

SECTION 5

ADVANCED FUNCTIONS

This section describes the advanced capabilities of WordPro 4 Plus. These functions include additional formatting features such as automatic page headers and footers, underlining text, hyphenation, column add/subtract, and simultaneous input/output. The Extra Text Mode and Numeric Mode are also explained in this section.

With the Extra Text Mode you can write and store "standard" or "boilerplate" paragraphs to use over and over again in letters and documents. You can also produce form letters manually or automatically with the Variable Blocks feature.

The Numeric Mode enables you to easily type columns of numbers containing equal decimal places. WordPro 4 Plus automatically lines up the numbers. Setting and clearing tabs is also explained under Numeric Mode.

Two advanced editing features are also explained in this section; the FIND Function and GLOBAL SEARCH AND REPLACE. Global Search and Replace enables you to search and replace through a series of linked files. The HUNT function is also explained. This function enables you to search for strings of text without changing the text.

This section includes:

- .Advanced Formatting Features
- .Using the Extra Text Mode
- .Using the Numeric Mode
- .Column Add/Subtract
- .Superscripts/Subscripts
- .Simultaneous Input/Output
- .Advanced Editing Features

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## LESSON 1

### ADVANCED IMBEDDED FORMATTING FEATURES

This lesson explains the advanced formatting features of WordPro 4 Plus; underlining, bold face printing, specifying a forced space, hyphenation, and setting heading and footing text.

NOTE: Please note that all Advanced Formatting Features to be mentioned occupy one character space in the Edit Mode, but not on the printed text. Also, these Advanced Functions should be inserted after you have created columns of text.

#### Specifying Underlining/Enhancement

This feature produces underlining on ASCII printers and enhancement on Commodore Matrix Printers. Enhancement prints the characters twice as wide as ordinary ones, with double-size spaces between words.

To turn on underlining/enhancement:

press <CONTROL> [ (left bracket).

To turn off this function:

press <CONTROL> ] (right bracket).

Pressing <CONTROL> [ will produce a small square on your screen during Edit Mode that will indicate where to begin underlining/enhancement during printing. Type in the text to be underlined and press <CONTROL> [. A similar but different square will appear to indicate the end of underlining or enhancement. Pressing <RETURN> also acts as a <CONTROL> [. In other words, after typing in your text to be underlined, pressing <RETURN> will end underlining.

It is easier not to use justification when you are using enhancement. However, if you must use justification with enhancement, try to have no spaces in the enhanced phrase. If you need more than one word, either specify all spaces as forced spaces, or use a separate enhancement specification (on and off) for each word.

#### SPECIFYING BOLD FACE PRINTING

**Bold Face Printing is available on most letter-quality printers. Bold Face Printing is activated by pressing <CONTROL> 8. A small "right angle" graphics character will appear on your screen that will indicate where to begin Bold Face Printing. Type in the text to be printed and press <CONTROL> 9. A similar but different "right angle" graphics character will appear on your screen that will indicate where to end Bold Face Printing.**

**Bold Face Printing and Underlining can be used at the same time if required.** <CONTROL> 8 and <CONTROL> I (in sequence) will underline and Bold Face Print all of the subsequent text until one (or both) of the functions is turned off via a <CONTROL> 9 or <CONTROL> J. As with Underlining, a <RETURN> will automatically turn off the function.

#### Specifying A Forced Space

Normally, when you press the space bar, you are telling WordPro 4 Plus that you have come to the end of a word. WordPro 4 Plus will end a line separating two words, only where there are spaces.

You can also tell WordPro 4 Plus when you want an unbroken or "forced" space, that is, where WordPro 4 Plus will not separate two words by putting them on different lines. For example, you might want to tell WordPro 4 Plus not to separate "WordPro" and "4".

To specify a forced space, hold down the SHIFT key and press the space bar. WordPro 4 Plus displays the bottom 1/4 of a solid square on the screen where you have specified a forced space.

#### Specifying Hyphenation

WordPro 4 Plus does not usually hyphenate words. However, you can use semi-automatic hyphenation by specifying where in a word you would like hyphenation to appear if it is needed.

If you specify a hyphenation point in a word, and the whole word fits on a line, WordPro 4 Plus ignores the hyphenation point. If the word occurs at the end of a line, and the whole word will not fit on a line, WordPro 4 Plus checks to see if the part of the word up to the hyphenation point will fit. If so, WordPro 4 Plus hyphenates the word. This command is useful when you have a letter or document containing a long name, title, location, etc., that is used repeatedly.

To specify a hyphenation point, enter a "long dash" where you would want the hyphen to appear during printing. To enter a "long dash", press <CONTROL> = (minus sign). WordPro 4 Plus displays a "long dash" on the screen. You may specify only one hyphenation point per word.

#### The Header (hd) And Footer (ft) Commands

The head (or header) is a line which appears at the top of every page of text in your document. The footer is a similar line which appears at the bottom of every page. Either the header or the footer can contain a title, page number, or other material you want printed on every page (such as "Confidential" or "Preliminary"). You may specify a header, a footer, or both a header and a footer.

When you include a header (hd) or footer (ft) command in the text, it must be on a format line by itself or the last format command on a format line. It is good practice to put the hd and ft commands on format lines by themselves.

The hd or ft is always followed by a number. In the hd command, this number specifies how many blank lines will be printed between the header line and the beginning of the text on the page. In the ft command, the number specifies how many lines from the bottom of the page the footer lines will be printed.

Before specifying the hd or ft numbers, be sure to check your pp and pg commands. The top-of-page and bottom-of-page margins must be large enough to include the lines where you are specifying the header or footer to appear. For example, if your pp and pg commands specify six blank lines at the bottom of the page, your ft value should not be more than 5.

After the hd or ft number, enter a colon. When using a Commodore Matrix printer, however, using a semi-colon in place of a colon will produce enhanced (wider) printing.

Next you specify the contents of the header or footer. Each header or footer has three fields -- left, center, and right. The contents of the left field start at the left margin. The contents of the center field are centered on the page. The contents of the right field are right aligned. You may put text into any or all of these fields. The contents of individual Header and/or Footer fields may be underlined by inserting a "begin underline" character (<CONTROL> \_) before the first character in each field.

After the colon or semi-colon in the hd or ft command, enter the contents of the left field, a comma, the contents of the center field, a comma, and the contents of the right field. If you omit the left or middle fields, do not omit their commas, because WordPro 4 Plus counts the commas to tell what field you are specifying. For example, if you want text only in the center field, be sure to put a comma before it (but not after it), or WordPro 4 Plus will think you are specifying the left field contents.

If you want the header or footer to include a page number, enter the symbols <> where you want the page number to appear. WordPro 4 Plus inserts the correct page number starting with page #1, (unless otherwise specified in the p# format command) as it prints each page. The p# command allows you to set a starting page number for use with the <> symbols in a header or footer command. The p# should be on a format line that precedes the format line containing the header or footer. The p# command takes the form:

example: @p#55 <RETURN> (sets page # starting at page 55)



### Margins For Headers and Footers

Normally the Header or Footer will be printed relative to the currently set Left and Right margins. Most of the time, this is fine, but sometimes, you may have changed the margins to do something special, like an indented paragraph, and the page break occurs during it. This causes the Footer and Header to appear with the same margins as the indented paragraph.

To preclude that potential problem, two imbedded format commands are available: hl and hr, for HEADER LEFT and HEADER RIGHT. The values given these commands also apply to the Footer. Simply set these commands to the Left and Right margins that you would like the Header and Footer to adhere to.

Compatibility is maintained with other WordPro files, because if no hl or hr is set, the Header and Footer will just use the currently set Left And Right margins as before.

LESSON 2EXTRA TEXT MODE

The Extra Text area of memory can hold special text such as frequently used phrases or paragraphs, variable blocks for form letters, as well as normal text. This "alternate memory area" can be used in the same manner as the main memory. As an example, if enough "lines" were allocated to the Extra Text area during Start Up, a letter could be recalled into both the Main and Extra Text areas. The number of lines held in Extra Text is established after you load and run WordPro 4 Plus during the System Set Up.

How many for main text?  
(Min=87, Max=150)

Since 173 lines of text can be held in memory, the maximum numbers of lines for Extra Text is the remainder of the number of lines you entered at the above prompt subtracted from 173. WordPro 4 Plus will always allocate 23 lines for EXTRA TEXT area, unless you specify more.

To enter Extra Text Mode, press <CONTROL> X. The Status Line displays:

Switch :X:I:S:C:N: C= XX L= XX

and the :X: indicator light turns on. To switch back to main text, press <CONTROL> X again. Extra Text is useful for appending frequently used phrases, groups of characters, producing form letters, and calling directories without effecting Main Memory (your text).

Appending Groups Of Lines (Frequently Used Phrases)

You can write entire paragraphs (or recall/store paragraphs from diskette) into Extra Text to append to the main text at any time. For example, you can create a letter by pre-writing a series of specially prepared paragraphs in Extra Text (or recalling into Extra Text a text file containing standard paragraphs), then append them to one another in any order in Main Text to create the letter.

Each group of lines or each paragraph in Extra Text must have a name to use when you append it to Main Text. To type in a paragraph enter Extra Text Mode, then press the ARROW UP key. Type the paragraph name, then the press the ARROW UP key and press <RETURN>. The paragraph name must be enclosed in ARROW UPs and must be placed on its own line. Then type in the "Standard Paragraph", followed by a <RETURN>.

Example:

|a| <RETURN>

This is a paragraph written in Extra Text and named "a". It could have almost any number of characters in the name but if you use too many, you might forget them. <RETURN>

### Appending Extra Text

To append a group of lines from Extra Text to Main Text, place the cursor on the line where you want the Extra Text lines to begin. Press <CONTROL> a. The Status Line displays:

Append Lines: \_\_\_\_\_ C= 1 L= 1

Enter the name of the group of lines you wish to append, in this case "a". The lines are brought into Main Text, one by one, and "make room" for themselves by pushing down all text below the cursor.

In many instances you need to enter a long name repeatedly in a document. With this function, you can enter an abbreviation while you are typing and append the full name from Extra Text. Enter in Extra Text (or recall from disk) a list of abbreviations (enclosed by ARROW UPs) and full names separated by an equal sign (=). For Example:

|psi|=Professional Software Inc.<RETURN>  
|pms|=Pro-Micro Software Ltd.<RETURN>

Then, instead of typing the full name in the main text, press <CONTROL> y (for Variable). The Status Line displays:

Append Chrs: \_\_\_\_\_ :X:I:S:C:N: \_\_\_\_\_ C= xx L= xx

Type the abbreviation of the word or words you want to insert into the Status Line, and WordPro 4 Plus inserts the full name where the cursor is located in the main text.

NOTE: Both types of Extra Text variables (characters or lines) may exist at the same time, but names may not be duplicated. If you attempt to find an "Append Lines" variable, and the variable found is an "Append Chrs" type (or vice-versa), then the Status Line will show the following error:

Variable Type Mismatch \_\_\_\_\_ :X:I:S:C:N: \_\_\_\_\_ C= xx L= xx

On the other hand, if the variable is simply not found, the Status Line will show:

Variable Not Found \_\_\_\_\_ :X:I:S:C:N: \_\_\_\_\_ C= XX L= XX

### Variable Blocks

The Variable Blocks function enables you to produce form letters or mailings semi-automatically or automatically. A form letter is typed or recalled into Main Text, with a <CONTROL> h (this produces a special symbol) wherever blocks of variable text occur. You can insert the variable text manually, or you can type the variables into Extra Text and let WordPro 4 Plus automatically produce and print the entire form letter. Variable Blocks can also be sequentially read from diskette (see programmer's notes).

### Automatic Variable Blocks

To produce form letters automatically, type the letter in Main Text using a <CONTROL> h where you would like the variable text to appear. A typical form letter appears like the sample below:

Dear <CONTROL> h:

We are sorry to inform you that your order for <CONTROL> h <CONTROL> h has not yet been shipped. We will ship it as soon as we receive your check in the amount of \$<CONTROL> h.

Sincerely yours,  
Professional Software Inc.

Type the list of variable data in Extra Text with each variable separated by a delimiter. A delimiter can be thought of as a "separator" and can be either a <RETURN> or a <CONTROL> z. Using the <RETURN> key places each variable on its own line, as shown below:

```
Mr. Jones (RETURN)
2 (RETURN)
WordPro 4 Plus' (RETURN)
1799.90 (RETURN)
Mr. Smith (RETURN)
3 (RETURN)
WordPro 1s (RETURN)
189.85 (RETURN)
Mr. Doe (RETURN)
2 (RETURN)
WordPro 4 Plus' (RETURN)
11,199.90 (RETURN)
```

Using <CONTROL> z to separate the variable data items saves line space in the Extra Text memory. The same list of variable data, entered with <CONTROL> z, looks like this:

```
Mr. Jones_2_WordPro 4 Plus'_1799.90_Mr. Smith
3_WordPro 1s_189.85_Mr. Doe_2 WordPro 4 Plus'
11,199.90 <RETURN>
```

The form letter and its variable data can be automatically merged and printed in the OUTPUT MODE. Press the <CONTROL> q (for OUTPUT), then the letter l (for LIST) then <RETURN>. This sequence will produce form letters automatically until the variable block information is exhausted. Adding a "y" (for Video) to the keystroke sequence will merge the variable data with the letter and display them on your screen. This is an excellent "pre-print" procedure.

To check individual letters on the screen before the printing process is started, press <CONTROL> i. Each letter will individually display, in sequence, on the screen. When you use the <CONTROL> i method, each letter must then be printed via the <CONTROL> q sequence after it appears on the screen. After each "filling in" of the Variable Blocks, the following message will appear on the Status Line:

```
Out of Blocks, More Data _____ :X:I:S:C:N: _____ C= xx L= xx
```

This message is telling you that all the Blocks in Main Text have been successfully filled, but there is more data to come. Once the last group of Blocks are filled, the message will read:

```
Data & Blocks Finished _____ :X:I:S:C:N: _____ C= xx L= xx
```

This message indicates successful completion of each form letter. During this process, if an error occurs, one of the following error messages will appear on the Status Line.

```
Out of Data, More Blocks
No Blocks Found
```

Refer to "Error Messages" in Appendix C for a description of these error messages.

When you check the letters on the screen before printing them, the variable data in Extra Text must be reset to the beginning of the list or the home data position. Press <CONTROL> CLR/HOME. The Status Line displays:

```
Home Data? _____ :X:I:S:C:N: _____ C= xx L= xx
```

Carry out the reset function by pressing the <RETURN> key. The Status Line then displays:

Home Data: Executed :X:L:S:C:N: C= XX L= XX

Access the Output Mode to insert the variables and print the form letters automatically. Press <CONTROL> o to enter the OUTPUT MODE. Inform WordPro 4 Plus that variable block information is available in the Extra Text area (in the form of a list) by pressing the letter "l" key (for LIST), then the "c" key (for CONTINUOUS PRINTING until the variable block data is exhausted).

example: <CONTROL> o l c <RETURN>

A sample series of form letters with variable data is shown below as it would appear when printed.

Dear Mr. Jones,

We are sorry to inform you that your order for 2 WordPro 4 Plus' has not yet been shipped. We will ship it as soon as we receive your check in the amount of \$1799.90.

Sincerely yours,  
Professional Software Inc.

Dear Mr. Doe,

We are sorry to inform you that your order for 2 WordPro 4 Plus' has not been shipped. We will ship it as soon as we receive your check in the amount of \$11,199.90.

Sincerely yours,  
Professional Software Inc.

### Manual Variable Blocks

To produce a form letter "manually" type a form letter into Main Text and use the <CONTROL> h command for the location of the variable blocks. To replace the <CONTROL> h's with the variable blocks, first press <CONTROL> TAB. WordPro 4 Plus searches for the first occurrence of a <CONTROL> h and automatically switches to INSERT MODE. Manually type in the variable text, then press <CONTROL> TAB to find the next <CONTROL> h location. When you finish inserting the variables, print the letter using the normal output procedure.

To use the same form letter again, with different variables, press the <CONTROL> key and then the ARROW UP key. This finds the filled variable blocks and deletes the contents. You can now use <CONTROL> TABs to fill in the variables as you did before, and then print the new letter. You can repeat this process as many times as needed.

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EXERCISE 1:

VARIABLE BLOCKS AND APPENDING

This exercise contains two parts. It is recommended you practice both parts.

PART 1 - Variable Blocks

Step 1: To produce form letters automatically, type in the following letter using <CONTROL> h in place of the variable text, as shown below:

Dear <CONTROL> h:

We are sorry to inform you that your order for <CONTROL> h <CONTROL> h has not yet been shipped. We will ship it as soon as we receive your check in the amount of \$<CONTROL> h.

Sincerely,  
Professional Software Inc.

Step 2: To enter Extra Text, press <CONTROL> x (Pressing the <CONTROL> key and then the letter x allows you to switch back and forth from Main to Extra Text without erasing any text).

Notice that the Extra Text area is blank (this is your extra space to use to enter variable data that will fill in the variable blocks). If your Extra Text is not blank, erase any text via <CONTROL> a.

Step 3: Type the following list of variable data in Extra Text:

Mr. Jones <RETURN>  
2 <RETURN>  
WordPro 4 Plus' <RETURN>  
1799.90 <RETURN>  
Mr. Smith <RETURN>  
3 <RETURN>  
WordPro 1s <RETURN>  
189.85 <RETURN>  
Mr. Doe <RETURN>  
2 <RETURN>  
WordPro 4 Plus' <RETURN>  
11,199.90 <RETURN>

Step 4: Press <CONTROL> x to return back to Main Text. (The :X: should not be lit up any more, and the body of the form letter should now be on your screen.)

**Step 5:** To check that your information was properly listed, perform the following steps:

- a) Press the <CONTROL> key.
- b) Press the CLR/HOME key, and the Status Line displays:  
Home Data? \_\_\_\_\_ ;X;I;S;C;N: C= xx L= xx
- c) Press the <RETURN> key and the Status Line displays:  
Home Data: Executed \_\_\_\_\_ ;X;I;S;C;N: C= xx L= xx
- d) Press <CONTROL> i (for INSERT).

The blocks are now being filled with the information you previously typed in Extra Text. Only the first batch of information was entered. To retrieve the second, press <CONTROL> i again and the next set of blocks are filled. Repeat this process until you feel you understand it.

Performing steps a, b, and c will allow you to re-use the variable data.

**Step 6:** To print this information, the blocks can automatically be filled on the screen and the paper. It does not matter what variable blocks are already listed on the screen when printing. WordPro 4 Plus automatically starts with the first name (variable block) listed in Extra Text. Perform the following steps:

- a) Press <CONTROL> o (for OUTPUT)
- b) To let the computer know you have a list of information in Extra Text, <PRESS> the letter l (for LIST) and press the <RETURN> key.

Notice that the screen picks up the first set of information from the Extra Text area and then prints the letter. To get the second set of Variable Blocks, put another piece of paper in the printer (if necessary) and <PRESS> o (for CONTINUE). The next block of information will be filled and the letter printed.

Step 7: Perform Steps 5a, b, and c. Then <PRESS>:

<CONTROL> a l e y <RETURN>

This merges your variable data and "prints/displays" it on your screen. Pressing any key will scroll through the first form letter, pick up the next set of variable data, and display it to the screen. This procedure (of printing to the screen) is an excellent pre-print procedure.

Step 8: Erase the text from the Main Memory via <CONTROL> a a. Then switch into Extra Text and erase that text. You are now ready to do Part 2 of this exercise.

## PART 2 - Appending

Several times you may find yourself using parts of a letter or document over and over again. These standard paragraphs or phrases are called Appends and can be easily inserted into text. You need to only type them once and with the use of Extra Text, you can call them into Main Text when needed.

To better understand the capabilities of Appends, follow the practice exercise below:

Step 1: Enter Extra Text (if the :X: is highlighted on the Status Line, then you are already in Extra Text) by pressing <CONTROL> X. First define each paragraph as a separate entity by giving it a number or name. In this case, use a number.

<PRESS> ARROW UP. A vertical line appears on your screen.

<TYPE> the number 1 and then <PRESS> ARROW UP again, then press <RETURN>.

Step 2: Type the following paragraph right under your append symbol using full 80 character lines:

We would like to continue as your insurance broker and therefore hope that you comply with the above where it will not be necessary to discontinue your policy.<RETURN>

Step 3: We will now type another sample paragraph for appending. Make sure you have pressed the <RETURN> key after the last line of the above paragraph.

<PRESS> ARROW UP and <TYPE> the number 2 and then <PRESS> ARROW UP again followed by <RETURN>.

Step 4: Type the following paragraph:

Should you require further assistance, please contact us at 444-9999. Expect to hear from me within the next 10 days to arrange for a mutually convenient appointment. Once again, thank you for your interest in PSI products.<RETURN>

**Step 5:** Memorize this text on a diskette, and name it with the Filename "appends" (see section on "MEMORIZE" if necessary.)

**Step 6:** ERASE ALL of the screen via <CONTROL> a.

**Step 7:** Type any standard form letter with a hypothetical date, name, address, etc., into Main Text.

The first paragraph we will recall is the insurance paragraph. Enter your Extra Text (<CONTROL> x) and RECALL the file named "appends" from diskette.

Once the text file has appeared on your screen, switch back to Main Text by typing <CONTROL> x.

**Step 8:** Bring your cursor to where the first paragraph should start (under the name, address, etc). Press <CONTROL> a (For Append). Now <TYPE> the number 1 (the symbol we gave that particular paragraph). Press the <RETURN> key.

Your paragraph will now have appeared in your Main Text without having to manually type it in.

**Step 9:** Follow the above instructions several times using the Append command for both paragraphs. Remember, your file name 'APPEND' must be in Extra Text for you to append it into Main Text.

**NOTE:** Appends are often used to append entire salutations or signature blocks from Extra Text into a letter in Main Text.

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LESSON 3TABS AND NUMERIC MODE

TABS may be set at as many of the 80 screen columns as you desire. To set a TAB, move the cursor to the column of the desired TAB and press <CONTROL> g. The Status Line will change to show:

Tab Set At N \_\_\_\_\_ :X:L:S:C:N: \_\_\_\_\_ C= xx L= xx

You will also note that on the solid line separating the Status Line from text, is a small downward extension, at the position of the TAB. This is the TAB set indicator, and one will appear at each position where there is a TAB already set. WordPro will also allow you to automatically set TABs at the column locations of 1, 21, 41, and 61 (these are the same TAB locations that are preset when a Directory is called) by <PRESSing> <CONTROL> <SHIFT> k.

If you wish to clear an individual TAB, move the cursor to the column of the unwanted TAB to be cleared, and press <CONTROL> g. The Status Line will change to show:

Tab Cleared At N \_\_\_\_\_ :X:L:S:C:N: \_\_\_\_\_ C= xx L= xx

All the TABs may be cleared at once by pressing <CONTROL> k. The Status Line will change to show:

Clear All Tabs \_\_\_\_\_ :X:L:S:C:N: \_\_\_\_\_ C= xx L= xx

TABS are executed by <PRESSing> TAB while in Edit Mode. The cursor will move to the TAB position. If there is no TAB to the right on the same line, then the cursor will move to the first TAB on the next line down. NOTE: If your computer does not have a TAB key, use the ARROW-LEFT key (located at the upper left-hand corner of the keyboard).

SAVING TABS WITHIN TEXT

If you have TABs in your document, these TABs will be automatically stored when you Memorize or Replace your document. When you Recall the document, the TABs will appear in their proper position.

NUMERIC TABS

A NUMERIC TAB (once set) allows you to automatically enter NUMERIC MODE when you TAB to the position. Numeric Tabs will be explained in more detail later in this section.

**NUMERIC MODE**

NUMERIC Mode is used to line up columns of numbers that have the same number of characters to the right of the decimal. The NUMERIC Mode is activated by TABBING to a previously-set Numeric Tab position. The :N: on your Status Line will highlight when you have TABBED to a pre-set Numeric Tab location.

To enter numbers with automatically aligned decimals, tab to a pre-set Numeric Tab position. The :N: on your Status Line will highlight to indicate that you are now in Numeric Mode. The cursor will stay stationary, while the numbers appear to the left as they are entered, as shown below:

```

          $12.44
          122.01
           1.25
    $1222.44
  
```

You will automatically exit from NUMERIC Mode when your cursor leaves the Numeric Tab position.

**SETTING NUMERIC TAB MODE**

Using this function (and pre-set Numeric Tab locations), you are able to automatically enter NUMERIC MODE in order to easily enter numbers into columns of figures.

To set a normal Tab position, you move your cursor to the position where you would like to set your Tab, then press

<CONTROL> S

A small square appears on the underside of the Status Line in the column where the Tab was set. To TAB to this position, the User presses the TAB Key.

**SETTING A NUMERIC TAB.** As with regular TABS, move the cursor to the position where the TAB is to be set, but instead of <CONTROL> S, use <CONTROL> N. This sets a Numeric Tab. The Numeric Tab as it appears on the screen is slightly different in that it descends a little further below the Status Line. To clear a Numeric Tab, use the same procedure as with a regular Tab.

**ENTERING NUMERIC MODE.** Numeric Mode is entered automatically when you set a Numeric TAB, or when you TAB over to a Numeric TAB (BUT NOT WHEN YOU ARRIVE THERE BY ANY OTHER MEANS, i.e., using the space bar to space over to it). As long as the cursor remains at the Numeric Tab position, numeric mode will remain active, but the moment the cursor leaves this position (except if TABBED over to another Numeric Tab), numeric mode will be cancelled.

MINUS SIGNS. Three types of minus signs are accepted for negation. Example:

12.77-            or            -12.77            or            (12.77)

These all mean "negative - twelve - point - seven - seven".

This means that you just type in the kind of "negation method" that you like best and WordPro 4 Plus will automatically use the right method.

An example of setting and using Numeric Tab Mode is shown in the next few pages.

COLUMN ADD/SUBTRACT

You may add almost any column of numbers within text using this function. You can add as many 12 digit wide (maximum width) columns as you can fit on the screen display, giving you 12 digits of accuracy.

CURSOR POSITIONING. The position of the cursor determines what column will be added, and where the answer will be placed in text. Vertically, the cursor should be placed directly below the numbers or columns to be added. Horizontally, the cursor should be placed on the space that immediately follows the last digit of the column to be added (this is the same relative position the cursor is placed in to enter numbers using Numeric Mode). The line the cursor rests on will tell WordPro Four Plus on which line the result is to be placed.

Example: (with Numeric Tabs set at columns 20 and 40)

\$1,234.56	\$1,234.56
\$(1,111.11)	\$(1,111.11)
\$222.22	\$333.33
-----	-----

To add the first column of numbers in this example you would move your cursor to a line below the column of numbers and <PRESS> the TAB key. This would automatically position the cursor. Alternatively, after moving your cursor to a line below the column, you could move the cursor over to the space directly after the last "2" in the number \$222.22. One of these two methods will position the cursor correctly.

ACTIVATING THE FUNCTION. To activate the function, position the cursor below and one space to the right of the column to be added and enter <CONTROL> <SHIFT> = (equals key). You MUST hold the shift key down while typing the equals key.

After positioning the cursor under the first column of our example we would activate the function by pressing <CONTROL> <SHIFT> =. The result would be as shown below:

\$1,234.56	\$1,234.56
\$(1,111.11)	\$(1,111.11)
\$222.22	\$333.33
-----	-----
345.6711	

SETTING A RANGE. You may want to tell WordPro 4 Plus what range of lines within the chosen column to add. If you want to add all the lines from the top of main text down to the cursor, simply enter the function as described above and no Range will be assumed.

If a specific range is desired, set a Range over the lines you require and then enter the function. Since there is a range set, the prompt "Range or All?" will appear on the Status Line. If you push a, operation will proceed as described below.

If you wish to add all the lines from a specific line down to the cursor, there is an easier way of doing it, rather than setting an entire range. Simply set a range on the single line which you wish to start the function from. The function will then act upon only the numbers on and below the line where the Range was set. If you have different columns of numbers, probably separated by some text, in the same vertical columns, WordPro 4 Plus may add them all. Setting a Range will preclude this from occurring.

NEGATIVE NUMBERS. Numbers in the column which are negative will, of course, be subtracted, rather than added. Three types of negation techniques are supported. Consider the number, negative twelve, point seven, seven. It can be written as:

-12.77            or            12.77-            or            (12.77)

If the result of the Column Add is negative, the type of negation used in the column will determine the type used in the answer.

At your leisure, using the example shown above, set a few Numeric Tabs, enter a few columns of numbers, and practice the Column Add/Subtract function.

EXERCISE 2:

SETTING NUMERIC TABS AND  
DECIMAL TABULATION

The NUMERIC Mode (or decimal tabulation) allows you to set up columns of numbers using decimal points and pre-set NUMERIC TABS, without having to line up each decimal point one at a time. Perform the following practice for NUMERIC Mode:

Step 1: Clear your screen by pressing <CONTROL> e a.

Step 2: Move your cursor over to column 15 (watch the column indicator on the Status Line). Press <CONTROL> n to set a NUMERIC TAB. Your Status Line displays:

Numeric Tab Set At 15 \_\_\_\_\_ :X:I:S:C:N: \_\_\_\_\_ C= xx L= xx

Notice that a block appears on the bottom of your Status Line that is similar to, but larger than, the block that appears when you set a regular Tab.

Repeat setting Numeric Tabs, as shown above, at column 30 and at column 45.

Step 3: Press the CLR/HOME key to bring the cursor back to the C=1 L=1 (HOME) position.

Step 4: Use your TAB key (just like on a regular typewriter) to tab over to your first tab position (column 15).

Notice that you automatically enter Numeric Mode once you have TABbed over to a pre-set Numeric Tab position.

<TYPE> the number 23.50 and <PRESS> TAB again (You are now on column 30). <TYPE> \$155.30 and <PRESS> TAB, then <TYPE> the number 6,548.20 and then <RETURN>.

**Step 5:** Your screen should now display:

23.50                      155.30                      6,548.20

<PRESS> TAB again (bringing you to column 15, line 2).

<TYPE> the number 444.22 and <PRESS> TAB.

<TYPE> \$20.22 and <PRESS> TAB.

<TYPE> the number 1.30 and <PRESS> <RETURN>.

Your screen should display:

23.50                      \$155.30                      6,548.20  
 444.22                      \$20.22                      1.30

Notice that all of your decimal points are lined up for you automatically.

When using NUMERIC Mode, make sure that you have the same amount of numbers to the right of the decimal point.

Position your cursor under (and one space to the right of) the second "2" in 444.22 and press <CONTROL> <SHIFT> =

The total will automatically display. Now practice Column Add/Subtract on the other columns of numbers.

If you wish to clear an individual TAB, move the cursor to the column of the unwanted TAB to be cleared, and press <CONTROL> g. The Status Line will change to show:

Tab Cleared At N                      :X:I:S:C:N:                      C= xx L= xx

All the TABs may be cleared at once by pressing <CONTROL> k. The Status Line will change to show:

Clear All Tabs                      :X:I:S:C:N:                      C= xx L= xx

**Step 6:** Memorize this text as a Text file named "numbers".

**Step 7:** ERASE the screen (your text).

**NOTE:** Numeric Tabs must always be at least twelve columns apart for the Column Add/Subtract to calculate properly.

LESSON 4SEARCHING

To hunt for a text string of characters in Main Text without changing them as in Search-and-Replace, press <CONTROL> f. The Status Line displays:

Search:[previous search string]:X:I:S:C:N: C= xx L= xx

You will note that this is the same prompt that you received when executing the Search-and-Replace function. Either accept the currently displayed text string (if any) by pressing <RETURN>, or <TYPE> in a new text string followed by <RETURN>.

The Status Line now displays:

String Search :X:I:S:C:N: C= xx L= xx

You may choose to search for the character string exactly as you entered it or for absolutely every occurrence of the string. Searching "absolutely" will locate the character string in text regardless of the case (upper or lower) of its letters. In other words, if you wanted to search for the word "and" as well as "AND", then you would choose to search "absolutely". To choose this option <PRESS> the letter a and the Status Line will change as shown below:

String Search (A) :X:I:S:C:N: C= xx L= xx

If you wish to search for the string exactly as it was entered press nothing at this point and go on to the next step.

As with search-and-replace, you may choose Global or Local operation. To choose Local, <PRESS> the letter l. The Status Line will change to:

String Search (LOC) :X:I:S:C:N: C= xx L= xx

The cursor will come to rest at the character position immediately following a section of text which matched the search text string. If there are no matches to be found, the cursor will come to rest on the 80th position of the last line of text.

Restarting a Local Search via the HUNT Command

Once a match is made, you will probably want to continue the search to see if there are any other matches. Instead of going through the long procedure described above, all you need do is press <CONTROL> h (for HUNT). This will immediately start a hunt of the most currently defined search text string. There is no Status Line message for this function.

\* \* \* \* \*

LESSON 5GLOBAL FILES

Previously in this User's Guide, the term "Global" has been mentioned. The term "Global" means that the given command will work upon more than one file stored on diskette, when the files are linked together by means of a special in-text command.

Assume, for instance, that you are writing something the size of this User's Guide. It is immediately obvious that the whole guide will not fit in Main Text. Somehow, you must be able to have multiple files on disk which can be linked together and then manipulated sequentially to perform functions on the entire document.

Linking Files

Once you have done as much in a single file as you feel is practical, you are now ready to Link this file to a new one, and save it on disk. On a blank line (below the very last line of text), simply <TYPE>

@nx:[next filename] <RETURN>

The nx format command must be on the line below the very last line of your text, otherwise it will be ignored. However, the nx linking command must not be the last possible screen line (line 116) for the function to operate correctly.

Global Operation

While a function is operating Globally, the Status Line will continually show the current file being acted upon:

Global : [current file] :X:I:S:C:N: C= xx L= xx

As WordPro 4 Plus continuously has to load different files during Global operations, there may be a case where it cannot find the file specified in the nx command. If this is so, the function will end and the Status Line will show:

Not End: [suspect file] :X:I:S:C:N: C= xx L= xx

If a file is acted upon which has no nx command at the bottom, the Global function assumes this to be the last file, and the Status Line shows:

Done : [last file name] :X:I:S:C:N: C= xx L= xx

You may cancel a Global function at any time by <PRESSING> RUN/STOP then <CONTROL>. Once WordPro 4 Plus has finished acting upon the current file, the function will end and the Status Line will show:

Cancel : [current file name] :X:I:S:C:N: C= xx L= xx

Global Find

To hunt for a character string through a series of files linked with the nx command, follow the instructions for Local Find, but when the Status Line shows:

String Search \_\_\_\_\_ :X:I:S:C:N: \_\_\_\_\_ C= xx L= xx

<PRESS> g (for Global) instead of l (for Local). As with the Searching function, you may choose "absolute" at this point. This will globally find all occurrences in either upper or lower case. The Status Line now displays:

Global : \_\_\_\_\_ :X:I:S:C:N: \_\_\_\_\_ C= xx L= xx

<TYPE> the file name of the first file to be searched and press the <RETURN> key. All files which are to be used for global operations, i.e. "linked files", must end with the nx: format command except the very last file.

Restarting a Global Find

Once the cursor has come to rest at a matched text string, you may re-start the Global search with <CONTROL> CRSR RIGHT/LEFT key. When you re-start the Global Search the Filename displayed will be an ARROW UP. Once the next file is loaded, the Status Line display will perform as previously described.

\* \* \* \* \*

GLOBAL SEARCH-AND-REPLACE

To replace a character text string with a new character text string through a series of linked files, press <CONTROL> @ (at-sign). The Status Line displays:

Search : [previous search string]\_\_\_\_\_

Accept the current text string (if any) by pressing <RETURN>, or <TYPE> a new text string, then press <RETURN>. The Status Line now displays:

Replace: [previous replace string]\_\_\_\_\_

Accept the current text string (if any) by pressing <RETURN>, or <TYPE> a new text string, then press <RETURN>. As with the Searching function, you may choose "absolute" at this point. This will globally find all occurrences in either upper or lower case. The Status Line now displays:

Search and Replace \_\_\_\_\_ :X:I:S:C:N: \_\_\_\_\_ C= xx L= xx

To search and replace text through a series of files linked with the nx command, <PRESS> g. The Status Line displays:

Global : \_\_\_\_\_ :X:I:S:C:N: \_\_\_\_\_ C= xx L= xx

Enter the name of the first file to be searched through and press <RETURN>. This file will be recalled from disk before searching commences. The Status Line displays the name of each file it is searching and the screen displays the replacements as they are made.

NOTE: The Global Search and Replace function automatically REPLACES files on diskette after the searching and replacing of each individual file is completed.

If you are editing a document and wish to initiate a Search and Replace starting with the document you are working on in Main Text, do not forget to REPLACE or memorize the document onto a diskette before starting the Global Search and Replace Function.

\* \* \* \* \*

LESSON 6GLOBAL OUTPUT TO PRINTER

Global Output, the chaining together of all the files to create an unbroken print out, is one of the most important Global functions. Using Global Output is quite simple; first, enter the Output mode by pressing <CONTROL> o. The Status Line will show:

OUTPUT \_\_\_\_\_ : : : X

Now <PRESS> g to indicate continuous printing (unless you do not have a tractor feed printer and have to put each piece of paper in by hand) then <PRESS> g to indicate Global Operation. The Status Line now shows:

OUTPUT \_\_\_\_\_ :G:C: X

Now decide if you want multiple copies of this document, and if so <PRESS> x and <TYPE> [number of copies] then <RETURN>. If you do not need multiple copies, just hit <RETURN>. The Status Line will now change to show:

Global : \_\_\_\_\_ :G:C: X

Enter the name of the first file in the document (series of linked files), or, if your cursor is placed next to the name of the file in a directory, just <PRESS> the BACKSLASH key. Either way, then press <RETURN> and the first text file will load, display, and begin printing. After the first file has completed printing, WordPro 4 Plus will automatically load and print the next file specified in the nx command.

Restarting a Global Output

If your output is interrupted for any reason (usually a tractor feed paper problem), either by you, or by an error of some sort, you can restart the output from the top of the page at which the interruption occurred, (keeping your sequential page numbers intact), rather than having to go back and print from the beginning of the document (in some cases that could save hours).

It is important to remember one thing; if you make any changes to the file at which the outputting was stopped, remember to re-memorize it before continuing, otherwise the same problem will occur again since the Global Output reloads the file from the disk, not from Main Text.

Once you are ready to continue printing, enter the Output mode and set up a normal Global Output. However, when you are ready to enter the file name, <PRESS> the LEFT ARROW key, then <RETURN> rather than entering the file name. The LEFT ARROW key produces a "Left Arrow" symbol on your screen. Ensure that your paper has been physically reset to the top of an empty page. WordPro 4 Plus will now automatically recall the proper file (last file printed) and start the page again keeping all page numbers in their proper sequence as if the problem had not occurred.

If you attempt to use this Global Restart feature when the last output you did wasn't Global, the Status Line will show the following error:

Last Format Not Global C= 1 L= 1

In this event, you can globally Output to Video to reach the file where printing was interrupted, then break the Output to Video function (via RUN/STOP then <CONTROL>), then re-start printing using the procedure described above. Output to Video is explained in Lesson 8.

\* \* \* \* \*

LESSON 7

GLOBAL COPY

GLOBAL COPY

A series of linked files may be copied from one diskette to another by using the Global Copy command. As an example, if you have three files that are linked (aaa, bbb, ccc) and you wish to globally copy those files to a diskette in the other drive, press <CONTROL> z. The Status Line will display:

Copy To Drive # ?

<PRESS> the number of the disk drive to receive the global linked files (drive number 0, 1, 2, or 3).

Then <TYPE> the drive # containing your linked files, a colon, the name of the first file, i.e., "aaa", then <RETURN>.

example: <CONTROL> z

<PRESS> 1

<TYPE> 0:aaa <RETURN>

This will copy all files that are linked with the file name "aaa" from drive #0 to the drive #1. This function is extremely handy for large linked documents that are stored on a diskette in a haphazard manner. After the execution of this command, the linked files will be stored on the other diskette in linked order.

\* \* \* \* \*

LESSON 8

OUTPUT TO VIDEO

Output to the Video (or screen) is handled much the same way as outputting to the printer. The advantages of outputting to the video are numerous. A few of the advantages are:

- A) You can quickly see what your document will look like without waiting for a paper copy.
- B) You can modify the format of your document to see what it will look like without waiting for a paper copy. This saves you an immeasurable amount of time as outputting to the video is faster than outputting to the printer.
- C) You will save paper as you will not have to print as many rough drafts to see if your pages have the "balanced" look you want.
- D) Finds all format errors before outputting to the printer.

Type the following commands to activate Output to Video:

<CONTROL> o v

The Status Line displays:

Output : C: X 1

Your video screen will now display the document exactly as it will appear when you output to the printer. You may "scroll" through the text by pressing any key except the RUN/STOP key. The video display shows everything that would be output, including headers, footers and page numbers. As you scroll through the text you will see a solid line across your video screen. This solid line indicates where one page ends and the next one starts. When you get to the "page-break-line" for the last page of your text, the video will show three up arrows, to indicate that you have viewed the last page of your document.

---

Notice that when performing a Video Output, <PRESSing> the letter "c" (for continuous output) is not necessary. Continuous mode is automatically assumed when performing Output to Video.

As you proofread your text files for content or review your work for margins and balance, you may want to stop to make corrections or format changes. In order to stop Video Output:

<PRESS> RUN/STOP <CONTROL>

This returns you to the edit mode, allowing you to make necessary changes or corrections before printing a paper copy. (Note: Remember to Memorize your files after the corrections have been made.)

After editing, especially in a global operation, you may continue outputting to Video from the point of interruption, by pressing:

<CONTROL> o g y

then pressing the LEFT-ARROW key, then <RETURN>. This will re-start the Output to Video feature from the file where Output was interrupted. This is basically the same procedure as restarting a Global Output to Printer (once interrupted). Review Lesson 6 for more information.

#### FORMAT ERRORS

During Video Output, format commands (i.e. margins, centering, spacing, etc.) will not appear on the screen. However, should your document contain a "Format Error", the video display will automatically return to the Edit Mode. For instance, if you use the number 1 (one) instead of the letter l for your left margin command, the display reverts back to the Edit Mode and your Status Line indicates that you have a "Syntax Error." The cursor remains on the character where the error was made, allowing you to quickly identify the problem and correct it.

LESSON 9

GLOBAL OUTPUT TO VIDEO

You may review Linked files on the screen using practically the same Global commands used to print paper copies of linked files. This is called Global Output to Video and is accessed by the following commands:

<CONTROL> o g v

The Status Line displays:

Global: \_\_\_\_\_ : G : C : X

Type in the name of the first file you want displayed on the screen and <PRESS> <RETURN>.

Notice that the Status Line shows a "C" (for continuous) rather than a "V" (for Video). WordPro assumes that any Global Video Output will be continuous.

Like any output to video, you can scroll through your Global document by pressing any key except the RUN/STOP key. You will notice that the disk drives are activated whenever WordPro encounters the link command. The computer "reads" the linked files on the diskettes and displays the documents on the screen. In this way, you can review a lengthy document without having to either print a paper copy or recall each linked file individually.

LESSON 10GLOBAL OUTPUT TO VIDEO-TO PRINT FROM ANY PAGE OF A LINKED FILE

You may start outputting to the printer from any page by utilizing the Global Output to Video previously described. Simply type:

<CONTROL> q q (if you desire continuous printing) g y

The Status Line displays:

Global: \_\_\_\_\_ : G : C : X \_\_\_\_\_

Now, type in the first file name and <PRESS> <RETURN>

The document appears on the screen formatted as it would appear on a printed page. Scroll through the document by pressing any key except the RUN/STOP key. When you reach the section of the file you wish to begin printing from, do the following:

<PRESS> RUN/STOP <CONTROL>

This returns your system to the Edit Mode. To begin printing from this section, press

<CONTROL> q g <RETURN>

The Status Line displays:

Global: \_\_\_\_\_ :G: :X \_\_\_\_\_

Instead of typing in a file name, as you normally would to output,

<PRESS> <BACK ARROW> <RETURN>

Using the BACK ARROW KEY instructs the system to begin printing from the top of the last page you viewed on the screen. All format commands, page numbering sequences, headers & footers, etc., will be correct; just as if you had printed paper copies of the preceding pages.

Restarting a Global Output To Video

If your output is interrupted for any reason, either by manually depressing the RUN/STOP key during Output or by a Syntax Error, you can restart the output from the top of the last page at which the interruption occurred, (keeping your sequential page numbers intact), rather than having to go back and Output to Video from the beginning of the document. The system will automatically retain the correct formats, headers, footers and page numbers.

After making the appropriate corrections and changes to the file, at which the outputting was stopped during Output, you must memorize your changes before continuing, otherwise the same problem will occur again. This is due to the fact that the Global Output command reloads the file from the disk, not from main memory. (If the printer stopped because of a Syntax Error, the cursor will appear over the character which caused the error to occur, allowing you to easily identify and correct the problem.) Once you are ready to continue printing, we must re-enter the Output Mode <PRESS><CONTROL> o g y <RETURN>. Notice that when performing a Video Output, <PRESSing> the letter "c" (for continuous output) is not necessary. Continuous mode is automatically assumed when performing Output to Video. The Status Line will show:

Global: \_\_\_\_\_ : G : C : X \_\_\_\_\_

<PRESS> <BACK ARROW> <RETURN>

The Output To Video will begin from the top of the last page you were working on.

If you attempt to use this Global Restart feature when the last output you did was not Global, the Status Line will show the following error:

Last Format Not Global \_\_\_\_\_ :X:I:S:C:N: \_\_\_\_\_ C= xx L= xx

In this case, you will have to Output starting with the first file.

\* \* \* \* \*

LESSON 11

SIMULTANEOUS INPUT/OUTPUT

A document can be output (stored/memorized) to the disk (in a special format) and then automatically printed by WordPro 4 Plus while another document is being typed/edited. This "Simultaneous Input/Output" function will save valuable time as it allows two functions to be performed simultaneously.

We suggest you read this entire Lesson and complete the example at the end of the Lesson, before trying a file on your own. This function may "seem" complex, but it is actually quite simple. We will now ask you to perform a number of keystrokes that will actually perform simultaneous Input/Output, then we will explain the function in detail.

STEP 1) Clear your screen by pressing <CONTROL> e a. Ensure that you have an initialized document diskette in drive #1.

STEP 2) Recall the file named "demo" from your System Diskette by pressing:

<SHIFT> CLR/HOME r demo <RETURN>

This will recall and display the file "demo".

STEP 3) Perform the following keystrokes:

<CONTROL> o d p l dp <RETURN>

Your disk drive will activate and a special type of file (named "dp") will be created on disk drive #1.

STEP 4) Clear your screen by pressing <CONTROL> e a.

STEP 5) Recall the file named "demo 1" from your System Diskette by pressing:

<SHIFT> CLR/HOME r demo 1 <RETURN>

This will recall and display the file "demo 1". At this point we have the file named "demo 1" displayed on the screen. In STEP 3 we performed a sequence of keystrokes that created (and stored) a special type of file (which we named "dp") called a Disk Print File.

STEP 6) To print the Disk Print File, press:

<CONTROL> p

The Status Line will briefly display the message "Disk Print", the printer will activate, and the printing of the Disk Print

File will commence. Notice that we are free to edit the file displayed on the screen while the printer is printing our Disk Print File. This is Simultaneous Input/Output.

When the disk drive is controlling the printing of a Disk Print File, access to the disk drive (or other peripherals) is not available. When the Disk Print File has completed printing, the disk drive becomes available for use.

#### Disk Print File Explanation

Using the PRINTER/MULTI-USER type output, the desired text is outputted to the disk in a special format and named "dp". Since this mode sends to the disk exactly what normally would be sent to the printer, all output features (semi-proportional justification, underlining, bold face, superscripts and subscripts) will be included. Then, at any time, the "special file" named "dp" may be printed directly from the disk to the printer, leaving the CBM 8032/9000 computer available for typing or editing. Although this function may seem complex on the surface, it really is quite simple. -The file was sent out to the disk instead of the printer (it would then be sent from the disk to the printer).

In our example, we instructed WordPro 4 Plus that we wanted to Output by pressing:

<CONTROL> o

This put the unit in Output Mode. At this point, we would have indicated whether or not we wanted to merge variable data from a List (by pressing l - letter "l"), or from a Sequential File (by pressing s), or whether or not we wanted to Output Globally (by pressing g).

Example:     <TYPE> l (for List data),  
              <TYPE> s (for Sequential),  
              <TYPE> g (for Global)

Our example did not use variable data or Global files, Therefore, none of these keys were pressed.

Next, our example indicated to WordPro 4 Plus that we wanted to send a file to the disk by pressing d for disk.

We then <TYPED> p for PRINTER FILE. This indicated to WordPro 4 Plus to send the information to the disk exactly as it would have gone to the printer.

We then instructed WordPro 4 Plus to store the file on Disk Drive #1 by <TYPING> 1. We then named the file "dp" (Disk Print) by:

<TYPING> dp <RETURN>

Remember, the name of the file must always be "dp". If the file name "dp" already exists on disk (from the creation of a previous Disk Print File), the message REPLACE? would appear and you would press <RETURN> to REPLACE the file. At this point, you would have to enter the Global File name and/or the Sequential File name if you had selected them during the Output sequence. Otherwise the file in Main Memory (your screen) will be used as the basis for output.

The disk will now activate and WordPro 4 Plus will create the file named "dp". The original file(s) will remain intact and unchanged. Remember, the "dp" file is stored separately on disk and does not affect the original file (or your other files).

As an example, if two file names, "demo" and "demo 1", were stored on diskette (by themselves), a (partial) directory would show:

```

demo                demo 1                help
blocks free XXX
    
```

To create a Disk Print File from the file named "demo" and store it on drive #1:

Recall the file, then:

```

<CONTROL> o d p l dp <RETURN>
or using a Global operation:
<CONTROL> o g d p l dp <RETURN> demo <RETURN>
    
```

If you had chosen g to create a Global dp file, the Status Line would prompt you with Global:\_\_\_\_\_. You would then enter the name of the first Global file and then <PRESS> <RETURN>.

Once the Disk Print File has been created, a (partial) directory would show:

```

demo                demo 1                help                dp
blocks free XXX
    
```

Notice that the creation of a Disk Print File (named "dp") does not affect the file(s) that it was created from.

Once the file has been completed (in far less time than if the same data were to be sent to the printer) it can be output to the printer at any time with:

<CONTROL> p

The Status Line will change to show:

Disk Print

It will take about 1 or 2 seconds for the disk file to be opened and begin printing, but when it does, control of WordPro 4 Plus will be returned to the operator. Before beginning to print you must have already recalled the file(s) that you wish to edit before printing commences. You cannot use ANY peripherals during Disk Print, which means File Mode, Directory and Output to Disk or Printer is not allowed. Any attempts to use:

- <SHIFT> HOME (File Mode)
- <CONTROL> 0 (Drive 0 Directory)
- <CONTROL> 1 (Drive 1 Directory)
- <CONTROL> 2 (Selective Directories)
- <CONTROL> < or < "comma" (Read Error Channel)
- <CONTROL> > or > "period" (Send Disk Command)
- <CONTROL> SHIFT RUN/STOP (Program Restart)

....will result in the following Status Line message:

Disk Use Not Allowed :X:I:S:C:N: C= xx L= xx

....and the function will not be entered. In the output mode, you will find the following keys have no effect:

- g (for Continuous Output)
- d (for Output-to-Disk)
- g (for Global Output)
- s (for Sequential List Data)
- <RETURN> (for starting printer output)

It is possible to do local Video Outputs, including those using Extra Text and List Data. When a Find or Search & Replace function asks you to select Local or Global, typing g will result in the function being cancelled.

The moment Disk Print is finished printing the file, all peripheral usage will return to normal.

**DISK ERROR HANDLING.** Disk errors occurring as a result of a problem with the "dp" file will simply cause automatic cancellation of the mode. Since this function is designed not to interfere with normal operation of the Word Processor, no error message is returned to the status line. The disk error can be displayed by pressing <CONTROL> < or <.

CANCELLING DISK PRINT. You may cancel the printing of a Disk File at any time with <CONTROL> p (It works like an on/off switch). Some printers may buffer ahead of the data coming from the CBM/PET, so the printer may not stop immediately. Once cancelled, printing of the "dp" file cannot be continued from the point where printing was interrupted. Once printing of the "dp" file has commenced, the file/document will be printed in its entirety without interruption.

You cannot recall a dp file. This is because it is a disk print only file. You still have access to the original file or files from which you made the dp file. If you should need to look at any part of the dp file you should recall the file in which the text was originally stored.

You may have only one dp file per disk. If a dp file already exists and you create a "new" dp file, then the REPLACE? prompt would be displayed. When you press <RETURN> the new dp file will REPLACE the old dp file. The dp file must be on the same diskette as the original file or files from which the dp file was created.

You can scratch (erase) a dp file from a diskette just as you would any other file on your diskette.

\* \* \* \* \*



SECTION 6

FILE HANDLING

WordPro 4 Plus provides complete file handling in the FILE MODE. You can Memorize (save) all of the text in memory or a section of the text. You can transfer text from a diskette to Main or Extra Text, recall a file into text at the end of memory, or between lines in memory.

Press <SHIFT> CLR/HOME to enter the FILE MODE. The FILE MODE commands are explained in the Lessons in this Section.

This Section contains:

- .Complete Memorize
- .Section Memorize
- .Complete Recall
- .Linked Recall
- .Merge Recall

\* \* \* \* \*

LESSON 1COMPLETE MEMORIZE

To memorize (record) the text in the main memory to a diskette, enter the File Mode, then <PRESS> M. The Status Line displays:

MEMORIZE - DRIVE # ? :X:I:S:C:N: C= xx L= xx

Enter the disk drive number that contains the diskette on which you wish to memorize the text. The Status Line displays:

MEMORIZE - N: :X:I:S:C:N: C= xx L= xx

Enter a file name of up to 16 characters and press the <RETURN> key. If no file by that name exists on the diskette the Disk Drive will activate and when the file is recorded on the diskette the Status Line displays:

Stored - N:[file name] :X:I:S:C:N: C= xx L= xx

The file is now stored on the diskette. If a file with the specified name already exists on the diskette, the Status Line will display:

REPLACE? N:[file name] :X:I:S:C:N: C= xx L= xx

Now you must decide whether to keep the existing file on the diskette or whether to replace it with the file in memory. To replace the diskette file with the text in main memory, press the <RETURN> key. This "overstoring" option allows you to easily update letters or documents without renaming them. To abort the memorize command, press the <CONTROL> key.

Erase your screen and type in a sample paragraph and follow the steps listed above to practice memorizing.

\* \* \* \* \*

LESSON 2SECTION MEMORIZE

To memorize a group of lines from the text in memory onto a diskette, first specify the section of text to memorize. To set the range, first position the cursor at the beginning of the text you want to memorize. Then press <CONTROL> r (RANGE). The line with the cursor "highlights". Move the cursor down the screen, highlighting the lines to memorize. Then press the <RETURN> key.

Enter File Mode, and <PRESS> m. When the Status Line displays:

```
MEMORIZE - DRIVE # ? :X:I:S:C:N: C= xx L= xx
```

<PRESS> r. The Status Line then displays:

```
DO RANGE - DRIVE # ? :X:I:S:C:N: C= xx L= xx
```

Enter the Disk Drive number. The Status Line then displays:

```
DO RANGE - N: :X:I:S:C:N: C= xx L= xx
```

Enter the file name to store the group of lines under. WordPro 4 Plus will memorize the lines or tell you that a file already exists under that name just as described above in "Complete Memorize".

Practice the Section Memorize command by choosing a portion of text to memorize on your document diskette in Drive #1. Name this section as "section" when you memorize it.

\* \* \* \* \*

LESSON 3

RECALLING FILES

Complete Recall

To recall a file from a diskette into memory, move the cursor to the beginning of text position by pressing the CLR/HOME key twice. Then enter the File Mode by pressing <SHIFT> CLR/HOME, then <PRESS> r (for RECALL). The Status Line displays:

RECALL \_\_\_\_\_ :X:I:S:C:N: \_\_\_\_\_ C= xx L= xx

Enter the name of the file you wish to recall, then press the <RETURN> key. WordPro 4 Plus will automatically search both diskettes for the file. To search only one diskette for the file (this is a user option), enter the disk drive number, a colon, and the filename as shown below, then press the <RETURN> key.

RECALL N:[file name] \_\_\_\_\_ :X:I:S:C:N: \_\_\_\_\_ C= xx L= xx

When WordPro 4 Plus finds the file, it displays the file on screen. If the file is not found, the Status Line displays:

62,FILE NOT FOUND,00,00 \_\_\_\_\_ :X:I:S:C:N: \_\_\_\_\_ C= xx L= xx

Re-enter the File Mode and re-enter the File name.

Linked Recall

To link lines from one file into another file use Linked Recall. Linked Recall differs from Complete Recall only in the position of the cursor. Place the cursor at the end of the text in memory where the file from the diskette will be linked. RECALL the file following the same procedure as for Complete RECALL. This function will link or add two files together on the display screen as long as both files will fit in Main Memory.

Merge Recall (Insert)

To merge lines from one file into another file use Merge Recall. Move the cursor to the line below where the file from the diskette will be merged or inserted. Enter the File Mode, then <PRESS> i (for Insert). The Status Line displays:

INSERT \_\_\_\_\_ :X:I:S:C:N: \_\_\_\_\_ C= xx L= xx

Type the name of the file to be merged. When WordPro 4 Plus finds the file, the text is inserted beginning with the line that the cursor was on.

\* \* \* \* \*

SECTION 7

DISK DRIVE COMMANDS

There are seven disk functions that can be performed with WordPro 4 Plus. These are:

Formatting - Makes a brand-new diskette ready for operation.

Initialize - Tells the disk drive that a particular diskette has been inserted into the drive for daily use.

Validate - Deletes from the diskette files that were never properly recorded.

Duplicate - Copies all the text from one diskette and makes an identical copy on another diskette. This command is very important as it is used to create "Back-Up" copies of all your files.

Copy - Duplicates individual files on the same diskette or copies individual files from one diskette to another.

Rename - Changes the name of an existing file.

Scratch - Erases unwanted files from a diskette and from the diskette directory.

To enter a disk command, press the <CONTROL> key and then the Period/Wedge key. To enter a disk command for the Secondary Drive, press the <CONTROL> key and then <SHIFT> and the Period/Wedge key. The Status Line displays:

> \_\_\_\_\_ C= XX L= XX

Or, if the Secondary Drive was selected:

S> \_\_\_\_\_ C= XX L= XX

**IMPORTANT NOTE:** When using the Secondary Drive, drive numbers 2 and 3 are used when calling a directory, or recalling or memorizing text. However, when using the disk commands with the Secondary Disk Drive, (after pressing <CONTROL> <SHIFT> and the Period/Wedge key) drive numbers 0 and 1 **MUST** be used, (**NOT** 2 and 3)!!! In all of the following examples **only the primary drive is shown**. However, these examples can also be applied to the Secondary Disk Drive by pressing the <CONTROL> key and then the <SHIFT>ed Period/Wedge key. Remember, when utilizing disk commands while using the Secondary Drive, you **MUST** use disk drive numbers 0 and 1.

\* \* \* \* \*

## LESSON 1

FORMATTING (NEWING) A DISKETTE

To enter a disk command, press the <CONTROL> key and then the Period key. The Status Line displays:

```
> _____ C= xx L= xx
```

The first time a new diskette is used, certain information must be recorded on a certain area of the diskette. This is called formatting or newing the diskette. This procedure can also be used on an old diskette to erase all of the files and the directory. To format a new diskette, the disk command is:

```
<TYPE> >n#:diskname,id#<RETURN>
```

n informs the disk drive that this is a new diskette to be formatted.

# represents the disk drive number. Enter a 1 or 0.

diskname is the name of the diskette. Enter a name, up to 16 characters long. Commas, semi-colons, or colons cannot be included as part of the diskname. The diskname will always appear when you examine the directory of a diskette.

id# is the disk identifier number. Enter any two digit number. Always try to keep all the numbers unique. Use a different two-digit combination for each diskette. If your diskette library begins to exceed 99 diskettes, start using two-letter combinations such as "aa", "ab", etc.

Practice FORMATTING by placing a brand new diskette into drive#1 and follow the steps listed above using n1:practice,02 as parameters.

Note: To format a disk in drive 0 or 1 of the Secondary drive, follow the above procedures entering Disk Mode for the Secondary drive by using <CONTROL> then <SHIFT> and , (comma). The Status line will display:

```
S> _____ C= xx L= xx
```

Keep in mind that when utilizing disk commands with the Secondary drive, you only use drive numbers 0 and 1.

\* \* \* \* \*

LESSON 2

INITIALIZING DISKETTES

Whenever you place a different diskette in a disk drive, the diskette must be initialized. A diskette must have been previously formatted for the Initialize command to function. This procedure simply tells the disk drive to align itself on the directory area and read the diskette name and ID number.

To actually perform the initialize function, <PRESS> RUN/STOP and 0 (to initialize the diskette in drive 0), or 1 (to initialize the diskette in drive 1), or 2 (to initialize both diskettes in both disk drives).

You do not need to enter the Disk Command Mode to perform the Initialize function.

You may initialize at any time without affecting your text. Repeated initialization of a diskette is not harmful.

Practice INITIALIZING a diskette (in drive#1) by <PRESSing> RUN/STOP 1.

\* \* \* \* \*

LESSON 3

VALIDATING DISKETTES

To enter a disk command, press the <CONTROL> key and then the Period key. The Status Line displays:

> \_\_\_\_\_ C= xx L= xx

The Validate command removes from use "bad" areas on a diskette, so that you cannot Memorize or Recall from them. It also deletes from the diskette files that were never closed properly. To validate a diskette, <TYPE> y and the disk drive number followed by a <RETURN>. To Validate diskettes in both drives, just <TYPE> y followed by a <RETURN>.

If you ever have 'difficulties' storing a file on a diskette and you know there are enough BLOCKS FREE on the diskette, you should use the VALIDATE command to clear the diskette of 'problem' areas.

\* \* \* \* \*

LESSON 4

DUPLICATING DISKETTES

To enter a disk command, press the <CONTROL> key and then the Period key. The Status Line displays:

> \_\_\_\_\_ C= XX L= XX

The Duplicate command creates a second, identical diskette with the same name, id number, and all of the same files. Be sure that both diskettes being used are in excellent condition.

To copy drive 0 to drive 1, Press <CONTROL> . d1=0 <RETURN>

To copy drive 1 to drive 0, Press <CONTROL> . d0=1 <RETURN>

NOTE: Place a brand new (or used) diskette in the disk drive to be copied to.

Before executing always check your command for possible error. Make sure that you give the correct drive numbers, or the blank diskette can be duplicated over the diskette containing the files.

The Duplicate command will be used extensively for BACKUP copies of your diskettes. This command allows you to duplicate a diskette onto a brand new diskette or used diskette. A diskette need not be formatted before the Duplicate command is performed.

Earlier in this User's Guide you produced a BACKUP copy of your Systems Diskette. Certain steps were required in order for you to accomplish that task. The DUPLICATE command explained above is the correct procedure for producing BACKUP/DUPLICATE diskettes during daily use. For example, to produce another DUPLICATE/BACKUP copy of your Systems Diskette you would insert a brand new diskette in Drive #1, enter the disk command mode via <CONTROL> . then <TYPE> d1=0 <RETURN>. A helpful mnemonic to use is as follows: Think of the letter "d" in this command as standing for Destination. Therefore d1=0 would mean the destination (drive to be copied to) is 1.

\* \* \* \* \*

LESSON 5

COPYING FILES

To enter a disk command, press <CONTROL> then . (Period). The Status Line displays:

> \_\_\_\_\_ C= xx L= xx

The Copy command enables you to copy a particular file or files from one diskette to another or to the same diskette under a new file name.

To copy a file from one diskette to another:

<TYPE> c#:new filename=Old#:old filename <RETURN>

where "#" is the drive number which will contain the new file, and "Old#" is the drive number of file being copied.

For example, if you want to copy a file named "sample" on disk drive 1 to another diskette in disk drive 0:

<TYPE> c0:sample=1:sample <RETURN>

The # and Old # can be the same disk drive. This allows you to copy files on the same diskette. If you want to copy the file "sample" to the same diskette under a new name:

<TYPE> c1:newname=1:sample <RETURN>

\* \* \* \* \*

LESSON 6

RENAMING FILES

To enter a disk command, press <CONTROL> then . (period). The Status Line displays:

> \_\_\_\_\_ C= xx L= xx

To change the name of a file on a diskette:

<TYPE> r#:[new\_name]=[old\_name] <RETURN>

For example, to rename a file on disk drive #1 called "sample" to the name "different":

<TYPE> r1:different=sample <RETURN>

\* \* \* \* \*

LESSON 7SCRATCHING FILES

To enter a disk command, press <CONTROL> key and then, (period).  
The Status Line displays:

> \_\_\_\_\_ C= xx L= xx

The scratch command enables you to erase unwanted files from a specified diskette. To scratch a file from a diskette:

<TYPE> s#:[file name] <RETURN>

You can scratch more than one file at once:

<TYPE> s#:[file name],[file name],... <RETURN>

For example, to scratch files called "sample" and "another" on disk drive#1:

<TYPE> s1:sample,another <RETURN>

Your practice diskette should contain a file named "section". Call a directory on disk drive #1 by pressing <CONTROL> 1 <RETURN>. Verify that the filename is displayed. If that file name is not displayed, choose another filename to SCRATCH/ERASE. SCRATCH/ERASE that file by pressing <CONTROL> . (period) to enter Disk Mode.

<TYPE> s1:section <RETURN>.

After a moment call up another directory from disk drive #1 and you will see that the filename "section" is no longer displayed.

To scratch similarly named files, i.e., all files beginning with the letters "lett" on Drive #1, you would:

<TYPE> s1:lett\* <RETURN>

To scratch all files from drive#1 you would:

<TYPE> s1:\* <RETURN>

\* \* \* \* \*

## LESSON 8

DISK DRIVE ERROR CHANNEL

If a DISK ERROR occurs during a Disk Command (signified by the red error light between the two drives) the Disk Error Channel can be read to determine the cause of the error.

To read the Disk Error Channel simply <PRESS> <CONTROL> then , (comma). As with the Disk Commands, to read the Error Channel of the Secondary Disk Drive, <PRESS> <CONTROL> then <SHIFT> and , (comma). The Status Line will now display the appropriate Error number and message.

The following are some typical Disk Error Messages. Please consult your CBM Disk Drive User's Manual for further explanation of these error messages.

<u>00,OK,00,00</u>	C= xx L= xx
<u>01,FILES SCRATCHED,xx,00</u>	C= xx L= xx
<u>26,WRITE PROTECT ON,xx,xx</u>	C= xx L= xx
<u>xx,READ ERROR,xx,xx</u>	C= xx L= xx
<u>xx,WRITE ERROR,xx,xx</u>	C= xx L= xx
<u>29,DISK ID MISMATCH,xx,xx</u>	C= xx L= xx
<u>xx,SYNTAX ERROR,00,00</u>	C= xx L= xx
<u>62,FILE NOT FOUND,00,00</u>	C= xx L= xx
<u>63,FILE EXISTS,00,00</u>	C= xx L= xx
<u>64,FILE TYPE MISMATCH,xx,xx</u>	C= xx L= xx
<u>72,DISK FULL,xx,xx</u>	C= xx L= xx
<u>73,DRIVE NOT READY,00,00</u>	C= xx L= xx

\* \* \* \* \*



SUMMARIESSUMMARY OF <CONTROL> FUNCTIONS

<u>NAME</u> ----	<u>ENTER BY</u> -----	<u>USE</u> ---	<u>CANCEL</u> -----
Append Function	<CONTROL> a	Append lines from Extra Text	YES
Print Variable Block	<CONTROL> b	Put a Variable Block on screen	NO
Clear TAB	<CONTROL> c	Clear TAB at Cursor Position	NO
Exit to BASIC	<CONTROL> SHIFT q	Resets Computer	NO
Delete	<CONTROL> d	Delete Words and Sentences	YES
Erase Mode	<CONTROL> e	a=erase all r=erase remainder l=erases line	YES
Find	<CONTROL> f	search for a given string	YES
Goto	<CONTROL> g	Goto a specified line number	YES
Hunt	<CONTROL> h	Restart a local find function	NO
Fill Variable Blocks	<CONTROL> i	Fill in Variable Blocks	NO
Clear All TABs	<CONTROL> k	Clear off all the TABs	NO
Duplicate Lines	<CONTROL> l	Duplicate the Range of Lines	NO
Modify	<CONTROL> m	Modify Search Replace strings	YES
Numeric Tab	<CONTROL> n	Set Numeric Tabs	NO
Output	<CONTROL> o	Enters the Output Function	YES
Print Disk Print File	<CONTROL> p	Prints Disk Print File	YES

NAME ----	ENTER BY -----	USE ---	CANCEL -----
Range	<CONTROL> L	Sets a Range of Lines	NO
Set TAB	<CONTROL> B	Sets a TAB at cursor position	NO
Set Automatic TABs	<CONTROL><SHIFT>K	Sets TABs at 1,21, 41, and 61	NO
Transfer	<CONTROL> T	Transfer the RANGE of lines	NO
Variable Characters	<CONTROL> Y	Appends groups of characters	YES
Extra Text	<CONTROL> X	Switches in and out of Extra Text	NO
Delimiter	<CONTROL> Z	Enters a delimiter for LIST Data	NO
Global Copy	<CONTROL> *	Copies all files in a linked Document	YES
Send Disk	<CONTROL> S (<CONTROL> <SHIFT> S for Secondary Disk Drive)	Send a command to the disk drive	YES
Read Error Channel	<CONTROL> R (<CONTROL> <SHIFT> R for Secondary Disk Drive)	Read the disk error channel	NO
Special Character	<CONTROL> I	Enter a special character	YES
Underline	<CONTROL> U <CONTROL> U	Turn on Underline Turn off Underline	NO
Bold Printing	<CONTROL> B <CONTROL> B	Turn on Bold Type Turn off Bold Type	NO NO
Hyphen	<CONTROL> =	Enter a Hyphen symbol	NO
Find Variable Block	<CONTROL> TAB	Find a variable block - go to it	NO
Empty a Variable	<CONTROL> ARROW UP	Delete the contents of Variable Block	YES
Home Data	<CONTROL> HOME	Clear Data Pointer to Home position	YES

<u>NAME</u> ----	<u>ENTER BY</u> -----	<u>USE</u> ---	<u>CANCEL</u> -----
Restart	<CONTROL> <SHIFT> RUN/STOP	Change Lines Allocated to Extra Text	NO
Directory	<CONTROL> 0 <RETURN> <CONTROL> 1 <RETURN> <CONTROL> 2 <RETURN> <CONTROL> 3 <RETURN>	Drive #0 Directory Drive #1 Directory Drive #2 Directory Drive #3 Directory	NO
Superscripts	<CONTROL> 4	Superscript	NO
Subscripts	<CONTROL> 5	Subscript	NO
Restart Global Find	<CONTROL> CRSR RIGHT	Restart a Global Find Function	NO
Search and Replace	<CONTROL> @	Enter search and replace function l = Locally g = Globally	YES
Column Add/ Subtract	<CONTROL> =	Column Add/Subtract	NO
Sound	<CONTROL> \	Sounds Internal Beeper	YES
Check Mark	<CONTROL> / (Question mark- Slash Key)	Enter a Check Mark on the screen	NO
Line Delete	<CONTROL> DEL	Delete a full line	NO
Line Insert	<CONTROL> <SHIFT> DEL	Insert a full line	NO
<u>OTHER IMPORTANT FUNCTIONS</u>			
Insert Mode	<SHIFT> <CONTROL>	Enter/Exit Insert Mode	N/A
Screen Read	BACKSLASH key	Inserts filename automatically into Status Line. Used for REPLACING files and loading files from a directory.	N/A

\* \* \* \* \*

SUMMARIES  
SUMMARY OF FORMATTING COMMANDS

<u>COMMAND</u> -----	<u>NAME</u> -----	<u>PARAMETERS</u> -----	<u>DEFAULT</u> -----
cm	Comment	-	-
cn	Centering	1=on, 0=off	off
fa	Form Advance	4,6,8,12	6
fp	Forced paging	none=immediate 1-255=conditional	-
ft	Create page footer	-	-
hd	Create page header	-	-
hl	Head left margin	1-163	lm
hr	Head right margin	2-164	rm
ju	Justification	1=on, 0=off	off
lf	Send line feed to printer	1=on, 0=off	off
lm	Left Margin	1-163	5
ln	Do a specified number of line feeds	1-255	-
ma	Margin release	1-163	-
nx	Link next file	filename	-
p#	Set page number	2 or greater	1
pg	Set paging	Less than pp	-
pp	Set printer page	Page Length	-
ps	Pause	-	-
pt	Set Pitch	8, 10, 12, 15	10
ra	Right alignment	1=on, 0=off	off
rm	Right margin	2-164	75
sp	Set line spacing	1, 2, 3	1
vp	Vertical Positioning	1-pp	0

SUMMARIESSPECIAL CHARACTERS

Each and every character on a NEC thimble (or other printing mechanism) has an assigned ASCII value for each character. The NEC Spinwriter print thimbles contain some characters that are important to certain WordPro 4 Plus users, i.e., copyright symbols, trademark symbols, etc. WordPro 4 Plus has the capability to use/print up to ten of these special characters. Character values must be set on a Format Line as shown below using the "assigning value procedure" (explained in this Section), to assign values to the ten special characters.

Example of Format Line to Assign Special Characters

```
@0=204:1=203:2=123:3=125:4=218:5=194:6=206:7=205:8=198:9=211
<RETURN>
```

These special characters are available in Edit Mode by pressing <CONTROL> ; (semi-colon). This produces an ARROW UP that will display on your screen. Then enter the number that corresponds to the special character previously assigned in a format line (or default value):

example: <CONTROL>; 6

This example produces an ARROW UP and the number 6 on your screen. During output, the special character assigned to #6 would print. This assigned number tells WordPro 4 Plus to look for an "ASCII" value previously set to the number 6 on a Format Line. In this case, the value would be ASCII (206) which will print a copyright symbol during output on the NEC Spinwriter. Ten default values have been assigned as shown below.

0=	Assign Special Character 0	0-255	204
1=	Assign Special Character 1	0-255	203
2=	Assign Special Character 2	0-255	123
3=	Assign Special Character 3	0-255	125
4=	Assign Special Character 4	0-255	218
5=	Assign Special Character 5	0-255	194

6=	Assign Special Character 6	0-255	206
7=	Assign Special Character 7	0-255	205
8=	Assign Special Character 8	0-255	198
9=	Assign Special Character 9	0-255	211

NOTE: The default values of the special characters are designed to give the ten most popular symbols on the NEC Spinwriter's "Super Courier" thimble. Those special characters are:

0 = British "POUND" Sign	= £
1 = Degrees	= °
2 = Open Squiggly Bracket	= {
3 = Close Squiggly Bracket	= }
4 = Cents Sign	= ¢
5 = Registered Trademark (circled R)	= ®
6 = Copy Right (circled C)	= ©
7 = TM Sign	= ™
8 = One Half	= ½
9 = One Quarter	= ¼

\* \* \* \* \*

## SUMMARIES

### SUMMARY OF ERROR MESSAGES

In addition to the WordPro 4 Plus error messages described below, please refer to the Commodore 2040/4040/8050 Disk Drive User's Manual for further explanations of disk-related error messages.

Device < 4: the printer device number must be 4 or more.

Dir Error: This means Directory Error. It can occur if the Disk Drive does not understand the directory on the diskette. Re-initializing the diskette may solve the problem.

Disk Full: The diskette you are using is full. No more files can be stored on it. Do not erase the file from memory. Re-memorize it on a different diskette, or scratch unwanted files from the full diskette and re-memorize.

Disk ID Mismatch: The diskette in the drive was not the last diskette to be initialized. Initialize the diskette you are trying to use.

File Not Found: The file the disk was directed to recall does not exist on the specified diskette. Check the exact filename you are recalling.

File Type Mismatch: There are three types of files that can exist on a diskette: a program file, a sequential file, and a user file. All text is stored as program files, but sequential files can be used for external list data files. An attempt to recall a file of the wrong type will cause this error.

Left Margin=0: In the lm command, the left margin must be 1 or higher.

Left > Margin: In the lm and rm commands, the right margin must always be greater than the left margin.

Line Out of Range: You tried to move the cursor to a nonexistent line number.

Line Spacing > 3: In the sp command, line spacing of 1,2,3 are acceptable.

No Blocks Found: During the Automatic Variable Blocks (CONTROL i) function, no blocks are indicated in the Main Text.

No Drive Specified: You requested the Global Copy function without giving the drive number of the source diskette before the file name.

No Line Range Set: You tried to use a Range function before entering the range setting.

No String Search Error: You have executed a Hunt function with no string search specified.

Out Of Blocks, More Data: During the <CONTROL> i function of Automatic Variable Blocks, the variable blocks are filled in Main Text, but there is more data left over in Extra Text. This is a normal Status Line message when you are using variable blocks and printing one document at a time.

Out Of Memory: You are trying to enter, recall, or append more text than WordPro 4 Plus can store in its memory at one time.

Paging > Printer Page: The value of the pg command must not exceed the value of the pp command.

Read Error: This error message probably means that there is no diskette in the drive, but it can also mean that you have a badly initialized diskette. Re-initialize the diskette if it is in the drive.

Right Margin > 163: In the rm command, the right margin cannot be higher than 163.

Syntax Error: This message occurs if you type in a command incorrectly. When a Syntax Error occurs, the cursor will move to the location of the error if the character is typed incorrectly or the cursor will move to the right of the error if a necessary character is missing.

Trans Error: Last Line Used: The transfer function cannot operate because the last line of available text is used.

Variable Not Found: The variable name specified during Appending was not found in Extra Text.

Variable Type Mismatch: The variable exists in Extra Text, but does not contain the correct delimiters.

Write Error: When the disk drive memorizes a file, it reads it back to see if it was memorized correctly. This error occurs if it was not. Re-memorize the file or change the filename if necessary.

Write Protect On: There was something blocking the write-protect slot on the side of the diskette, and you attempted to memorize something. If you wish to memorize (store) something on a diskette that has the write protect notch covered, you must first remove the write protect tab.

## PROGRAMMER'S NOTES

By Steve Punter

### INTRODUCTION

The following guide will explain in programmer's terms how to use the input/output features of WordPro 4 Plus with other programs such as mailing lists and terminal programs. The information given here will assume an advanced understanding of the Commodore model 8032/9000 and/or computers in general and is not intended for the novice WordPro 4 Plus user.

#### Output To Disk

Text is normally stored on disk as "Text Files" in special "screen code", and accessed through the MEMORIZE and RECALL commands. These files are not particularly useful to anyone intending to interface with other programs.

To remedy this problem, a special mode of the Output function called "Output To Disk" allows text to be sent to the disk in one of three forms. These three forms are as follows:

- CBM compatible format
- ASCII compatible format
- Printer compatible format

CBM compatible: This means that the text is sent to the disk in "CBM/PET ASCII" form. To make it directly usable to an INPUT# statement, a quote is put at the beginning of each line so that BASIC does not stumble on commas, colons, or semi-colons. To round out the compatibility, all quotes (ASC[34]) in your text are converted to APOSTROPHIES.

ASCII compatible: In this mode, the text is sent to the disk in proper ASCII format, not the PET ASCII format. As above, a quote is sent at the beginning of each line to allow a Basic INPUT# statement to work without stumbling on colons, commas, or semi-colons.

Printer compatible: In this mode, the disk receives **EXACTLY** what the printer would receive if the output were going there. This includes all escape codes for Form Advance, Pitch Setting, and Semi-Proportional Justification (if letter-quality printer mode was selected at power-up). No quotes are added, and no characters are converted for the sake of BASIC interface.

The file is of the fully formatted SEQUENTIAL type in all cases, and not in the "raw" form.

Choosing The Right Type Of Output

Off hand, you may not be sure what type of output suits your needs the best. To make life easier, here's a quick cross-reference of possible needs and their associated output types.

- 1) You have a BASIC program which you would like to have read each line of the formatted text and print it on the screen for the operator to read. Ideally, all you want to do is open the sequential file, use INPUT# to get the line and PRINT to put it on the screen (no conversions or GET# required). For this application, use the CBM compatible output.
- 2) You have an ASCII type printer and you would like to have your BASIC program input the formatted text from disk and send it directly to the printer without having to do any ASCII conversions or use any slow GET# routines. For this problem, use the ASCII compatible output.
- 3) You have a MACHINE LANGUAGE program which you would like to have drive a Letter-Quality printer from the formatted text files, but you want all Escape sequences left intact so that you will get Semi-Proportional spacing and the proper Pitch and Form Advance settings. For this, the best type of output is the Printer compatible one.
- 4) You have written up some text you would now like to send to another computer via a modem. The computer at the other end does not like CBM/PET ASCII and knows nothing of printer Escape codes, but you don't want to have to look for the Quote at the beginning of each line and skip it. For this, you are going to have to make sure your WordPro 4 Plus was powered up for an ASCII printer. If it wasn't, be sure your text is saved, then execute <CONTROL> <SHIFT> RUN/STOP to return the program back to the start-up configuring questions, and select ASCII for the printer type. Now reload your file and use the Printer compatible output.

As a quick rule of thumb: If the sequential file is destined to the PET screen, or the CBM printer, use CBM type; If the file is destined to a simple ASCII printer or the file is to be further manipulated by an external program, use ASCII type; If the file is destined to a Letter Quality printer, or another computer, use Printer type.

### Marking of File End

The end of the sequential file could be noted by checking the STATUS variable during input, but I personally think this is not as reliable as a definite end marker. The end marker appears only in the CBM and ASCII compatible files and consists of the following characters:

- ASC [128] ;end marker
- ASC [13] ;carriage return
- ASC [10] ;line feed

### A Sample INPUT program

For your reference, here is a sample BASIC program which will input a CBM compatible file from drive 0 and print it on the screen. The sequential file is called "screenprint" in this example.

```
100 open 2,8,2,"0:screenprint,s,r"  
110 input#2,a$ : if a$=chr$(128) then 130  
120 print a$ : goto 110  
130 close 2 : end  
140 rem notice line 120 only sends 1 string at a time
```

### Accessing Output To Disk

With the exception of Printer compatible output, the type of printer chosen during program power up does not affect the characters sent to the disk (In the case of Printer type, it is solely responsible).

Once you are satisfied that the printer type you selected on power up is correct, and that the text will output without errors, you can proceed to send it on to the disk. Enter the Output mode as usual with <CONTROL> Q. Set up for LIST DATA or GLOBAL operation (as required) and instead of pushing <RETURN>, push Q. The Status Line will change to show:

#### Cbm. Ascii or Printer?

To this you respond C, A, or P depending on which of these previously mentioned three output types you require. The Status Line will now show:

#### XXX File: Drive # ?

Where XXX is "CBM", "ASC", or "PRT" to verify which of the three output types you chose. Enter the drive number upon which you want the sequential file to be created. The Status Line will change to show:

#### XXX File: D:(cursor)

Where D is "0" or "1" to verify the drive number chosen. Now

enter the name you would like the sequential file to have. Press <RETURN>, the program will now do one of three things:

- 1) It will discover there already is a file on the disk under the name you have specified, in which case you will be asked if you want to REPLACE the existing file (in EXACTLY the same manner as MEMORIZE). You can either cancel the function by pressing <CONTROL>, or overwrite the old file by hitting <RETURN>. If the file is to be overwritten, operation continues the same as if the file did not have to be replaced.
- 2) A disk error will occur, in which case output will be automatically cancelled and the error displayed on the status line. NOTE: This also includes an attempt to overwrite a file which is not currently a sequential file (i.e. a Text File).
- 3) Everything will go smoothly on the disk and output will commence (if Global output was chosen, the Global file name would be asked first).

Completion of the sequential file can be determined by noting that the disk light has gone off, and that the Status Line has returned to normal.

### Sequential List Data

You have now seen how formatted text can be passed out of WordPro 4 Plus, but how can data from another program be brought in? You could have this other program create a Text File, which could be directly brought in with RECALL, but as this is a very time consuming method of passing data, we have provided a Sequential List Data function.

What is Sequential List Data? It is a function of Output which allows Variable Blocks to be filled by RECORDS from a sequential file (stored on disk) rather than from EXTRA TEXT. The format of a Sequential List Data (SLD) file (on disk) is quite simple. It contains all of the "pieces" of data to be inserted into Variable Blocks, delimited by carriage returns (ASC[13]) or <CONTROL> z characters (ASC[162]).

As an example, consider the following Form Letter:

Dear Mr. <CONTROL> b:

Our computers tell us that you currently owe us the sum of \$<CONTROL> b. We would like payment within <CONTROL> b days, or we will have to take legal action.

Yours Truly,  
The Management

The contents of a sequential file which can fill in these Variable Blocks is as follows:

```
Punter(ASC[13])100.00(ASC[13])12(ASC[13])  
Smith(ASC[13])125.25(ASC[13])2(ASC[13])
```

You will note that each piece of data is separated by a carriage return in this example, but any, or all, could have been separated by using ASC[162].

If you use carriage return/line feed combinations, no ill effects will be noted since line feeds are ignored.

### Creating SLD Files in BASIC

To allow you to test the operation of this feature, here is a BASIC program which will create a simple SLD file:

```
100 open 2,8,2,"0:an sld file,s,w"  
110 input"piece of data";a$  
120 if a$="end" then close2 : end  
130 print#2,a$ : gotol10
```

Simply type in each piece of data, then hit <RETURN>. Once the last piece has been entered, type end <RETURN>. This SLD would create a sequential file named "AN SLD FILE" which would then be available as input (via imbedded variable blocks) into a WordPro document.

### Creating SLD Files from WordPro

Using Main Text, rather than Extra Text, type in (or RECALL) as much List Data as you can fit into (see Automatic Variable Blocks (placing data in Extra Text) in Section 5) the text area. Now prepare to memorize this on disk as, say, "List1", but first, add an nx command to link it to "List2". Memorize this file, then start on the next one.

What you are in effect doing is creating (when it is Output to Disk) a large List Data File that is made up of Globally Linked Files.

Once you have all the files of your List Data ready to go, you can create the SLD file when you globally output it to disk by using the following keystrokes:

```
<CONTROL> o g d c [drive #] [filename] <RETURN>  
[first global file name] <RETURN>
```

Once this is finished, you may use the newly created, "combined" file as an SLD. With this method, the amount of List Data available for a single output is limited only by the space left on the diskette.

### Using SLD Files

To use SLD files, first make sure your Form Letter is in Main (visible) Memory, then enter the output function with <CONTROL> Q. Proceed with the setting of output parameters EXACTLY as you would for a regular Extra Text-derived form letter, but instead of using L for List Data, use S for Sequential.

Upon pushing <RETURN> or d (yes, a sequential file can be written while another is read) the Status Line will change to show:

SEO File: [cursor]

Type in the name of the SLD file that you wish to use. If the file name entered does not exist, or another disk error occurs, the output function will be aborted and the disk error will be shown on the Status Line. Otherwise, the program will go on to work like it does with List Data, but the information will come from the disk, not Extra Text.

### Internal Uses of Disk Access

We have discussed how to use Output To Disk and Sequential List Data, but what can they do for us internally? Back in Section 5 you were shown how to create a file which could be output to the printer while you continued to use the WordPro 4 Plus non-disk functions. If you hadn't noticed, this was a Printer compatible Output To Disk function that you used to create the file called "dp".

Another use is to extend how much List Data you can put in the computer. As it will soon become clear, if it has not already, there will be times where there isn't enough space in Extra Text to allow all the pieces of List Data you would like to have available for a single continuous output. This problem can be solved by a combined use of both Output to Disk and SLD.

### The CBM Printer's Special Character

As you know, the CBM printer has a special user definable character which can be used by printing the ascii value of 254. Upon power up of WordPro 4 Plus, if you choose CBM as your printer type, this special character will be assigned to a British Pound symbol. [The CBM Printer must be turned on and connected first, before the program is initialized, so that the program can form the special character in the printer....Ed.]

To use this symbol, assign any of the ten special characters to 254 and use in text where required. Usually, when special characters appear in text, and output is to the CBM printer, only the index number of the special character (in reverse field) is printed, but when the value 254 is assigned, WordPro outputs this value directly as the assigned special character.

### Special Characters

First of all, you might wonder why some of the sample characters ( on the NEC thimble ) had values of greater than 127, after all, ASCII is a 7 bit code, not an 8 bit, so what gives? Well, quite simply, the NEC Spinwriter does not have all its special characters as straight ASCII values, but instead, has them as the Graphics Mode of the letters A to Z (ASC65 to ASC90). To access them, you must output an ASC14 (which puts the NEC in the Graphics Mode), followed by the ASCII value, and finally, an ASC15 (to put the NEC back in the regular mode).

The special characters on WordPro 4 Plus are arranged in the following manner: If the value assigned is between 0 and 127, then only that number will be output. If the value assigned is between 128 and 255, then the output will be ASC14, ASC(Assigned Value 128), ASC15. For example, if you wanted the special character to be "A", you would assign the value to 65, but if you wanted the character to be the Graphic Mode "A" (the one eighth symbol), then you would assign the value to 193 (65+128).

### Assigning Printer Controls To Special Characters

It may have run through your mind that perhaps the special characters could be assigned to printer controls, like 8 for back space. Well, you can, but beware, the formatter does not allow for them. It presumes that all characters printed, do in fact print, so anything else could mess up the line length, printer page, or both. Use them if you must, but know what you are getting yourself into.

### Exit to BASIC

For the convenience of programmers (and users) who wish to exit WordPro 4 Plus in order to load another program into the CBM 8032/9000 computer, the Exit to BASIC command is available.

In order to "Exit" WordPro 4 Plus and return to "Computer Mode" without turning off the computer, perform the following three keystroke sequence:

<CONTROL> SHIFT g (letter "Que")

The three keystroke sequence has been designed to preclude any "accidental" Exits to BASIC. Performing this keystroke sequence will return control to BASIC. Once accomplished, the BASIC command "new" should be executed to clear the BASIC memory area.

### MULTI-USER or PRINTER DISK OUTPUT

MULTI-USER/PRINTER DISK OUTPUT is added to assist in multi-user applications where spooling from disk to a common printer is required. Still maintained are the ASCII and CBM type disk outputs, but added to these is the "PRINTER" disk output. In this mode, every character that would be sent out to the printer is sent out to the disk WITH ABSOLUTELY NO MODIFICATIONS.

When you type **d** in the output mode, the question will now be:

**C**bm, **A**scii or **P**rinter?

If you want the Printer type output, simply type the **p** key. To verify your choice, the next prompt will be:

**PRT** File: Drive **#** ?

Since the output is what would be sent to the printer, the type of printer you have selected at power-up will determine the exact format of this file.

Note: Additional information may be found under Simultaneous Input/Output.

\* \* \* \* \*

January 1, 1981

WordPro 4 Plus Operator,  
 c/o Your Location  
 One PSI Drive  
 NEECO, MA 02194

Dear WordPro 4 Plus Operator:

As the saying goes, "a picture is worth a thousand words". The following "sample letter" is intended to act as a "picture". A careful study of this letter will enable you to graphically see how almost every major format command in WordPro is used in a real example.

### How to Print Out This Example Letter

After examining this example file in Edit Mode (on your screen) you may print out (on paper or on the screen) this textfile for comparison purposes. To printout this example letter position your paper (in the printer) at the very top of the page and press:

#### TO PRINT A COPY

<CONTROL> q g g <RETURN>

#### TO OUTPUT TO VIDEO

or <CONTROL> q g v <RETURN>

then

<TYPE> example letter <RETURN>

Note: If you do not have continuous forms paper in your printer, omit the g in the above command and <PRESS> g for "continue" after it finishes printing each page and you have inserted another sheet of paper.

The first line of a text file should be a comment line, as shown in this textfile named example letter. The comment line in this example contains the name of the text file you are currently working on. A comment line can also be used to inform the operator of any special notes or instructions for a specific file, date of last revision, or other useful operator information. A comment line should be on a line of its own and will appear as part of the displayed document in Edit Mode but will not be printed on the paper when output.

The second line of this text file contains an imbedded command referred to as vertical positioning. Vertical positioning commands the printer to advance the paper from the top of the page to the number of lines specified by the vp command. Vertical positioning causes the printer to automatically position your paper in the desired location before output begins. To position the first line of text (in this case the Header) two lines down from the top of every page, you would use a command of vp2. The vp command is extremely handy when using letterhead stationery. If the company logo/information is 7 lines deep (from the very top of the paper) use a vp of 9. This

allows all operators to always start paper at the very top edge of the paper.

The third line in this text file is referred to as the format line. The format line tells the printer where to begin the left and right margins, the length of paper you will be working with, the number of lines to print on each page, header and footer parameters, and other format information. When using more than one format command on the same line, they must be separated by a colon (:). Format lines must always be started with a **FORMAT CHECKMARK** (via **<CONTROL> /**) and end with a **RETURN**. The following paragraphs explain the use of each command on the format line.

Margins: The left margin is set by using an "lm" command followed by a number, which represents the left margin for printing purposes. Similarly, the right margin is set by using an "rm" command followed by a number. For example, lm12:rm75 instructs the printer to begin printing at column 12 and end each line at column 75.

Printer Page: The 'pp' command sets the "length of the page," i.e., tells WordPro the length of the sheets of paper you are printing on. This information is essential when using multi-page documents, continuous form paper, or headers and footers. Standard size paper (8 1/2 x 11 inches) has 66 lines top to bottom. European size paper is approximately 8 1/4 x 11 3/4 inches and has 70 lines top to bottom.

Paging: The 'pg' command is used in conjunction with the pp command. It establishes the maximum number of lines of text to be printed on each page. The pg command must have a smaller number than the pp command as you cannot print more lines on a page than there is room for. The pp and pg command must go together to avoid printing off the paper; especially important when printing multi-page documents. In this particular text file, we have set our "pg" to 62. This tells the printer that we never want it to print less than 62 lines from the top of the paper. We will see later in this text that we have the flexibility to put "less than" 62 lines of text on a page by using another imbedded command called Forced Paging.

Justification: The ju command tells the printer to justify the right margin so that the right margin is "flush" down the page (as seen in books or newspapers). The printer spaces proportionally between words to create an even right-hand margin. When the "ju" command is followed by the number 1, justification is on. Should you want to discontinue right-hand justification, you can do so at any point in your document by creating a new Format Line by entering a Format Checkmark, the letters ju and the number 0, which turns justification off. As an example, notice how justification is turned off in this paragraph and turned on in the next paragraph.

**Headers/Footers:** The "hd" and "ft" commands allow you to automatically number your pages or print out the same text at the top or bottom of each and every page. The Header or Footer commands should be on format lines of their own. The number following the ft command specifies the number of blank lines up from the bottom of each page the page number or footer comment is to appear. The number after the hd command tells the printer how far down from the Header you want text to start printing. A colon must always follow the number. In the ft example in this document, the comma tells WordPro that no text will be printed in the left-hand field and to print the page number in the center field. The return indicates that the third field will not be used. If you prefer having your pages numbered on the left-hand side of your paper, eliminate the comma. If you want the pages numbered on the right-hand side you would use two commas instead.

**Linked Files** There will be times when you will type a document which exceeds the available lines of internal memory, making it necessary to link files on the diskette. The link, or "nx" ("nx" = next) command, creates one document out of a number of linked files. For instance, this example letter will not fit on one file. To make the two files seem as one, we use an "nx" command to instruct the system to treat all linked files as one large document. This is accomplished through the use of the "nx" command. Begin your file as you would any other file, using whatever margin and paging commands you desire. Type in the information until you have used all but 10 or 20 of the available lines of memory. End the last paragraph with a RETURN. On the very next line, type in a Format Checkmark followed by the letters nx and a colon. Then, type in the name of the file you want to link to (i.e., linked letter) and <RETURN>. THE nx COMMAND MUST BE ON A FORMAT LINE OF ITS OWN AND MUST BE THE LAST LINE OF TEXT IN YOUR FILE.

When you wish to output files that are linked GLOBALLY, you must specify g for Global during your output sequence, i.e., <CONTROL> o g g <RETURN>. The g is for GLOBAL output, the c represents CONTINUOUS.

The nx command shown below instructs the system to treat the next textfile as part of the same document. The "nx" command does not print out during output and it is invisible to the user during global output or global file manipulation of the entire document. When an nx command is encountered during output, WordPro 4 Plus automatically calls the next file (specified in the nx command) into Main Text and continues printing with the same output parameters (margins, etc.) as before.

Forced Paging: The forced paging command insures that the printer will stop printing text on the current page and FORCE the remaining text to be printed on the next page. This command follows the last line of text you want printed on a particular page (that line of text must end with a return). Type in a FORMAT checkmark and the letters fp followed by a RETURN. The second to last line of the previous file (example letter) was an fp command to force the next page. This allowed us to start the paragraph on a new page. You may also instruct the printer to "look ahead" and see if there will be enough room on a given page to print an entire table, etc. We would specify the number of lines after the fp command.

An example: @fp5 <RETURN>

This fp5 command tells WordPro 4 Plus to look ahead at the next 5 lines and see if they will fit on the current page; if they fit, WordPro 4 Plus will print them on the current page. If they do not fit, WordPro 4 Plus will automatically Force Page to the beginning of the next page. This command is very handy for paragraphs, columns of numbers, or any other text that you would want to always print out together.

Right Alignment: The ra command, which should appear on a line of its own, will align the text following the ra command with the right-hand margin (causing a ragged left-hand margin.) The ra command is ideal for placing dates (see date below) or signature blocks flush with the right margin automatically. The ra format command is turned on by typing an "ral" and turned off by typing an "ra0".

Date would be right aligned here

### Centering

The centering command is usually placed on a line of its own. As with all format commands, it must be preceded by a check mark. Like the justification and right alignment commands, centering is turned on by a "cn1" and turned off by a "cn0". All text following the cn1 command will be centered automatically until WordPro encounters a cn0.

### Line Spacing:

The imbedded command preceding this paragraph instructs the printer to automatically double space from this point on. If you prefer triple spacing, the number 3 would follow the "sp" command rather than a 2. You can alter your spacing commands at any point in a text file by entering the number desired. (1=single spacing, 2=double spacing and 3=triple spacing)

If you need to block indent a paragraph instruct the printer to change the left and right-hand margins. Use the same format as you did to originally set the margins (ie:, check mark at the beginning of the line and a colon to break up the commands). Your paragraph will automatically indent for you.

To reset the margins back to their original or a new position, simply type in a checkmark followed by your initial lm and rm commands. Notice how the margin changes have been "imbedded in text" before this and the preceding paragraph. These imbedded commands are instructions to the printer and are not meant to be printed out.

Lines Command: The "ln" command (see above example) instructs the printer to advance the paper forward the specified number of blank lines entered in conjunction with the "ln" command. In this case the printer will advance 7 blank lines before starting this paragraph. This is used in place of repeating the return key 7 times, and prevents using excess space on the screen and in memory.

If paging had just occurred and WordPro 4 Plus encountered an ln command and executed it, you would start a new page with the number of blank lines specified in the ln command! Since this would make your output look inconsistent, we have set up WordPro 4 Plus to ignore the ln command when it falls between the parameters explained above. If an ln Format Command is encountered at the beginning of any page (during output) and no text has yet been printed out on that page, the ln command will be ignored. If however, you do want the ln command to function (even at the beginning of an output page), precede the ln command with a RETURN on a line of its own (not on a Format Line.)

Margin Release: The margin release command over-rides the imbedded left-hand margin command. That is, it "outdents" text the number of spaces specified in an ma command. This is an extremely useful command when setting up outlines, block indented paragraphs, etc. It should be remembered that the margin release command only affects the first line of text immediately following it.

1. Whenever you are working in an outline format, you can command that a specified number of characters be placed to the left of your left-hand margin.
2. This allows the operator to continue to input at full typing speed while taking advantage of word wraparound.

Underlining: To underline a character, word or phrase, we must tell the printer where to begin underlining by pressing <CONTROL> and the open bracket ([) key. Type what you want underlined and then tell the printer to end underlining by pressing the control key and the end bracket (]). The screen will display a small square before and after the text to be underlined. When using underlining, keep in mind that the underline control characters ( [, ] ) take up a space on the screen. However, when printing out they do not take up a space. This is important if you are lining up columns of numbers or text.

### Bold Face Printing

Notice that it is very easy to have Bold Face Printing. Bold Face Printing is accomplished by:

<PRESS>ing <CONTROL> 8

and then <TYPE>ing the text to be emboldened. All the text will be Bold Face Printed until the <CONTROL> 9 or the <RETURN> key is encountered. If you are editing text and wish to Bold Face Print only a few words, you would move your cursor to the position where you wish Bold Face Printing to begin, insert one space and then type in <CONTROL> 8. When you are finished with bold facing your text, <PRESS> <CONTROL> 9.

Bold Face Printing and underlining can be accomplished at the same time. If you review the Example Letter on your screen (and compare it to the printed version contained in the User's Guide), you will see how this is accomplished in the next sentence. This sentence is underlined and Bold Face Printed at the same time.

### Superscripts and Subscripts

Superscripts (superscript<sub>1</sub>) and Subscripts (subscript<sub>1</sub>) are very easy to accomplish. Press <CONTROL> 4 (this produces a graphics character "line" on your screen) and the next character you type will be superscripted. Using a <CONTROL> 6 produces a similar but lower graphics character "line" on your screen) and the next character you type will be subscripted. Repeat the sequence as necessary for each character to be superscripted and subscripted.

Compare this paragraph (in edit mode) on your screen with the printed version. Notice that in order to save space, we have started the line with two format commands (lml7:rm70) that cause both the left and right margins to be indented five spaces which are followed by a semi-colon. This means that you may begin a line with format commands separated from your text by a semi-colon. This is a very useful space-saving method.

Notice this line is centered by the same method.

With WordPro you save valuable time, manpower, and money. You have seen some of the features and benefits that can be realized with the use of WordPro. There are a multitude of editing features available. These features include inserting or deleting words, lines, phrases and paragraphs. You may transfer paragraphs and recall frequently used phrases and paragraphs into your document from memory. This eliminates the need to tediously type repetitive pieces of information.

Again, thank you for purchasing a WordPro 4 Plus from Professional Software Inc. We are sure that you will enjoy its use.

THE STAFF OF PROFESSIONAL SOFTWARE INC.



### CARE OF DISKETTES

Diskettes are flat, round, flexible "plates" with a magnetic surface similar to the surface of an audio tape. This magnetic surface stores data in a fashion similar to audio tape recording.

Diskettes are extremely delicate and should be handled with care. The proper care and handling of diskettes is critical to the reliable performance and life expectancy of the recorded data contained on that diskette. Diskettes should always be held very lightly with your thumb over the diskette label. The oblong oval-shaped area (that exposes the magnetic media) is the area from which information on the diskette is read from. If any foreign substances mar this area of the diskette, you may experience loss of data. NEVER touch, or otherwise have contact with, this area of the diskette.

Notice the circular hole in the middle of the diskette. When placed into the disk drive with the hatch cover closed, this circular hole is engaged by a conical-shaped device (inside the disk drive unit) which then spins the disk media around within the disk jacket during reading or writing. When placing a diskette into a disk drive unit, this hole should be centered as much as possible. This can be accomplished by inserting the diskette into the disk drive unit very slowly and "jiggling" the disk drive hatch door closed, rather than snapping the hatch cover closed in one quick motion. This jiggling allows the conical-shaped device to slowly force its way into the circular-shaped opening of the diskette which helps to align the diskette correctly. This procedure will save you from experiencing initializing errors.

As you look directly at a diskette, you will notice that the right-hand edge contains a "notch" approximately 3/4 of the way up on the right hand side. This "notch" (usually not covered by anything) is called the "write protect notch". When this notch is not covered by anything, information can be stored on the diskette. When this notch is covered, however, the diskette will not allow anything to be stored on it. Once you have completed an important diskette (and would not want to inadvertently store something on it), place a write protect tab (always supplied with diskettes) over the notch.

\* \* \* ALWAYS BACKUP YOUR IMPORTANT \* \* \*  
DISKETTES

STORAGE OF DISKETTES

Diskettes should be stored in the paper jackets supplied with your diskettes. We also suggest you store those diskettes in diskette holders which come in a variety of shapes and sizes (inquire with your diskette supplier). Diskettes should be stored under approximately the same environmental conditions in which people are comfortable. An ideal condition is humidity at 50% and an environment free of dust and dirt. A small particle of dust is "extremely large" when compared to the topography of the recording magnetic media that actually records information. Relatively safe environmental ranges for diskettes are between 50-125 degrees Fahrenheit and 10%-80% relative humidity. Environmental conditions outside of these limits should be avoided whenever possible.

DO'S AND DON'TS OF DISKETTE CARE

DISKETTE DON'TS

- Store diskettes in a pile or stack.
- Apply any label or materials to any exposed surfaces.
- Write on the diskette with pencil or ballpoint pen.
- Handle any exposed surfaces.
- Expose the diskette to any environmental extremes.
- Slam or snap door of disk drive.
- Place objects on top of diskettes.
- Place diskettes on top of disk drive.
- Expose diskettes to dust.

DISKETTE DO'S

- Store diskettes in the supplied paper jacket in an upright position.
- Write on labels before applying labels to the diskettes.
- Place diskettes into paper jackets properly by inserting the oval exposed area first.
- Fully insert diskettes into drive and gently jiggle the door closed.
- Write on diskette labels with felt tip pens.

\* \* \* \* \*

GLOSSARY

- APPEND The ability to call for frequently used phrases, paragraphs, salutations, etc. by supplying the WordProcessor with a number, initials or some other pre-designated code.
- AUTOMATIC WRAPAROUND Feature which automatically "drops" characters to the next line when it cannot fit on the current line. Eliminates having to return after every line.
- BACKUP The process of making copies of Diskettes on duplicate Diskettes, or of printing hard copies, to insure against loss of valuable text or data in the event of a system or power failure, or an operator error.
- CARTRIDGE The interchangeable Ribbon Cartridge which may reside on the Printhead.
- CONTINUOUS FORM Any form supplied in continuous, tear-off format for continuous printing. Usually has Tractor holes on both edges.
- CONTROL KEY OFF/REV key, which allows us to access the second functions (editing functions) on the keyboard.
- CURSOR A solid white or green block on the Video Screen which indicates where the next entry will be placed.
- DEFAULT Pre-determined values set within the system.
- DATA DISKETTE A Diskette which contains data or text generated on the SYSTEM by the user, or a blank formatted Diskette ready for the entry of information (see Document Diskette).
- DECIMAL TAB Automatically aligns decimal numbers with equal decimal places at specified TAB locations.
- DIRECTORY A listing of all the file names stored on a particular Diskette. A hardcopy can be printed in the normal manner if necessary.

- DISKETTE** A 5 1/4 inch magnetic disk enclosed in a plastic protective envelope. The element for nonvolatile storage. Also referred to as a "floppy disk", "floppy", or "floppy diskette".
- DISK ACTIVITY INDICATOR** A red light located on each drive which indicates that Diskette read or write activity is in progress. A green light may activate to indicate a power on status.
- DISK DRIVE** The mechanical device which reads and writes to and from Diskettes. Each Disk Drive is designated with a number from right to left, 0 and 1.
- DISK ERROR INDICATOR** A red light located above the two disk drives which indicates an error condition when continuously on.
- DOCUMENT DISKETTE** The "floppy" Diskette which all of your files are stored on; in addition, holds your Directory.
- ERROR MESSAGE** A message which appears on the screen to inform the operator that an improper function has been attempted or that a command has not been given in the required form.
- EXTRA TEXT** Area of temporary memory where we can store frequently used phrases, formats, etc. This area will not retain data if power is removed. We may, however, store from Extra Text onto our Diskettes for permanent storage.
- FILE NAME** The name assigned by the operator for a Document to be stored on a diskette. This file name can never contain a (, " \* ; :). A number can never be the first character of a file name.
- FOOTER** Information which is automatically generated on the bottom of specified pages in a document, e.g., page numbers.
- FORM LENGTH** The length of a Continuous Form which must be set on some printers subpanel to insure that printing will begin at the proper point on each succeeding form (normally 66 lines).
- FORMATTING** The function which must be performed prior to using a new (unused) Diskette. (See "Newing").

<b><u>GLOBAL</u></b>	Pertaining to an entire document via linked files, e.g., global replace or global hyphenation
<b><u>HARD COPY</u></b>	Any Document or other information when printed on paper.
<b><u>HEADER</u></b>	Text which is automatically generated on the top of specified pages in a document; e.g., running headers such as "CONFIDENTIAL".
<b><u>HOME POSITION</u></b>	Left-most position on first text line.
<b><u>IMBEDDED COMMANDS</u></b>	Commands placed within text to instruct the printer to output in a certain way. The imbedded commands are not printed out on hard copy, but are visible on the display screen.
<b><u>INITIALIZE</u></b>	The process of preparing an already "newed" diskette for immediate use. The initialize function allows the Disk Drive to read the Diskette "name" and Diskette I.D. number. The initialize function also aligns the "read/write" head on the Directory portion of the Diskette. After initializing, the Diskette is now available for use. A Diskette may only be initialized if it has been properly "newed" when it was used for the very first time.
<b><u>JUSTIFY</u></b>	To create an even right-hand margin.
<b><u>KEYBOARD</u></b>	A typewriter-like keyboard used to input information, text or commands to WordPro 4 Plus.
<b><u>LINKED FILES</u></b>	Files that are "linked" together via the use of an NX command at the end of each file.
<b><u>LOCAL</u></b>	Pertaining to text within "Main Text" area only.
<b><u>MAIN TEXT</u></b>	The Main temporary memory of the System. Main Text is used as a window into the memory. Main Text however, unlike a Diskette, will <u>not</u> retain data or text if power is removed.
<b><u>MEMORIZE</u></b>	The act of storing a file on Diskette to be saved for later use.
<b><u>NEWING</u></b>	The action which must be performed prior to using a new (unused) Diskette. This function may be used to "erase" an entire diskette and give the diskette a new name and ID number. (See Formatting).

<u>NUMERIC MODE</u>	See decimal tabulation.
<u>OUTPUT (or Printout)</u>	Automatic typing of recorded text.
<u>PAGE NUMBERING</u>	Automatic sequential numbering of pages.
<u>PAGINATION</u>	Automatic breaking of text into pages during the printing process.
<u>PRINTHEAD</u>	The entire moving mechanism within the Printer which usually carries the Thimble and Ribbon Cartridge across the paper.
<u>PROMPT</u>	A message from WordPro 4 Plus which informs the operator that a particular entry is required.
<u>RANGE</u>	A section of text, which we specify by highlighting in reverse field. We would specify this particular area for performing a function with it (i.e., transfer it, delete it, etc).
<u>RECALL</u>	The act of asking for a file stored on Diskette to be brought into the main text area for editing or printout.
<u>SYSTEM DISKETTE</u>	A Diskette which is usually loaded in Disk Drive #0. Contains the WordPro 4 Plus program which contains all of the operational instructions for the system.
<u>THIMBLE</u>	The circular-printing element located in some PRINTERS. May be easily replaced to change type styles or fonts.
<u>TRACTOR</u>	A device which is attached to a PRINTER to allow the use of CONTINUOUS FORMS. Contains the sprockets which engage the holes on CONTINUOUS FORMS.
<u>VARIABLE BLOCKS</u>	The portion of any standard letter which changes or varies from one letter to another (i.e., - Policy number within an insurance letter). The Variable Blocks allow us to type the same letter continuously while changing only the variable portion.

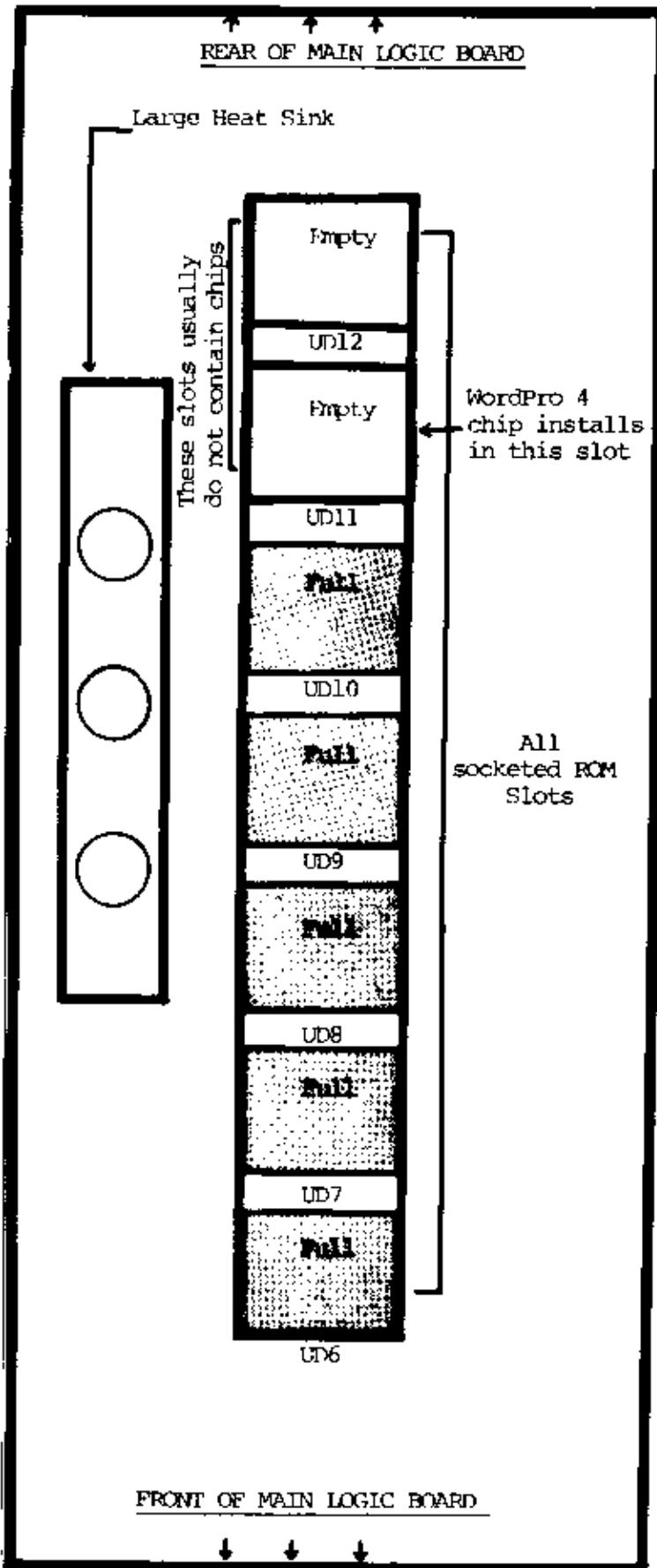
VIDEO DISPLAY The television screen of the computer, also called simply the "screen", or CRT.

WORD PROCESSOR Automated system used to create, edit, store, and print text. Also, it is capable of performing special functions and operations such as text movement, merging variables into standard text, etc.

WRITE PROTECT TABS Tape like material used to cover the Write Protect Notch on a Diskette. When a Write Protect Tab is placed over this area, we cannot erase or destroy the data on the Diskette.

\* \* \* \* \*





With the power off, open up the CBM computer by removing the restraining screws on each side of the unit. Upon raising the cover, lower or raise the stay bar which will keep the cover in the raised position.

Following the diagram above, locate position UD11 on your main logic board. There should be 2 or 3 empty sockets. Locate position UD11, the second slot from the rear.

**NOTE:** Notice that all ROMs are inserted so as to have the notch of the chip facing left.

Insert the WordPro 4 Plus Program ROM in position UD11 with the notch facing left. Please be sure that all pins are seated securely and were not bent upon insertion. Some ROM pins may have to be bent slightly to allow the pins to fit into the slot. If so, hold the ROM sideways against a solid surface and bend 12 pins at a time.

You can now lower the cover and secure it closed with the screws.

With the power on, you may now load WordPro 4 Plus following the instructions in the WordPro 4 Plus User's Manual.

IF YOU HAVE ANY QUESTIONS OR IF YOU NEED ASSISTANCE, PLEASE CONTACT YOUR PROFESSIONAL SOFTWARE DEALER.



Producing a BACKUP/DUPLICATE System Diskette (CBM 2031/2040/3040)

Note: Do not perform these steps if you have already produced a BACKUP copy on your CBM 4040/8050. If you have been supplied with a CBM 2031/2040/3040 you should already have performed Steps a & b shown below before you were referred to this section. If not, please perform them again as shown below, otherwise please continue with Step c.

STEP a) Insert a brand new diskette into Drive #1 (with the label facing up) and close the diskette door very carefully by "jiggling" the door shut.

STEP b) Press <CONTROL> . (period) to enter Disk Mode, then

<TYPE> nl:wordpro 4 plus.99

Please check very carefully that you have typed in the above listed command exactly as shown using the number "1" after the letter "n". Do not type in the letter "l". If you make a mistake typing it in, just press the INST/DEL key to delete the wrong characters or numbers (one at a time) and then type the command in again. Once you are sure that the command has been typed in correctly, PRESS the <RETURN> key.

Please wait about two minutes for the NEWING/FORMATTING function to finish. (The left-hand disk drive light will go out).

FOR A 2031 DRIVE PLEASE SEE THE STEPS ON THE NEXT PAGE

STEP c) Call a Directory via <CONTROL> 0 (zero) <RETURN>.

STEP d) Enter the Disk Mode by pressing: <CONTROL> . (period).

STEP e) <TYPE> cl:wordpro 4 plus=0:wordpro 4 plus <RETURN>

Wait a minute or two for the indicator lights to stop flashing and the "copy" command to finish. This copies the WordPro 4 Plus program onto the diskette in Drive #1.

STEP f) Enter the Disk Mode again by pressing: <CONTROL> .

STEP g) <TYPE> cl:wordpro 4+ b/u=0:wordpro 4+ b/u <RETURN>

STEP h) Enter the Disk Mode again by pressing: <CONTROL> .

STEP i) <TYPE> cl:example letter=0:example letter <RETURN>

Repeat STEPS h & i for each other file listed on your screen directory by inserting the next file name where "example letter" is shown in Step i. When all text files are copied, then proceed to page 14-3.

PRODUCING A BACKUP/DUPLICATE SYSTEM DISKETTE ON A CBM 2031

The procedure for making backup copies of a System Diskette is somewhat cumbersome, but relatively simple. Realistically speaking, this need only be done once.

- STEP c) Exit WordPro by <PRESS>ing <CONTROL> <SHIFT> Q (Que).
- STEP d) <TYPE> load"wordpro 4 plus",8 <RETURN>
- STEP e) When the cursor reappears, place your backup diskette in the disk drive unit.
- STEP f) <TYPE> save"wordpro 4 plus",8 <RETURN>
- STEP g) When the cursor reappears, place your systems diskette in the disk drive unit.
- STEP h) <TYPE> load"wordpro 4 plus b/u",8 <RETURN>
- STEP i) When the cursor reappears, place your backup diskette in the disk drive unit.
- STEP j) <TYPE> save"wordpro 4 plus b/u",8 <RETURN>
- STEP k) When the cursor reappears, place your systems diskette in the disk drive unit.
- STEP l) Reload WordPro and enter the Edit Mode.

NOTE: This procedure only makes a backup copy of the WordPro 4 Plus program and NOT the "example letter" and other linked files also included on the diskette. To back them up, they must be individually recalled from the systems diskette and memorized on the backup diskette. Recalling and memorizing text is described in another section of this manual.

If you encounter difficulties, perform the above Steps again using a different backup diskette.

Performing the steps listed on the previous page will copy all the files on your System Diskette onto a new diskette. Remove this diskette from Drive #1 and carefully label it "WordPro 4 Plus System Diskette". When labeling the diskette you should use a felt tip pen or use a typewriter to type the diskette name onto a separate label (supplied with new diskettes) and then carefully stick/press the new label over the existing diskette label. You will notice a small notch on one (or both) sides of the diskette. This notch must be "covered" in order to preclude accidental "writing over" of information stored on that diskette. Now remove the original MASTER SYSTEMS DISKETTE from Drive #0 and examine it. The small adhesive tab that is used to cover that notch is called a "Write Protect Tab". These tabs can be found in any box of brand new diskettes, if not available then use a piece of cellophane tape. Place a Write Protect Tab over the notch on the side of the diskette. Press the sides of the Write Protect Tab very firmly to preclude the tab from coming loose or falling off in the future.

Your new BACKUP Systems Diskette is now ready for use. Put away the original Master Systems Diskette and store it in a safe, dry location for potential future use. If your Backup Systems Diskette ever fails to load properly, you can use your original to make a new one.

From now on you should use your newly-created Systems Diskette for daily use. Your newly created System Diskette should, from now on, always be inserted into the disk drive WITH THE LABEL FACING UPWARDS.

Insert your new Systems Diskette in Drive #0 (with the LABEL UP) and initialize it by <PRESSing> the RUN/STOP Key and then 0 (zero).

You are now ready to proceed with the next Lesson. Please return now to Page 3-15, "Typing a Sample Page".

\* \* \* \* \*

PUT THE ORIGINAL WordPro 4 Plus MASTER DISKETTE AWAY  
IN A SAFE, DRY LOCATION.  
THIS IS YOUR MASTER SYSTEMS DISKETTE BACKUP COPY.

\* \* \* \* \*

NOTE: The "DUPLICATE" command would be a faster and simpler method of producing a backup copy, but as this command is not compatible among all Commodore disk operating systems, we do not feel it would be prudent to use it at this point without a long, relatively involved, potentially confusing explanation.



WARRANTY DISCLAIMER

The computer programs supplied on the magnetic diskette and IC ROM device (WordPro 4 Plus Program ROM), and these instructions are provided to you, their user, with no warranty of any kind. Although due care has been taken to ensure the correct operation of these programs, no representation is made about their fitness for any particular use or about the accuracy of their results. PROFESSIONAL SOFTWARE INC., their distributors, retailers, and agents thus assume no responsibility and accept no consequential, incidental, or other liability arising from the use of these programs. Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitations may not apply to you.

All WordPro 4 Plus System Diskettes are thoroughly inspected and tested before final packaging. It is still possible, however, to experience loading problems with a known good diskette. If you are unable to load WordPro 4 Plus via the normal method, try the procedure below.

- STEP a) Turn your CBM 8032/9000 off and then on again.
- STEP b) Insert your System Diskette in drive #0 and "close the door".
- STEP c) <TYPE> open 1,8,15,"i0" <RETURN>. Use the number zero, not the letter "o".
- STEP d) <TYPE> load "0:wordpro 4+\*" <RETURN>

Wait five or six seconds for the cursor to reappear. If the cursor does not reappear after ten seconds, try the entire procedure again.

- STEP e) <TYPE> run <RETURN>

If WordPro 4 Plus does not activate, contact your Professional Software dealer.

If you are unable to successfully load and run the WordPro 4 Plus System Diskette, you can contact your dealer for assistance. If you experience further difficulties, you should send the System Diskette and proof of purchase directly to:

Professional Software Inc.  
51 Fremont Street  
Needham, MA 02194

We will replace your System Diskette within one business day and return it to you via First Class Mail. If, after receiving this replacement System Diskette you continue to experience loading difficulties, your disk drives may require alignment or adjustment. Contact your dealer for additional information.

Additional WordPro 4 Plus System Diskettes are available from Professional Software Inc. for \$15.00.

SPECIFICATIONS and prices are subject to change at any time and without notice.

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\* \* \* \* \*

## PRINTER MODIFICATION

The modifications listed below allow you to utilize a Commodore CPU and WordPro program(s) with the following typewriter-quality printers:

- A. NEC 5510 or 5520 Serial Printers
- B. NEC 5530 Parallel Printers
- C. DIABLO 630
- D. C.ITOH FP-1500 -25C (Parallel version)
- E. C.ITOH FP-1500 -25S (Serial version)
- F. QUME SPRINT 5

(After modification, the letter "P" will be used to denote a modified printer.)

### **I. To modify a NEC 5510 or NEC 5520 to a NEC 5510P or NEC 5520P:**

- A. Switch pins #8 and #9 on the serial interface cable which is supplied with the unit. It is important that this change be made on the end of the cable that is inside the printer as these pins are different at the interface connector end.
- B. To remove the pins, take a common small screwdriver and push down on the side of the pin. After this has been completed, pull on the wire and use the screwdriver to pull the tab out. Now re-insert the pins.
- C. Set the Dip switches on the PCB behind the operator control panel as follows:

2, 4, 7, 8 **ON** (up position)  
1, 3, 5, 6 **OFF** (down position)

The Dip switches are located behind the front panel, directly below the ribbon cartridge when it is to the extreme left.

- D. Set the front operator controlled, "rocker switches" panel switches to the appropriate position (see Diagram B).

### **II. To modify a NEC 5530 to a NEC 5530P:**

- A. Run a (jumper/connect) wire from the post on the power supply board marked "TP (test post) +5V" to "pin #18" on the interface connector. The power supply board is the board closest to the front of the machine.
- B. Set the Dip switches on the PCB boards as indicated on Diagram A.

**III. To modify a Diablo 630 to a Diablo 630P**

- A. Jumper pins #5 to #6, #7 to #8, and #9 to #10 on the jumper block A-60 (see diagram below)
- B. Set the Dip switches on the operator control panel as indicated Diagram C.
- C. Set the spacing and print wheel select knobs as appropriate.

**IV. To modify the parallel version of the C.ITOH (TEC) FP-1500-25C to a FP-1500-25CP**

- A. Run a (jumper/connect) wire from the right side of the capacitor marked "C-28" on the board closest to the front of the machine to pin #18 (top left pin) on the interface connector.
- B. Set the Dip switches on the PCB board as follows:

SW1                    1, 2, 4, 5, 6, 10 - UP  
                         3, 7, 8, 9 - DOWN

**V. To modify the serial version of the C.ITOH (TEC) FP-1500-25S to a FP-1500-25SP**

- A. Set the Dip switches on the PCB as follows:

SW1 on forward board    1, 2, 4, 5, 6, 7, 10 - UP  
                             3, 6, 8 - DOWN

SW1 on rear board        2, 3, 6, 7 - UP  
                             1, 4, 5 - DOWN

**VI. To modify a QUME Sprint V to a QUME Sprint 5P**

- A. Set the rocker switches on the front control panel as follows:

- 1. Baud rate .....TOP
- 2. Duplex Switch .....BOTTOM
- 3. Parity .....MIDDLE POSITION
- 4. Auto Line Feed .....TOP POSITION
- 5. Character spacing .....BOTTOM
- 6. Form Length Rotary Switch ...11

- B. Set the switches on the PCB behind the front control panel to the extreme left. These switches are located below where the ribbon is positioned when it is in the extreme left position. These switches control the baud rate which should be set for 1200 baud.

RECOMMENDED INTERFACES

The following interfaces have been tested and found satisfactory for use with the above printers:

Serial Printers

1. NEC 5510P
2. NEC 5520P
3. Diablo 630P
4. C. ITOH FP-1500-25SP
5. QUME Sprint 5P

IEEE to RS-232 Interfaces

TNW-2000  
ADA-1450

Parallel Printers

1. NEC 5530P
2. C. ITOH FP-1500-25CP

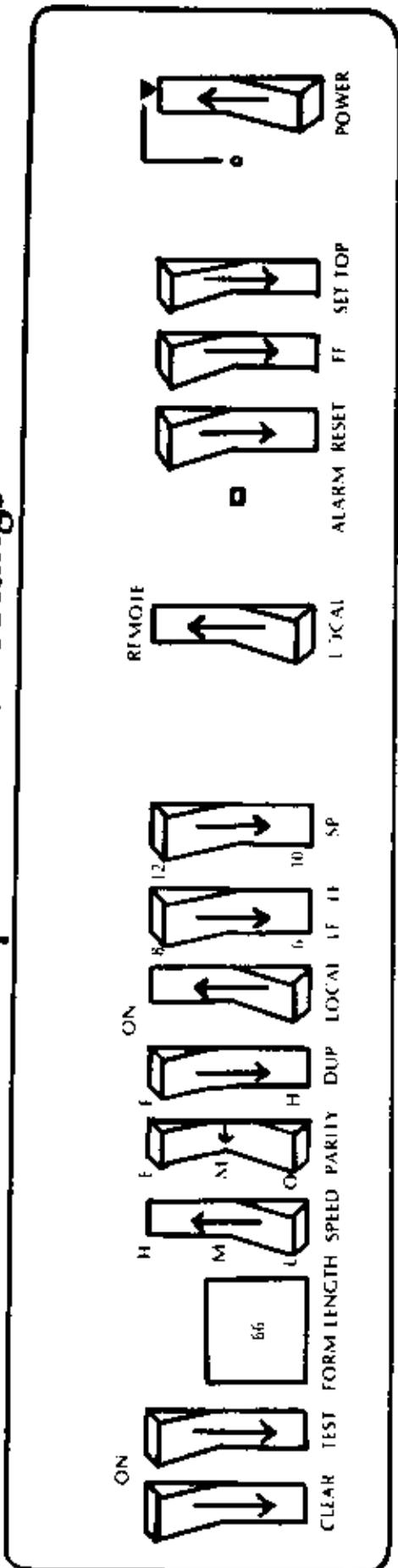
IEEE to Parallel Interfaces

ADA-1600  
CPA-080



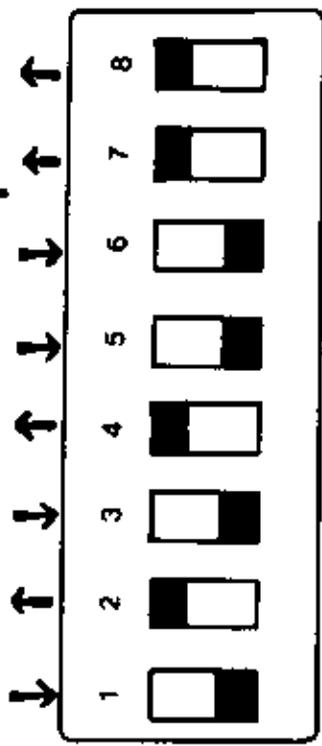
# NEC SPINWRITER 551OP

## Front panel switch settings



- CLEAR — down
- TEST — down
- FORM LENGTH — 66
- SPEED — up (on H)
- PARITY — middle (on M)
- DUP — down (on H)
- LOCAL LF — up (ON)
- LF — down (on 6)
- SP — down (on 10)
- REMOTE/LOCAL — up (on remote)
- ALARM
- RESET
- FF
- SET TOP
- POWER

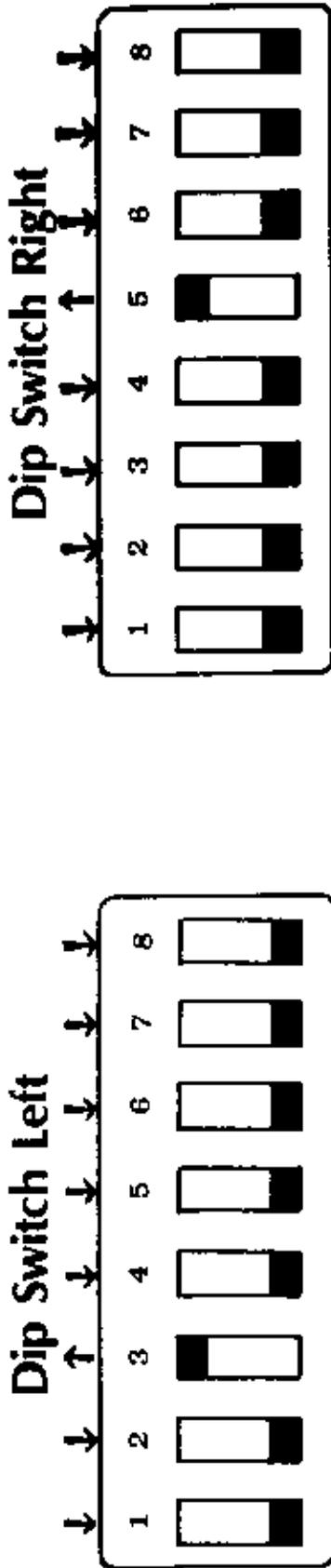
# NEC SPINWRITER 551OP Dip Switch Settings



Dip Switches are located behind the front panel of the printer near to and below the ribbon cartridge.

DIAGRAM B

# DIABLO 630P



Dip switches settings are located directly under the front cover of the control panel.

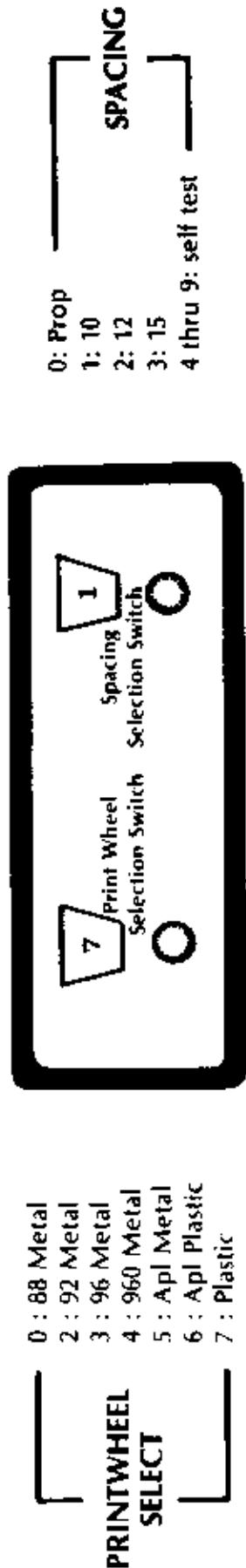


DIAGRAM C

DIABLO 630 Jumper/Connections

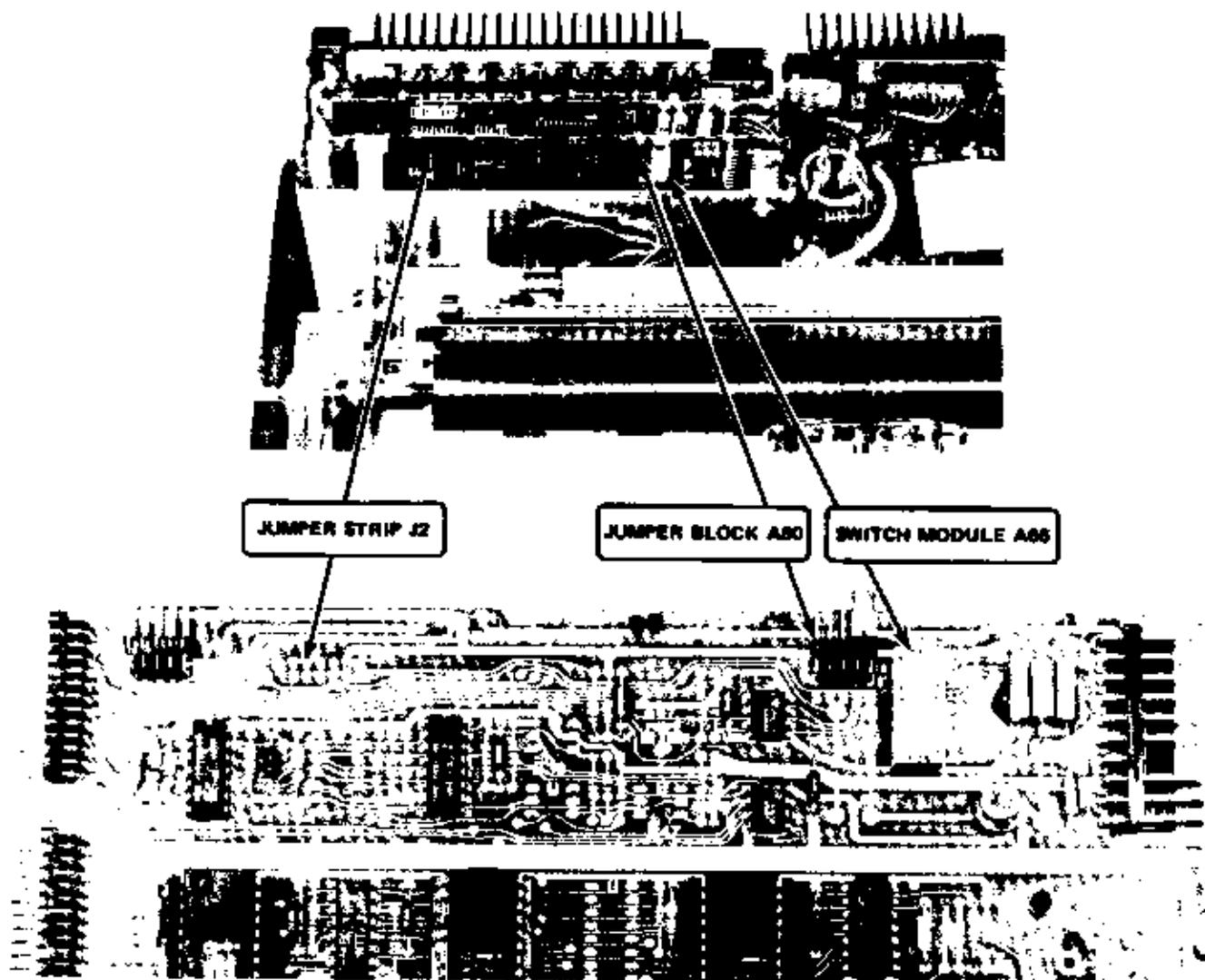
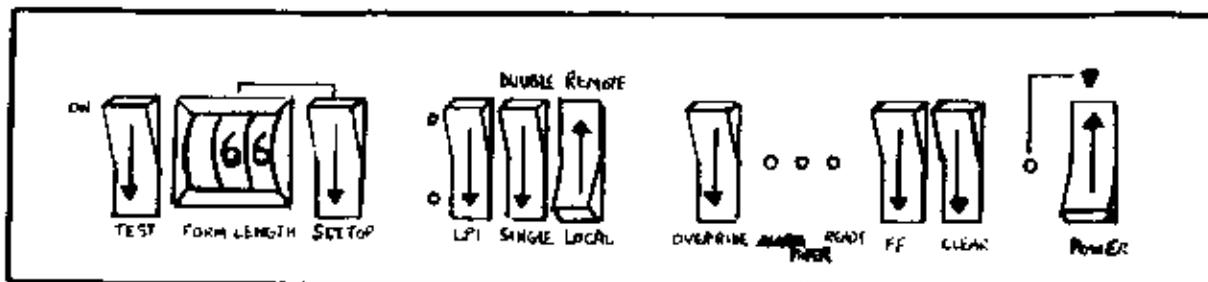


Figure 2-16. HPRO5 OPTION JUMPERS AND OPERATING CONTROL SWITCHES

SPINWRITER HINTS

- A) Make sure paper, ribbon, and print thimble are properly installed.
- B) Check to make sure that all front panel control switches are properly set (see reverse side).
- C) Be sure that the printer cover is closed tightly.
- D) Check to see that Sound Deadener (plexiglass cover) is in the closed position.
- E) Be sure that the print carriage is not positioned in the extreme left position. To verify this:
  - 1) Turn power off.
  - 2) Lift cover and move the print mechanism to the center of the printer.
  - 3) Turn Power on.
- F) Be sure that the ribbon cartridge is not empty or that the ribbon has not broken.
- G) Check the "paper out". In the right rear of the printer there is a small slot that contains the paper out control. If the metal arm from the paper out option is "down" in the slot, it should be lifted out as this will indicate to the printer that it is out of paper.
- H) Check that the unit is "plugged in".
- I) If you are getting all capitalized letters, either when typing your document or outputting, you inadvertently gave the wrong "printer type" in the initial loading process. To correct this, you must reload your system. When you get to "Printer:" you will have either "CBM or ASCII" or "CBM, ASCII, or Spinwriter" on the screen depending upon your system's operating program. If your screen reads "PET or ASCII", simply type a. If your screen reads "PET, ASCII, or Spinwriter", simply press the RETURN key to default to Spinwriter mode.

The front panel control switches should be set as follows on a NEC Spinwriter Model 5530P. A standard NEC 5530 must be slightly modified to function with CBM computers.



- |                      |   |
|----------------------|---|
| A) [test]            | -Down Position  |
| B) [set top of form] | -Down Position  |
| C) [LPI]             | -Lines Per Inch, can be set on either 6 or 8, depending on user preference  |
| D) [Double/Single]   | -Double or Single lined spacing; set on either depending on user preference |
| E) [Remote/Local]    | -MUST be set in the up position (remote position)                           |
| F) [over/ride]       | -Down Position  |
| G) [FF]              | -Down Position  |
| H) [Clear]           | -Down Position  |
| I) [Power]           | -Up for 'ON'  |

After the printer has been turned on, there should be two control lights illuminated on the front panel. They are:

- 1) Power On
- 2) Ready

If the printer does not print and/or these two lights are not illuminated, check the items listed on Page 13-1.



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