



# **Paperback Writer 128/64**

## **Reference Guide**

**Serious software  
that's simple to use.**



# Paperback Writer 128/64

A professional word processor  
for the Commodore 128 and 64

## Reference Guide

Written by Eric L. Mills

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**Program concept and design** — V.E. Kass  
— D.W. Foster

**Program written by** — D.W. Foster

**Digital Solutions Inc.,**

P.O. Box 345, Stn 'A'  
Willowdale, Ontario,  
Canada M2N 5S9



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# Introduction

Welcome to *Paperback Writer 128 and 64* — probably the best writing tool available for inexpensive home computer systems. Extraordinarily easy to learn and use, *Paperback Writer* also offers many sophisticated controls over your documents, on both the video screen and printed paper.

The philosophy behind *Paperback Writer* — and every software product of Digital Solutions Inc. — is to enable you to start using it as soon as it's loaded into the computer's memory.

In almost every situation, "help" is available at the touch of the <F7> key. You'll be offered a spectrum of possible courses of action, often in more detail if you press <F7> again. You really don't need a manual that takes you away from the screen; use this reference guide only to clarify functions you don't understand, to utilize advanced features or to solve problems.

Best of all, what you see is what you get! You can see **boldface**, *italics* and underlining on the screen — and exactly what you see on-screen comes out on printed paper. No fancy codes to memorize that clutter up the screen; no words broken up at the end of a line; no need to guess what a page will look like.

*Paperback Writer* doesn't limit you to the standard 40 columns of the Commodore 64. You may choose to work in 80 columns, the width of most printed documents — no need to scroll sideways to see everything!

You can also load files from Paper Clip™, Word Pro™, Easy Script™ and other popular word processors, enabling you to easily switch to *Paperback Writer's* ease and power. (For Easy Script files, see page 34 in Loading.)

And a spelling checker will help find typing and spelling mistakes. It compares the words in your documents with a dictionary disk you create yourself, or with a 32,000-word disk available separately from Digital Solutions — save proofreading time!

*PAPERBACK WRITER FOR THE COMMODORE 128*: Making full use of the doubled memory, faster speed and 80-column capability of the 128, *Paperback Writer 128* adds several new features to the powerful program produced for the 64. Now you can have two files in memory at once, making cut-and-paste operations a snap. Superscripts and subscripts now appear on-screen as raised and lowered. Also, the program loads automatically.

*Paperback Writer 64* will also run on the Commodore 128, but only in the 64 mode. It won't use the 128's extra speed and capabilities, although the numeric keypad, ESC (escape), TAB and HELP keys will function.

Registered owners of *Paperback Writer 64* can upgrade to *Paperback Writer 128* for \$15 U.S. plus \$3 for shipping and handling. Write Digital Solutions Inc.

*Paperback Writer 128* will also run on the Commodore 64, but only the 40-column format and the Spelling Checker. It will not run in 80 columns nor use the extra features in the 128 program.

For the latest information on *Paperback Writer*, Digital Solutions Inc. and other Paperback software, see the file called "**read me**" on the *Paperback Writer* disk.

**SUPPORT:** If you can't get some of the options to work, check the Trouble-Shooting section and the Index of this guide for help. If you still have problems, ask the retailer who sold you the program. If you can't get satisfaction from the retailer, write Digital Solutions Inc. at the address in the front of this guide.

# The Joy of Word Processing

*Paperback Writer* offers all the usual benefits of writing on a word processor — and then some! You can write and store long documents without bothering with paper and typewriter ribbons. You can add, subtract or move text without retyping. And when the document is letter-perfect, you can have it printed out automatically.

*Paperback Writer's* other major features include:

- **wordwrap** — no words break at the edge of the screen.
- **flexible cursor movement**, including tabs and other timesavers.
- **deletion and insertion** of characters, lines and blocks of text.
- **on-screen text enhancement**, such as boldface, italics, underlining superscripts and subscripts, and foreign and other characters.
- **manipulation of blocks (ranges)** of text for functions such as moving and deleting, even between files.
- **sorting lists** in order of numbers and letters.
- **aligning and adding numbers** in columns, helpful with tables.
- **variable margins** at left and right, and **paragraph indentation**.
- **lines centered, justified or aligned** at the right side.
- **variable page lengths** and **line spacing**.
- **borders** at top or bottom with optional title lines and page numbers.
- **linked files** to print extra-long documents in sequence.
- **flexible printer set-up** to allow use with any printer.
- **find and replace** text functions that can be automatic.
- complete or selective **directories** of files on the disk.
- **sequential files** for mail lists and communication with other computers.
- **mail-merge**, to customize form letters for a group of people.
- **16-color choice** on the screen.
- **fast loading** on 1541 and 1571 disk drives.
- **alternate screens** (on the 128), allowing rapid comparison and swapping.

## Using This Guide

The best way to learn *Paperback Writer* is to load it up and start using it (see Let's Go! on page 6). We suggest reading all the Getting Started section before long — but after that, use on-screen help (the <F7> or <HELP> key) to get clear and simple explanations of the functions; refer to this guide only when you need more detail.

**Getting Started** (pages 4 to 7) describes in detail how to begin working with **Paperback Writer**, and how to create a storage disk. A typical use — writing a letter — is described from start to finish, showing some of the functions at your disposal.

This section also explains basic terms to operate the keyboard, and briefly outlines editing and other options, suggesting that you get help on-screen from memory and disk.

**Function Feast** (pages 8 to 33) details how-to-do-it — simply at first, with more complex details following (if necessary). Once you understand what you want to do, you don't need to read any further. Functions are listed approximately in the order you'll encounter in using the program:

*Within a file (editing):* cursor movement, text manipulation, text enhancement, ranges and text formatting;

*Between files and printing (< C > commands):* load, save, verify, join, find/replace, directories, disk commands and print.

**Spelling Checker** (page 46) explains how to find spelling errors before you print your document.

**Creating a Printer File** (pages 47 to 50) helps you use all the features available on your printer.

**Trouble-Shooting** (pages 51 to 52) explains disk errors and how to solve problems that aren't dealt with elsewhere.

**Index** lists functions, special keys and commonly understood terms in alphabetical order. Use it to quickly find functions in this guide and to clarify terms.

*128 USERS:* Throughout this guide, sections explaining special features for Commodore 128 users are enclosed in a box like this one for easy recognition (except for small points mentioned in text). In the Contents and Index, items with special information for 128 users are marked with asterisks (\*).

# Getting Started

## What you need

*Paperback Writer* is designed for the Commodore 64 and 128 computer system using a 1541 or 1571 disk drive and a TV or monitor. The manuals for your hardware tell you how to connect these components.

You'll also need several 5 1/4-inch floppy diskettes (called disks) for storage and back-up, in addition to the one containing the *Paperback Writer* word processing program.

And to print your documents on paper (called hard copies), you'll need a compatible printer.

## LET'S GO!

**LOAD THE PROGRAM:** When the disk drive, monitor and Commodore 64 keyboard are properly connected, put the *Paperback Writer 64* disk in the disk drive (in drive 0 if you have a dual drive).

Now type: **load''pw'',8** (which appears in capitals)  
and press <**RETURN**> (the key near the lower right of the keyboard).

The screen should show:  
**SEARCHING FOR PW**  
**LOADING**  
**READY.**

Now type: **run** (which also appears in capitals)  
and press <**RETURN**>.

(If the screen shows **''?FILE NOT FOUND''** after you enter **load''pw'',8** and press <**RETURN**>, enter **open1,8,15,''** and press <**RETURN**>. Now, try to load again.)

If you want to: work with **40 columns** in a line — press <**f1**> .  
work with **80 columns** in a line — press <**f3**> .  
use the **Spelling Checker** — press <**f5**> .

The screen flashes for about 20 seconds as the program loads.

**CHOOSE A PRINTER:** Move the cursor to the name of your printer (choose any if you don't intend to print) and press <**RETURN**>. If your printer isn't listed, see "Creating a Printer File" on page 47.

**TIMESAVER:** If you're not planning to print, you can save time by holding down the Commodore key (<**C**>, at the bottom left of the keyboard) when the program is loading. Even after the title page is displayed with the choice of printers, you can save a few seconds by pressing <**C**> instead of choosing a printer. In either case, you arrive directly in edit mode.

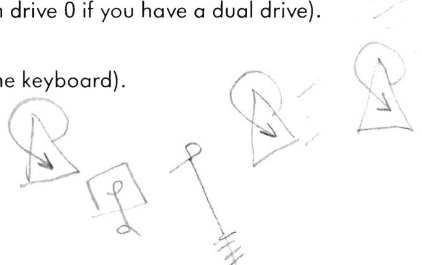
To print later on without reloading the program, install a printer file (see page 42).

Now you're in "edit" mode and can begin work.

To start a new document, simply begin typing.

To work on a document (file) previously stored on a disk, you must load it into the computer's memory. First, replace the *Paperback Writer* disk with the storage disk in the disk drive. Now press <**C**> (the Commodore key at lower left of keyboard), type **I** (the letter "L"), enter the file's name and press <**RETURN**>.

(To see a directory of files on the disk, press <**C**> and type **d**. Now you can load a file by putting the cursor on its name and pressing <**RETURN**>.)



Ask for HELP at any time by pressing <f7>. The first time you press it, you'll get fast but limited help from memory. Press it again to get more detailed help from the program disk (if the storage disk is in the drive, replace it with the *Paperback Writer* disk). Return to edit mode from HELP by pressing <f8> (shift <f7>).

**CREATING A STORAGE DISK:** If a disk has never been used on a 1541 or 1571 disk drive, it must be formatted.

Caution: formatting erases all files stored on the disk. It only needs to be done once unless the disk is not functioning correctly.

Press <C> and then type **c**.

Place the disk to be formatted in the drive. Choose a name for it and a two-digit identity number (id).

Type: **n0:name,id** and press <RETURN>.

(Replace 0 with 1 if the disk is in Drive 1 of a dual drive.)

**Disk Drive Error Message:** After about a minute, the red disk drive light should go out, indicating that the disk is formatted. If it flashes, an error is indicated. To read the error, press <C>, then type **c** and press <RETURN> — and see the Trouble-shooting section of this guide.

## Loading Paperback Writer 128

The *Paperback Writer 128* disk contains two programs:

\* An **80-column program**, employing the full capabilities of the 128 computer and the extra features of this program, to be used on the Commodore 128.

\* A **40-column program**, to be used on the Commodore 64 or the Commodore 128 (but using only the limited capabilities of the 64). This program also contains the Spelling Checker, which can be loaded on either Commodore computer.

On the *Commodore 128*, both programs load automatically if the program disk is in the drive when the computer is turned on.

To use the word processor on a *Commodore 64*, follow the usual procedure described above. The program does not load automatically, and offers only the 40-column format or spelling checker program as options.

**TIMESAVER:** If you don't plan to print a file, you can save time with either computer by holding down the Commodore key (<C>) when the program is loading, as described above.

### 80-column display (128 word processor)

Before turning the Commodore 128 computer on, make sure the <40/80 DISPLAY> key is in the down position. This tells the computer you want the screen to show 80 columns.

Also before turning the computer on, put the program disk in the disk drive. Now turn the power on and the program loads automatically, displaying "**BOOTING PAPERBACK WRITER . . .**".

If the computer is already on when the program disk is put in the drive, load the program by typing **boot** (which appears in capital letters) and pressing <RETURN>. As before, "**BOOTING PAPERBACK WRITER . . .**" is displayed on the screen.

When the program is loaded, the title "**Paperback Writer 128**" appears with the choice of printers. As described above, move the cursor to the name of your printer and press <RETURN> to arrive in edit mode.



## 40-column display (for Spelling Checker)

To use the Spelling Checker, you must load the program using 40-column display. You can also choose the 40-column display for word processing on the Commodore 128, but as described above, this is the same program as for the 64 — using none of the 128's extra speed and capabilities.

Before turning the 128 computer on, make sure the < **40/80 DISPLAY** > key is in the up position. This tells the computer you want the screen to show 40 columns.

Now put the program disk in the disk drive and turn the power on. As before, the program loads automatically, displaying "**BOOTING PAPERBACK WRITER . . .**".

If the computer is already on when the program disk is put in the drive, load the program by typing **boot** (which appears in capitals) and pressing < **RETURN** >. As before, "**BOOTING PAPERBACK WRITER . . .**" is displayed on the screen.

Next, you must choose between:

"**f1 — 40-column word processor**" and

"**f3 — Spelling Checker**"

Press the key of the option you want — < **f1** > or < **f3** > — and the program loads.

If you chose the 40-column word processor, the title "**Paperback Writer 64**" appears with a choice of printers. Move the cursor to the name of your printer and press < **RETURN** >.

If you chose the Spelling Checker, your options are now displayed, as described on page 46.

*BACK-UP:* To protect the copyright, the *Paperback Writer* disk cannot be copied. However, you can purchase a back-up copy when you send in your registration card (in the disk envelope) or at a later date (for pricing and other information, see the "**read me**" file on the program disk). The back-up sent to you will be the most up-to-date version available.

Note: Also because of the protection system, don't try to validate the *Paperback Writer* disk. See Install Printer File, page 42, for details.

## Typical Use — Writing a Letter

The following example of how to write a letter is in a sequence also used (approximately) in this guide.

After loading the *Paperback Writer* program from its disk into the computer's memory, you arrive in **edit** mode. Now you may type the letter in, ending each paragraph by pressing < **RETURN** >.

In the course of editing, you may **manipulate text** by inserting or deleting characters. You'll **enhance text** if you want to underline, boldface or italicize it. Blocks of text may be moved within a file, or new text brought from other files, using **ranges**.

You'll **format text** to control how the letter will look on the screen or on paper, altering such factors as: how much space is at the top, bottom and sides; whether paragraphs are indented; and whether each page has a title and page number. And you may **link** the letter to an another file so they print in sequence.

When finished, you may **save** the letter, giving it a name for reference. You can then see its name listed in the storage disk by looking at a **directory** of files on the disk, and can **edit** it again by **loading** it onto the screen (into memory). If you find a spelling error, perhaps in someone's name, you can **find** all occurrences of the error and **replace** them with the correct one.

When you're satisfied with the letter, you can use the **spelling checker** to have the computer find errors, and the **80-column screen format** to see exactly how the letter will appear.

Finally, you can **print** it onto paper.

At any point, you can get **help** (advice on your options) by pressing the < **f7** > key.

# The Keyboard

*Paperback Writer* uses every key on the Commodore 64 keyboard as indicated on top of the key, with two exceptions: The leftwards arrow key at the top left is used for tabs and the <RESTORE> key is not used.

Characters that you may type include letters, numbers, punctuation and # \$ % + - @ \* ↑ \_ | { } < > = (and others — see Text Manipulation). Note the difference between 0 (the number zero) and O (capital letter o). Holding down a character key will repeat it until the key is released.

Function keys <f1> through <f8> and the Commodore key <☞> have special duties. Other functions are performed using the <CTRL>, <SHIFT> and other keys in various combinations.

In this reference guide, function keys are enclosed by < and > (eg. <INST/DEL> and <f1>). Most of these should be pressed once and released, but the <INST/DEL>, **tab** and the two <CRSR> keys may be held down to repeat their functions. <CTRL> and <SHIFT> don't activate anything by themselves, and should be held down (sometimes together) while other keys are pressed.

## 128 Keyboard Additions

All of the Commodore 64's keys are included in the 128 keyboard, and they all — except one — function in the same way in this program. In addition, the 128 keyboard has several new keys which save time and effort and a numeric keypad.

These keys:	perform the same function as:	
<HELP>	<f7>	(to obtain help)
<SHIFT> <HELP>	<f8>	(to exit help)
<ESC>	<f5>	(to enter/exit text formatting mode)
<TAB>	<←>	(to move forward one tab)
<SHIFT> <TAB>	<SHIFT> <←>	(to move backward one tab)
gray arrow keys at top	cursor keys	
<ENTER>	<RETURN>	
<CAPS LOCK> replaces <ALT>, <LINE FEED>	<CTRL> C	(to enter/exit capitals mode)
and <40/80 DISPLAY>		have functions unique to the 128.



## Help

As stated above, you can get help — advice on your options — at almost any time simply by pressing the <f7> key (or the <HELP> key on the Commodore 128). While you're getting assistance, the text you have on the screen is safe: as soon as you return to edit mode you get the text back.

To return to edit mode, press <f8> (<SHIFT> <f7>) (or, for 128 users, <SHIFT> <HELP>).

When *Paperback Writer* is first loaded, six lines at the top of the screen are used to display help. If you want to use these lines to display more text — while losing the ability to get help — hold <CTRL> and press **h**. When you want help, press <CTRL> **h** again.

In edit mode, you can get help with cursor movement, text manipulation, text enhancement and ranges simply by pressing <f7> (or <HELP>). To get help with text formatting, press <f5> (the text formatting function key), then <f7> (or <HELP>).

To get help on modes other than edit, press <☞> (to change modes) and then <f7> (or <HELP>). After pressing <☞> and **l**, **s**, **v**, **j**, **f** or **c** (to load, save, verify, find/replace or send disk commands), you can get further help by pressing <f7> (or <HELP>) again.

# Function Feast, Part One: Within Edit Mode

## 40 or 80 Columns (on the 64)

As described on page 4 of *Getting Started*, when loading up *Paperback Writer* on the Commodore 64 you're asked to choose between a screen 40 columns wide or 80 columns wide. (You can also choose at this point to use the Spelling Checker). If you switch from one width to another, you may want to change brightness and contrast settings on your monitor.

*40-column screen* (press <f1>) is easy to read and has faster response times to commands. Margins are set at 1 on the left and 39 on the right unless you change them.

*80-column screen* (press <f3>) lets you see the whole width of a typical printed document without scrolling sideways. However, it is more difficult to read, has only about half the memory and responds more slowly.

Also, when you put text into boldface or super/subscripts, the immediately preceding character may include an adjacent character. However, it will always be printed correctly.

Margins are set at 1 on the left and 75 on the right unless you change them.

*A suggested procedure:* If you plan to print with margins of more than 40, enter and work on the text in the 40-column width. Then save it and look at it in the 80-column width before printing.

Remember that you must reload *Paperback Writer* to change screen widths, which means you must save anything on-screen (in memory) on a storage disk to avoid losing it.

## Cursor Movement

### The Cursor

The flashing square that appears when you first load up *Paperback Writer* is the cursor. It shows exactly where you can enter or delete text or define some commands. It can move down as far as one line below the bottom of the text, and can go to the right indefinitely.

While text is being added at the end of a file, the cursor will move to the next line automatically when the right margin is reached. If the cursor is in the middle of a word when it reaches the margin, the word *wraps around* — moves in its entirety to the next line.

If text is being typed in before the end of a file, the line that the cursor is on can expand to the right indefinitely. When the cursor is moved to another line or the text is reformatted, the text off to the right is brought back to fit into the screen.

### Command Line

The line at the very top of the screen, specifies the cursor's position in text. It can't be controlled directly — it just shows where the cursor is.

**P** = gives the *page* number.

**L** = gives the *line* number.

**C** = gives the *column* number.

**PAGES:** When a page break appears in the editing portion of the screen, the number it contains shows the end of a page (i.e. the number represents the bottom of the previous page, not the top of the new one).

To control how many lines a page can have, see "Page Length" and "Printed Lines" on page 29.

The command line also displays the name of the file on the screen and gives other information. When you're moving between modes (performing Commodore Key functions — see page 34) the command line provides space to enter commands. The cursor then moves onto the command line and can be moved left, right or HOME (see below).



## 128 Command Line Changes

Instead of one area of the command line being used to indicate mode changes, the 80-column program for the 128 reserves space for each one. Thus, each change you make is indicated on the screen — and stays there until you reverse it (instead of an indicator of one mode being overwritten when another mode is used, as in the 40-column program).

<u>These initials:</u>	<u>indicate these modes:</u>
<b>INS</b>	insert — <b>&lt;f1&gt;</b>
<b>CAP</b>	capitals — <b>&lt;CAPS LOCK&gt;</b> or <b>&lt;CTRL&gt; C</b>
<b>NUM</b>	numeric — <b>&lt;CTRL&gt; n</b>
<b>GBL</b>	global — <b>&lt;CTRL&gt; g</b>
<b>64K or 32K</b>	memory for current file — <b>&lt;SHIFT&gt; &lt;ALT&gt;</b>

## Cursor Keys

The two keys marked “CRSR” with arrows at the bottom right are cursor keys. To move the cursor:

- down one line — press the **<CRSR down>** key (directly to the right of the **<SHIFT>** key), and release it.
  - up one line — hold down the **<SHIFT>** key (either one), press the same cursor key and release it.
  - right one space — press the **<CRSR right>** key (at bottom right) and release it.
  - left one space — hold down **<SHIFT>**, press the same cursor key and release it.
  - down one screen — hold down **<CTRL>** and press **<CRSR down>**. The line the cursor is on moves to the top. Repeat, and the text moves up so that the former bottom line is now at the top.
  - up one screen — hold down **<CTRL>** and press **<CRSR up>** (don't forget to **<SHIFT>**). The line the cursor is on moves to the bottom. Repeat, and the text moves down so that former top line is now at the bottom.
  - to end of line — hold down **<CTRL>** and press **<CRSR right>**.
  - to beginning of line — hold down **<CTRL>** and press **<CRSR left>** (**<SHIFT>**).
  - beginning of next line — hold down **<SHIFT>** and press **<RETURN>**.
  - forward one word — press **<f3>** (among keys at right).
  - backward one word — press **<f4>** (**<SHIFT> <f3>**).
  - to top left of screen — press **<HOME>** (**<CLR/HOME>** key at top right).
  - to beginning of file — press **<HOME>** twice.
  - to end of file — press **<f2>** (**<SHIFT> <f1>**).
- Holding down the cursor keys or **<f3>/<f4>** repeats their movements until they're released.

## Tabs

Just like a typewriter, *Paperback Writer* has tabs to move the cursor quickly. When the program is loaded, they're set at 10-column intervals. To:

- move forward 1 tab — press the arrow key at the keyboard's top left (can be held down for continuous movement).
- move backward 1 tab — hold down <SHIFT> and press the tab key (continuously, if desired).
- set or clear a tab — move the cursor to desired column and press <CTRL> t (the letter T).
- clear all tabs — press <CTRL> T (<CTRL> <SHIFT> t).

When a file has tabs set at greater than column 40, saving a file on a disk (see page 36) uses more storage room. However, it takes no extra memory when the file is on the screen.

## Return

The <RETURN> key near the bottom right of the keyboard is used to end paragraphs and begin new ones, or to add blank lines. Outside the edit mode, <RETURN> is often used to execute commands.

When visible (see Other Screen Controls, page 20), it shows up as a right-to-left arrow (10).

To move the cursor to the next line without ending or starting a paragraph, press <SHIFT> <RETURN>.

Pressing <RETURN> in the middle of a paragraph breaks it into two separate paragraphs, with the character under the cursor starting the second paragraph. Formatting commands remain with the first paragraph.

When the cursor is on a return arrow, pressing <RETURN> creates a new paragraph only when you are in insert mode. If you aren't in insert mode, the cursor moves to the next line as if <SHIFT> <RETURN> was pressed.

# Text Manipulation

Most functions used in editing — such as deleting and inserting text — are text manipulation. This section also includes the advanced features of altering the type of file and handling numbers.

## Delete Character

To delete the character or space to the left of the cursor, press **<DEL>** (the **<INST/DEL>** key at the keyboard's top right corner).

You can also choose to reverse the direction in which the deletion works, starting with the space or character that the cursor is on. To do this press **<CTRL> e** ("**Edit Delete ON**" appears on the command line.)

To restore the original deletion type press **<CTRL> e** again ("**Edit Delete OFF**" appears on the command line).

Deletion repeats when the **<DEL>** key is held down.

## Insert Character

To insert a space to the left of the cursor, press **<SHIFT> <INST/DEL>**.

This function repeats when the keys are held down. The cursor doesn't move, but the text past it is forced further right as spaces are inserted.

## Delete/Insert Line

To delete the line the cursor is on, press **<CTRL> <DEL>**.

To insert a blank line above the current line, press **<CTRL> <INST>** (remember to **<SHIFT>**). The cursor doesn't have to be at the beginning of the line.

Both these functions repeat when the keys are held down.

## Insert Mode

To begin automatic insert, press **<f1>** (at the top of the column of keys at the keyboard's right).

Now everything past the cursor moves right as you enter text, rather than being overwritten. The letters "**INS**" appear on the command line.

To cancel the automatic insert, press **<f1> again**. (This is a "toggle" function — pressing the same keys turns it on and off.) Only pressing **<f1>** again or reloading the program cancels insert mode.

To add text to the right of an existing line, there's no need to enter insert mode: simply type the text and spaces automatically fill any gap out to where you are typing.

## Clear (Erase) Text

To clear (erase) all the text to the end of the file, starting at (and including) the line the cursor is currently on, press **<SHIFT> <CLR/HOME>**.

As a safety feature, "**Erase text from cursor?n**" appears on the command line. If you do want to erase the text, type **y** and then press **<RETURN>**.

If you decide *not* to eliminate the text after pressing **<CLR>**, press **<RETURN>** and you'll return to edit mode with nothing changed. Even after typing **y** you can change your mind: Type **n** and press **<RETURN>**.

Once text has disappeared using the **<CLR>** key, it cannot be restored.

To delete a portion of text, see page 18 in Ranges. This method enables recovery of the deleted text.

## Reformatting Text

When a line in a paragraph has been lengthened or shortened, you can readjust the line to fit into its margins by pressing <f6> (<SHIFT> <f5>). This may make the text easier to read.

The cursor stays on the current character, even if the character moves to another line.

Moving the cursor off the current line also reformats the text.

As well, pressing <f5> twice (see page 24 for Text Formatting) or <⌘> twice reformats the text, but these methods are slower and risk errors. Also, <f6> cleans out undefined space which <⌘> and <f5> toggled won't.

## All Capitals

To have every letter you type entered as a capital, press <CTRL> C (<CTRL> <SHIFT> c). The letters "CAP" appear on the command line, although they will not replace "INS" if you're in insert mode. Now punctuation and functions such as <DEL>, <HOME> and cursor keys still work, but all letters typed are capitalized.

To return to normal (upper and lower case), press <CTRL> C again (toggle).

Pressing <SHIFT/LOCK> also makes all letters you enter be capitals, but don't forget that it locks into the shift position all function keys that operate differently when shifted (eg. pressing <INST/DEL> will not delete characters, only insert them, and the cursor keys will only work upward and leftward.)

*128 CAPITALS:* The Commodore 128 has a special <CAPS LOCK> key to type in all capitals. To avoid confusion, <CTRL> C does *not* enter caps in the 80-column program for the 128; use <CAPS LOCK>. This is the only *Paperback Writer 64* key function that doesn't function exactly the same way on the 128.

"CAP" remains on the command line as long as you are in capitals mode.

## Alter File Type

*Paperback Writer* loads most files as *text* (shown as "prg" in directories), which permits more flexibility in editing and permits on-screen enhancement.

You may want to change a text file to a *sequential* file ("seq" in directories) to handle repetitive data such as mail lists and to communicate between computers.

A sequential file automatically ends every line with a return symbol. Only characters on the keyboard can be used, because on-screen enhancement (such as underlining) is eliminated. Text formats (such as page breaks and indented paragraphs) are also eliminated.

To alter a text file to a sequential file, press <CTRL> a.

Now the query "Switch to SEQ file?n" appears on the command line, as a safety feature.

Press y and then <RETURN>. "SEQ" replaces "P=" on the command line.

If you decide *not* to alter the file type after pressing <CTRL> a, simply press <RETURN>, leaving the "n" (no) unchanged. You can also change "y" back to "n" and press <RETURN> if you change your mind.

To change a sequential file to a text file, follow the same procedure (<CTRL> a toggles between text and sequential files). Note that end-of-paragraph symbols (<RETURN> arrows) remain at the end of each line and that there is no text formatting — but now you can insert some.

## Align Numbers

To enter a column of numbers and align their decimal points under a tab, press <CTRL> n to enter numeric mode (“NUM” appears on the command line).

Put the cursor at the tab at which you want numbers aligned, and enter a number. Now press the **tab key** (to align the number and move the cursor to the next tab) or <RETURN> (to align the number and move to the next line).

For example, to create a table of numbers like:

\$123.45	64.25
29	142.3

set two tabs where you want the decimal places. Move the cursor to the first tab on a blank line and enter **\$123.45**. Now press the tab key: \$123.45 appears with its decimal point under the first tab and the cursor moves to the second tab. Enter **64.25** and press <RETURN>: 64.25 appears with its decimal point under the second tab and the cursor moves to the beginning of the next line. Enter the second line in the same fashion.

Indentation, margins and other formatting commands still affect tables of numbers, so make sure indentation is set to 0 and all of your table can fit within the current margins.

To turn numeric mode off, press <CTRL> n again (toggle). Leaving it on could cause trouble when numbers are entered.

To sort and add columns of numbers, see page 19 in Ranges.



# Text Enhancement

## Underline, Boldface, Italics, Superscript, Subscript

All these text enhancement functions work the same way. They enable you to emphasize or otherwise alter the appearance of type on the screen — and on paper if your printer has the capacity.

Put the cursor at the first character of the text you want to enhance, press <CTRL> and:

- u** for underlining
- b** for **boldface**
- i** for *italics*
- +** for superscript, eg.  $r^2$
- for subscript, eg.  $H_2O$

Now all text from the cursor to the end of the paragraph is displayed as enhanced. (Superscripts appear as yellow on color monitors and are brighter on monochrome monitors; subscripts appear as green on color monitors and are not quite as bright in monochrome.)

If you want to stop the enhancement before the end of the paragraph, move the cursor to the first character you do *not* want enhanced. Press <CTRL> and the appropriate character **again**.

If you delete the first character of enhanced text, the enhancement is eliminated. You may also remove the enhancement by placing the cursor at the beginning of the enhancement, and pressing <CTRL> and the appropriate character.

In 80-column format on a Commodore 64, boldface, superscripts and subscripts only operate in two-character blocks. Thus, if you enhance text while in 80-column format or switch a file from 40-column to 80-column format, some text enhanced this way may show an adjacent character similarly enhanced. Don't worry — when the document is printed on paper, it will appear accurately. (Italics and underlining display normally.)

Also, these types of text enhancement are not available in sequential-type files, and are eliminated when a text file is altered to sequential.

## 128 Superscripts and Subscripts On-screen

With *Paperback Writer 128* loaded in 80-column format, superscripts and subscripts take on their natural appearance on the screen. Superscripts are raised about a third of a line, while subscripts are lowered by the same amount. Both appear in the same color as other normal text.

(If the program is loaded in 40-column format, including on a Commodore 64, super/subscripts aren't raised or lowered but appear in different colors as described above. These colors can be changed, as described on page 22.)

## Merge Variable

*Paperback Writer* gives you special help when sending the same letter to people on a mailing list.

Instead of having to set each letter up individually and type in the name and address of each recipient, you can insert a special character — a merge variable — into the letter. When the letters are printed, the merge variables draw information from a separate sequential file (usually names and addresses) one piece at a time and merge them into each letter.

To mark where the merged information is to be printed, type **<CTRL> v** . Usually the first variable is a name, and following ones represent parts of the address — the variables must correspond exactly with the order of pieces of information in the sequential file.

The character **■** appears on the screen — a small block occupying two spaces.

See page 43 for information on printing documents with merged variables.

**ELIMINATE TRAILING SPACES:** If you're printing form letters drawing names and addresses from a sequential file, you may find leftover spaces inserted between pieces of data.

For example, if the sequential file allows 10 spaces for each name (the names are the data represented by two consecutive merge variables with one space between them in your text file), John Smith would be printed as John      Smith

However, you can eliminate these "trailing spaces". Enter **-** (a minus sign) immediately after the merge variable.

In our example, **■ - ■** would print "JohnSmith". To separate them, put a space after the minus sign:

**■ - ■** produces "John Smith".

In the unlikely case that you wish to print a hyphen immediately after the data (eg. to print John-Smith), you must redefine a character as a hyphen. See "Redefine Character", pages 16 and 32.

**OMIT FIELDS:** If you want to omit a field (piece of data) from a sequential file, enter **<↑>** (the upwards arrow key beside the asterisk) immediately in front of the merge variable symbol. At the next merge variable found, the printer will skip to the following field in the sequential file.

For example, suppose you want a form letter to begin:

name  
street address  
city, state zip

and the sequential file you're using has the following fields for each person:

(1) name  
(2) street address  
(3) city  
(4) state  
(5) zip  
(6) phone number

instruct the printer to leave out the phone number by entering:

■  
■  
■ -, ■ - ■ ↑ ■

## Foreign Characters

A set of characters from the French alphabet is available on the screen at the touch of an extra key — although your printer may not print them. Letters from other languages may be substituted; see Creating a Printer File, page 47.

Press **<CTRL>** and **1 2 3 4 5 6 7 8 9 0**  
to get: é è ê à â ù ô î û or ç

## Additional Characters

Press <SHIFT> and + - £ @ \* or ↑  
to get: { } | ` \_ or ~

Not all printers can produce these characters.

To bind two distinct words together so they *wordwrap* together at the end of a line, press <SHIFT> **space** (space bar) between them to produce a space that behaves like a character — it can't be separated from adjacent characters. The screen displays it as a thick line between the two words (■), but it prints as a space.

## Redefined Characters

If your printer has characters not visible on the Commodore keyboard or contained in the above sets of foreign and additional characters, you may obtain them with redefined characters. These are also useful if you want to use a comma in headers and footers, which interpret commas as separators.

Up to 10 redefined characters are available.

To represent characters on the screen that have been redefined (see page 32 in Text Formatting) press <CTRL> <SHIFT> and the appropriate numeral between 0 and 9.

<CTRL> <SHIFT> **1 2 3 4 5 6 7 8 9 0**  
produces: 1 2 3 4 5 6 7 8 9 0

# Ranges (blocks)

Ranges, sometimes known as blocks, let you delete, move or copy variable amounts of text.

## Define a Range

To define a range, put the cursor on the character (or space) where you want the range to begin and press **<CTRL> r** . Now move the cursor to where you want the range to end and press **<CTRL> r** again.

The range is highlighted in reverse (letters appear dark on a lighted background). Italicized text turns red (a lighter shade on a monochrome monitor) everywhere on the screen in a 40-column program while a range is defined, returning to italic appearance when the range function is completed.

If the range is too large to memorize “**Not memorized**” appears on the command line after **<CTRL> r** is pressed the second time. The text is still highlighted, but you won’t be able to move or copy it, just delete it. The previous range is cleared.

If you’re manipulating columns of numbers — see “sort lists” and “add numbers” below — define the range as a block by ending it with **<CTRL> b** instead of **<CTRL> r**. A block range isn’t memorized (the previously defined range remains in memory) and it can’t be moved.

## Clear a Range

If you decide not to proceed with a range after defining one, you can clear it by pressing **<CTRL> r** . It will still be memorized (and can be inserted anywhere using the copy or move range functions), but the highlighting disappears from the text and you’re able to edit as usual.

Pressing any character key or **<RETURN>** also clears it and types the character or inserts the return arrow as if the range never existed.

At any point, you can clear the existing range from memory by pressing **<CTRL> k** . This may be used to make more memory available to enter text, whether by typing or by loading or joining files.

## Move a Range

To move a defined range to another location, put the cursor on the character or space where the range is to be inserted.

Now press **<CTRL> m** . The range disappears from its previous location and reappears inserted where the cursor was.

If no range has been defined, the move range function recalls the last range memorized, if any.

*BETWEEN ALTERNATE FILES:* To move or copy ranges from one alternate file into another on the Commodore 128, see page 22 in Other Controls. This function can be used to avoid saving and loading while swapping data between files.

## Copy a Range

To copy a defined range, put the cursor where the copy is to go and press **<CTRL> c** . While the range is inserted at the cursor, the identical text remains where it was.

If no range has been defined, the copy range function recalls the last range memorized, if any.

## Delete a Range

To delete a defined range, press <CTRL> **d**. The range disappears from the screen.

To recall it, use Move or Copy — put the cursor where you want the range to be recalled and press <CTRL> **m** or **c**.

*For the deletion range function only, there's a shortcut. Start the range (with <CTRL> **r**), move the cursor to the end and press <CTRL> **d** — instead of pressing <CTRL> **r** and then <CTRL> **d**.*

If the range to be deleted is too large to memorize — once it's gone you can't get any of it back — "**Range not memorized. Delete?N**" appears on the command line.

If you don't want to lose the text, press <RETURN>. If you're willing to lose the text, enter **y** (which appears as Y) and press <RETURN>.

## Sort Lists

To sort a list — of either words or figures — that are vertically aligned, first *define the range as a block* (press <CTRL> **b** instead of <CTRL> **r** after starting to define it). The text of the block to be sorted can't have any indentation and must have return arrows at the end of each line; otherwise "**Illegal Range**" will appear on the command line when you try to sort.

Put the cursor *in the column with the first character* (letter or number) by which the block is to be sorted, and press <CTRL> **s**.

The column sorts first by alphabetical order (if the first character of any line in the block is a letter) and then in numerical order. Numbers must be aligned with the decimal points underneath one another.

In the following examples, define the text or numbers as a block (they're already aligned), put the cursor on the first column of letters or numbers, and press <CTRL> **s**.

Example: dog	becomes: cat
skunk	dog
cat	skunk

Example: 789	becomes: 55.5
456	123
123	456
55.5	789

Example: 789	becomes: cat
dog	dog
456	456
cat	789

To sort in *reverse order*, press <CTRL> **S** (<CTRL> <SHIFT> **s**).

Example: cat	becomes: skunk
dog	dog
skunk	cat

## Add Numbers

To add a column of vertically aligned numbers (see page 13), first *define them as a block* (see above). The text of the block can't have any indentation and must have return arrows at the end of each line; otherwise "**Illegal Range**" appears on the command line when you try to add.

Now put the cursor *under the rightmost digit* of the column (leave blank space below the column) and press **<CTRL> =** .

For example, to add: 123  
                  456.1  
                  789.23

define them as a block (note that space is left underneath), put the cursor under the 3 in 789.23 and press **<CTRL> =** . The total **1368.33** appears immediately below the column.

To add a **row** of numbers, define them as a block, put the cursor in blank space to the right of the row and press **<CTRL> <SHIFT> =** .

To add: 123 456 789

put the cursor at least five spaces to the right of the 9 and press **<CTRL> <SHIFT> =** . The total 1368 appears with the last digit at the cursor.

*Negative numbers* can also be added, which enables you to subtract numbers simply by putting a minus sign (hyphen) before or after them.

For example:   -123   or   123-  
                    456         456  
adds to become   333         333

# Other Screen Controls

## Returns and Spaces Display

To see on the screen all the *return arrows* (symbols ending paragraphs), press **<CTRL> <RETURN>**.

This can help align tables and ensure all lines and paragraphs end where you want them. Returns will appear on screen until you clear them or reload the *Paperback Writer* program.

To clear the return arrows, press **<CTRL> <RETURN>** again (a toggle function).

To see all the *spaces and return arrows* on the screen, press **<CTRL> space** (space bar). Spaces you put in appear as thin square brackets lying at the bottom of the space (␣). Spaces inserted by the program — to indent or justify text, for example — are larger brackets (␣).

This may help you clarify why spaces appear on the screen that you can't account for — for example, spaces inserted by paragraph indentation, which you can't eliminate by deleting characters.

To clear, press **<CTRL> space** again (toggle).

If you have returns on screen and press **<CTRL> space**, the spaces are simply added on the screen.

If you have spaces and returns on screen and press **<CTRL> <RETURN>**, the returns disappear but the spaces remain.

No spaces or returns ever show up on printed paper.

## Cursor Type

When the program is first loaded, the cursor appears as a flashing block. However, you have options.

When you press **<CTRL> \*** (the asterisk key)

once	the cursor becomes a solid block
twice	it becomes a flashing underline
thrice	it becomes a solid underline
a fourth time	it returns to a flashing block.

## Error Bell

Most monitors have a bell that dings when an error is made, such as illegal ranges, disk errors or full memory.

If you don't want to hear the bell, press **<CTRL> B** (shift b). "**Bell OFF**" appears on the command line.

If you want to turn it on again, press **<CTRL> B** again (toggle). Now "**Bell ON**" appears.

## Device Number

The computer identifies devices attached to it, such as disk drives and printers, by a number.

If your device must have a number other than the defaults (see its manual) or — more commonly — if you have more than one device attached, you may direct the computer to deal with a particular device.

Press **<CTRL> D** (shift d). Now:

"**Disk Device Number:8**" appears on the command line, referring to the usual number assigned to the disk drive. Change the number if desired and press **<RETURN>**. Now:

"**Printer Device Number:4**" appears, referring to the usual number assigned to the printer. Change the number if desired and press **<RETURN>**. You will then return to edit mode.

If your disk drive number is other than 8, you must load *Paperback Writer* using that number in place of 8 in the line **load "pw",8**.

## Memory Check

To see how many bytes are left in the computer's memory, press <CTRL> M (shift m). The command line displays the number of bytes free, taking into account those used by the *Paperback Writer* program, the current file and current range, if any. The number approximates the number of keystrokes you can add to the file before it will refuse to accept any more.

If the number appearing is 1,000 or less, you have little space in which to work. Restore more memory by saving the file and starting a new one (you can link them — see page 33 in Text Formatting and "global mode" below), deleting text or replacing the current range in memory with a short one.

## Global Mode

Global mode lets you see linked text files (page 33 in Text Formatting) on screen as they would appear when printed.

When global mode is not being used, every file loaded into memory (loaded onto the screen) begins on page 1, line 1. However, linked files print in sequence, carrying the page and line number over from one file to the next. Only the first file in a chain of linked files begins on page 1, line 1; the rest begin where the previous file leaves off.

Global mode enables page numbers, line locations and text formats to be carried over on-screen to the following linked file. Typically you will load the first file of the chain (with global mode off — so it begins on page 1, line 1) and then turn global mode on before loading the next linked file.

Press <CTRL> g and "Global ON" appears on the command line.

Now, if you load a linked file, its page and line numbers will appear as a continuation of the file previously on the screen. The text format of the previous file's last paragraph will carry over to the top of the newly loaded file, unless text formatting commands are changed in the new file.

For example, if file A is linked to file B, turn global on while A is loaded. Now when you load B, its formats and page breaks will appear on-screen as if it were printed after A.

Any file loaded when global mode is on (global is on until it or the program is turned off) shows on-screen as if it were linked to the previous file, whether or not it really is. This makes the page number and page breaks — and likely the text format — inaccurate. Avoid this by turning global mode off when you're finished working in the last linked file, or restore the format (see below).

Turn global off by pressing <CTRL> g again (toggle). Now when you load a file, only page and line numbers and text format contained within that file appear on the screen.

See page 35 in "Load" to automatically load a chain of linked files.

Sequential files cannot use global.

## Restore Format

When a linked file is on the screen in global mode, its page and line locations and text format are carried over from the previous file. You can restore its format to treat it as an independent file — without turning off global mode and reloading the file. This may help you separate one part of a document or to escape global mode if you're in it by accident.

Press <CTRL> f.

Only the current file's format is restored; the next file loaded will assume it's linked to the current one if global is still turned on.



## Color Control

You can change the color of almost anything on the screen — text, background, help and super/subscripts.

Sixteen colors are available by pressing <CTRL> and a function key while in edit mode. Each time this combination is pressed, a part of the screen appears in a new color (including black), until the 17th pressing brings you back to the beginning of the cycle.

To change the color of:

normal text (in a file)  
command line (and other fixed data)  
text background  
border  
background in help area  
text in help area  
superscripts  
subscripts

press <CTRL> and:

— <f1>  
— <f2> (<SHIFT> <f1>)  
— <f3>  
— <f4> (<SHIFT> <f3>)  
— <f5>  
— <f6> (<SHIFT> <f5>)  
— <f7>  
— <f8> (<SHIFT> <f7>)

NOTE: italics always appear in red in the 40-column program, boldface in white and the text format checkmark (at the right of the command line) in yellow. Be careful not to make these indistinguishable.

MONOCHROME MONITORS: Color control is especially helpful in making superscripts and subscripts easy to see on the screen. You can't get different colors, but the color control produces differing shades. Experiment to find a combination that suits you.

## 128 — Alternate Files

The *Paperback Writer 128* program occupies 64K (64 kilobytes) of the computer's memory when in 80-column format, leaving the other 64K available for on-screen documents. If the memory holds just one file, that file can be about 30 pages of 80-column text — much longer than most files.

You can choose to have two files in the memory at the same time, dividing the memory into two units of 32K. This enables fast comparison and exchange of text between two files, avoiding continual saving and reloading. The files can't be longer than 32K each, but this is still more than adequate for most uses.

### One File — 64K

When *Paperback Writer 128* is loaded, the memory is set up to contain one file. That one document and a memorized range can occupy 64K of memory — a very large amount. As long as memory is set in this maximum position, “**64K**” appears in the command line.

### Two Files — 32K

When the memory is changed to be able to contain two files at once, either file can be on the screen. You can switch rapidly between them, moving text from one to the other if you want, without continually saving and reloading.

That means you can alter the text of one file and switch to another without losing the current version of the first. However, to save new versions of both files onto the work disk, you must save them individually.

As long as memory is set to contain two files, “**32K**” appears in the command line.

Of course, you don't have to have a file in each portion of the memory. However, even if you have only one file in memory, only 32K is available for it and a memorized range — still enough for nearly all uses.

A file created in the 64K memory may be too long to load from the disk into 32K. When that happens, the first 32K of it is loaded and "**Memory full**" appears on the command line. You may want to load it in 64K, where you can divide it into two smaller, linked files, or clear the current range.

*SWITCHING BETWEEN ALTERNATE FILES:* at any point while in the two-file mode, you can switch from one file to the other. Simply press **<ALT>**, the third grey key from the left at the top of the keyboard.

The text in the first file is retained in the memory, but not saved on the disk. Press **<ALT>** again to return to the first file.

*MOVING RANGES BETWEEN ALTERNATE FILES:* To put text from File A into File B, define a range in A as described on page 17. While the range is highlighted, switch to B. Now put the cursor where the text is to appear and press **<CTRL> m** or **<CTRL> c**.

File B must not have a range highlighted. If B does have a highlighted range, the range from File A will not overwrite it; B's range will be the one moved or copied.

Whether the range is copied or moved into File B, it still remains highlighted in File A. (Of course, you can switch back to A and delete it. You can also move or copy the range within A, or clear it to do other work.) In B, the new range replaces the previous range memorized.

In sum, each file has the capacity to memorize a range. The ranges remain distinct in memory except when you highlight one, switch to the alternate file and move or copy it. Then the two memorized ranges become identical.

*QUITTING THE PROGRAM WHILE IN 32K:* as a safety feature to avoid accidental loss, "**Save alternate file?Y**" appears on the command line when you quit the program from the two-file mode — whenever there is an alternate file.

To automatically save the alternate file before quitting, simply press **<RETURN>**.

To quit without saving the alternate file, enter **n** and press **<RETURN>**.

### **Switching between 64K and 32K**

At any time you can switch between 64K and 32K memories, i.e. choose between one file in memory (which could be very long) or two alternate files. Simply press **<SHIFT> <ALT>**.

*FROM 64K to 32K:* the text on the screen is transferred into one of the two alternate files, unless it occupies more than 32K of memory. In that case, "**Text too large**" appears on the command line and you remain in the one-file mode (64K). Before trying again to switch, you must reduce the size of the file, by clearing either text or the current range.

(One way to keep all the text is to divide it into two files: Save the file, clear some text, and save the remaining text in a file with a new name. Reload the original file, and clear the text you just saved in the new file. Link the two files if you want.)

*FROM 32K to 64K:* the text on the screen remains, this time in the 64K memory, while the number of free bytes increases.

If the alternate file contains any text, "**Save alternate file?Y**" appears on the command line as a safety feature.

To automatically save the alternate file before switching, simply press **<RETURN>**.

To switch without saving the alternate file, enter **n** and press **<RETURN>**.

# Text Formatting

*Paperback Writer* offers tremendous control over a document's appearance on the screen or on paper. Twenty-seven text format options are possible, many of which are illustrated in the diagram on the next page. To save you effort, all the options have *default* settings, the standard or most common value.

It's easy to change the settings: Place the cursor within the paragraph you wish to change, and press the <f5> (or <ESC> on the 128) key at the keyboard's right to see the list of possible options. The cursor now appears as a solid bar on "**Left Margin**", the first option. To choose any other, move the cursor as usual (sideways, up and down, even home).

Then press <RETURN> and the cursor moves into the space below, where the option and its current setting are displayed. If it's a new file or that option has not been altered above the current paragraph, the default for the option is displayed.

Change the setting if you wish, and press <f5> or <ESC> *return to edit mode* — where a change to the text will usually be apparent on the screen. Or press <RETURN> again to see or change another option. The lower screen contains space to change up to 14 options; in the unlikely case that you want to change more than 14, return to edit mode (press <f5> or <ESC>), insert a line above the current paragraph and place the remaining format changes on the new line.

In almost every case, an option whose setting is changed retains the new setting in the following paragraphs (unless changed again). Page length, printed lines, top border, header and footer commands are usually set in the first paragraph of a document, to define the form of the document and to make them easier to find.

To *delete a setting* — i.e. return to the default or previous setting — put the cursor on the value line below and delete the line (press <CTRL> <DEL>).

To *save setting changes* when you shut off the computer or switch to another file (or perform other Commodore key functions) you must save the file (see page 35 in *Commodore Key Commands*).

As usual, *help* on any option is available by pressing the <f7> or <HELP> key when the cursor is on the option. (The *Paperback Writer* program must be in the disk drive.)

In edit mode, the *command line* displays "√" (check mark) at the far right whenever the cursor is in a paragraph that has a formatting command attached. This helps you see where the format changes.

To display the format changes, press <f5> or <ESC> when the cursor is in the paragraph. Any format changes will appear in the bottom space. You can change them again in the usual way, or *restore the previous value* by putting the cursor on the appropriate line in the bottom section and *deleting the line* (press <CTRL> <DEL>).

Changing text format options usually *changes all subsequent paragraphs* in the file.

But "√" does not appear on the command line for the following paragraphs whose options have not been directly altered, and the changed values do not appear automatically when <f5> or <ESC> is pressed while the cursor is in one of the following paragraphs. However, if you move the cursor to an option that has been altered and press <RETURN>, the changed value is displayed.

If you want to guarantee that a format option will remain at its current value even if the option is changed above, you can type that current value in the appropriate place. But to make it easier to change values for the whole file, it's advisable to avoid unneeded changes.

## Left Margin

In the 40-column format, text normally begins in column **1**, as shown in the column indicator (C= ) on the command line. In 80-column format, (on the 64 or 128 program) the left margin's default setting is **1**. Change the left margin simply by entering the number of the column at which you want text to begin.

**FIXED MARGINS:** When a number is entered as a left margin, it is considered "fixed". A fixed margin can be changed only by overwriting the number with another number or deleting it.

**RELATIVE MARGINS:** If you want to temporarily change the left margin, you can create a relative margin. Then if you change the main margin, a paragraph containing a relative margin begins the same number of columns from the new main margin as it did from the previous main margin — without you having to recalculate and re-enter it. This allows you to change the margins in your document by altering just one value at the beginning, rather than updating every paragraph where a fixed margin is specified.

Enter **+** or **-** and the number of columns you wish to move the margin right or left. The value of the fixed left margin plus the relative left margin must be positive, i.e. text can't begin further left than the first column.

End a relative margin by entering **+0** in a subsequent paragraph, which returns the margin to its last fixed (non-relative) value. A new fixed margin also automatically ends a relative margin.

Example: to indent a quotation five columns from a main (fixed) margin of 10, enter **+5** in the left margin option and the quotation will begin at column 15. Now, even if a new fixed margin is entered in a previous paragraph, the quotation will start five columns further in.

However, if a new relative margin is inserted above, the text below will remain at its setting of five columns from the last fixed margin.

To end the indentation of the quotation, enter **+0** as the left margin of the following paragraph.

In paragraphs below a relative left margin, the number that appears for the left margin text format is the relative margin (a **+** or **-** number). A new relative margin will set from last fixed margin rather than from the displayed number.

To change the left margin of only the first line of a paragraph, use indentation or margin release. Also, "Printer Offset" can be used to shift the entire document to the right when printing. (See below.)

## Right Margin

The right margin — the column furthest to the right to which text can extend — functions the same as the left margin but has no practical limit on the screen (although printers are limited in horizontal size). It must be greater than the left margin.

*Relative right margins* also work the same way.

In the 40-column format, the right margin is normally set at column **39**. In 80-column format, (on the 64 or 128 program) the default setting is **75**.

"The Cursor", page 9, explains what happens at the right margin when text is being added.

## Indentation

To indent the first line of the current and subsequent paragraphs from the left margin, enter the number of spaces you want blank before the text begins. This paragraph, for example, is indented five spaces — the first letter of the first line begins on column 6.

The default setting is **0**, i.e. the first line of each paragraph begins at the left margin.

"Centering" and "Margin Release" override indentation, which overrides "Justify" and "Right Align".

## Margin Release (left)

If you want just the first line of just the current paragraph to begin to the left of the current left margin, enter a margin release.

This may help set up a series of notes in contracts or tables in which an identifying number on the first line is at the left, and subsequent lines begin further right. Enter a positive left margin as many columns to the right as you want the body of the points to begin, and set a negative margin release back as far left as the point is to begin.

Enter – (a minus sign) and the number of columns you want the first line to move left from the margin (not the indent). Positive numbers (+ and a number) have the same effect as indentation, but only for the current paragraph.

If the sum of the margin release number and the margin is negative, the first line will begin at column 1 and subsequent lines are pushed to the right as many columns as the margin release number. That is, it has the effect of pushing the left margin to the right, but releasing the first line.

Margin Release overrides (and ignores) “Indentation”.

## Centering

Lines between the first and last lines of a paragraph are usually set left aligned (also described as “flush left and ragged right”) — they’re lined up evenly at the left margin and go to the right until a word will not fit in the space allowed by the right margin. (That word then moves automatically to the beginning of the next line, a feature called wordwrap).

You can center each line — including a paragraph’s first and last lines — between the current left and right margins. Enter **ON** instead of OFF in the centering option. This paragraph is centered (within narrowed margins).

If you are centering a title, remember to turn centering OFF in the following paragraph to avoid centering the rest of your document.

Centering overrides paragraph indentation, “Justify” and “Right Align”.

## Justify

Text is normally left aligned (also described as “flush left and ragged right”) — lines are even at the left margin and go to the right until a word doesn’t fit in the space allowed by the right margin (then it moves to the next line, a feature called wordwrap). One space is usually between each word.

You can make the text line up evenly at both sides, with the lines starting at the left margin and ending at the right margin. Enter ON instead of OFF in the justify option. When the paragraph is reformatted, spaces will be inserted between words, starting at the left, to make the sides line up evenly. The last line is set flush left, however, and any paragraph indentation is retained in the first line. This paragraph is justified (within narrowed margins).

“Justify” is overridden by “Centering”, but overrides “Right Align”.

Some printers subdivide the spaces between words in justified lines so that the words are evenly spaced (called micro-justification). This manual is micro-justified.

## Right Align

Text is normally left aligned (also described as “flush left and ragged right”) — lines are even at the left margin and go to the right until a word doesn’t fit in the space allowed by the right margin. (That word then moves to the beginning of the next line, a feature called wordwrap.)

You can create the opposite (“flush right and ragged left”) — making the lines even at the right margin but leaving the left side ragged. Enter **ON** instead of **OFF** in the right align option. This paragraph is right aligned (within narrowed margins).

(If indentation is also set, the number entered is the minimum number of blank spaces before text begins.)

“Centering” and “Justify” override right align.

## Spacing

Lines of type are normally one line apart (single-spaced). Change the amount of space between lines by entering a number.

- 1** is single-spaced (the default setting)
- 2** is double-spaced
- 3** is triple-spaced
- . . . etc.

## Pitch

Most printers print **10** characters in one horizontal inch (called “pica” type — the default setting). But some let you alter how close together the letters are; **12** per inch (“elite” type) is also common.

To change the number of characters per inch when printing, simply enter a number your printer accepts. Pitches found on printers include: **5, 6, 8, 9, 10, 11, 12, 15** and **20**.

Changing this option does not change the text’s appearance on the screen.

Changing the number to less than the standard setting on a dot matrix printer usually results in the letters being horizontally wider, which is sometimes used for emphasis. A larger than standard setting may result in compressed letters. (On daisy-wheel printers, a smaller setting may result in spaces between the letters; a larger setting risks overlapping letters).

## Forced Page

If you want to be sure that a paragraph (such as a chart or the start of a new chapter) begins on a new page, enter a **space** (press the space bar) on the forced page option. Now the previous paragraph is the last on its page and the current paragraph begins at the top of a new page.

If you enter a **number** on the option, the current paragraph is forced to a new page if the number of printed lines available to the end of the page is less than the number you enter.

Example: If you want to ensure an eight-line paragraph is not split up by the end of a page, enter **8**. Now, if only five printed lines are still available, all eight lines of the paragraph will begin on a new page. But if eight or more printed lines are available on the current page, the paragraph will remain on the current page.

Forced paging with a number can ensure that a section heading isn’t separated from the start of text.

To eliminate a forced page command, delete its option line (press **<CTRL>** **<DEL>**).

## Blank Lines

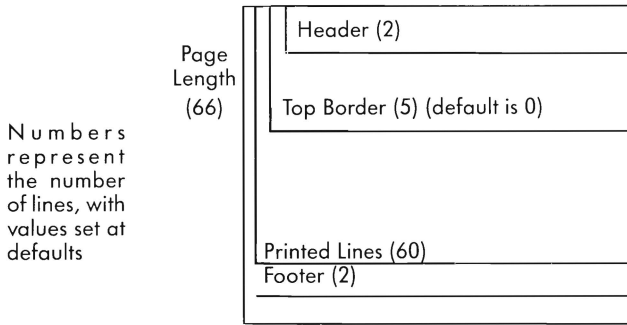
To easily insert a number of blank lines above the current paragraph, enter the number in the blank lines option. The default setting is **0**.

This feature only applies to the current paragraph; blank lines do not repeat automatically on following paragraphs.

Blank lines entered in the first paragraph of a page are *not* inserted. Thus if you want space between two paragraphs that's eliminated if the first paragraph ends a page (and the second one begins a new page), use this option. Lines inserted by pressing <**RETURN**> or <**SHIFT**> <**INST**> would put space between the two paragraphs no matter where they occur.

If you want blank space at the top of a page, use "Top Border" or insert <**RETURN**> arrows.

## Typical Page Layout



## Top Border

If you want blank lines to appear at the top of a page before the text begins, enter the number you want. The default setting is **0**.

If you insert **6**, for example, the first line with text is the seventh. The screen may not show six blank lines, but the command line will show **L = 7** when the cursor is on the first line of text.

This feature works in the current page only if it's entered in the first paragraph of the page. If it's entered after the first paragraph, the top border takes effect on the next page (and the following pages unless it's reset).

A top border is part of printed lines but contains the header, if any (see diagram). A header creates space at the top of the page for itself; if you want more space at the top, enter a header with a bigger number or a top border larger than the header.

("Blank Lines" doesn't give any blank lines at the top of a page, so don't use it instead of a top border.)

## Page Length

The maximum number of lines on a page is the page length, sometimes known as the paper size.

The default setting is **66**, the standard number of lines on *letter-size paper (11-inches)* at six lines per inch. Change it if your paper isn't standard size; the only visible on-screen change in edit mode is that a checkmark will appear on the command line to indicate a text format change.

On *legal-size paper (14 inches)*, the page length is **84** lines at six lines per inch.

Maximum page length is **250** lines.

See "Printed Lines" for the actual number of lines used on the page.

## Printed Lines

To set the number of lines of text in a page — on-screen and printed — enter a number in the printed lines option in the first paragraph of your document. At the point where the text exceeds the number of printed lines you have entered, a new page begins.

The number of printed lines must be no greater than the page length (the maximum number of lines on a page); any difference between the two is assigned to the bottom and is available for a footer (see diagram on page 28). At the top of the page, any top border or header is part of printed lines, leaving that many fewer lines available for text.

The default setting is **60**, for a page length of 66 lines on 11-inch *letter-sized paper* (i.e. the page could hold 66 lines but only 60 are used). The other six lines, which may include a footer, are at the bottom.

A typical setting for 14-inch *legal-size paper* is **78**, again leaving six lines at the bottom for a total of 84.

## Lines per Inch

Most printers print **6** lines in one vertical inch, the default setting.

Some printers allow **8** lines/inch, which permits more lines to be printed on a page. If you change to 8, remember to adjust the number of printed lines, which increases by a third. Also change the page length, to correspond to the new maximum number of lines on a page.

For example, a standard *11-inch* page has 60 printed lines and a page length of 66 at six lines per inch. At eight lines per inch, the same page has 80 printed lines and a page length of 88. If those two settings are left unchanged (from 60 and 66), the printer will put the 61st line of text on what it considers a new page starting on line 67 (which is still on the first real page).

If your printer allows you to choose a number of lines per inch other than 6 or 8, you likely also have to change the printer file (see page 49) as the printer manual specifies.

## Page Number

The number of the page that the cursor is on shows on the command line (P= ), which begins at **1** and increases according to how many pages the text occupies. The number can be printed automatically only by using a header or footer (see below).

If you want to begin printing at an arbitrary page number — for example, from pages 8 through 17 of a document — change the page number setting to **8** in the paragraph at the top of the page you want printed as page 8. Subsequent page numbers will print sequentially (from 9 through 17) from that first number.

A changed page number is displayed on the command line.

*Page numbers only print if they are established in a header or footer.* The default setting is the current page number shown on the screen.

See Global mode, page 21, for carrying over page numbers between linked files.



## Printer Offset (right)

If you discover when printing a document that it begins too close to the left side, you can shift the whole document to the right without resetting all the margins.

Enter the number of columns you want the document to move horizontally in the printer offset option of the first paragraph to be shifted. All text formatting remains the same; the only indication that printer offset is in effect is a checkmark on the command line while the cursor is in the paragraph containing the command.

## Pause Printer

If you want to limit the amount of a file that is printed, you can temporarily stop the printer at a particular point. This may help you ensure that printing is proceeding as you want before a lot is printed.

Enter a **space** in the pause printer option in the first paragraph below where you want it to stop. The only visible change on the screen in edit mode is that a checkmark appears on the command line when the cursor is in the paragraph (to indicate a format change).

To resume the printout, press any key except the < **C** > key.

If you'll need to make a change in the printer at a particular point, you can enter a message of up to 80 characters (eg. "insert next disk" if your document continues on another disk, or "change print wheel" if you have a daisy-wheel printer).

Now the printer will stop printing before the current paragraph and display the message on the command line. The message is never printed on paper.

To remove a pause printer command, delete the format command (< **CTRL** > < **DEL** >).

## Header

To print a special piece of text at the top of each page (such as the page number, title and/or author's name), use a header of up to 100 characters. Usually set in the first paragraph, headers repeat on every page unless they're changed or cancelled — but don't appear when you check the format, even of headers, of subsequent paragraphs.

First enter the number (**N**) of lines from the top of the page you want allocated to the header block. The first line of the header text starts printing on the top line of the block; any extra lines below the header text are left blank, so there's no need to create a top border as well.

Next enter a colon (:).

Now enter the part of the header to be left-aligned (**left**), a comma (,), the part to be centered (**center**), another comma (,) and the part to be right-aligned (**right**).

The complete form is: **N:left,center,right**

with two commas separating the components. Thus you can't enter "Oct. 28, 1985" for the left part because the comma is a separator: "Oct. 28" will appear on the left and "1985" in the center, while the comma disappears. To use a comma, you must redefine a character to represent it (see below).

Everything but the separating commas may be left out.

If N and the colon are omitted, a default of **2** lines is allocated for the header block.

To print only a centered title, type "N:,title" (remember the first comma; the second isn't needed).

PRINTING PAGE NUMBERS: use < > (the less-than and greater-than symbols) to represent the page number in a header. When printed, these symbols are replaced by the current page number as shown on-screen (it will increase from one page to the next).

The page number doesn't have to be alone as a separate part of the header. For example, - < > - prints hyphens (and spaces) before and after the page number, and **Page** < > prints "Page 1", "Page 2" etc.

Example: **2:May, < >, Ted** prints “May” at left, the page number in the center and “Ted” at the right, all on the top line of the page. The second line of the header block is left blank. The third line from the top is the first line of text on the page.

To print *more than one line* of header text, make sure the number of lines you specify for the header block (N) is enough to accommodate the number of text lines. Now divide the header parts vertically with slash marks (/). For example:

**5:Doris Lessing/The Letter T,- < > -,Chapter 3/On Golden Pond** prints as:

Doris Lessing	— [current page number] —	Chapter 3
The Letter T		On Golden Pond

[followed by three blank lines; text begins on the sixth line]

To leave a *blank line above the header*, enter / (a slash mark) before each of the three header parts that go on the second line. For example: **5:/Doris Lessing/The Letter T,/ - < > -,/Chapter 3/On Golden Pond**

Headers are part of printed lines (see the diagram on page 28), so the maximum number of lines of text on a page is printed lines minus the number occupied by the header (N).

Also, a top border creates extra blank lines below the header (before the text) only if it occupies more lines than the header, and only to the extent of the difference. If you want blank lines below a header, it’s easier to increase N by the desired number.

## Footer

To print a special piece of text at the bottom of the page, use a footer. Footers use the same formula as headers but their placement is different: They’re at the bottom and are *not* part of printed lines (see diagram on page 28). Thus the difference between page length and printed lines must be enough to accommodate the footer (if not, the footer won’t be printed).

**N** represents the number of lines from the bottom of the last possible printed line on the page (as specified by “Printed Lines”) to where the footer begins. The default setting is **2**: If page length is 66 and printed lines are set at 60, one blank line is left on line 61 and the footer’s first line of text is on line 62. If the footer has a second line of text, it is printed on line 63, and so on for additional footer lines.

Footers are also usually set in the first paragraph.

However, if you *change a footer* in the first paragraph of a *new page*, the *previous page’s* footer also changes when it is printed. To ensure that the old footer prints on the previous page and that the new footer starts at the bottom of the new page, enter a forced page (see above) in the paragraph *before* the footer is changed. Do this by inserting a return arrow (blank paragraph) with a forced page immediately before the paragraph in which the footer changes — either in the new page or at the bottom of the previous page.

A footer will not print at the bottom of a document’s last page. If you want it printed there, add enough return arrows at the bottom to start a new page, or enter a forced page in an arrow below the last paragraph.

## Header/Footer Left/Right

Usually you want the margins for headers and footers to remain constant, even if the document's text is indented or set outside the left margin (with margin release). To ensure consistency, set (usually in the first paragraph):

Hdr/Ftr left           to the desired left margin (the default is **1**).

Hdr/Ftr right          to the desired right margin (the default setting is **75** in all formats).

## Header/Footer Pitch

If your printer offers a choice, you may want to use a different pitch (see page 27) in headers or footers to emphasize them. For example, if your document is set at 12 characters per horizontal inch, you may be able to make headers and footers spread out, by using 10 characters per inch.

The default setting is **10** per inch (pica); another common setting is **12** (elite).

## Redefine Character

Your printer may have characters not visible on the keyboard or directly accessible through *Paperback Writer* (see "Redefined Characters" in Text Enhancement, page 16). Or you may wish to print characters not otherwise allowed, such as commas in headers and footers.

To use such a character in a text file, redefine it using the "Redefine Char" option and enter the redefined symbol in place of the original character. Then, if your printer accepts the redefinition, every time the symbol appears in the text (on-screen) the character you want will be printed.

Up to 10 redefined characters are available, represented by **N**, a number from **0** to **9**.

Enter **N = ASCII value** in the format setting option and use **<CTRL> <SHIFT> N** in the text to obtain the character. (ASCII values can be found in your printer manual.) For example, to redefine symbol number 1 to the ASCII character 95, enter **1 = 95** in "Redefine Char".

You may send more than one ASCII character per definition by entering + (a plus sign) between the ASCII numbers. For example, **1 = 95 + 64** will send the codes 95 and 64 respectively when 1 is encountered in the text.

You may group several definitions together on a line by separating them with colons (:), eg. **1 = 95 + 64:2 = 35**

For *French letters*, try **<CTRL>** and the numbers 0 to 9 before turning to redefined characters (see Text Enhancement, page 16). Remember also that extra characters are available (see page 16).

Characters in sequential files cannot be redefined.

## External File

To print a separate (external) file before the current paragraph, enter the external file's **name** in the "External File" option. Now the printer will interrupt the current file before the marked paragraph, print the external file, and resume printing the current file.

To keep pagination (the page number and line location) accurate on the screen, enter the number (**N**) of lines the external file will occupy when printed and a slash mark (/) before the external file's name.

For example, entering **15/logo** leaves 15 lines to print the external file named "logo".

If the external file crosses a page boundary, accurate pagination is lost. Also, the external file, which is often a graphic, must be set up so that it may be sent directly to the printer.

The current file's text format is not affected by an external file (other than the lines added to the middle of the document). Neither is the external file's format affected by the current file's formatting.

## Link Next File

If a document is too long to fit in one file (i.e. it's too large to fit in the memory), it may be split into two or more parts and linked to print automatically in sequence. At the same time, the second file (and subsequent ones) can be treated on the screen as an extension of the first file, so that page number, line location and text format follow in sequence.

Enter the next file's name in the "**Link Nxt File**" option of the current file's last paragraph.

Now, when the document is printed, the next file prints immediately after the current file, adjusting the page number and line location as necessary. The linked file also assumes the text formats of the previous file, unless they're changed in the linked file.

On-screen, if *global* mode is turned on in the first file (see Other Screen Controls, page 21) before the linked file is loaded, the new file's pagination and text formats are accurate. The Find and Replace functions (page 37) can also be used globally in a linked file.

For printing, linking files enables them to print automatically in order. For on-screen viewing, linked files just enables them to be loaded in order; use global mode to have them carry previous file's format and location.

The printer ignores anything in the current file that's below a paragraph linked to a next file, but the on-screen memory will still account for it in displaying the pagination. So be sure to establish the link in the current file's last paragraph.

See Load in Commodore key commands (page 35) for easy loading of linked files.

# Function Feast, Part 2: Between Modes

## The Commodore Key (C=)

When *Paperback Writer* is loaded into the memory of your Commodore 64 or 128, you arrive in the Edit Mode. This mode enables you to enter and change (edit) a document in preparation for use.

To do something with the document — such as save or print it, or to see a directory of files on a disk — you must enter other modes by pressing the Commodore key. This key at the keyboard's lower left, represented by < C= >, takes you between major functions, which are usually selected by pressing the first letter of their name.

For example, when you want to return to *edit* from another mode, press < C= > and type **e**. (In most cases, you can also press < C= > again to return to edit).

As usual, *help* is available at the touch of < f7 >. For general help, press < C= > and then < f7 >.

For specific help on most Commodore key functions (except directories) press < C= >, the appropriate letter (**l s v j f c i o p**) and then < f7 >.

Most Commodore key functions require information on the *command line*. When the cursor is on that line, you can usually move it left or right or HOME to edit the information. Usually the function is not performed until < RETURN > is pressed; until the function begins, you can return to edit (or the previous) mode by pressing < C= >.

**RUN/STOP**: Whenever you must *enter a file name* on the command line during a Commodore key function, the < RUN/STOP > key may help. To quickly duplicate a piece of text that currently appears on the screen onto the command line (also called reading text from the screen), place the cursor on the first character that you want duplicated. Now press < C= >, the first letter of the mode you wish to enter (eg. **l** for load) and then < RUN/STOP >. Starting from the cursor, the first 18 characters on the line of text now appear on the command line.

You can also quickly *eliminate characters on the command line* — especially useful if < RUN/STOP > displays more text than you want. Put the cursor on the first character to eliminate and press < CTRL > **x**.

While using a 40-column screen, you'll find that the top lines of the screen that are normally blue change to black when information is being sent to or received from the disk drive or the printer. (On a monochrome monitor, the background color turns darker.) Until the normal color is restored, the computer is busy and can't be used. Also, the disk drive's red light goes on while it is being accessed.

## Load

To take a file from a disk where it's stored onto the screen (into memory) so that you can edit or print it, press < C= > and then **l** (the letter L). Now enter the file's exact **name** and press < RETURN >.

Loading takes a variable amount of time, depending on the length of the file and the type of your disk drive. When finished loading, the file appears on the screen with its name on the command line. *It replaces any text currently on the screen* — save the on-screen file if you want to keep it.

If the name you have entered is not exactly the same as one on the disk, "**File not found**" appears on the command line. Try again with the proper name.

You can also load a file directly, and easily, from a directory (see page 40).

Files from Paper Clip™, Word Pro™, Easy Script™ and other popular word processors can also be loaded. In the case of Easy Script files, which load as sequential files, switch them to text files (<CTRL> a) and delete embedded format commands.

DEFAULT NAME: After <☒>, I is pressed, the name of the last file encountered during a disk function appears on the command line (after "Load:"). This is often the name of the file you wish to load, in which case there's no need to overwrite it.

## Linked Files

To load the *next linked file* from the current file, press <CTRL> n when the program asks you for the file name (i.e., after <☒>, I). Now the name of the next linked file is automatically displayed on the command line; press <RETURN> and it loads. If you want to carry over the correct page number, line location and text format from the previous file, enter global mode (press <CTRL> g) before loading the next file.

**AUTOMATIC LOADING:** Using global mode to maintain correct pagination and text format, you can use this process to load a chain of linked files — one at a time — until a particular file is reached. This requires you to continually enter each next file name and load it until the desired file is reached. But you can do the same thing in one operation:

While in the first file, enter global mode, press <☒> and I. Now, enter a / (a slash mark) and the desired file's **name** and press <RETURN>. The linked files automatically load in order until the desired one is reached.

## Sequential Files

Most sequential files created on the 64 will be in *Commodore format*. Load these files in the same way as text files: Enter the file name and press <RETURN> or load from a directory.

Most files from other computers (or files transferred over a modem) are in *ASCII format*, although they don't appear different in the directory. To load an ASCII file, press <CTRL> a at any time before pressing <RETURN> to begin loading. The top line will display "ASCII".

If you specify the wrong format of sequential file, it will probably be unreadable when loaded. In that case, try loading again using the other format.

## Pattern Matching

If you can't remember the exact name of a file or it's complicated to type, you can use \* (asterisk) to help load it quickly. \* is a special instruction that tells *Paperback Writer* to read only what's typed before it.

For example, if you want to load the file "april8report3", you can type **april\*** on the command line and press <RETURN>. Now the first file the computer finds that begins with "april" will load.

However, "april\*" — not its actual name — will appear on the command line, so this function is usually used only to examine and print the file. If you later want to save the on-screen version, you'll have to enter a valid name.

**Wild card:** If you can't remember one character in a file name, you can substitute ? (a question mark). For example, if you enter **april?report3** on the command line, the first file found whose name corresponds to every character but the ? will load. Again, however, the name on the command line will contain the question mark, and you can't save the file using that name.

## Save

If you enter a new file on the screen (in memory) and immediately turn the computer off or load another file, the first file is lost. Also, if you load a file from the disk, change it and turn the computer off (or load another file), only the previous version will be on the disk the next time you load it.

To preserve your work for later use, you must save it. It's also a good habit to save files often to protect work from operator mistakes or technical problems.

Press **< C >** and then **s** . Now enter the file's **name** and press **< RETURN >** .

**“Drive Number:0”** appears on the command line. If the disk you're saving the file on is in drive 0 (which it always is if you have a single drive), simply press **< RETURN >** .

If the name of the file you are saving is already on the disk, **“Replace existing file?Y”** appears on the command line as a safety feature. To overwrite the file on the disk with the on-screen file, simply press **< RETURN >** .

The cursor now disappears while the file is being saved. When the cursor reappears, with the file on-screen exactly as before, the file is saved. (To ensure that it is accurately saved, see *Verify*, below).

If the file on the screen has been *loaded from the disk*, its name is already on the command line when you enter the save mode (unless it was loaded by pattern matching, above). If you want to save the file under the same name (as you usually will), you can press **< RETURN >** without entering the file's name again.

However, if you want to *change the name*, enter the new name at this point.

To save the file onto *another disk*, replace the current disk in the disk drive with the new disk and save the file again (you can use the same name). Do this to create a back-up version of the file, another good habit.

If you change your mind, you can decide *not* to save a file at any time before the save begins. Simply press **< C >** twice, and you'll return to edit mode. If the query **“Replace existing file?Y”** appears and you decide *not* to replace the existing file, enter **n** (no, which appears as capital N) in place of the Y and press **< RETURN >** , which puts you back in edit mode.

**DISK DRIVE NUMBER:** If you have *two drives*, the number of the drive you last used appears as **N** in **“Drive Number:N”** after you enter the file name and press **< RETURN >** . If you wish to direct the file to be saved onto a disk in a different drive, enter the drive's number before pressing **< RETURN >** .

To *avoid the disk drive query*, enter its number and a colon before the file's name, eg. **0:name** . (If the name is already on the command line, you can avoid typing the name again by inserting spaces — **< SHIFT >** **< INST >** — to make room for N:). Now, after you press **< RETURN >** , the computer skips the query, proceeding directly to save a new file or to the next query if an existing file is being replaced.

## Verify

You can ensure that the file on the screen is identical to a file on the disk, which can be useful in checking that a file you just saved is stored correctly or to see if a file on-screen from one disk matches one on another disk.

Press **< C >** , then **v** .

Now, to verify that the current file is saved correctly, simply press **< RETURN >** . To verify the on-screen file against a file on the disk with another name, enter the name of the file on the disk and press **< RETURN >** .

If the files are identical, **“Verify OK”** appears on the command line after about the same length of time required to save the file.

If the files are not identical, **“Verify error”** appears as soon as the computer finds a difference. If this indicates your attempt to save the on-screen file has failed, try the save again, and see *Trouble-Shooting* (page 51) if it fails a second time.

## Join

To join (or merge) two files together, load one of them onto the screen (into memory). Press < **C** >, then **j** (the letter J) and enter the **name** of the file to be joined. Finally, press < **RETURN** > and the second file appears at the bottom of the current file.

The joined file takes the name of the *current* file, but the second file doesn't disappear from the disk. In effect, joining adds a copy of the second file to the current file. To eliminate the second file from the disk, you must perform a separate operation (see Scratch under Disk Commands, page 40).

If you want to retain a file link which is in the first joined file (usually placed in its last paragraph), be sure to move the link to the end of the joined file. Otherwise, everything below the paragraph with the link in it will be ignored in pagination and printing.

Also make sure that headers and footers are wanted.

If the joined file is too long for the available memory, "**Memory Full**" appears on the command line. Before attempting to join them again, clear some memory: Shorten one or both of the files or shorten the current memorized range, if any.

Another alternative is to link the files (see page 33 in Text Formatting) and deal with them in global mode.

## Find/Replace

If you wish to locate a specific point in a long document, or to replace a string of text with new text, use the Find and Replace function. This is especially useful if you discover a spelling error that is repeated — each instance can be found and replaced automatically, even in linked files.

You can also use it to save typing. For example, instead of typing "antidisestablishmentarianism" several times in a document, you could enter + – every time the complex word or phrase (up to 32 characters and spaces) appears. Later, you can order "antidisestablishmentarianism" to automatically replace "+ –" everywhere in the document.

### Find

To find text *after the current cursor position* (any occurrence above or at the cursor is ignored), press < **C** > and then **f**.

"**Find**:" appears on the command line. Enter the text you wish to find (< **RUN/STOP** > may assist you by duplicating text in the file — see above) and press < **RETURN** >.

Next "**Replace**:" appears on the command line. If you simply want to find text, press < **RETURN** > again and the function begins ("**Searching . . .**" appears on the command line). If the text you want is:

**not found** the cursor moves to the end of the file and puts you back in edit mode.

**found** the cursor stops on the first occurrence and puts you back in edit mode.

To find the *next occurrence* of the text, you may repeat the find process. Or press < **C** > and **F** (< **SHIFT** > **f**) to begin the find function automatically from the current cursor position. This shortcut can be repeated (the text remains in the "find" memory) until you search for different text.

If < **C** >, **f** or **F** is still searching at the end of file that's followed by a linked file, the query "**Get Next File?N**" appears. Press < **RETURN** > to return to edit mode in the current file. To continue the search in the next linked file, enter **y** (which appears as Y) and press < **RETURN** >. You'll end up in the linked file; if you want to keep the on-screen version of the current file, make sure it's saved before starting "Find" in the next file.

Normally the program finds any mixture of *upper and lower case* of the text you seek. For example, if you enter **cat** any of cat, CAT and Cat will be found.



To find a particular combination of upper and lower case, enter a double quotation mark (") immediately before the text. For example, if you enter "cat only cat will be found; Cat and CAT will be ignored. (Don't enclose the text with a second double quote; that will search for the text ending with a quotation mark.)

To find a quotation mark, enter a **space** before entering the quotation mark (followed by the text, if any).

**WILD CARD:** A question mark (?) substitutes for any character (but not a space). Thus if you enter **c?t** words or combinations such as cut and C5T and will be found, but clericltitle won't.

To avoid finding **scatter** when you only want cat, enter a **<SHIFT> space** (which appears on the screen as **—**) before and after cat, i.e. **—cat—**.

## Replace

To replace text that has been "found" (see above), enter the new text when "**Replace:**" is displayed on the command line.

Thus to replace cat with dog, press **< C >** and **f**, enter **cat** in the "Find:" line and press **<RETURN>**.

Now enter **dog** in the "Replace:" line and press **<RETURN>** again. (As with find, **<RUN/STOP>** may assist you by duplicating a piece of text onto the command line — see page 34. And to enter the previous replacement text, press **<SHIFT> <RUN/STOP>**.)

Next, "**Query before replacing?Y**" appears on the command line.

To be shown every occurrence of cat and have the choice of whether to replace it, press **<RETURN>**. To automatically replace every cat with dog, enter **n** (no) and press **<RETURN>**.

Now "**Global or Local?L**" appears on the command line.

If you just want replacement in the current file, simply press **<RETURN>**.

If you want every cat to become dog in all the linked files below the current cursor position, enter **g** (which appears as G) and press **<RETURN>**. Note that you end up in the last linked file. Replacements are made in the previous linked files, which are saved when the next linked file is loaded. But you must save the last linked file to retain its replacement. Also, if no occurrences are found in the current file, it is not saved before the next one is loaded.

**Summary:** press **< C >** and **f**

"Find:" enter **cat**

"Replace:" press **<RETURN>** and the find function begins  
or enter **dog** and follow this sequence:

"Query before replacing?Y" press **<RETURN>**

or enter **n** and press **<RETURN>**

"Global or Local?L" press **<RETURN>**

or enter **g** and press **<RETURN>**

If you answer **n** (no) to "**Query before replacing?Y**", every cat is *automatically* replaced by dog. The cursor goes to the end of the file and puts you back in edit mode.

If you answer **y** (yes), cat will flash when it's found, and "**Replace?**" is displayed on the command line. Press **y** to replace it or **n** to leave it as is. The cursor moves to the next occurrence and offers you the same choice. This pattern repeats until the end of the file is reached and you're back in edit mode.

If you answer **L** to "**Global or Local?L**", the replacement function ends in the current (local) file.

If you answer **G** (global) the function loads the next linked file, performs Find/Replace and loads every subsequent linked file. Thus when the Replace is finished, you're left in the last linked file (in edit mode) rather than the one you started in.

# Directories

To display at a glance the names of all the files on a disk, press < **C** > and then **d** . A directory (list of files) of the disk in drive 0 appears, with the disk's name and identifier (which were assigned when it was formatted — see page 5 and 41) at the top.

If the list of files is longer than one screen, they will scroll up until the end of the directory is reached, during which the cursor disappears.

To stop the directory from continuing to scroll, press < **C** > or < **RUN/STOP** > . Now you can load the files listed on the screen.

To make the directory pause while scrolling — so you can see the part on the screen but can't load files — press **any other key** . Press any other key again to resume scrolling.

Each file is displayed on its own line, starting with its name, its type ("**prg**" for text, "**seq**" for sequential) and the number of blocks it occupies on the disk. A block is a unit of 254 bytes, which is equivalent to about the same number of characters.

At the end of the directory (if it hasn't been stopped before reaching the end), "**BLOCKS FREE = N**" is displayed, in which N is a number. Each floppy disk normally has 664 blocks of storage space available when formatted for *Paperback Writer* . Do not confuse the number of storage blocks free on the disk with the on-screen memory (RAM — random access memory).

Once the directory has stopped scrolling, basic cursor movement functions (including the < **HOME** > key but not some rapid movements) function again. Now you can:

<b>load a file</b>	by putting the cursor on the file's line and pressing < <b>RETURN</b> > , or
<b>return</b>	by pressing < <b>C</b> > and then <b>e</b> . You return to the previous file on the screen (which
<b>to edit</b>	means that if you just want to look at the directory, you don't have to save the file first),
<b>mode</b>	with the cursor on the same character as before.

## Directories with Patterns

If a disk contains many files, they may not all fit on one screen. If you want to see a directory of just the files with similar names (a pattern), instead of **d** after < **C** > , press:

- 0** for the directory of drive 0 (zero) with a pattern
- 1** for the directory of drive 1 (one) with a pattern
- 2** for the directory of both drives with a pattern

"**Directory Pattern: \***" appears on the command line (the specified drive number is also displayed if just one drive is being accessed); you may use the asterisk (for a complete directory) or enter a different pattern. You may use **wild cards** like those described in "loading with a pattern" (page 35) and in Find/Replace (page 37).

For example, to get a directory of every file whose name starts with "h" on the disks in drive 0 and 1, press < **C** > , then **2** and **h\*** . All such files appear in the directory with their correct name.

To get a directory of every file on the disk in drive 0 with one character varied, eg. files named "May N report", where N is a number indicating the dates from May 1 to May 9, press < **C** > , **0** and then **May ? report** .

## Loading the Directory as a File

You may want to print a directory onto paper (make a hard copy). A directory is only a list compiled from the disk — you must load it into the memory as a file before it can be printed. To save it you must give it a name.

Press < **C** > and then **3**. “**Load Directory Pattern: \***” appears on the command line.

If you want the complete directory of the disk in drive 0 (and drive 1 if you have a dual drive), simply press < **RETURN** >.

If you want to load a selected directory as a file, use pattern matching as above (note that the number of blocks free doesn't change just because the directory you select doesn't include all the files on the disk).

*A loaded directory replaces the on-screen file* — save that file first if you want to keep it. If you press < **C** >, **3** and change your mind, you can return to the on-screen file in edit mode by pressing < **C** > twice.

## Disk Commands

To perform specialized disk functions such as eliminating or renaming a file, you must enter the disk commands mode by pressing < **C** > and then **c**. Then you enter precise instructions, including the name of a file or disk, before executing the function.

When you need to *enter the exact name* of a file or disk on the command line, you may either type it or enter it directly from a directory or text using the < **RUN/STOP** > key. This shortcut is also known as reading from the screen.

Before pressing < **C** > and **c**, put the cursor at the first letter of the file (or disk) name. Now press < **RUN/STOP** >, which duplicates the first 18 characters starting at the cursor onto the command line. (If more text than the name is entered, you can erase the excess with < **CTRL** >.)

Next, insert three spaces (use < **SHIFT** > < **INST** >) between > and the file name to make room for the disk command. If you enter the command before pressing < **RUN/STOP** >, the command is overwritten.

If the red (error) light on the disk drive flashes when you're using any disk command, press < **C** > **c**, < **RETURN** > to display a description of the error on the command line. See Trouble-shooting (page 51) for remedies.

## Scratching (deleting) Files

To erase a file from the disk, use the scratch command. This also frees the storage blocks that the erased file occupied so that more text may be stored, either new files or longer versions of current stored files. *Scratched files cannot be restored.*

After pressing < **C** > and then **c** enter

**sN:file name** in which N is the disk drive number (usually 0), and press < **RETURN** >.

For example, entering **s0:letter** will erase the file called “letter” from the disk in drive 0.

**PATTERN MATCHING:** Use the asterisk or question mark wild cards if you want to scratch more than one file at a time or to scratch a file without entering its full name. For example, entering **s0:i\*** would scratch every file whose name begins with the letter i, and **s0:May ? report** would scratch all “May N report” files (where N might represent a date).

## Rename Files

To change the name of a file on the disk, rename it.

After pressing < **C** > and then **c** enter

**rN:new name = old name** where N is the drive number (usually 0) and press < **RETURN** >.

For example to change a file named "field report" on drive 0 to "area report", enter **r0:area report = field report** and press **<RETURN>**.

If the new name (area report) is already on the disk, the disk drive's red light flashes and the old name (field report) remains. The screen returns to edit with nothing changed.

*The name changes only on the disk.* If "field report" is on the screen during the change, its name doesn't alter — if you then save it, both "field report" and "area report" will be on the disk.

## Validate a Disk

To ensure that a disk is storing files compactly, and to update the remaining free disk space, validate it. This function may also help if a disk does not appear to be storing files correctly.

After pressing **<C>** and **c**, enter

**vN** in which N is the number of the drive containing the disk, and press **<RETURN>**.

Validating takes longer than most functions because all files on the disk are checked.

Note: do not validate the *Paperback Writer* program disk. Because of the protection system, validating this disk will prevent you from saving any new printer files (see page 42) onto it.

## Format a Disk

Before a disk can be used, the whole disk must be formatted by the disk drive (see also page 5 in *Getting Started*). Formatting maps out the disk into blocks for storage. *It erases the whole disk*, so be sure nothing you want is stored on it.

After pressing **<C>** and **c**, enter

**nN:disk name,ID** where N is the drive number and ID is any two characters (used for identification) and press **<RETURN>**.

When a disk is already formatted, you may use this function to clear it. You may also format a disk to clear repeated disk errors. Make sure you have saved every file that you want onto a different disk.

## Quit

If you wish to stop working in *Paperback Writer* or to switch between 40-column, 80-column or the spelling checker, you can turn the computer off and turn it back on to start over. An easier method, which is also less risky for the files stored on the disk, is to quit the program.

Press **<C>**, then **q**.

"**Quit?N**" appears on the command line. To quit the program, change the N to **y** (which appears as Y) and press **<RETURN>**.

If you change your mind and want to remain working in the program, simply press **<RETURN>**.

*Quitting clears the memory:* Remember to save the current file if you want to keep it.

**QUITTING WHILE IN 32K:** Commodore 128 users may be in an alternate file (see page 22) when quitting the program.

As a safety feature to avoid accidental loss, "**Save alternate file?Y**" appears on the command line after you press **<C>** and **q** — whenever an alternate file is in memory.

To automatically save the alternate file before quitting, simply press **<RETURN>**.

To quit without saving the alternate file, enter **n** and press **<RETURN>**.

## Install a Printer File

When you load *Paperback Writer* to begin work, you're asked to select the name of your printer. This tells the computer how to implement many of the advanced text formats and enhancements that documents may employ for your specific printer.

If you selected the wrong printer, want to use another printer or decide to create a disk file in ASCII code (usually to communicate with other computers), this function lets you switch printer codes without reloading the program.

Put the disk with the printer file you want (usually the *Paperback Writer* disk) into the drive, press < **C** > and then **i**.

“**Install Printer File:**” appears on the command line.

Enter the name of the printer file and press < **RETURN** >.

If the file you chose isn't on the disk, “**File not found**” appears on the command line. Otherwise, the file you selected is loaded and you can print using that printer (or create a disk file using the selected code). The previous printer file, whether selected at the time of loading the program or by installing a printer file, is replaced by this one.

All printer files on the program disk are listed when you load the program. They can be checked at any time by taking a directory of the *Paperback Writer* disk, and easily installed by using < **RUN/STOP** > to read the file name onto the command line.

If you wish to create your own printer file (see page 47), you can save it onto the *Paperback Writer* disk. As supplied, the disk contains room for one more printer file. If you subsequently wish to add another, scratch a printer file you don't need (or save it onto another storage disk for future use) to create room for it. Don't validate the *Paperback Writer* disk, or you won't be able to save new printer files onto it.

If your printer is not listed, see *Creating a Printer File* on page 47.

## Print

### Preparing to Print — Formatting and Hyphenation

When your document is in the form you want it to appear on paper, you may print it at the touch of two keys (< **C** > and **p**).

But first, you may want to check the document's words against the Spelling Checker (page 46). Remember to save it first.

Then, if you're working in the 40-column format and want the document to be wider when printed (many business letters run from columns 10 to 70), it's a good idea to check the final appearance in 80-column format. (After saving all files, quit the program, reload it in 80 columns and load the document again.)

This is especially recommended if the document contains any tables or variable margins, or if the location of the page breaks is important.

Next, if the margins are close together or the text is justified, you may want to enter *hyphenation* at the end of lines to make the right side of the text more even or to reduce gaps justification inserts between words. Although hyphenation isn't automatic, it's easy to insert because *Paperback Writer* lets you see exactly how the document will appear on paper.

Starting at the top of the document, find the first significant gap at the right side of the line that's followed by a word you can break up. Insert a hyphen and a space at the break and reformat the text (press < **f6** > or move the cursor off the line). Now you can see how the text following the newly divided line will appear when printed. Repeat this procedure until you are satisfied with the document's appearance.

*Check the hyphenation if you alter the format of the body of your document or add or delete text.*

## Begin Printing

To print a file, load it onto the screen and put the cursor on the first line to be printed. Make sure the paper is at the correct place in the printer (usually you want to start at the top of a page).

Now press < **C** > and then **p**. If your printer is properly connected and turned on, it begins printing the document immediately, scrolling the text when it reaches the bottom of the screen. When printing is finished, you're returned to edit mode with the cursor at the end of the file.

To *stop printing* part way through a document, hold down < **C** > until printing ceases and you're in edit mode (it may not be immediate if the printer is part-way through printing a line of text). To *resume printing* where it left off, make sure the cursor is on the next line to be printed and press < **C** >, **p**.

If the printed output is too close to the left side of the paper, you can use "Printer Offset" (see page 30 in Text Formatting) to shift printing to the right without requiring margins to be reset.

## Print Options

Pressing < **C** > and then **p** prints one copy of the file on the screen from the cursor to the end — it assumes a default setting for all five printing options *Paperback Writer* offers.

To utilize any of those options, press < **C** > and then **P** (< SHIFT > p instead of just p). Now the command line displays, in order:

"**Pause at end of page?N**" — If your paper is fanfolded (linked together) and you want the document printed continuously, or if your document fits on one page, press < **RETURN** >.

But if you feed paper to the printer sheet by sheet, or if you want to examine the printout after every page, enter **y** (which appears as Y) and press < **RETURN** >. Now when the printer reaches the end of any page, it pauses and displays "**Insert paper; press any key to continue**".

If you change N to Y note that the default becomes Y the next time the print option is used (i.e., the most recent value becomes the default).

"**Merge with mail list?N**" — Press < **RETURN** > except:

— If you wish to merge the current document with data in a sequential file — such as to print 50 copies of a form letter (text) with names and addresses taken from a sequential file — enter **y** (which appears as Y) and press < **RETURN** >. The on-screen file (or a file subsequently linked to it) must contain at least one merge variable (see page 14). Now "**Mail list file name:**" appears, which asks you to enter the name of the sequential file and press < **RETURN** >.

When the document is printed, the program reloads the text file (with linked files, if any) and replaces the first merge variable in the text file with the first piece of data in the sequential file. Then it merges the next piece of data in the sequential file into the next merge variable in the text file, and repeats this until the text file has no more merge variables. Then the text file is printed with all the merged information.

If the sequential file has more pieces of data, the text file is then reloaded, merged and printed until all the sequential file's data has been merged and printed. (The default for the number of copies requested in the next query — see below — automatically becomes 0, which prints the document over and over until the sequential file is exhausted, or the printing has been stopped.)

If you want to *omit a field* (piece of data) from a sequential file, or *eliminate trailing spaces* after a piece of data, see page 14 in Text Enhancement.

If you have a single disk drive, *both the text and the sequential files must be stored on the same disk*. If you have a dual disk drive, the two files can instead be on separate disks, which is faster.

If the computer cannot find the named sequential file when the final query of this series is answered, it displays “**File not found**” on the command line and returns you to edit without printing anything. If it finds the sequential file, but the on-screen file has no merge variable, the document will be printed without any merged data.

“**Number of copies?1**” — If you want only one copy, press <**RETURN**>.

— If you want more copies, enter the **number** you want and press <**RETURN**>. Now when the printer finishes printing the document, it will be reprinted as many times as you have ordered — as if it were a global file linked to itself.

To begin subsequent copies at the top of a page, enter a Forced Page (see page 27) in the empty line at the bottom of the text (which also ensures that a footer, if any, prints on the page and that printing ends at the bottom of a page). If you enter a forced page in a paragraph with a return arrow at the bottom, the second and subsequent copies will include an extra blank line at the top.

Pagination accumulates with each printing unless you specify the Page Number (see page 29) at the beginning of the document. Also, text formats in the last paragraph will carry over to the first paragraph in the next copy unless they’re reset at the beginning of the document.

If the number entered is **0** (as created by mail merge, for instance), the document is printed indefinitely — until the process is stopped (in the case of mail merge, when all the data in the sequential file is printed).

“**Create disk file?N**” — Press <**RETURN**> except in the following case:

— If you want to store a formatted document on the disk in a form that can be sent over a modem to other computers (and retain the format), use this option.

Creating a disk file diverts a document from the printer to the disk as a sequential file, storing all the special information that print mode would send to the printer to a the disk file. Nearly all computers can only receive the file as an ASCII file (see “Sequential Files”, page 35), which means when you load *Paperback Writer* you must select **ASCII** as the printer (regardless of your actual printer) or install it as a printer file (see page 42).

Enter **y** (which appears as Y) and press <**RETURN**>. Next you’re asked to enter the “**Disk file name:**” of your choice. After the last query in this series is answered, all text starting at the cursor automatically forms a new disk file under the specified name, at the same time also remaining in the current file.

If the name you enter is the same as the name of a file currently on the disk, “**File exists**” appears on the command line, no new file is created and you’re returned to edit mode.

“**Global file?N**” — If the current file is independent, or if you want just it printed, press <**RETURN**>. Printing now begins immediately (unless you’re creating a disk file) according to the instructions entered.

— But if the current file has linked files after it that you want printed in sequence with correct pagination and format, enter **y** (which appears as Y) and press <**RETURN**>. Printing begins immediately (unless you’re creating a disk file) according to the instructions above, and continues into the next linked file(s). When finished, it returns you to edit mode *at the end of the last linked file*, which means the on-screen version of the current file is lost — save it before printing, if you want to keep it.

If you change your mind about any of the first four options, you can press < **C** >, **P** to re-enter new printing commands or twice to re-enter edit mode. (If you changed "pause" to yes, it remains at that setting; all other values in these queries return to their defaults.) But after you press < **RETURN** > in response to the fifth query (about global) printing begins immediately.



# Spelling Checker

To check the spelling of every word in a document, select the Spelling Checker when you load *Paperback Writer* (press <F5> after loading **pw** — see Getting Started, page 4). If you want to spell-check a document currently on the screen, remember to save it before quitting and reloading the program. You'll need a dictionary disk, either a blank one you add words to, or Digital Solutions Inc.'s disk which comes with 32,000 words and lets you add another 8,000.

Now the main spelling checker menu appears. Move the cursor to the option you want and press <RETURN>. You can choose from:

“**CREATE A DICTIONARY DISK**” — if you don't have a dictionary disk, put a blank disk in the drive.

“**Enter disk name:**” appears on the screen; enter a disk name of up to 16 characters and press <RETURN>. Now:

“**Enter disk ID:**” appears; enter a two-character identifier and press <RETURN>. This formats the disk to be used as a dictionary, and returns you to the main spelling checker menu.

“**DIRECTORY**” — displays a directory of the disk in drive 0, which helps you to find the disk the desired file is on and to check the exact spelling of the file's name.

Press any key to make the directory display pause while scrolling, and then any key to resume scrolling.

Pressing <C> stops the scrolling of the directory.

To return to the main spelling checker menu, press <RETURN>.

“**CHECK A FILE**” — put the storage disk in the drive.

“**Enter file name:**” appears on the screen; enter the name of the file whose spelling you wish to check. If the file is not on the disk, the error bell sounds and “**Enter file name:**” appears again.

If the file is on the disk, the drive will spin for a while, the bell sounds and “**Place dictionary disk in drive**” appears.

Put the disk in the drive and press <RETURN>. The drive now spins again, the bell sounds and “**Place storage disk in drive**” appears.

Next, any word in the file not found in the dictionary disk is displayed, one at a time, highlighted (in reverse) with its surrounding text. You have three options. To:

skip the word (leave it and the dictionary unchanged), press **s** or <RETURN>.

add the word to the dictionary (accepting the current spelling), press **a**.

change the word in the file (but not in the dictionary), press **c**. Then retype the word correctly and press <RETURN>.

When the last unrecognized word has been dealt with, any words you have changed are then changed in the file on the disk.

If you haven't chosen to add any words to the dictionary, the main menu for the spelling checker reappears.

If you have added words to the dictionary, the screen instructs you to put the dictionary disk in the drive. It then adds the words to the dictionary disk, and then returns you to the main spelling checker menu.

“**QUIT**” — this quits the program. Load the program again (and press <F1> or <F3>) if you wish to edit a document.

At any time in a spelling checker option, you can return to the main spelling checker menu by pressing <C>. Remember that word changes made in a file aren't saved on the disk until all words not found in the dictionary have been dealt with.

# Creating a Printer File

A printer file contains the codes the printer needs to use all its capabilities. Printers come in two basic types: ASCII or Commodore. Any ASCII printer will function if the ASCII printer file is chosen and any Commodore printer will work if you select CBM 801/1525. In either case, only the characters on the keyboard and standard spacing will be employed.

To use features specific to your printer — especially pitches and enhancements such as underlining, boldface, italics and super/subscripts — a printer file must be installed. When the *Paperback Writer* program is first loaded, it offers a choice from several of the most common printer files; if your printer is among them, move the cursor to it and press < **RETURN** > .

(If you have a Commodore 802 or 1526 printer, select “**CBM 802/1526**” to be able to use its extra features — although it will function with “**CBM 801/1525**”. Use the Commodore printer file only to create a disk file — see page 44.)

You can also install a printer file when in edit mode — see page 42. If your printer isn't on the supplied list, you must create a printer file to fully use its features. This is a technical operation that your Commodore dealer may help you with. What follows is how to create a printer file using *Paperback Writer*.

**LOAD THE ASCII PRINTER FILE:** Put the *Paperback Writer* program disk in the drive. Now press < **C** > , **l** (the letter L), enter **ASCII.pf** and press < **RETURN** > . [You can also get a directory of the program disk, and put the cursor on “**ASCII.PF**” now press < **C** > , < **RUN/STOP** > and < **RETURN** > .] When it's loaded, a file of all possible printing options appears on the screen. A few options have default values.

**ENTER YOUR PRINTER'S CODES:** If you want to use an option that's available on your printer, you must enter one or more values beside each option in the file. (If no value is entered, the option will have no effect when printed.)

Values may be entered in any of four formats:

**Decimal** — the normal number system (eg. 77)

**Hexadecimal** — base 16, using 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, a, b, c, d, e and f, always preceded by \$ (eg. \$4d is the same as 77 in decimal — four times 16 plus 13).

**ASCII** — characters enclosed in double quotation marks (eg. “M” is equivalent to 77 in decimal and \$4d in hexadecimal). Upper- and lower-case letters have different values.

**ESC** is a code representing ESCAPE that has a special meaning to many printers. ESC has the value of 27 decimal or \$1b hexadecimal, and is entered without being enclosed in quotation marks.

If more than one value is entered for a specific option, separate the values with commas but no spaces.

## The Options

### Printer Type

“**ASCII:y**” — enter **y** (or leave it) if your printer is of the ASCII type; enter **n** if it's a Commodore printer.

### Printer Interface

“**Device:**” — to set the default printer number at other than **4**, enter the number. (You can still change it each time you use the program by pressing < **CTRL** > **D** — see page 20.)

“**Connection:**” — leave it blank or enter **serial** if your printer is connected to the serial port directly or through an interface. Enter **parallel** if your printer is connected through the user's port by a parallel cable.

If your printer is connected through the user's port by an RS232 cable, enter **rs232** and fill in the next five options:

**"Baud:"** — enter the baud rate that you've chosen for the printer. Options are **50, 75, 110, 134, 150, 300, 600** and **1200**.

**"Parity:"** — enter the parity that you've chosen for the printer. Options are: **even, odd,** or **none** for no parity.

**"Bits:"** — set a value to agree with your printer from among **5, 6, 7** or **8**.

**"Stop Bits:"** — set the value agreeing with your printer, **1** or **2**.

**"Handshake:"** — enter **0** if the handshaking line goes low when the printer is busy, or **1** if the handshaking line goes high when the printer is busy (the handshaking line from your printer — usually DTR — must be connected to CTS — pin 9 — of the Commodore 64 or 128). Enter **2** for no handshaking.

## Paper Advance

If the line feed is automatic when the program sends a carriage return command at the end of a line, enter the carriage return code (usually **13**) after **"CR:13"** (the first query).

If the carriage return command ends the printing of the line without advancing the paper, enter the carriage return code (again usually **13**) after **"CR (no LF):"** and remove any value in the first carriage return query.

Also, you must enter the code to advance the paper (usually **10**) after **"LF:"**

## Backspace

**"Backspace:"** — enter the code to move the print head back one character (usually **8**).

## Underline Character

**"Underline:95"** — enter the code (usually **95**) to print just an underline ( \_ ).

## Printer Secondary Addresses

**"Text Secondary Address:"** — to send the text through a secondary address (necessary with some interfaces), enter the address.

**"Control Codes Secondary Address:"** — to send the control codes through a secondary address, enter the address.

## Printer Initialization

**"Printer Initialize:"** — this code is sent once, at the beginning of a document. Typically it is used to reset the printer to its default settings.

**"Secondary:"** — enter the secondary address, if any, to send the printer initialization code.

## Line Beginning

**"Line Begin:"** — to send a code at the beginning of each line, enter it here.

## Text Enhancement

**"Underline on:"** — enter the code to turn underlining on.

**"Underline off:"** — enter the code to turn underlining off.

See note below "Microspacing".

**“Bold on:”** — enter the code to turn boldface on.

**“Bold off:”** — enter the code to turn boldface off.

See note below “Microspacing”.

**“Italics on:”** — enter the code to turn italics on.

**“Italics off:”** — enter the code to turn italics off.

**“Value to add to italics:”** — instead of on/off codes, some printers require a value to be added to all italicized characters. If applicable, enter the value, usually 128.

**“Superscript on:”** — enter the code to turn superscript on. If your printer doesn’t accept this code (or for subscript), see “Superscript Mode” below.

**“Superscript off:”** — enter the code to turn superscript off.

**“Subscript on:”** — enter the code to turn subscript on.

**“Subscript off:”** — enter the code to turn subscript off.

## Line Spacing

**“6 LPI:”** — enter the code to set the printer to 6 lines per inch.

**“8 LPI:”** — enter the code to set the printer to 8 lines per inch.

**“Optional LPI:”** — if you want to set the lines/inch to a setting other than 6 or 8, enter it here.

**“Superscript Mode:”** — if your printer doesn’t have on/off codes for super- and subscripts, use superscript mode. It works by printing the superscripts, then advancing the paper one-third of the normal line feed to print regular text, then advancing the paper another third to print subscripts, and then advancing a final third to begin the next line. This is much slower than the on/off code method, risks clashing subscripts of one line with superscripts of the next, and the characters are the same size as regular type (not small as most super/subscripts are).

To use it, answer **y** and set all line spacing codes to three times their normal values (eg. instead of 6 lines per inch, enter the code for 18 lpi on the “6 LPI” line).

## Pitch

Put the codes for the pitches (characters per horizontal inch) of your printer beside the appropriate line. These codes must cancel any previous pitch and send the desired one.

**“MS:”** (microspacing) — this allows the printer to insert blank space smaller than one character between words when text is being justified. Thus the distance between each word appears more equal.

For every pitch that you wish to have printed with microspacing, enter a value following “MS:”. This value is the number of intervals that a character may be divided into (on a dot matrix printer, it’s usually the number of horizontal dots a character may use). Then answer:

**“Microspace Codes:”** — enter the code to send the smallest interval a character may be divided into.

**“Byte position within codes:”** — many printers can save time by accepting the exact number of intervals to leave blank rather than accepting one blank interval at a time, as many times as needed. If your printer permits this, the microspacing codes must include one or two locations that the program can change to the number of intervals it wants printed.

Enter one or two numbers corresponding to how many values past the colon the locations are. For example, if the microspace code is ESC, “Y”, 0, 0 the two zeros are the byte positions. Since they’re third and fourth in the code, enter **3,4**.

“**Microspace Character:**” — some printers require a certain character representing one interval to be sent after the microspace code, which the program repeats sending as many times as needed to fill a particular space between words. Enter the character, if applicable to your printer.

“**Microspace off:**” — some printers require a code to end microspacing. Enter it.

“**Send pitch after microspace:**” — some printers (usually daisy-wheel) alter the pitch to microspace. Answering **y** here restores the pitch to its previous value.

“**Microspace for bold:**” — if your printer isn’t set to print boldface by using on/off codes or by overprinting with two passes, it may be able to do so by backspacing (if you have entered a backspace code). An option using backspacing, if the printer can microspace, is to overprint with an offset of one interval, which produces a darker image. Enter **y**.

### Note on boldface and underlining

The program determines how to print boldface and underlining in the following order:

1. by on/off codes (if available);
2. by backspacing and overstriking (if a “Backspace Character” is entered), offset by one interval if entered;
3. by making a second pass over the line, overstriking the text (if the carriage return doesn’t automatically advance the paper).

If you want to use one of the second or third methods, which are slower, make sure the codes for the methods above aren’t entered.

## Foreign Characters

“**Foreign on:**” — if your printer requires codes to access foreign characters, enter them here.

“**Foreign off:**” — enter the codes to turn off foreign characters.

Next, a file name appears that refers to a file on the *Paperback Writer* disk that determines what foreign characters are shown on-screen for the characters accessed by <CTRL> **0** to **9**. The file contains 10 dot patterns, one for each character, that are supplied as French characters (the file is called “french chars”).

After the file name are 10 lines for the codes that produce the characters or symbols.

If your printer has a different set of foreign characters, possibly in another language or for mathematical symbols, you can make their on-screen representations resemble the desired characters by changing their dot patterns. For each dot pattern you change, you must enter the correct printer codes in the corresponding line in the printer file.

## Using a Printer File

Once the printer file is created, you must save it in order to use it. To save it, press < **C** >, **s**. Now enter the name of your printer followed by **.pf** and press < **RETURN** >. For example if your printer’s name is ABC, enter **ABC.pf**.

To use the printer file, you must install it — see page 42 of Install Printer Codes.

The most appropriate place to store your printer file is on the *Paperback Writer* disk. As supplied, the disk contains room for one more printer file. If your new printer file won’t fit, or if you want to save more than one printer file, first scratch a printer file you don’t need from the disk (you might want to store it on another disk in case you want it in future).

Remember not to validate the *Paperback Writer* disk. Because of the protection system, validating would then mean you couldn’t save printer files onto the disk.

# Trouble-shooting

This section is designed to pinpoint trouble with disk operations and suggest remedies.

## Program Loading Problems

If the program won't load, make sure the program disk is in the drive, and that the disk drive device number is **8**. (If it's another number, use the correct number when entering **load''pw'',8**.)

If **''?FILE NOT FOUND''** appears, enter **open1,8,15, ''1''** and press **<RETURN>** before loading again. **''?FILE NOT FOUND''** also may indicate that the disk drive has a number other than 8. If so, substitute the number for 8 in **load''pw'',8**.

## Disk and Other Error Messages

When the disk drive light flashes during a disk function, it indicates a disk error. Press **< C= >, c <RETURN>** to have the error displayed.

These errors take the form: two-digit number, message, two-digit number, two-digit number

The following are some of the more common disk and other error messages (often accompanied by the bell sounding), listed alphabetically:

**''Device not present''** — the disk drive isn't connected to the computer or no disk drive is present at the specified number. Connect the drive and turn on the power, connect the proper drive or select the proper device number (**<CTRL> <SHIFT> d**).

**''Disk full''** after an attempt to save a file — the disk doesn't have enough storage space to save the file. The previous version of the file (if any) is erased, and shows up in a directory as a star file (an asterisk is before the name), while none of the current version is saved.

To avoid trouble in saving this and other files on this disk, validate the disk (see page 41) and shorten the file before saving it again. However, do not validate the *Paperback Writer* disk, or you will be unable to save any printer files onto it (because of its protection system).

**''Disk id mismatch''** — a part or all of the disk isn't working properly. If you're loading a file onto the screen, you won't get all of it. If you're saving a file, save again onto a new disk. Transfer as much as you can from the bad disk onto a new disk and don't use the old disk.

**''Drive not ready''** — the drive door isn't closed or no formatted disk is in the drive. Re-insert a properly formatted disk and close the drive door before attempting a disk operation again.

**''File exists''** when trying to create a disk file through the print mode or renaming or copying a file — a file of that name already exists on the disk. Choose a new name and try the operation again.

**''Illegal range''** when you attempt to define a range — the cursor may be on a line without data, or you may be trying to sort or add numbers (using a block range) in lines that aren't paragraphs by themselves.

**''Illegal track or sector''** when trying to load a file (disk drive light not flashing) — the disk may be bad, and you may lose files. Try to transfer as many files on the disk as possible onto a new disk.

**''Memory full''** when trying to load a file — the file on disk is too large to fit into available memory. You may be able to free up some memory by clearing the current range from the memory; press **<CTRL> k**. If you're in 32k (an alternate file) on the Commodore 128, it will probably load if you switch to 64k (page 22)

“**Memory full**” may also appear while trying to load a file in 80-column width that would load in 40-column width. Reload the program in 40 columns and break it into two smaller files.

“**Not memorized**” when trying to define a range — the range is too big to fit into memory, although it is still highlighted. Try performing the function with a smaller range.

In the case of delete only, pressing <CTRL> **d** instead of <CTRL> **r** to finish defining a range will permit deletion of a range too large to memorize. But you won't be able to get it back again.

“**Printer not present**” — see printing problems, below.

“**Read error**” — either the disk door has been opened during a disk operation, or the disk is bad (see “disk id mismatch”).

“**Syntax error**” while a file is being saved — file names containing **\*** or **?** can't be saved. Save again, using a different file name.

“**Verify error**” while verifying — file on disk isn't same as file on screen. If you're verifying a file just saved, this means the save failed; try saving onto the same disk again or onto a new disk.

“**Write error**” during a save operation — the disk is bad (see “disk id mismatch”).

“**Write file open**” when you try to load a file — the file wasn't correctly saved onto the disk and can't be read. In the directory the file shows up with “**\*prg 0**”. All you can do is recover the blocks it used and delete it from the directory, by pressing < **C** >, **c**, **v0** and <RETURN>.

## Printing Problems

“**Printer not present**” — the printer isn't connected and turned on, or the printer file doesn't specify the port that the printer is connected to (see Creating a Printer File).

If your printer still isn't working properly, first try using every other printer file available on the *Paperback Writer* disk. If that doesn't work, see if the following remedies help.

If your printer is always printing on the same line, you must enter the line feed code in the printer file (see “LF” in the paper advance section of Creating a Printer File page 47).

If your printer is double-spacing when it should be single-spacing, remove the line feed codes from the printer file and enter an appropriate code for carriage return in the printer file (see “CR” in the paper advance section of Create a Printer File).

INTERFACES: If you have a non-Commodore printer connected by an interface and your printer produces gibberish, you must lock or make transparent the interface so it doesn't change any codes the *Paperback Writer* program is trying to send to the printer.

(Otherwise, you can select the CBM 801/1526 printer file, which may work but won't produce any enhancements such as boldface and italics.)

Lock the interface by a) setting a dip switch in the interface or b) sending a command to the interface. Instructions for two popular interfaces follow; for other interfaces consult your printer interface manual.

CARDCO: some Cardco interfaces have a dip switch you can set. There are two other options: — before loading the *Paperback Writer* program, type **open4,4,25:print#4,“lock”:close4** and press <RETURN>.

— in Printer Initialization in the printer file (see page 48), enter **0** after “Printer Initialize:” and **25** after “Secondary:”.

THE CONNECTION: in Printer Secondary Addresses in the printer file (see page 48), enter **6** after “Text Secondary Address:” and **6** after “Control Codes Secondary Addresses:”.

## Line Feed

If your printer prints everything on same line, press the < **LINE FEED** > key on the Commodore 128 (beside the < **HELP** > key). This key ignores the line feed code in the printer file (see "Paper Advance", page 48) and sets the line feed on ("Line Feed ON" appears on the command line).

If your printer prints everything double-spaced, press the < **LINE FEED** > key twice. This will ignore the line feed code in the printer file (page 48) and cancels the line feed ("Line Feed OFF" appears on the command line).

< **LINE FEED** > doesn't affect the printer file on the disk, and is reset whenever another printer file is installed (the "Paper Advance" setting in the printer file takes precedence).

## Support

If you have any problems using *Paperback Writer*, first examine the Index and Contents of this guide for a remedy. If that doesn't solve the problem, contact the dealer from whom you bought the program.

If you still can't get satisfaction, write Digital Solutions Inc. at the address printed at the front of this guide, citing the program's version number and serial number. If the problem involves printing, send a photocopy of the printer codes from your printer manual.

For Digital Solutions Inc.'s policy on upgrades (improved versions of the program), see pages 1 and 6 of this guide and the "read me" file on the program disk. To be advised of major changes, you must send in the registration card supplied with the program disk.



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**\*Items with special information for 128 users are preceded by an asterisk\***