word for hyphenation with RETURN. Select a new meaning with TAB
  
```

SYNONYM(S): This line displays a list of synonyms for the word in the HYPHENATION line, corresponding to the selected definition in the MEANING(S) area.

When the SYNONYM screen appears, the selected meaning is underlined, the list of synonyms corresponding to that meaning is displayed, and the first synonym of the list is selected (highlighted).

Select one of the synonyms by using the cursor keys and display the information for the selected word by pressing **RETURN**.

Use the function menu for other options. See "Using the Function Menu" on page 238.

Selecting a Meaning

1. If the **MEANING(S)** area is not active, (there is no highlighted definition), first press **TAB**.
2. Use **↑** and **↓** to select the desired meaning.
3. Press **RETURN**.

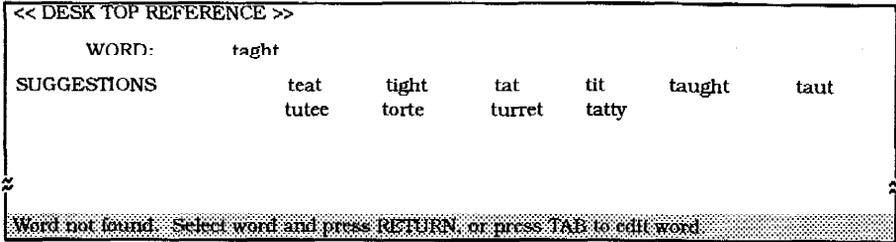
The list of synonyms for the selected meaning appears. The first synonym is highlighted, and the selected meaning is underlined.

Selecting a Synonym

1. If you want to see all the information on a particular synonym, use the cursor keys to highlight the desired synonym.
2. Press **RETURN**.

When the Word Cannot be Found

If the specified word is misspelled or not present in the dictionary, the word processor displays a list of possible replacement words in the **SUGGESTIONS** line, in the same manner as the Spell Checker.



From this point, you can take one of the following steps:

- Select one of the suggested words.
- Edit the word to correct the mistake.
- Start searching for a new word.
- Use the function menu for other options. See “Using the Function Menu” on page 238.

NOTE:

The arrow up and arrow down symbols indicate that there is more information available than appears on the screen.

Selecting One of the Suggested Words

1. Use the cursor keys to highlight the desired word.
2. Press **RETURN**.

Since the selected word exists in the dictionary, the display will switch to the **INFORMATION** screen.

Correcting the Word

1. Press **TAB** to move the cursor to the **WORD** entry field.

The list of suggestions disappears. Press **RETURN** at this step, without editing the word, to display the same list of suggestions.

2. Edit the word. You can use ← and → to position the cursor, and **BACKSPACE**, **WORD OUT**, or **CODE + LINE OUT** to delete characters.
3. Press **RETURN**.

The word processor starts searching for the new word and again displays a list of suggestions if the word cannot be found, or switches to the **INFORMATION** screen if the word is found.

Using the Function Menu

EXIT USER DICTIONARY MAINTENANCE NEW WORD
--

Returning to the Main Menu

EXIT is used to quit the Desk Top Reference application and return to the Main menu (or to the Word Processing application when you enter the Desk Top Reference from the WP application).

1. Press **MENU** to display the menu.
2. Press **RETURN** or **E**.
- **Short cut:** On the *DESK TOP REFERENCE* screen, press **CANCEL** instead of (1) and (2).

Adding the Word to the User Dictionary

USER DICTIONARY MAINTENANCE is used to add a specified word to your user dictionary. This works exactly like the **ADD** option of the Spell Checker. For more details, see "Maintaining the User Dictionary" on page 130.

1. Press **MENU** to display the menu.
2. Press **U** to select **USER DICTIONARY MAINTENANCE**, and press **RETURN**.

NOTE:

USER DICTIONARY MAINTENANCE is enabled only when the cursor is on the **WORD** entry field of the *DESK TOP REFERENCE* screen.

Searching for a New Word

NEW WORD is used to send the cursor to the **WORD** entry field of the *DESK TOP REFERENCE* screen. The entry field is cleared and you can immediately start typing a new word.

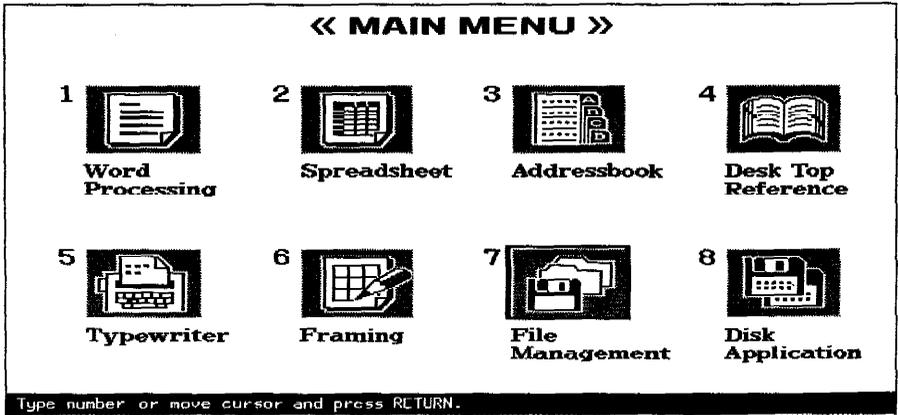
1. Press **MENU** to display the menu.
2. Press **N** to select **NEW WORD**, and press **RETURN**.

The *DESK TOP REFERENCE* screen reappears and you can type another word.

File Management

The File Management application allows you to organize your files on diskette. Most functions available with the File Management application are also available on the INDEX screen of the WP, Framing, Address Book, and Spreadsheet modes. However, these INDEX screens display only the list of the files used in the corresponding modes. The INDEX screen of the File Management application displays the list of all files that this word processor can use (except the User Dictionary and the Abbreviated Phrase file), which makes file maintenance easier.

Starting the File Management Application



1. Switch the power on to display the Main Menu.
2. Insert a data diskette in the drive.
3. Use ← and → to select the icon for File Management and press **RETURN**, or press 7. The FILE MANAGEMENT screen appears.

You can distinguish different types of files with their file name extension:

Type of File	File Name Extension
Word Processing	.WPT
ASCII	.TXT
Spreadsheet	.SPR
Address Book	.MRG
Framing	.FRM

NOTE:

When creating or renaming a file with your personal computer, make sure that you use the proper file name extensions. There are two errors that you should try to avoid.

The first error is to change the file name extension of a file that has been created on your Brother word processor. For example, if you use your personal computer to change the extension ".WPT" to ".WP", your Brother word processor will not recognize the file and will not display it on the FILE MANAGEMENT screen.

The second error is to create a file in a format that cannot be recognized by your Brother word processor, and give it one of the above file name extensions. For example, if you use your personal computer to create, say a graphic file, then give that file the file name extension ".WPT", the file will appear on the FILE MANAGEMENT screen, but your Brother word processor will not be able to display the contents of the file.

Other differences between the FILE MANAGEMENT screen and the other INDEX screen that you can access from the individual modes are:

- You cannot select a file and press **RETURN** to edit the file.
- There is no file name with asterisk such as *NEWFILE, which means that you cannot start creating a new file from this screen.
- You cannot print a file from this screen.

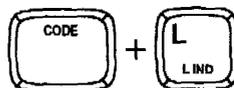
The Function Menu

The functions that are available on the function menu have already been explained in the "File Operation" section of the WP mode. When you are required to enter a file name while renaming and copying a file, the correct file name extension will be automatically displayed.

Here is a list of the available functions:

Function	Description
EXIT	To return to the Main Menu. You can also press CANCEL .
COPY	To copy a file on the same diskette or on another diskette. The word processor allows you to enter a new file name for the copy. See "Copying a File" on page 82.
DELETE	To delete a file. See "Deleting a File" on page 83.
RENAME	To rename a file. See "Renaming a File" on page 83.
CONVERT	To convert an ASCII file into a WP file or vice versa. See "Using Your Brother Word Processing Files in a PC or Using a PC File in Your Brother Word Processor" on page 85.
DISK DELETE	To delete all files from the diskette. See explanations below.

Disk Delete



EXIT COPY DELETE RENAME CONVERT **DISK DELETE**

This function allows you to delete all files contained in a diskette at one time.

1. Press **MENU** to display the function menu.
2. Type **L** to select **DISK DELETE**. This message will appear:

Delete all files on this disk? Press Y (yes) or N (no).

Press **Y** to format the diskette, or press **N** to quit deleting.

Select the format type. Press **1** for Double density or **2** for High density.

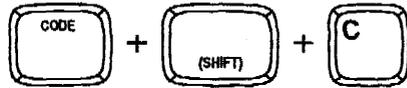
Initializing disk ... please wait.

- **Short cut:** Instead of (1) and (2), press **CODE + L**.

WARNING:

When you perform a DISK DELETE, all the files on the diskette are deleted and cannot be restored. This includes not only the files that are displayed on the INDEX screen, but also files with a file name extension that is not recognized by your Brother word processor, as well as any file that is not in the root directory.

Disk Copy



This function allows you to copy all files contained on a diskette to another diskette (back up copy).

NOTE:

You cannot perform a disk copy function on a high density diskette (1.44mb) formatted double density (720kb). Also the word processor does not allow a disk copy function when the diskette format is not the same, i.e., 1.44mb to 720kb or 720kb to 1.44mb.

Although it does not appear on the function menu, the Disk Copy function is available from WP, Addressbook, Framing, and File Management screens.

WARNINGS:

- **The Disk Copy function erases the text in the CLIPBOARD from memory.**
- **Copying an entire diskette to another destroys any data that may be on the destination diskette. Check the destination diskette before starting. Be sure your destination diskette has been initialized.**

1. Press **MENU** to display the function menu.
2. Type **O** to select DISK COPY. This message will appear:

Source disk: 720KB/2DD. Use the same format type for destination disk
Insert source disk and press **RETURN**.

or

Source disk: 1.44MB/2HD. Use the same format type for destination disk
Insert source disk and press **RETURN**.

Insert the source (original) diskette and press **RETURN**. The word processor will start reading files from the source diskette. Since the memory space is limited, the word processor may not be able to read all files in one step. After a while, this message will appear:

Source disk: 720KB/2DD. Use the same format type for destination disk
Insert source disk and press **RETURN**.

or

Source disk: 1.44MB/2HD. Use the same format type for destination disk
Insert source disk and press **RETURN**.

3. Insert the destination diskette and press **RETURN**. The word processor will transfer the files that have been read from the source diskette onto the destination diskette. If all the files of the source diskette have not been transferred yet, the word processor will ask you to re-insert the source diskette. repeat steps (2) and (3) until all files have been transferred to the destination diskette. You may need to swap these diskettes a number of times before all of the files are copied to the destination diskette.

NOTE:

The word processor "knows" which diskette is the source diskette and which one is the destination diskette. If you mistakenly insert a wrong diskette, one of these messages will appear:

Incorrect disk. Insert destination disk and press RETURN.

Incorrect disk. Insert source disk and press RETURN.

NOTE:

*Press **CANCEL** at any time (except during disk access) to cancel the operation.*

4. When copying is complete, the normal message of the INDEX screen reappears.

Conversion

PC software for converting document files between different word processing programs and Brother.

Copyright notice:

WP FILE CONVERSION SOFTWARE copyrighted © by Advanced Computer Innovations, Inc., 1990-1993.

WARNING:

This program was created to facilitate converting your documents from the Brother word processing format, and other leading word processing formats. Practically all formatting, text enhancement and other control codes are correctly translated, so that little or no touching up of the converted document is required.

However, in some cases, the translation results are not as accurate as we would like them to be. We warn you against these situations, and we recommend that you review each file after the conversion is done to check for any irregularities.

NOTE:

If you are using a PC with a mouse, the conversion software does not support the mouse. Use the arrow keys to scroll through the menu or press the highlighted letter to select an option

Introduction

The Brother Conversion Software is a utility that allows you to convert documents between different word processing formats and the Brother format.

It takes document files created by one word processing program (source files), and converts them to Brother files (destination files), and vice versa.

Practically all the formatting, text enhancement and other control codes are correctly translated, so that little or no touching up of the converted document is required.

The different possibilities are: PC → Brother

Convert From	To
ASCII	Brother
DisplayWrite®	
IBM® DCA/RFT	
IBM® Writing Assistant®	
Microsoft® Word™ family Word for DOS Word for Windows® Word for Macintosh® Computer	
Microsoft® Works	
Microsoft® Write	
pfs.® series pfs:Write® pfs:Professional Write pfs:First Choice	
WordPerfect® Version 4.1/4.2 Version 5.0/5.1/Windows	
WordStar® WordStar 3.x/4.0 WordStar 5.0 - 7.0	
WordStar-2000®	

IBM DCA/RFT stands for IBM's Document Content Architecture, Revisable Form Text.

ASCII stands for American Standard Code for Interchange of Information.

ASCII (print) files are suitable for copying to a printer which supports backspace and form feed functions.

When converting to Microsoft Word for Windows or Word for Macintosh, the conversion software produces word for Dos files, which can be read by these programs directly without any loss of formatting.

The other possibility is to convert vice versa as follows: Brother → PC

Convert From	To
Brother	ASCII Document Print
	DisplayWrite Version 2 Version 3 Version 4 Version 4.2 Version 5 or 5/2
	IBM DCA/RFT
	Microsoft Word (DOS)
	Version 3.0 or prior Version 4.0 Version 5.0 Version 5.5
	Microsoft Word for Windows Version 1.0 Version 2.0
	Microsoft Word for Macintosh
	Microsoft Works Version 1 Version 2
	Microsoft Write
	WordPerfect Version 4.1 Version 4.2 Version 5.0 Version 5.1 for Windows
	WordStar Version 3.x Version 4.0 Version 5.0 Version 5.5 Version 6.0 Version 7.0
	WordStar-2000 Release 1.x Release 2.x Release 3.x

CONVERSION

Installing and Starting the Brother Conversion Software

We recommend that you make a copy of the Brother Conversion Software diskette before you start the installation. You can work from the copy made, and keep the original diskette in a safe place in case it is needed in the future.

Computer System Requirements

The Brother Conversion Software runs under MS-DOS on any IBM-PC, PC/AT, PS/2 and compatible computer. The computer must have at least one floppy disk drive, a hard disk drive, and 512 KB or more of memory.

If your system has a color monitor, the program automatically uses it to the best advantage.

Installing and Starting from Your Hard Disk Drive

To install the Brother Conversion Software on your hard disk drive, power up your computer as usual, and get the C> prompt. Then insert the Brother Conversion diskette in your disk drive, default to that drive (either A: or B:) and type INSTALL.

For example:

```
C>A:  
A>INSTALL
```

This starts the installation program which automatically creates a subdirectory, on your C: drive, named "BROTHER", and copies all necessary files into that subdirectory.

The installation program also creates a batch file, on your C: drive, called "CONVERT.BAT".

Each time you want to start the Brother Conversion Software, type the command CONVERT at the C> prompt.

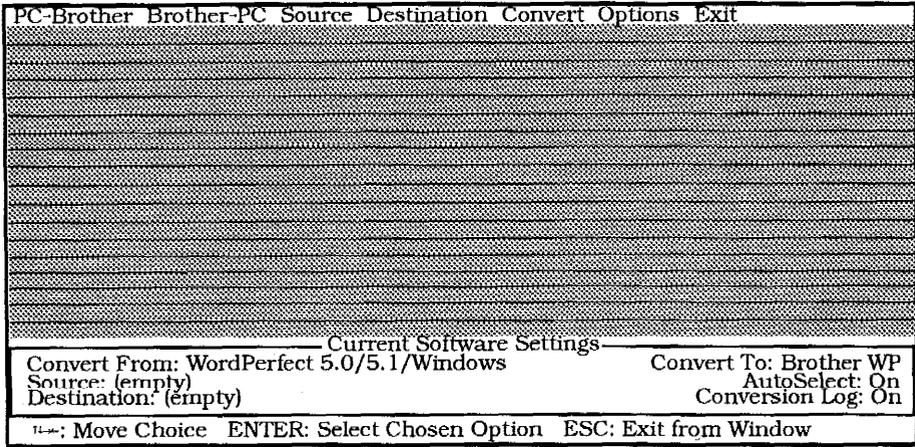
For example:

```
C>CONVERT
```

Then after a brief opening screen, the main menu screen appears.

Explanation About Each Item in the Menu

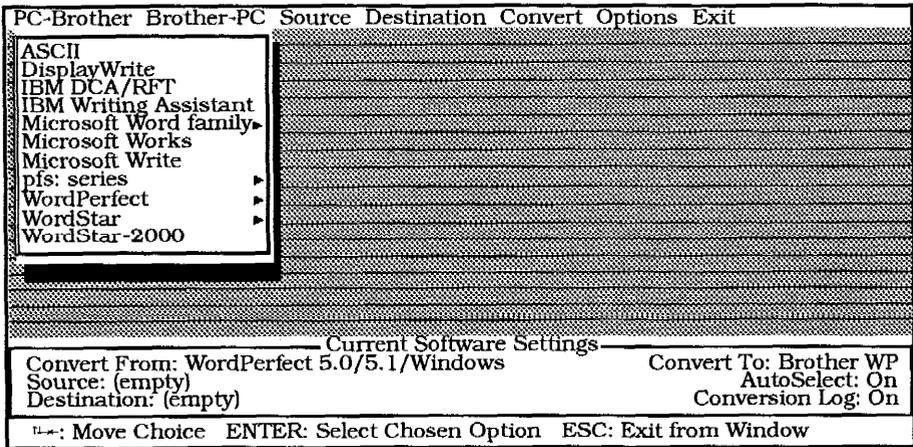
The main menu screen looks like this:



CONVERSION

PC → Brother

The PC → Brother menu screen looks like this:



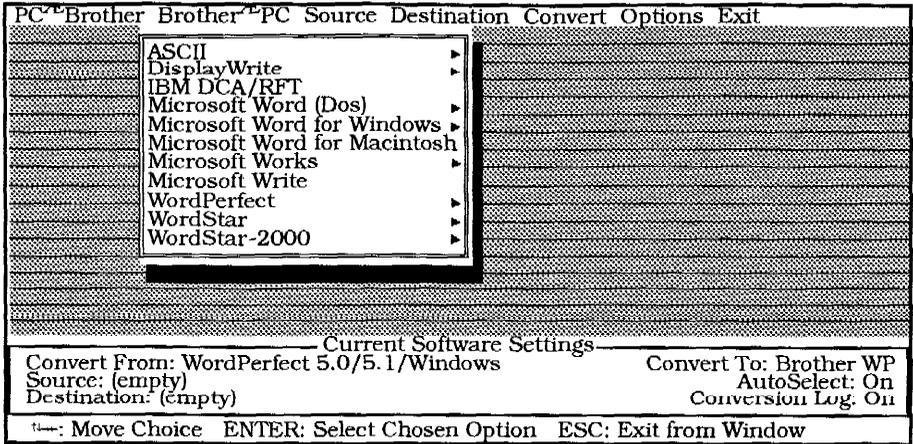
This menu allows you to select the word processing format you wish to convert from. It will always convert your file to the Brother file format. To make your selection, move the highlight bar to the format of your source document, then press [Enter]. Or, cancel this screen by pressing [Esc], in which case the source format remains unchanged.

The status panel at the bottom of the screen will show the format you have selected.

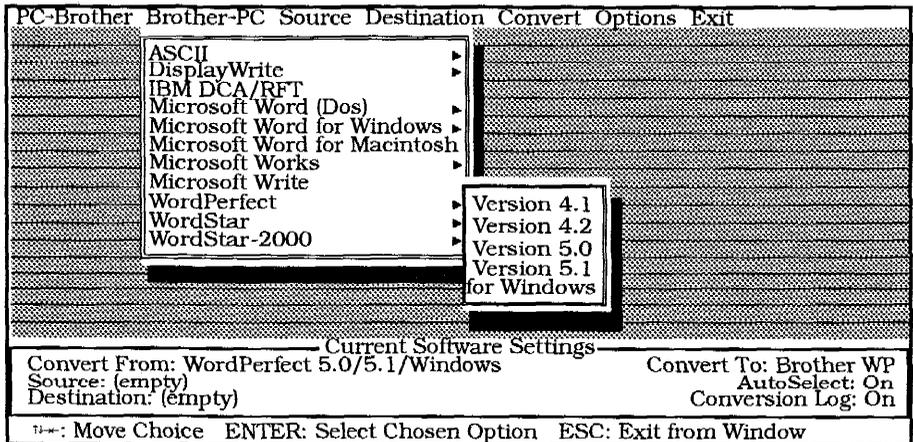
Your selection stays in effect even the next time you run the Brother Conversion Software, so you do not have to repeat the procedure unless you want to change your selection.

Brother → PC

The Brother → PC menu screen looks like this:



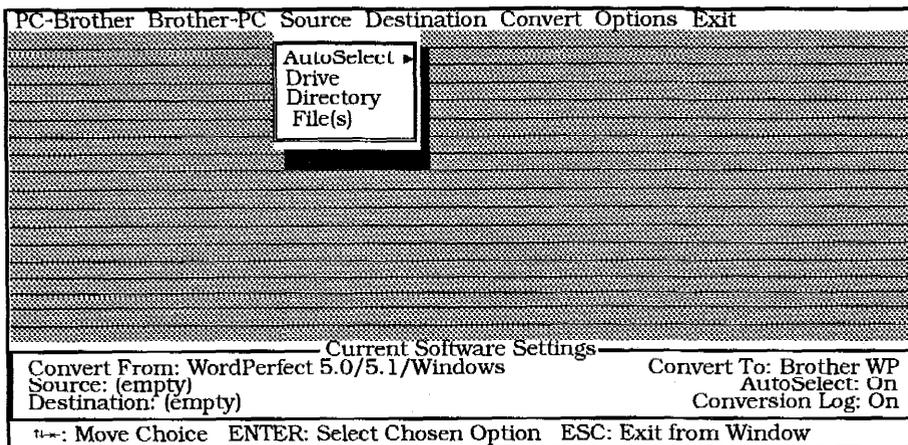
This menu allows you to select the word processing format you wish to convert to. It will always convert your Brother files to the format of your choice. To make your selection, move the highlight bar to the format you wish to convert to. In most cases, the software will ask you to specify the version of the destination program. For example, if you select WordPerfect, the Brother Conversion Software will present a screen like this:



Move the highlight bar to the specific version, then press [Enter]. At any time during the selection of any format or version, press [Esc] and return to the main menu. The status panel at the bottom of the screen will show the format you have selected.

Source

The Source menu looks like this:



AutoSelect

The Brother Conversion Software is capable of automatically identifying document files belonging to your source formats.

This is called the AutoSelect feature. It is particularly useful when you have document files along with assorted other files in the same subdirectory, since you can then automatically exclude the irrelevant files.

You may select On or Off for the AutoSelect feature from the sub-menu.

If the source format cannot be automatically identified, then the AutoSelect option will appear dimmed on most monitors, and cannot be selected.

Drive

Allows you to enter the letter indicating the disk drive where the source files to be converted are located.

Type the drive letter, and press [Enter].

Directory

Allows you to enter the name of the directory where the source files to be converted are located. Type the name of the directory, and press [Enter].

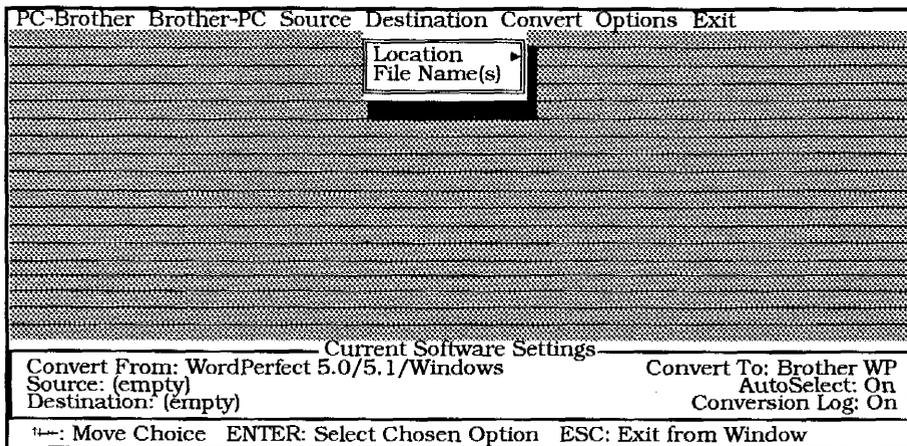
File(s)

Allows you to select the specific file(s) to be converted.

When you select this option, a window appears on the screen listing the files in the source drive and subdirectory. If AutoSelect was turned on, then only those files belonging to the source file format appear in the window. Move the highlight to the name of the file which you want to convert and press [Enter]. You may select as many files as desired, then press [Enter] to close the window. The status window at the bottom of the screen will indicate the source file name (if one file was selected), or the number of files (if multiple files were selected).

Destination

The destination menu looks like this:



CONVERSION

Location

This menu allows you to indicate where (which disk and subdirectory) the converted files should be placed. When you select this option, the software displays the following screen:

PC-Brother	Brother-PC	Source	Destination	Convert	Options	Exit
		Location	Different	Drive		
		File Name(s)	Same	Directory		
Current Software Settings						
Convert From: WordPerfect 5.0/5.1/Windows			Convert To: Brother WP			
Source: (empty)			AutoSelect: On			
Destination: (empty)			Conversion Log: On			
←: Move Choice ENTER: Select Chosen Option ESC: Exit from Window						

Same: Means the destination files will be placed in the same disk and subdirectory as the source files.

Different: Means the destination files will be placed in either a different disk or different subdirectory from the source files. At this time, you will be prompted to enter the destination drive and the subdirectory path.

At any time while specifying the destination file name(s), press [Esc] to return to the main menu.

The destination is always reflected in the status panel at the bottom of the screen.

File Name(s)

This option allows you to specify the name(s) of the converted file(s). As in standard DOS conventions, you may use "*" or "?" to keep portions of the name(s) the same as those of the corresponding source document file(s).

When converting files from other file formats to Brother, the converted files must always have .WPT extension, since the result of the conversion are Brother files. Therefore, only 8-letter name field can be specified.

There may be occasions when the conversion program has to break up a single source document into several Brother files. In this case, the converted file names will automatically have sequential numbers appended to their name(s). For example, if a source document name MEMO.DOC is broken up into three destination files, the converted files will be named MEMO.WPT, MEMO-1.WPT, and MEMO-2.WPT. Similarly, a file named DOCUMENT.TXT, if broken up into two files, would result in DOCUMENT.WPT and DOCUME-1.WPT.

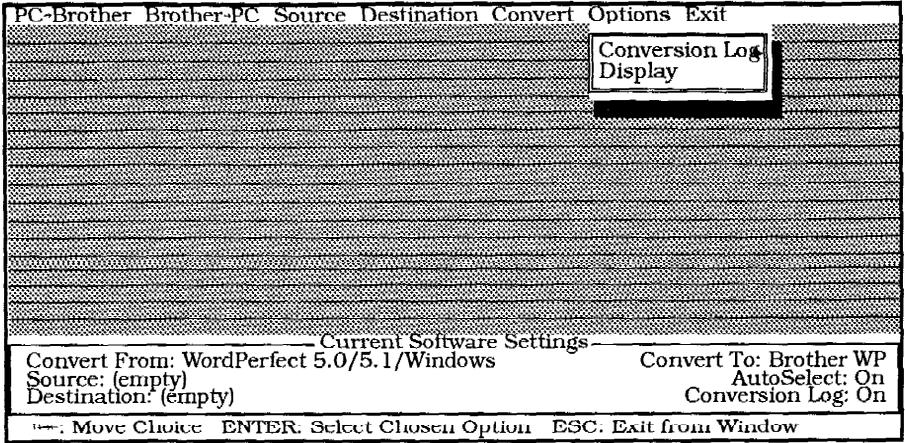
Convert

After all the necessary set ups have been done, the highlight bar moves to the Convert command. Simply press [Enter] to convert.

The screen will switch to a different mode to show you, which files are being converted, and how much conversion is done so far.

Options

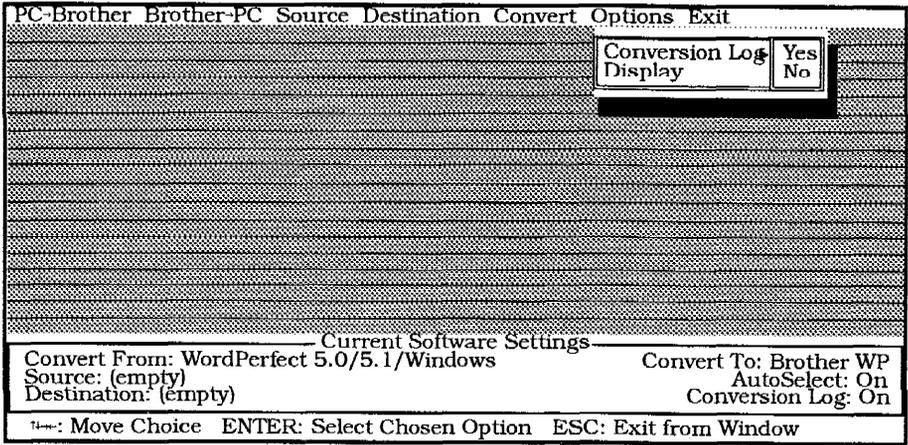
The options menu screen looks like this:



CONVERSION

Conversion Log

The conversion log menu screen looks like this:



The conversion log is a file that the program creates to record information about the conversion process. It is conceivable that some features in a document cannot be converted because they are not supported by the destination word processor.

The program can record such exceptions in a log file containing an audit trail. The audit trail log file is a simple ASCII text file, which may be reviewed or printed after doing a conversion.

If the log file does not exist when you run the program, it automatically creates it and writes the log into it. If the file already exists, the program appends the new information to the end of the file, leaving the previous information in it intact. Therefore, the log file can accumulate the audit trail over successive conversion sessions.

The log file created will always be named "CONVERT.LOG", and will be saved in the Brother subdirectory.

The log file can be viewed on the screen using the DOS type command. For example:

```
C>TYPE C:\BROTHER\CONVERT.LOG
```

This will display the audit trail on the screen.

Note that for each conversion session, the audit trail records the date and time the conversion was performed, the source and destination word processing formats, and the exception summary results for each file converted.

You have the option to allow the program to create the log or not to create it. You may select On or Off for the Conversion Log feature from the sub-menu.

Display

This option allows you to specify how you like your computer screen to appear. The program allows you to indicate high intensity or reverse video emphasis, and whether you prefer a "black-on-white" or "white-on-black" screen.

If your display monitor supports color, you may also select from any of the color schemes available.

Your display menu screen looks like this:

PC-Brother Brother-PC Source Destination Convert Options Exit

Conv Disp

- Mono (with Intensity)
- Mono (with Rev Video)
- Mono (White on Black)
- Blk & Wht (Backdrop)
- Color 1 (Blue)
- Color 2 (Magenta)
- Color 3 (Red,Blue)
- Color 4 (Red,Green)
- Color 5 (Green)
- Color 6 (Brown)
- Color 7 (Yellow)

Sample Message Window

Current Software Settings

Convert From: WordPerfect 5.0/5.1/Windows
Source: (empty)
Destination: (empty)

Convert To: Brother WP
AutoSelect: On
Conversion Log: On

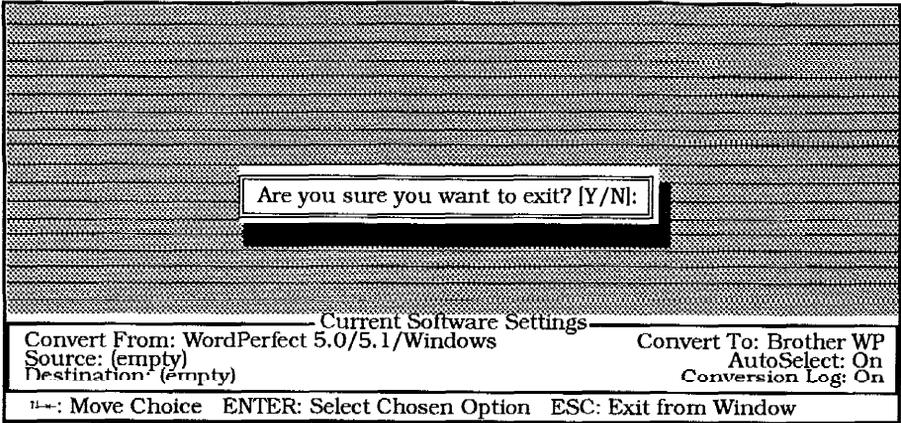
←: Move Choice ENTER: Select Chosen Option ESC: Exit from Window

Move the highlight bar to the scheme of your choice. The color scheme will change to adapt to the new selection. When you find a scheme you like, press [Enter] to select it. Or press [Esc] to leave the original display scheme unchanged.

Exit

You may exit the program whenever you wish to do so. Just move the highlight bar to the Exit choice in the menu and press [Enter].

The program double checks to make sure you really want to exit by displaying the following screen:



Type "Y" and press [Enter] will exit you to DOS.

Type "N" and press [Enter] to stay in the program.

Typical Sequence of Operations

STEP 1

PC → Brother
(From PC to Brother)
This is where you select the PC word Processing format you need to convert from. The files will be converted to Brother format.

OR

Brother → PC
(From Brother to
This is where you select which word processing format your Brother file will be converted to.



STEP 2

Source
AutoSelect
Drive
Directory
File(s)
This is where you select which file(s) you need to convert, and where those files are located.



STEP 3

Destination
Location
File Name(s)
This is where your converted files will be saved to.



STEP 4

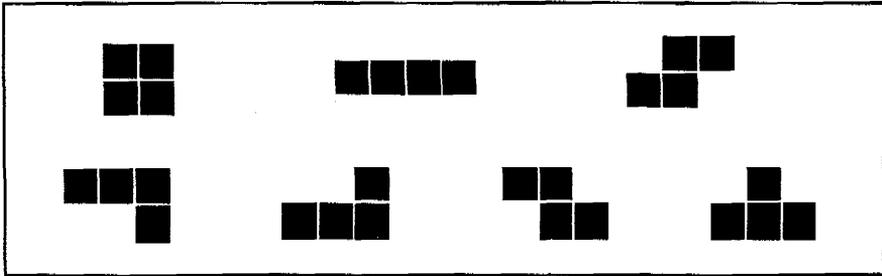
Convert
This command initiates the conversion process.

CONVERSION

Tetris (Optional)

Pieces made of four small squares fall one-by-one from the top of the screen into an empty pit. When a piece is falling, you can move it to the right or the left, and rotate it so that the piece fills the gaps at the bottom of the pit. When one row in the pit is filled without gaps, it is deleted. As the lines fill from the bottom with gaps, there is less time to position the pieces. The game ends when the pit is filled with open lines.

The Pieces



Starting Tetris

1. Turn on your word processor and insert the program diskette.
2. Select **Disk Application** from the **MAIN MENU** and press **RETURN**.
3. Use the cursor keys to select **TETRIS.APL** and press **RETURN**. The following logo appears:



A Copyright notice screen displays after the logo, followed by the TETRIS SETUP screen.

Setting the Level and Height

LEVEL and HEIGHT determine the difficulty of the game.

Tetris Setup

LEVEL					HEIGHT		
0	1	2	3	4	0	4	7
5	6	7	8	9	11	15	<<

Select **LEVEL** and **HEIGHT** by pressing **J** or **L**.

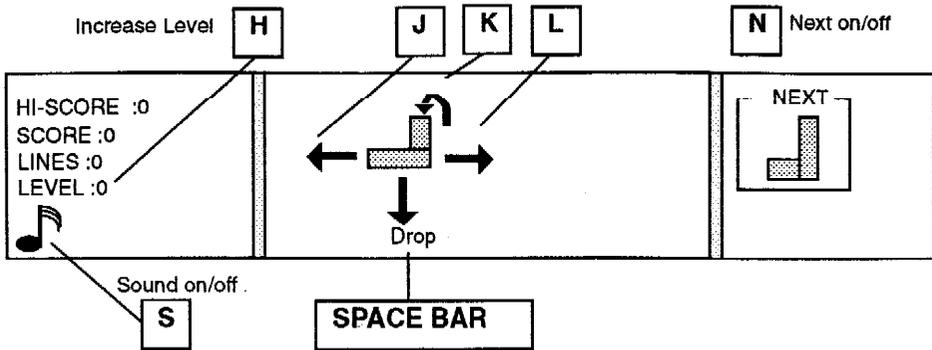
 Press **RETURN** to start.

The LEVEL sets the speed that the pieces fall from the top of the screen. Select values from 0 (slow) to 9 (fast).

The HEIGHT sets the number of rows at the bottom of that pit that are already filled when the game starts. The default setting is 0. You may challenge someone else with the same configuration that you played by pressing "<<". This selection starts a new game with the previous configuration.

1. Press → or **L** to increase the LEVEL. Press ← or **J** to decrease the LEVEL. Press **H** during play to increase the level (you can not decrease the level during play).
2. When the LEVEL is set, press **SPACE BAR** or **RETURN**.
3. Press → or **L** to increase the HEIGHT. Press ← or **J** to decrease the HEIGHT.
4. Press **SPACE BAR** or **RETURN** to start the game.

Playing Tetris



1. Press ← or **J** to move the pieces to the left. Press → or **L** to move the piece to the right. Press ↓ or **K** to rotate the piece. Press **SPACE BAR** to drop the piece when it is aligned.

NOTE:

The faster a piece falls, the more points are scored when the line is deleted.

2. Press **S** to turn the sound off/on.
3. Press **N** to show the next piece that is going to fall into the pit.
4. When the game is over, the following message is displayed:

Do you want to play again? "Press RETURN (yes) CANCEL (no)."

5. Press **RETURN** to reset and play again, or **CANCEL** to return to the MAIN MENU.

NOTE:

The difficulty of the game will change as lines are deleted. After 11 lines, the LEVEL will change from 1 to 2, and after 22 lines, from 2 to 3. The level will continue to change until LEVEL 9 is reached.

Indicators

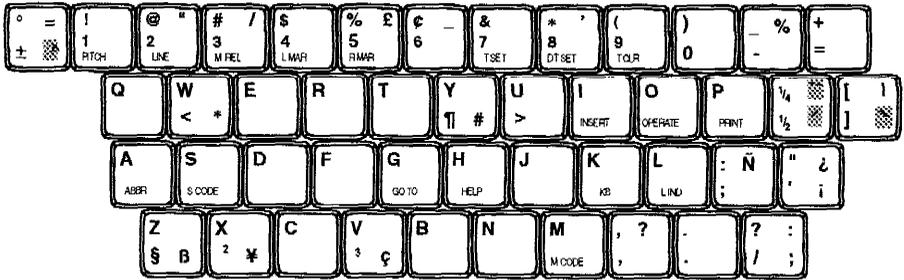
Indicator	Description
HI-SCORE	The highest score of a series of games.
SCORE	The score of the current game.
LINES	The number of deleted lines.
LEVEL	The current difficulty level while playing.
NEXT	The shape of the next piece is displayed (can be turned off by pressing N).
	The sound is on (can be turned on and off by pressing S).

Appendix

This section provides quick access to reference information. For example, if you do not remember the meaning of an error message, indicator, or symbol that appears on the screen, you will find a short definition and the page of this Manual where more information is provided.

Character Keys

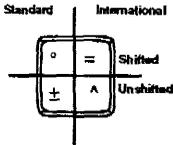
Standard (I) and International (II) Keyboard



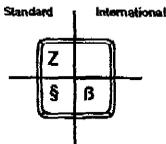
Keys with a single character (standard alphabet)
(Unshifted: small letter; shifted: capital letter)



Keys with more than one black character



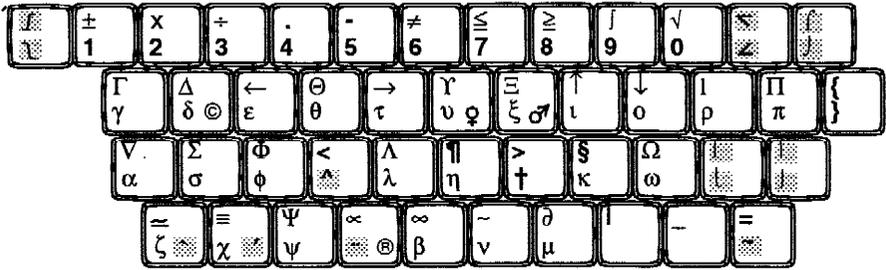
Keys with a green character (extra character obtained with the **CODE** key)



NOTE:

In the above illustration, dead keys are indicated with a small box.

Symbol (III) Keyboard



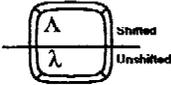
Keys with a single character

(same character when shifted or unshifted)



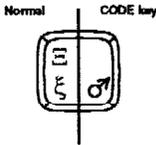
Keys with more than one character

(Unshifted: lower case; shifted: upper case)



Keys with a third character

(extra character obtained with the **CODE** key)



NOTES:

- In the above illustration, dead keys are indicated with a small box.
- To compose large mathematical symbols, use two dead characters and a blank space as the base character.

Examples: \sum (sum) and \int (integral)

Function Keys

The following list of function keys can be used as a quick reference guide. The list is organized in alphabetic order by function. The page(s) of this Manual where you can find more details about the operation are listed. For functions selected from a menu, see also "Function Menus" on page 274.

NOTE:

The functions marked with an asterisk () can be selected from many screens.*

Function	Function Key or Short Cut	Screen & Menu	Page
ABBREVIATED PHRASE LOAD		WP WRITE/EDIT (PHRASE)	141
ABBREVIATED PHRASE MAINTENANCE		WP WRITE/EDIT (PHRASE)	139
ABBREVIATED PHRASE (recall)	CODE + ABBR	WP WRITE/EDIT	138
ABBREVIATED PHRASE SAVE		WP WRITE/EDIT (PHRASE)	141
ALL DELETE (files)*	CODE + L	INDEX screen (except File Management)	88
ALL DELETE (lines)	CODE + D	FRAMING	152
ALL DELETE (words)		USER DICTIONARY	131
BACKSPACE*	BACKSPACE		41
BACKSPACE 1	CODE + BS 1	TW	106
BOLD	CODE + B	SPREADSHEET	200
		TW (STYLE)	115
		WP WRITE/EDIT (STYLE)	61
BOTTOM RECORD		ADDRESS BOOK EDIT (INPUT DATA)	162
CANCEL*	CANCEL		24
CAPS*	CODE + CAPS		25
CENTERING	CODE + F	TW (CTR/RMF)	118
		WP WRITE/EDIT (CTR/RMF)	57
CENTERING (^ format mark)	CODE + F	SPREADSHEET	187

Function	Function Key or Short Cut	Screen & Menu	Page
CHANGE SCREEN	CODE + RETURN	ADDRESS BOOK DATA INPUT	158
	CODE + Q	WP WRITE/EDIT (FORM)	92
CLEAR		SPREADSHEET	219
CONVERT (file)	CODE + O	SPREADSHEET INDEX	224
		FILE MANAGEMENT	242
		WP INDEX	85
CONVERT (block)		SPREADSHEET	219
COPY (block)	CODE + C	ADDRESS BOOK EDIT (BLOCK RECORD)	163
		WP WRITE/EDIT (BLOCK)	42, 45
COPY (cell)	CODE + C	SPREADSHEET	201, 202
COPY (file)*	CODE + C	INDEX screens	82
COPY TO CLIPBOARD		WP WRITE/EDIT (BLOCK)	45
CORRECTION*	CORRECT		41, 109
CURRENCY		SPREADSHEET (FORMAT)	213
CURSOR KEYS*	↑, ↓, ←, →		37
CURSOR SHAPE SWITCH	CORRECT	FRAMING	150
DECIMAL TAB SET	CODE + DT SET	TW	113
		WP WRITE/EDIT	53
DELETE (abbreviated phrase)	CODE + D	ABBREVIATED PHRASE	140
DELETE (block)	CODE + D	ADDRESS BOOK EDIT (BLOCK RECORD)	164
		WP WRITE/EDIT (BLOCK)	43
DELETE (file)*	CODE + D	INDEX screens	83
DELETE (label)	CODE + D	ADDRESS BOOK EDIT	166
DELETE (row/column)	CODE + D	SPREADSHEET	203
DELETE (word)	CODE + D	USER DICTIONARY	132

Function	Function Key or Short Cut	Screen & Menu	Page
DEMONSTRATION	CODE + D	MAIN MENU	21
DESK TOP REFERENCE		WP WRITE/EDIT (GRAMMAR1)	137
DISK APPLICATION	CODE + Q	MAIN MENU	21
DISK COPY	CODE + SHIFT + C	FILE MANAGEMENT	243
DISK DELETE	CODE + L	FILE MANAGEMENT INDEX SCREEN	242
DOUBLE COLUMNS SWITCH	D	PAGE LAYOUT VIEW	93
DUAL SCREEN		WP WRITE/EDIT (FORM)	91
EXIT*	CANCEL, FILE	ABBREVIATED PHRASE	140
		USER DICTIONARY	131
	CANCEL	FILE MANAGEMENT	242
		FRAMING INDEX	154
		WP INDEX	76
		DESK TOP REFERENCE	238
		ADDRESS BOOK	178
		SPREADSHEET	181
EXPAND		TW (STYLE)	117
		WP WRITE/EDIT (STYLE)	63
EXPRESS BACKSPACE*	CODE + EXPR		38
FILE*	FILE		73
FILL		SPREADSHEET (COLUMN)	210
FIXED		SPREADSHEET (FORMAT)	213
FOOTER		WP WRITE/EDIT (FORM)	70
FREEZE		SPREADSHEET (COLUMN)	211
GO TO*	CODE + GO TO		39

Function	Function Key or Short Cut	Screen & Menu	Page
GRAMMAR CHECK	CODE + GRAM	TW (GRAMMAR)	128
		WP WRITE/EDIT (GRAMMAR1)	125
HEADER		WP WRITE/EDIT (FORM)	70
HELP*	CODE + HELP		14
HYPHEN*	-		34
HYPHEN SCAN		WP WRITE/EDIT (SEARCH)	50
INDENT CLEAR	CODE + IND CLR	TW	114
		WP WRITE/EDIT	57
INSERT*	CODE + INSERT		40
INSERT (column/record)	CODE + INSERT	ADDRESS BOOK EDIT (FUNCTION)	171
INSERT (row/column)	CODE + INSERT	SPREADSHEET	204
JUSTIFY	CODE + OPERATE	TW	101
		WP WRITE/EDIT	60
KEYBOARD*	CODE + KB		64
LABEL LONGER	CODE + T CLR	ADDRESS BOOK DATA INPUT (LABEL)	158
		ADDRESS BOOK EDIT (LABEL)	166
LABEL SHORTER	CODE + T SET	ADDRESS BOOK DATA INPUT (LABEL)	158
		ADDRESS BOOK EDIT (LABEL)	166
LAYOUT (preview)	CODE + LAYOUT	FRAMING	152
		WP WRITE/EDIT	93
LEFT MARGIN	CODE + L MAR	TW	103
		WP WRITE/EDIT	52
LINE INDENT	CODE + L IND	TW	114
		WP WRITE/EDIT	55
LINE OUT*	CODE + LINE OUT		41
LINE SPACING	CODE + LINE	TW	104
		WP WRITE/EDIT	67

Function	Function Key or Short Cut	Screen & Menu	Page
LOAD (abbreviated phrase)		ABBREVIATED PHRASE	140
LOAD (file)*	RETURN	INDEX screens (except File Management)	76
LOAD (user dictionary)		USER DICTIONARY	140
MANUAL CORRECTION	CODE + CORRECT	TW	110
MARGIN RELEASE	CODE + M REL	TW	103
		WP WRITE/EDIT	52
MENU*	MENU		14
MERGE CODE	CODE + M (M CODE)	WP WRITE/EDIT	95
MOVE	CODE + E	ADDRESS BOOK (BLOCK RECORD)	164
		WP WRITE/EDIT (BLOCK)	44
MOVE (cells)	CODE + E	SPREADSHEET	207
NEW LABEL		ADDRESS BOOK EDIT (LABEL)	165
NEW RECORD	CODE + N	ADDRESS BOOK EDIT (INPUT DATA)	162
NEXT SCREEN*	CODE + NEXT S		38
NEW WORD		DESK TOP REFERENCE	238
NO DISPLAY		SPREADSHEET (FORMAT)	214
OPERATE	CODE + OPERATE	TW	101, 101
PAGE BREAK	CODE + P BREAK	SPREADSHEET	208
		WP WRITE/EDIT	67
PAPER DOWN	CODE + P DOWN		35
PAPER INSERT	P INS		9
PAPER SIZE		WP WRITE/EDIT (FORM)	68
PAPER UP	CODE + P UP		35
PARAGRAPH INDENT	CODE + P IND	TW	114
		WP WRITE/EDIT	56
PASTE FROM CLIPBOARD	CODE + T	WP WRITE/EDIT (BLOCK)	46

Function	Function Key or Short Cut	Screen & Menu	Page
PERCENT		SPREADSHEET (FORMAT)	214
PERMANENT BACKSPACE*	CODE + BACKSPACE		34
PERMANENT HYPHEN	CODE + -		34
PERMANENT SPACE	CODE + SPACE BAR		33
PITCH*	CODE + PITCH		66
PREVIOUS SCREEN*	CODE + PRE S		38
PRINT (abbreviated phrase)	CODE + PRINT	ABBREVIATED PHRASE	140
PRINT (file)*	CODE + PRINT	INDEX screens (except File Management)	77
PRINT (frame)	CODE + PRINT	FRAMING	153
PRINT (label)	CODE + PRINT	ADDRESS BOOK	174
PRINT (list)	CODE + PRINT	ADDRESS BOOK	176
PRINT (page)	CODE + PRINT	WP WRITE/EDIT (PAGE PRINT)	77
RECALC		SPREADSHEET	214
RELEASE		SPREADSHEET	212
RELOCATION*	CODE + RELOC		38
RENAME*	CODE + R	INDEX screens	83
REPLACE		WP WRITE/EDIT (SEARCH)	49
RETURN*	RETURN		24
RIGHT MARGIN	CODE + R MAR	TW	103
		WP WRITE/EDIT	52
RIGHT MARGIN FLUSH	CODE + R	TW (CTR/RMF)	119
		WP WRITE/EDIT (CTR/RMF)	59
RIGHT MARGIN FLUSH ("format mark)	CODE + R	SPREADSHEET	187
SAVE (abbreviated phrase)		ABBREVIATED PHRASE	140
SAVE (file)*	FILE		73
SAVE (user dictionary)		USER DICTIONARY	140
SCALE LINE ON/OFF		WP WRITE/EDIT (FORM)	32

Function	Function Key or Short Cut	Screen & Menu	Page
SEARCH		WP INPUT EDIT (SEARCH)	47
SELECT	CODE + L	ADDRESS BOOK EDIT (FUNCTION)	168
		SPREADSHEET (SORT)	217
SHIFT*	SHIFT		25
SHIFT LOCK*	CAPS		25
SORT	CODE + O	ADDRESS BOOK EDIT (FUNCTION)	167
		SPREADSHEET (SORT)	215
SORT & SELECT		SPREADSHEET (SORT)	218
SPACE*	SPACE BAR		33
STOP CODE	CODE + S CODE	WP WRITE/EDIT	80
TAB	TAB		54, 113
TAB CLEAR	CODE + T CLR		54, 113
TAB SET	CODE + T SET		53, 113
TOP RECORD		ADDRESS BOOK EDIT (INPUT DATA)	162
TYPEWRITER/WORD PROCESSOR	TW/WP		98
UNDERLINE	CODE + N	SPREADSHEET	200
		TW (STYLE)	116
		WP WRITE/EDIT (STYLE)	62
USER DICTIONARY MAINTENANCE		DESK TOP REFERENCE	238
		TW (GRAMMAR)	130
		WP WRITE/EDIT (GRAMMAR1)	130
USER DICTIONARY LOAD		TW (GRAMMAR)	133
		WP WRITE/EDIT (GRAMMAR1)	133

Function	Function Key or Short Cut	Screen & Menu	Page
USER DICTIONARY SAVE		TW (GRAMMAR)	134
		WP WRITE/EDIT (GRAMMAR1)	134
WIDTH		SPREADSHEET (COLUMN)	209
WORD COUNT	CODE + J	WP WRITE/EDIT (GRAMMAR2)	142
WORD OUT*	WORD OUT		41

Function Menus

The following table can be used as a quick guide for the functions available from the function menus. The characters printed in bold indicate the accelerators.

WP WRITE/EDIT Screen

Main Menu	Sub-menu	Short-cut Key	Page
STYLE	BOLD	CODE + B	61
	UNDERLINE	CODE + N	62
	EXPAND		63
BLOCK	COPY	CODE + C	42
	DELETE	CODE + D	43
	MOVE	CODE + E	44
	COPY TO CLIPBOARD		45
	PASTE FROM CLIPBOARD	CODE + T	46
CTR/RMF	CENTERING	CODE + F	57
	RIGHT MARGIN FLUSH	CODE + R	59
GRAMMAR1	GRAMMAR CHECK	CODE + GRAM	125
	GRAMMAR CHECK SET MENU		129
	DESK TOP REFERENCE		137
	USER DICTIONARY MAINTENANCE		130
	USER DICTIONARY LOAD		133
	USER DICTIONARY SAVE		134
GRAMMAR2	WORD COUNT	CODE + J	142
	EDIT THESAURUS		144
	TYPE THESAURUS		146
	ABBREVIATED PHRASE MAINTENANCE		139
	ABBREVIATED PHRASE LOAD		141
	ABBREVIATED PHRASE SAVE		141

Main Menu	Sub-menu	Short-cut Key	Page
SEARCH	SEARCH		47
	REPLACE		49
	HYPHEN SCAN		50
FORM	PAPER SIZE		68
	HEADER		70
	FOOTER		70
	SCALE LINE ON/OFF		32
	DUAL SCREEN		91
	CHANGE SCREEN	CODE + Q	92
PAGE PRINT		CODE + P (PRINT)	77

ABBREVIATED PHRASE Screen

Menu	Short-cut Key	Page
EXIT	FILE or CANCEL	140
PRINT	CODE + P (PRINT)	140
DELETE	CODE + D	140
LOAD		140
SAVE		140

USER DICTIONARY Screen

Menu	Short-cut Key	Page
EXIT	FILE or CANCEL	131
DELETE	CODE + D	131
ALL DELETE		131
LOAD		131
SAVE		131

WP INDEX Screen

Menu	Short-cut Key	Page
EXIT	CANCEL	76
COPY	CODE + C	82
DELETE	CODE + D	83
RENAME	CODE + R	83
CONVERT		85
ALL DELETE	CODE + L	88
PRINT	CODE + P (PRINT)	77

TW Application

Main Menu	Sub-menu	Short-cut Key	Page
STYLE	BOLD	CODE + B	115
	UNDERLINE	CODE + N	116
	EXPAND		117
CTR/RMF	CENTERING	CODE + F	118
	RIGHT MARGIN FLUSH	CODE + R	119
GRAMMAR	GRAMMAR CHECK	CODE + GRAM	128
	USER DICTIONARY MAINTENANCE		131
	USER DICTIONARY LOAD		131
	USER DICTIONARY SAVE		131
	EDIT THESAURUS		144
	TYPE THESAURUS		146

FRAMING Screen

Menu	Short-cut Key	Page
PRINT	CODE + P (PRINT)	151
ALL DELETE	CODE + D	152

FRAMING INDEX Screen

Menu	Short-cut Key	Page
EXIT	CANCEL	154
COPY	CODE + C	154
DELETE	CODE + D	154
RENAME	CODE + R	154
ALL DELETE	CODE + L	154
PRINT	CODE + P (PRINT)	154

SPREADSHEET INPUT/EDIT Screen

Main Menu	Sub-menu	Page
COLUMN	WIDTH	209
	FILL	210
	FREEZE	211
	RELEASE	212
FORMAT	FIXED	213
	CURRENCY	213
	PERCENT	214
	NO DISPLAY	214
RECALC		214
SORT	SORT	215
	SELECT	217
	SORT & SELECT	218
CLEAR		219
CONVERT		219

SPREADSHEET INDEX Screen

Menu	Short-cut Key	Page
EXIT	CANCEL	178
COPY	CODE + C	177
DELETE	CODE + D	178
RENAME	CODE + R	178
CONVERT	CODE + O	178
ALL DELETE	CODE + L	178
PRINT	CODE + P (PRINT)	178

ADDRESS BOOK EDIT Screen

Main Menu	Sub-menu	Short-cut Key	Page
INPUT DATA	NEW RECORD	CODE + N	162
	TOP RECORD		162
	BOTTOM RECORD		162
BLOCK RECORD	COPY	CODE + C	163
	DELETE	CODE + D	164
	MOVE	CODE + E	164
LABEL	NEW LABEL		165
	DELETE LABEL	CODE + D	166
	LABEL LONGER	CODE + T CLR	166
	LABEL SHORTER	CODE + T SET	166
FUNCTION	SORT	CODE + O	167
	SELECT	CODE + L	168
	INSERT	CODE + I (INSERT)	171
PRINT		CODE + P (PRINT)	174

ADDRESS BOOK DATA INPUT Screen

Main Menu	Sub-menu	Short-cut Key	Page
CHANGE SCREEN		CODE + RETURN	159
LABEL	LABEL LONGER	CODE + T CLR	166
	LABEL SHORTER	CODE + T SET	166

ADDRESS BOOK SELECT Screen

Menu	Short-cut Key	Page
PRINT	CODE + P (PRINT)	170
SAVE	FILE	170

ADDRESS BOOK INDEX Screen

Menu	Short-cut Key	Page
EXIT	CANCEL	177
COPY	CODE + C	177
DELETE	CODE + D	177
RENAME	CODE + R	177
ALL DELETE	CODE + L	177
PRINT	CODE + P (PRINT)	177

FILE MANAGEMENT Screen

Menu	Short-cut Key	Page
EXIT	CANCEL	242
COPY	CODE + C	242
DELETE	CODE + D	242
RENAME	CODE + R	242
CONVERT		242
DISK DELETE	CODE + L	242

DESK TOP REFERENCE Screens

Menu	Short-cut Key	Page
EXIT		238
USER DICTIONARY MAINTENANCE		238
NEW WORD		238

Symbols

The following lists describe the symbols that appear on the screen. Two kinds of symbols exist:

- Symbols displayed on the scale
- Symbols displayed in the text that are never printed

Symbols Displayed on the Scale

Symbol	Meaning	Page
L	Position of the left margin	52
R	Position of the right margin	52
T	Position of a tab stop	53
D	Position of a decimal tab stop	53
⌘	Beginning of the hot zone	33
0, 1, 2,...	Absolute position from the left edge of the paper	29
▾	Position of a tab in the FRAMING screen	150

Symbols Displayed in the Text

All the following symbols are displayed in the text area of the WP application (unless otherwise specified).

Symbol	Meaning	Page
➤	ADD CURSOR: indicates that the cursor can be used to add lines on the FRAMING screen	149
⌘	CENTERING BETWEEN MARGINS: displayed at the left of the centered string when the centering function is activated	57
⌘	CENTERING BETWEEN TABS: displayed at the left of the centered string when the centering function is activated	58
✂	DELETE CURSOR: indicates that the cursor can be used to delete lines on the FRAMING screen	150

Symbol	Meaning	Page
	FORMAT CHANGE: displayed in the dead column, in front of the first line of a reformatted paragraph	30
	INDENT CLEAR: displayed at the end of an indented paragraph when CODE + IND CLR is pressed	57
	LINE FEED: displayed at the end of a paragraph when RETURN is pressed	24
	MERGE CODE: displayed at the cursor position when CODE + M (M CODE) is pressed	95
	MOVE CURSOR: indicates that the cursor can be moved across the FRAMING screen	149
	PAGE BREAK: displayed at the end of a paragraph when CODE + P BREAK is pressed	67
	PARAGRAPH INDENT: displayed at the left of a tab stop when the cursor has been moved with CODE + P IND	56
	PERMANENT BACKSPACE: displayed by the TW application between the base character and the superimposed character when CODE + BACKSPACE is pressed (L/L, centering, right margin flush, and decimal tab)	107
	PERMANENT SPACE: displayed at the cursor position when CODE + SPACE BAR is pressed	33
	RIGHT MARGIN FLUSH: displayed at the left of the aligned string when the right margin flush function has been activated	59
	STOP SYMBOL: displayed at the cursor position when CODE + S (S CODE) is pressed	80
	TAB: displayed at the left of a tab stop when the cursor has been moved with TAB	54

Indicators

The following list describes the indicators that appear on top of the screen. In the following list, the "X's" stand for variable indication.

Indicator	Meaning	Page
AUT	On when the auto return function of the TW application is activated	100
BLD	On when the bold function is activated	61, 115
CAPS	On if the keyboard is in caps lock mode	25, 105
COL:XXX	Number of the current column	66
CNT	On when the continuous underline function is activated	62, 116
CTR	Displayed when the centering function is on (TW application)	118
DEAD:XX	Displays the dead character when the cursor is on the base character (WP application)	36
DTAB	Displayed when the decimal tab function is on (TW application)	113
EXP	On when the expand function is activated	63, 117
GR	On when the Spell Checker is activated	125
INS	On when the insert mode is activated	40
JST	On when the justify function is activated	60, 101
KB:XX	Current keyboard selection (I, II, or III)	64, 105
L:XXX	Number of the current line	67
L.SP:X.X	Current line spacing (1.0, 1.5, or 2.0)	67
M.C	On when the manual correction function of the TW application is activated	110

Indicator	Meaning	Page
MRG:XX	Prompts you to specify the label number of the information to appear at the current position in a merged document	95
P:XX	Number of the current page	67
P BS:X	Displays the superimposed character when the cursor is on the base character (WP application)	34
P IND	Displayed when the paragraph indent function is on (TW application)	114
PITCH:XX	Current pitch (10, 12, or 15)	66, 104
RECORD:XX	Indicates the number of the record on which the cursor is positioned (Address Book application)	160
REMAIN	TW application: Indicates the number of characters which can be typed until the right margin is reached	99
	In other screens: Indicates the remaining free space on the diskette	72
RMF	Displayed when the right margin flush function is on (TW application)	119
SHIFT	On if the keyboard is in uppercase mode	25, 105
TOTAL WORDS:XX	Indicates the total number of words in the user dictionary.	130
WRD	On when the word underline function is activated	62, 116
XXXXXXXX	Displayed at the upper-left corner of the WRITE/EDIT screen: Name of the current file	29

IBM PC Code

The following table shows the printable characters that can be correctly translated when using the separate conversion program provided on diskette, or the conversion function of the WP INDEX screen or FILE MANAGEMENT screen. Empty cells in that table correspond to control codes or characters that are converted into blank spaces.

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0				0	@	P	'	p	Ç	É	á					
1		!	1	A	Q	a	q	ü	æ	í					ß	±
2		"	2	B	R	b	r	é	Æ	ó						
3		#	3	C	S	c	s	â	ô	ú						
4		\$	4	D	T	d	t	ä	ö	ñ						
5		%	5	E	U	e	u	à	ò	Ñ						
6		&	6	F	V	f	v		û	ª						
7		'	7	G	W	g	w	ç	ù	º						
8		(	8	H	X	h	x	ê	ÿ	¿						
9		)	9	I	Y	i	y	ë	Ö							
A		*	:	J	Z	j	z	è	Ü							
B		+	;	K	[	k	{	ï	ø	½						
C		,	<	L	\	l	|	ı	£	¼						
D		-	=	M	]	m	}	ì	¥	ı						²
E		.	>	N	^	n	~	Ä								
F		/	?	O	_	o			f							

Error Messages

Please consult the following table when an error message appears.

Message	Cause	Remedy
Memory full.	You attempted an operation that would require more memory than the total limit of 32 kilobytes.	Delete some parts of the text using BACKSPACE , CORRECT , WORD OUT , CODE + LINE OUT , or the block delete function. You may also try to copy a smaller block. Save the file and start a new file.
Unidentified disk error. Insert another and press RETURN.	Defective diskette.	Consult your dealer.
	You attempted to copy an uninitialized source diskette.	Initialize the diskette. (This will erase any files previously stored on the diskette.)
Insert disk and press RETURN.	The diskette is not inserted when you start a read operation, or the diskette is removed during read or write operation (a message was telling you to wait).	Insert the diskette and press RETURN . Avoid removing or inserting a diskette while prompted to wait.
Incorrect disk. Insert another and press RETURN.	The selected file cannot be found on the inserted diskette (you changed the diskette so that the INDEX screen and the inserted diskette do not match).	Press CANCEL or reinsert the correct diskette and press RETURN .
Disk is write protected. Release the protection and press RETURN to retry.	You are using a write-protected diskette.	Use another diskette or disengage the write protection.
Check printer.	Malfunction of the printer mechanism.	Consult your dealer.
Check disk.	Malfunction of the disk drive.	Consult your dealer.

Message	Cause	Remedy
ROM down.	Malfunction detected in your word processor's Read Only Memory.	Consult your dealer immediately.
RAM down.	Malfunction detected in your word processor's Random Access Memory.	Consult your dealer immediately.
Incorrect Format.	Double Column printing with line-spacing, pitch, or margin changes.	Remove any line-spacing, pitch, or margin changes from your document before printing in Double Columns.
Cover open.	The acoustic cover is open.	Close the acoustic cover firmly.

Troubleshooting Chart

Your word processor has been precision-manufactured to give you years of trouble-free use. In the rare case that trouble does happen, you will probably be able to find the solution in the table below. If you cannot, please do not attempt to repair the word processor yourself. Instead, please contact your dealer.

Trouble	Remedy
Nothing works after the word processor has been switched on.	Check that the power cord is plugged in. Check that the acoustic cover is firmly closed.
Printout is impossible or difficult to read.	Check that the cassette daisy wheel is inserted correctly. Check that the cassette ribbon is positioned correctly. Check that the installed daisy wheel matches the selected KEYBOARD.
Correction on paper is impossible.	Check to see if the correction tape has run out and replace it if necessary. Check that the correction tape is installed properly. Check that the correction tape you have purchased corresponds to the cassette ribbon you are using.
All seems normal after the word processor has been switched on, but nothing is displayed.	Adjust the brightness controller.
Printed and displayed characters do not match.	Check that the installed daisy wheel matches the selected KEYBOARD. Check that the PAUSE FOR KEYBOARD CHANGE is selected as NO on the Print Menu screen.
Diskette operation is not possible.	The diskette has been damaged, or a television set is located too close to the drive. Try with another diskette and/or move the word processor.

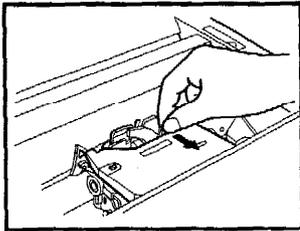
Accessories

Changing Daisy Wheel Cassette

This word processor uses Brother daisy wheel cassettes, which are print elements housed in clear plastic. This ensures that fingers will never touch the typeface, thereby reducing the risk of damage. One wheel comes with the word processor. Others providing different type sizes, styles, and character sets are also available.

NOTE:

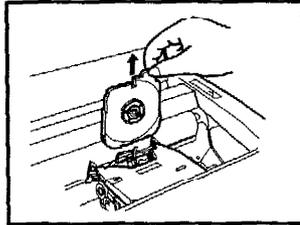
If the cassette is not inserted properly or the daisy wheel is not locked in position, there may be no printout, the printout may be gibberish, or the wheel may break.



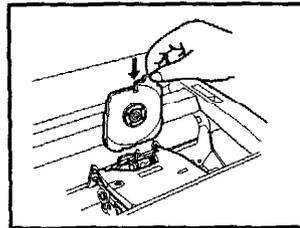
Lift the acoustic cover, and then release the daisy wheel by pulling the lever toward you.

NOTE:

It is not necessary to remove the ribbon when replacing the daisy wheel.



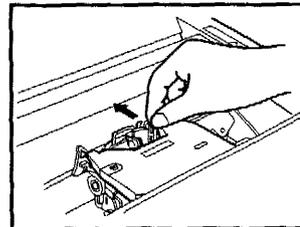
Remove the cassette by the "ear" on the top right.



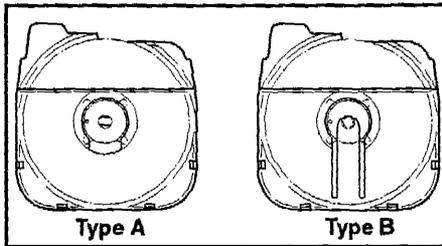
Slide the new cassette into the slot.

NOTE:

Use only Brother Cassette Daisy Wheels and make sure the cassette is not inserted backwards. (The "ear" should be on the right.)



Be sure to slide the lever back to its original position to lock the daisy wheel in place. Press the lever forward once more to assure the daisy wheel is properly set, and close the acoustic cover.



NOTE:

Please check the shape of your daisy wheel cassette before replacing the daisy wheel. The daisy wheel cassette type B cannot be used with this word processor.

Changing Ribbons

This word processor uses ribbons enclosed in handy cassettes. Two types of ribbons are available, Brother Correctable Ribbon model #1030 and Brother Nylon Ribbon model #1032.

NOTE:

Use only Brother ribbons. Ribbons of different brands, or Brother ribbons other than models #1030 and #1032 will not fit into the word processor, or could affect the operation of the word processor.



Turn the power on and use **TW/WP** to switch the word processor to the Typewriter application.



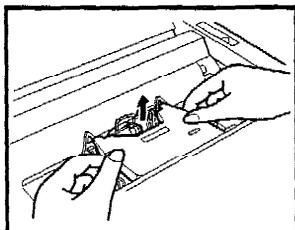
Use **SPACE BAR** and **BACKSPACE** to move the carrier to the center of the platen.



Lift the acoustic cover.

NOTE:

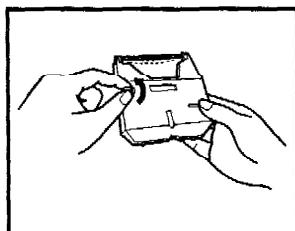
It is not possible to move the carrier while the acoustic cover is open. Close the acoustic cover to re-position the carrier.



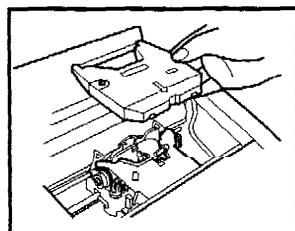
Grasp the cassette with both hands, raise the front end and lift out.

NOTE:

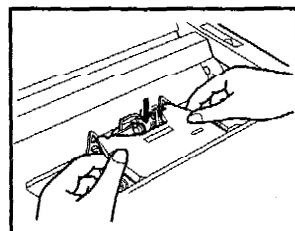
The amount of ribbon remaining can be checked through the viewing hole on the right side of the cassette.



Turn the feed knob on the left side of the new cassette counterclockwise to take up any slack.



Align the arrow on the cassette with the center of the cassette holder, slide the ribbon between the guides, and use both hands to ease the cassette into the holder.



Gently press down on the front of the cassette until it clicks into place. Once again turn the feed knob counterclockwise to take up any slack. Close the acoustic cover.

Changing Correction Tapes

This word processor uses correction tape to correct printing errors. Two types of correction tapes are available, Brother Lift off tape model #3010 (for use with the correctable film ribbon) and Brother Cover up tapes model #4010 (for use with the nylon ribbon).



Turn the power on and use **TW/WP** to switch the word processor to the Typewriter application.

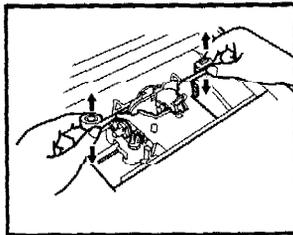
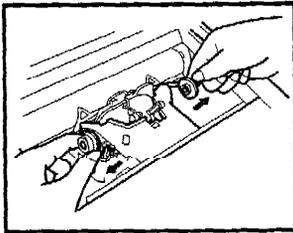
Use **SPACE BAR** and **BACKSPACE** to move the carrier to the center of the platen.

Lift the acoustic cover and remove the ribbon cassette, if installed. (See "Changing Ribbons" on page 290.)

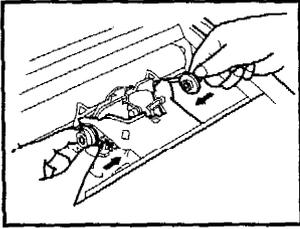
NOTE:

It is not possible to move the carrier while the acoustic cover is open. Close the acoustic cover to re-position the carrier.

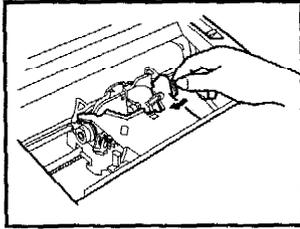
Grasp the spools with your thumbs in the positions shown and pull them off their mounts. Bring the tape back to a position parallel with the platen and then lift it up and out.



Pass the new tape through the left guide, behind the ribbon guide, and out through the right guide. The rough side of the tape should face the platen.



Mount the feeder spool on the pin on the left and the take-up spool on the pin on the right.



Turn the take-up spool counterclockwise until a small amount of white tape has been wound around it.

Replace the ribbon cassette and close the acoustic cover.

Specifications

Display	CRT, 20 lines x 90 columns
Keyboard	65 keys Auto repeat function 3 selectable character sets
Printer	Built-in daisy wheel printer
Daisy wheel	Cassette (96 characters)
Paper capacity	326.9 mm (12.87")
Typing capacity	228.6 mm (9")
Copy capacity	Original + 4 copies
Typing speed	13 characters/second
Character pitches	10, 12, 15 (90, 108, 135 characters/line max.)
Line spacing	1.0, 1.5, 2.0
Printing direction	bi-directional
Ribbons	Correctable film (approx. 50,000 characters) Nylon (approx. 500,000 characters)
Correction tapes	Lift off & cover-up (up to 1,400 characters)
Memory	
Correction memory	One line
Internal memory	128K bytes
General	
Voltage	110 ~ 120V
Weight	15 kg
Dimensions	23.6" (W) x 20.8" (H) x 20.8" (D) 600 mm (W) x 530 mm (H) x 530 mm (D)

Glossary

ABBREVIATED PHRASE	To increase your typing speed, you can store frequently used strings in a special abbreviated phrase file and recall any string by merely typing its abbreviation (which has been stored along with the string).
ABSOLUTE ADDRESS	A spreadsheet cell address specified in a formula that is not updated if you change the layout of your spreadsheet.
ADDRESS	The position of a spreadsheet cell, designated by its row and column number.
ALPHANUMERIC DATA	Data entered into a spreadsheet that cannot be calculated.
ARGUMENT	The information you must supply when using a spreadsheet function.
ACCELERATOR	Instead of selecting a function from a menu with ← or → and then pressing RETURN to activate the function or to display a submenu, you may press the letter keys that appear in bold on the menu. This character is called an accelerator.
ADDRESS BOOK	The Address Book application is used to create and edit lists of names, addresses, telephone numbers, etc.
BACKUP	A copy of all the data on a diskette that you keep in case your original data is damaged.
BLOCK OPERATIONS	The block operations on this word processor allow for on-screen cutting & pasting tasks. They include block copy, move, delete, copy to clipboard, and paste from clipboard.
BOLDFACE	Boldface characters are thicker than normal characters.
CELL	On a spreadsheet, the intersection of a row and a column, and where one piece of information is stored.
CENTERING	A layout function that allows you to automatically center a line between margins or tabs.
COLUMN	With the Address Book application, a vertical grouping of information that represents one category, such as NAME or ADDRESS . With the Spreadsheet application, a vertical area on the grid which is one cell wide.

CONVERSION	Changing computer data into a form that can be used by a different computer system or program to convert a Word Processing file into an ASCII file and vice versa as well as a Spreadsheet file or a part of a Spreadsheet file into a Word Processing file.
CORRECTION MEMORY	A special memory used by the TW application to temporarily store the text of the current line. Since the typewriter knows the contents of the current line as well as their position on the paper, corrections can be carried out without retyping the wrong character. The correction memory is cleared as soon as the carrier advances to the next line.
CURSOR	1) A blinking box used to select a position on the screen; 2) a block-shaped illuminated area used to select menu items by highlighting the item in reverse image.
DAISY WHEEL	A removable plastic wheel with spokes extending out from the center that is used for printing on this word processor.
DEAD KEY	A key that produces a character but does not move the cursor or carrier one position to the right. Dead keys are usually used to type the accent marks used in such languages as French, German, and Spanish.
DECIMAL TAB	A special tab used to neatly align a column of numbers the same way you align them when carrying out a sum manually.
DIRECT NUMBER	Spreadsheet data, consisting of digits and possibly a decimal point that can be used in calculations.
DISK DRIVE	The mechanism which writes data to and reads data from the diskette.
DISKETTE	A thin, flexible magnetic-coated diskette on which computer data can be stored.
DISPLAY	The CRT display shows the setting indicators, the text you are typing, function menus, and messages.
DOUBLE COLUMNS	This function allows you to print your document PRINTING in two columns. On the screen, the text is displayed continuously in one column.
DUAL SCREEN	This function splits the display in two halves and allows you to work simultaneously with two documents.

EDITING	Editing a text simply means modifying it. With this word processor, you may edit a line in L/L mode or the entire document (WP application). You can also edit user dictionaries, abbreviated phrase files, merge data files, and framing files.
ELITE	One of the available pitches on this word processor. Elite pitch corresponds to 12 characters per inch. When you select this pitch, make sure that the daisy wheel in use bears the indication "12".
EXPAND	A Word Processing and Typewriter function that changes the appearance of text by inserting a space after each character.
EXPRESS BACKSPACE	A Typewriter and Word Processing function that moves the carrier or cursor quickly to the left margin.
EXTENSION	A period followed by a maximum of three characters, that are added to the end of a file name to identify in which application the file was created. This word processor automatically adds the proper extension to your file names.
FILE	The unit in which data is stored on the diskette, for example, a single Word Processing document.
FOOTER	A footer is a line of text that is printed automatically at the bottom of each page. With this word processor, the footer includes an automatic page numbering function.
FORMAT	1) The way a diskette is organized for storing files. This word processor uses 720K and 1.44M DOS formats. 2) The visual arrangement of text on a page, determined by such factors as margin and tab settings, justification, centering, etc.
FORMAT MARK	Characters that designate spreadsheet data as alphanumeric, and can also be used to place data flush to one side or at the center of a cell.
FORMATTING	A process by which the system divides a new diskette into sections that organize the storage of your files.
FORMULA	With the Spreadsheet application, you may input data in order to automatically perform a mathematical operation.
FRACTIONAL BACKSPACE	A Typewriter function that moves the carrier backwards by 1/60th of an inch.

FREEZE	Keeping the first column(s) of a spreadsheet on the screen while displaying the rightmost columns.
FUNCTION	Formulas "built-in" to the Spreadsheet application that allow you to perform common calculations and other tasks without entering long formulas yourself.
FUNCTION MENU	A listing of available operations that can be performed. By pressing the MENU key, you may choose an operation available for the selected mode.
HEADER	A header is a line of text that is printed automatically at the top of each page. With this word processor, the header includes an automatic page numbering function.
HELP MENU	Screen that appears when you press CODE + H (HELP) that displays a list of "short-cut" function you can perform by pressing CODE plus a character key.
HOT ZONE	The range of six characters just before the right margin. A beep sounds when the carrier enters the hot zone (TW application). In auto carrier return mode, and with the WP application, a space or a hyphen typed in the hot zone triggers a carrier or cursor return.
HYPHEN	This word processor distinguishes two different kinds of hyphens: permanent hyphens and "ghost hyphens". A permanent hyphen is obtained with the hyphen (-) key outside the hot zone, and with CODE + the hyphen key in the hot zone, and is always printed. A ghost hyphen is obtained with the hyphen key alone in the hot zone. Such a hyphen triggers the word wrap function.
HYPHEN SCAN	The hyphen scan function detects the lines of the document with too many blank spaces and helps you insert hyphens in order to improve the layout.
INDEX	A list of all the files on a diskette. On this word processor, you can also display an index of files created with a specific application.
INITIALIZE	To delete all data from a diskette to prepare it for formatting.
INSERT MODE	The mode in which you can insert text at the current cursor position without deleting other text.
INTEGER	A whole number (no fractional value).
INTERNATIONAL KEYBOARD	The keyboard setting that offers accents required by such languages as French, German, and Spanish.

JUSTIFICATION	When a line is printed in justify mode, the word processor divides the total length of the line, minus the length of the actual characters, by the number of spaces between words to obtain equal spacing between words. The first character of the line is aligned with the left margin, and the last one with the right margin.
LABEL	The word or other set of characters that identifies each category of information in an Address Book file or Spreadsheet file.
LINE-BY-LINE	One of the options of the TW application. The text of the current line is displayed until the line is completed. Meanwhile, you are free to edit the contents of the line directly on the display.
LINE INDENT	The LINE INDENT function allows you to quickly insert five blank spaces at the beginning of a line. This feature can be used to neatly mark the beginning of a new paragraph.
LINE OUT	The LINE OUT function allows you to quickly erase the current line, from the carrier or cursor position to the beginning of the line.
MEMORY	A special part of the word processor where data can be stored. An electronic memory is divided into small units called "bytes" where a single character can be stored. See also RAM and ROM.
MENU	A list of functions you can select by positioning the cursor at the desired function and pressing RETURN .
MERGED DOCUMENT	An advanced function which allows you to automatically print many copies of a document (a letter, for example) using variable data (names and addresses, for example) stored in a separate Address Book file.
MICRON	One of the available pitches on this word processor. Micron pitch corresponds to 15 characters per inch. When you select this pitch, make sure that the daisy wheel in use bears the indication "15".
OPERAND	The data in a spreadsheet formula on which a mathematical operation will be performed. In a spreadsheet formula, an operand can be a number, address, function, or formula enclosed in parentheses.

OPERATOR	The character in a spreadsheet that specifies the mathematical operation to be performed (+, -, #, *, and /).
OVERWRITE MODE	The mode in which inserting text at the current cursor position deletes the existing text at that position.
PAGE LAYOUT VIEW	In general, the word "layout" refers to the distribution of the text on a page. The page layout view function of this word processor allows you to preview several pages on the screen by compressing the size of the characters. On that screen, you are not able to read your text, but you have a global view of your document. The function also allows you to preview framing data.
PARAGRAPH INDENT	A function that allows you to temporarily reset the left margin at a tab position.
PERMANENT HYPHEN	A hyphen entered with + for word that always require a hyphen.
PICA	One of the available pitches on this word processor. Pica pitch corresponds to 10 characters per inch. When you select this pitch, make sure that the daisy wheel in use bears the indication "10".
PITCH	The number of characters you can type per inch, based on the Pitch setting and the daisy wheel you are using. Pica, Elite and Micron pitches are available on this word processor if you have the corresponding daisy wheels.
PLATEN	The rubber roller driving the paper up and down. The movement of the platen can be controlled with the keyboard, or manually, by turning the platen knob. We recommend that you never type anything without inserting paper to prevent the platen from becoming dirty.
RAM	Random Access Memory – a memory you can write in or read from. All the information you input from the keyboard is stored in this type of memory. The RAM is always cleared when you turn the power off.
RANGE	A range of cells is a portion of the spreadsheet that is enclosed in a rectangle. Many functions, such as move, copy, delete, and print can be applied to a range.

RECALCULATION	With the Spreadsheet application, a result which is related to other cells through a formula can be recalculated if the contents of the cells have been modified. Since recalculation of a large spreadsheet is time consuming, the word processor lets you edit without recalculating automatically each time you edit a cell. Recalculation is carried out only when you activate the function.
RECORD	A record is an entry of a Address Book file. It may contain different items but must fit on a single line.
REDUNDANCY CHECK	Redundancy check is a function of the Spell Checker. It detects repeated words.
RELATIVE ADDRESS	A spreadsheet cell address in a formula that is updated if you change the layout of your spreadsheet.
RELEASE	Freeing "frozen" columns in a spreadsheet so that the data can be edited.
RELOCATION	The relocation function automatically moves the carrier or cursor to the end of the current line after correction has been carried out in the middle of the line.
REVERSE IMAGE	A way of highlighting text by reversing the screen image so that text appears dark and the area surrounding it appears light.
RIGHT MARGIN FLUSH	A layout function that allows you to automatically align the text of a line with the right margin. This is useful, for instance, when you type the date on a letter.
ROM	Read Only Memory. This kind of memory is where the manufacturer stored the software for this word processor. This permanent memory is not cleared when you turn the power off.
ROW	On a spreadsheet, a horizontal grouping of information which is one cell high.
SCALE	The line at the top of the display that shows the horizontal position of the cursor as well as the position of the margins, hot zone, and tab settings.
SCROLL	When all data cannot fit on the screen, changes the displayed data such that as old data disappears at one edge, new data appears at the opposite edge.
SELECT	To display and print data in a spreadsheet or address book that meet certain criteria.

- SEARCH & REPLACE** The search and replace function automatically scans the document and stops at each occurrence of a specified word. It allows for easy replacement of a word.
- SHORT-CUT KEYS** Keys that are used to activate a function quickly, without displaying the function menu.
- SOFT HYPHEN** A hyphen typed to divide a word in the hot zone that disappears if subsequent revision or reformatting moves the word out of the hot zone.
- SORT** To reorganize spreadsheet or address book data in either alphabetic or numeric order (or reverse order).
- SPREADSHEET** The Spreadsheet application allows you to create files containing numbers to be calculated. Calculation is performed automatically. This application is ideal to create files like financial reports, balance sheets, check books, playlists, etc.
- SPELL CHECKER** A sophisticated package of functions including a spell checker program with a user dictionary. The spell checker function automatically checks your text and warns you when a mistake is detected (misspelled or double word).
- STATUS LINE** The area at the top of the screen showing the name of the file you are working on, the current page, line, and column number of the cursor, number of characters remaining on the line, and the current settings such as Keyboard, Pitch, and Line Spacing.
- STOP SYMBOL** Stop symbols can be inserted in your file in order to automatically interrupt printing. When printing is interrupted, you are free to type additional text on the paper. That text will not be stored in the memory.
- SUBMENU** A menu that “drops down” from a function menu to display a list of additional options related to your function menu choice.
- SUBSCRIPT** A character that must be printed at a position slightly lower than normal characters. Used to type mathematical expressions or chemical formulas.
- SUPERIMPOSED** A character like “ Ψ ” is not directly available CHARACTERS on the keyboard, but can be obtained by superimposing “Y” and “=”.

SUPERSCRIP	A character that must be printed at a position slightly higher than normal characters. Used to type mathematical expressions (exponents).
SYMBOL KEYBOARD	The Keyboard setting that offers mathematical symbols and Greek characters.
TEMPLATE	A skeleton spreadsheet that you can start with rather than creating a spreadsheet from scratch. The template includes the standard labels and formulas for a specific purpose.
TOP COVER	The clear plastic cover that protects the inside of the word processor and decreases printer noise.
TYPE MODE	An option of the Typewriter application in which the characters you type are printed immediately rather than being displayed on the screen.
UNDERLINE	With this word processor, characters can be automatically printed with an underline.
USER DICTIONARY	A list of words that are not in the Spell Checker standard dictionary, which the Spell Checker consults when checking spelling in your document.
WORD OUT	The WORD OUT function allows you to quickly erase the word the carrier or cursor is on, from the current position to the beginning of the word.
WORD WRAP	When displaying or printing a file, a word that cannot fit on a line is automatically moved to the next line.
WRITE PROTECTION	Protecting a diskette from accidental erasure by setting the write-protection switch in "Read Only" position.

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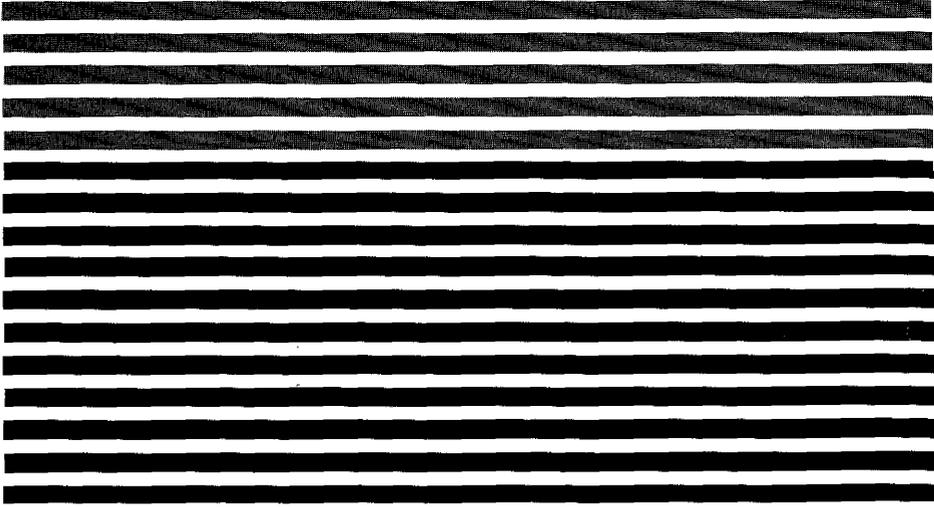
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