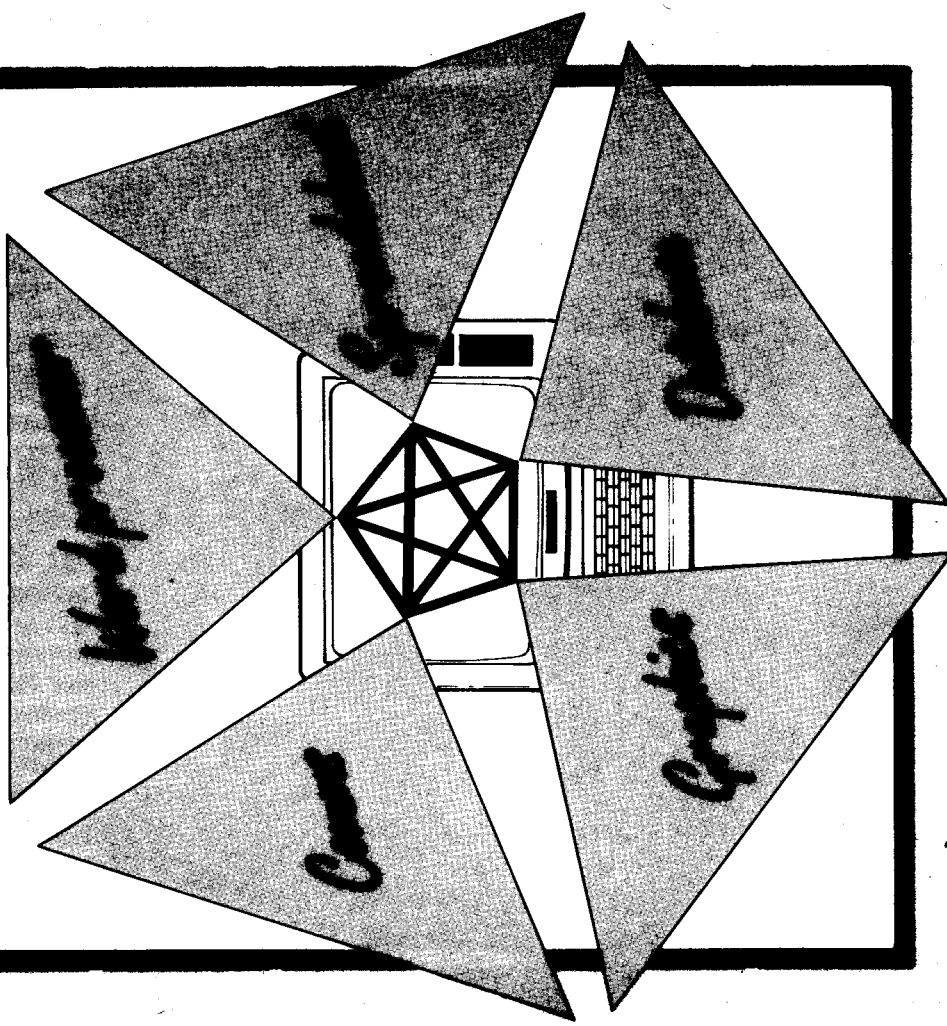


Contents

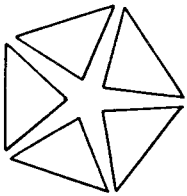
Introduction	3	Print	24
Getting started.....	3	Preview page(s)	24
Menus	5	Print	25
Sub-menus	5	Print page(s).....	25
Discs	5	First page	25
Disc utilities.....	6	Last page	25
Catalogue disc	6	Set up printer	25
Sort files by	6	Database	27
Selected drive	6	Getting started.....	28
User number	6	Tutorial	28
Erase file.....	6	The menu	34
Rename file	6	Edit structure	34
Printers	7	Edit data	36
Word Processor	7	Sort data.....	36
Getting started.....	7	Search and mark data	37
Tutorial	7	Calculations	37
The menu	10	Total all records	37
Edit text	10	Total marked records	37
Modes	12	Alter all records	37
Moving within text	12	Alter marked records	37
Rulers	14	Load/Save data	38
Deleting text	15	Load data file	38
Reorganising text	15	Append data file	38
Case changing	16	Save all records	38
Embedded commands	16	Save marked records	38
Search	22	Save mail merge file	38
Search for	23	Load report/label format	38
Case dependant	23	Save report/label format	38
Ignore control codes	23	Clear data	38
Search and replace	23	Clear all records.....	38
Database	23	Clear marked records	38
Load database	23	Clear whole database	38
View database	23	Clear markers.....	38
Assign strings	23	Toggle markers.....	38
Clear document	23	Clear report/label format	38
Load/Save	23	Print data	38
Load document	24	Printer type	38
Save document	24	Print style	38
Load all	24	Separate records with	38
Load/Save set up	24	Print field names	38
Merge document	24	Print totals record	38
Save block	24	Print all records.....	38
Save Ascii	24	Print marked records	38
Save prompt	24	Edit report/label format	38
Disc utilities	24	Print reports/labels	39

Mini Office PROFESSIONAL



Amstrad PCW
8256, 8512
and 9512

User guide



Introduction

MINI OFFICE PROFESSIONAL provides the five most essential pieces of business software in a single, user-friendly, integrated package, each performing a series of specific tasks.

These five modules are:

- A powerful Word Processor.
- A comprehensive Database.
- A sophisticated Spreadsheet.
- An effective Graphics system.
- An easy-to-use Communications system.

What follows is advice on how to choose the module most suitable for your needs, how to use it to the best effect, and how data entered into one module can be used in others.

Details of amendments or updates to Mini Office Professional are on disc 2 side A in a file called READ.ME. To view this file, follow the usual loading procedure for the package up to the A> prompt then enter:

TYPE READ.ME

Also on disc 2, side A are some tutorial files which are detailed on page 71 and a file - READ9512.me - giving the limitations of the package for the PCW9512 with a daisywheel printer.

Getting started

USING Mini Office Professional could not be easier:

- *Ensure the drive(s) are empty.*
- *Switch on the computer, insert your CP/M system disc into drive A and press the spacebar.*
- *Once the A> prompt appears, insert the appropriate Mini Office Professional disc and enter:*

OFFICE

Now press Return, and you will immediately be presented with the main Mini Office Professional menu.

The remainder of this section consists of a brief explanation of the purpose of each module and other major features.

Word Processor

NO-ONE, no matter how talented, will produce even a short piece of writing which is free from spelling errors, grammatically correct and clearly and attractively laid out at the first attempt. A word processor is the only tool available at present which allows a writer to modify his text without constantly copying, erasing and/or redrafting his words. Using the power of the computer to store, manipulate and display

Spreadsheet	41	Load data	61
Getting started	41	Append data	61
Tutorial	41	Save all data	61
The menu	47	Save set(s) of data	61
Edit data	47	Disc utilities	61
Moving between cells	48	Auto screen save	61
Commands	48	Key functions	62
Operators and functions	49	Maths functions	62
Copy a cell	51	Communications	63
Alter spreadsheet	52	Getting started	63
Number of columns	52	Tutorial	63
Number of rows	52	Connecting to Prestel	64
Cell display	53	Connecting to MicroLink	64
Windows	53	Connecting two micros	65
Auto update	53	The menu	65
Negative values	53	Communicate	65
Read null cells as	53	Preset systems	66
Wipe spreadsheet	53	Configure RS232	66
Print spreadsheet	53	Receive rate	66
Headings	53	Transmit rate	66
Printer type	53	Word length	66
Printer width	53	Parity	66
Print style	53	Stop bits	66
Highlight window	53	Screen format	66
Print whole spreadsheet	53	Xon/Xoff	66
Print window	53	Load configuration	66
Save graphics data	53	Save configuration	66
Graphics window	53	File transfer	66
Data sets are	54	Protocol	66
Continue	54	Transmit file	67
Graphics	55	Receive file	67
Getting started	55	Buffer control	67
Tutorial	55	Buffer	67
The menu	57	Load buffer	67
Bar chart	57	Save buffer	67
Bar chart	57	Print buffer	67
Bar chart options	57	Transmit buffer	67
TV set	58	Clear buffer	67
Text	58	View buffer	67
Line graph	58	Screen options	67
Line graph	58	Local echo	67
Line graph options	58	Auto line feed	67
TV set	59	Entry window	67
Text	59	Status line	67
Pie chart	59	Cursor type	68
Pie chart	59	Invert screen	68
Pie chart options	59	Function keys	68
TV set	60	Define keys	68
Text	60	Load definitions	68
Editing data	60	Save definitions	68
Edit	60	Mail Merging	69
Print all data	60	Assigning strings	69
Print set(s) of data	60	Editing the document	69
Printer type	61	Loading database files	70
Delete all data	61	Adjusting the document	70
Delete set(s) of data	61	Tutorial files summary	71
Invert screen	61		
Loading and saving data	61		

communicating directly with other offices, not only in Britain but around the world. The Communications module easily allows you, via a few simple keystrokes, to get online quickly with the minimum of fuss. It also gives you the opportunity to access a wealth of information on national and international databases such as MicroLink/Telecom Gold, Prestel and a host of private electronic bulletin boards.

The menus

MINI OFFICE PROFESSIONAL is operated through the use of menus – lists of options from which you make a selection in one of two ways:

- *Move the highlight to the option you wish to select using the arrow keys and confirm your selection by pressing Return or Enter. From now on any reference to Return also includes the letter.*
- *Press the single letter or key allocated to the option. Using Set/Unset (the keys marked + and -) you can toggle a display of these at any time a menu is visible.*

Sub-menus

IN some cases another menu will be presented before the action you require is carried out and you select from this in the same way.

This procedure allows you to perform complex activities without needing to know anything about the internal workings of the computer. The options will be presented in terms you are familiar with, such as Erase file or Sort data. Having made your choice if the option you require is irreversible, you will be asked to confirm it by pressing Y for Yes or N for No.

Sometimes when setting options or entering a filename you will need to change the existing entry. You can do this in one of two ways: Edit it as normal using the left and right arrow keys and/or either Del key, or erase a complete entry using Cut and enter a new one.

Menu selection is an extremely simple and safe way of performing your tasks. Therefore feel free to experiment – this is the quickest way to learn about the large number of facilities contained in this package. Rest assured there is nothing you can do to harm the software. If you make an impossible request you will be told, and no action will take place – other than a menu being presented to allow you to choose again.

At all times pressing Exit will abort the current operation or take you back to the previous menu.

Using discs

WHILE using any of the five Mini Office Professional modules you will often want to perform various tasks on files stored on a floppy disc. Each module has two menu options – Disc utilities and Load/Save – which allow you to perform such tasks as Erase, Save and Catalogue.

The way a file is selected is the same for all disc options where a filename needs to be entered. Once you have selected the required feature you will be presented with a list of all the files and a filename at the bottom of the screen. You may edit this name and press Return, or just select it by pressing Return or an up or down arrow key.

You can use * as a *wildcard* for all or part of the name. If more than one file exists that matches the name you enter, all possibilities are displayed on the screen and you select one using the arrow keys. For example, selecting A:*.* will allow you to use the arrow keys to select from all the files on drive A but A:*.DOC only lets you choose from all the .DOC files and A:LETTER.DOC loads that file.

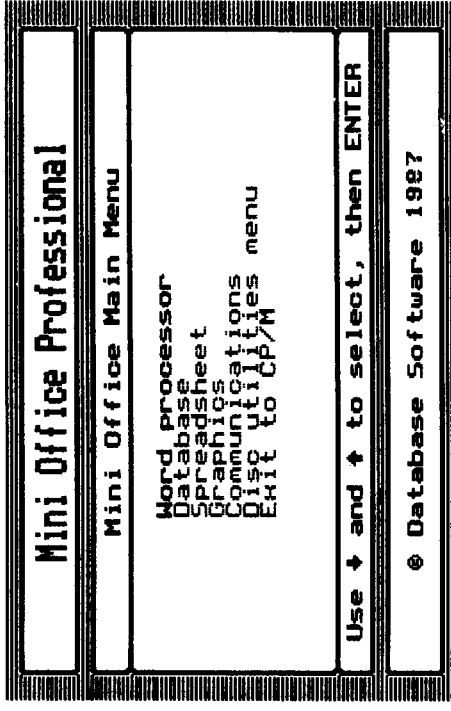
When you select Load/Save the subsequent sub-menu will vary from module to module to suit the type of data being handled, but you will always select the file as we have just described. Files should not be

Database

THE benefits of a database are legion, the most important being that a single record – the computer equivalent of a single document in a filing cabinet – may be found by reference to any or all the categories used such as name, address, date and so on. Studying the contents of any part of the file does not require physical removal of any record, thus ensuring that data cannot be lost. Records can also be sorted in a wide variety of ways prior to being viewed; information can be merged into the Word Processor, making multiple documentation more personal; and labels or reports of any shape or size can easily be printed using the Label/Report printer built into the Database module.

Spreadsheet

THE Spreadsheet can be used in every case where tabular information needs computing. The format is a table of figures which, depending on the memory limitations of your PCW, can be as large or as small as your requirements demand. Once created, your spreadsheet will process all the information to produce the correct results. People with no programming experience and only the most elementary mathematical ability can quickly and easily set up sophisticated calculations.

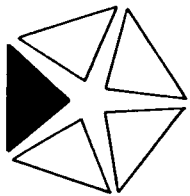


Graphics

WHILE spreadsheets are an exceptionally efficient way of handling large volumes of repetitive calculations, they do have one serious drawback – the average person can suffer arithmetic indigestion when confronted by a large table of numbers. It is when trying to detect relationships and trends on the table that the interpretation of the results becomes at best a chore and at worst a nightmare. The powerful Graphics module takes figures, either typed in directly or previously saved using the Spreadsheet, and redisplay them as a series of graphs or charts.

Communications

MORE and more companies are now realising the benefits of electronic mail and going online – linking their micro to the telephone and



Word processor

THE Word Processor module of Mini Office Professional provides you with the facility to create a variety of documents. These can range from a simple letter to a friend, to a complex script or a manual like this.

Although you could attempt to do this with a typewriter, to err is human and it would be extremely unlikely that you could achieve a satisfactory finished product at the first attempt.

The Word Processor offers you a screen editing facility with which you can easily correct typing mistakes, bad grammar, and badly structured text, without having to resort to correcting methods, or re-typing the whole thing again.

Getting started

TO show how easy it is to get your text on to paper we'll enter a couple of lines directly from the keyboard. Try the following:

- From the Word Processor main menu select Edit text
- Type in the paragraph above starting 'To show how ...' without pressing Return until you reach the colon (:). You'll notice immediately that the word at the end of the line didn't split. The Word Processor assumes, unless you tell it otherwise, that a word too long to fit into the space remaining must be placed on the next line.
- Press Exit to return to the Word Processor menu and select Print.
- At the sub-menu move the highlight down three to select Print again and you'll find your text printed exactly how you typed it.

Mini Office Professional is capable of printing in a wide variety of styles and these can be combined as you wish. To demonstrate this let's print out the same text in double width italic characters. Return to Edit mode and make sure the cursor (highlighted letter) is over the first character in the text (T). Press Shift+Alt+W (for double width) followed by Shift+Alt+I (for italic). You'll notice that all the text shuffles up and two symbols called control characters have been inserted into the text.

To allow you to see how your document will look, the word Processor has a split screen mode called paged edit mode, where the bottom half shows how your document will look and the top half displays it with the control characters in it. Press f3 to see this now. The bottom half of the screen does not update automatically as you work in the top half, but pressing Relay refreshes it at any time. To see this,

saved to the main program discs — a separate formatted data disc is required for this.

To prevent you trying to load the wrong type of data into the module, as you save files the displayed three-letter suffix will be automatically added to the filename to show its type. You can edit this to allow compatibility with other software but unless you intend to use the file in another package we recommend you leave it as it is.

Disc utilities

THE Disc utilities option is the same on all the modules and when you select it you will be presented with a sub-menu from which you can choose one of the following:

CATALOGUE DISC: Presents you with a directory of the currently selected drive with the files displayed in the order determined by the Sort Files By option. The other drive may be catalogued by pressing the appropriate letter while a directory is on the screen.

SORT FILES BY: Toggles between Name and Type so that whenever files are displayed they are in an order determined either by the first part of the filename or the extender such as .DBS.

SELECTED DRIVE: Allows you to choose which drive is accessed (A or B) when a disc operation is required.

USER NUMBER: Determines which area of the disc will be used for disc operations. Enter a User number from 0 to 15.

ERASE FILE: Wipes files from the disc after confirmation. If you use a wildcard for your selection, when the matching files are displayed pressing Del erases them all while pressing Return or a vertical arrow key allows you to select one.

RENAME FILE: Allows you select a file and give it a new name. Once you have selected the file to rename, the same name is presented for you to edit in to a new one so small changes are easy.

Printers

THE PCW dot-matrix and Epson-compatible printers connected to an appropriate interface are fully supported by Mini Office Professional except where stated. However most other printers should work adequately except where special features are utilised, such as when printing screen dumps from the Graphics program.

While every effort has been made to ensure the accuracy of the programs and manual, Database Software cannot accept responsibility for any imperfections in the programs or manual. Our policy is one of continuous improvement and we reserve the right to change any part of Mini Office Professional.

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you to practice correcting.

The next interesting feature is on line 51 – the new page symbol created by pressing **Alt+N** causing the summary to be printed on a new sheet. In paged mode the page boundary is shown on the edit screen by a dotted line but in normal edit mode it isn't – as you can see if you press **f3**. Make sure you are back on the split screen of paged edit mode and move around the summary pressing **Relay** occasionally to see just some of the effects possible with the Word Processor. In the main part of the manual find out which key combinations gave the effects and experiment with some of the others that we haven't mentioned here.

Most of the features of the word processor can be set from within Edit mode, but others are available from the menus. Move around the menus and look at the options available. Most are self explanatory and so won't be covered in this tutorial – but make sure you try them for yourself to see just how easy it is to tailor a document to your own requirements. Remember, if you print it, it's a good idea to use draft before selecting a high-quality output.

Let's end the tutorial by looking at a couple of the menu-selected options – Search and the Database merge facility. If, for example, you notice a spelling error in the middle of a document the quickest way to find it is to use Search. You should have already corrected any mistakes, but to demonstrate the feature let's just search for the word *off*. The search always starts from the cursor position, so press **Extra + ↑** to move the cursor to the top of the document then press **Exit** to return to the Word Processor menu. From there select Search and you'll be prompted with a sub-menu where you select Search for. You are then prompted for the search string so type in a word to search for, – **off**. You will automatically be returned to Edit mode with the cursor at the first occurrence of the word.

Now that the search string is entered, you can move to the next occurrence of the word by pressing **Find**.

If you've made a consistent error throughout your text, you can use Search and Replace to change them all at once. Let's change all occurrences of the word *off* to *out*.

Again move the cursor to the top of the text, then select Search and Replace from the Word Processor menu. Enter the word **off** and you will be prompted for the replace string with *off* already entered for you to edit. As the word you wish to enter is completely different, press **Cut** and type the word **out**. Press **Return** and you'll find all the changes are made.

Alternatively, instead of pressing **Return** you can press **Shift+Return** after typing the replace string. You will be returned to the edit screen at the first occurrence of the search string and you will be prompted *Replace Y/N* so you can decide whether individual strings need replacing.

The final feature of the Word Processor that we'll look at is the Database merge facility. To use this you need both a Database file and a word processor file in memory and there are suitable files on the Mini Office Professional disc. Load the file called **MERGE.DOC** and its associated set up files (**MERGE.PRX** and **MERGE.DBX**) by selecting **Load All** from the **Load/Save** menu. This not only loads the document file but, as the **Printer** and **Database** set up options are set to **Yes** on the **Load/Save** set up menu when the program is loaded, any other necessary values also are loaded.

Next, select **Database** from the **Word Processor** menu and load the file **MEMBERS.MRG**. Select **View** database just to check what you've loaded and then select **Assign Strings**. You'll notice that the first string is set as the date. This is good practice if you send a few letters

type in a few more words and press the key.

The facilities of the Word Processor are too numerous to show with a short piece of text. To allow you to learn some of its features without typing in a large document there's a file called **DEMO** on the disc and we'll use it for the rest of this tutorial. We'll add more control codes, correct mistakes, move blocks of text to better locations and show you how to polish the document to give a professional result.

To load the letter, select **Load/Save** for the main menu then select **Load Document** from the sub-menu. Reply **Y** to the warning message, press **Return** to enter the default **A:*.*** and move the highlight to **DEMO.DOC** and confirm your choice with **Return**. Press **Exit** to return to the main menu and select **Edit Document** to see the demonstration file.

The first thing you'll notice is that there is a ruler at the top of the text. The dim **Ts** in front of the address cause the first character of each line to fall below the **Ts** on the ruler. To see the effect of rulers, let's insert another, alter it and finally delete it to return the document to its original state.

Move the cursor to line 2 – you can see the line it is on from the header. Press **Extra+R** and a new ruler will be inserted. Notice how the address has moved to the first tab. Move the cursor to the first **T** on the new ruler, delete it and move the cursor down. You'll notice that as the screen is updated the address moves right. The right margin also moves left one, so return it to its original place by moving the cursor back onto the ruler and pressing the spacebar. Alter the other tabs in the same way so that the address returns to its former position when the cursor is moved down.

Try moving the **l** on the ruler by entering another one – as only one is allowed, the first will automatically be erased. As you move the cursor off the ruler you'll see the paragraphs that have been created with the **Alt+Return** line up with the new indent position.

Delete some of the dashes in the ruler so that the right margin moves over – notice how when you move the cursor the new width is reflected in the text. You can put the dashes back either by using spaces or dashes. Experiment more with your extra ruler, and once you're satisfied that you understand how it operates move the cursor on to it and press **Extra+Del** to remove it.

The next interesting point in the letter is the date. Notice how *th* has dim characters both sides of it so it prints in superscript. These were inserted using **Shift+Alt+S** and **Shift+Alt+O**. Move the cursor to line 11 and press **f3** to see this on the preview screen.

Moving on to line 15 of the letter, you'll notice that two words – *currently* and *working* – have dim hyphens in them on the edit screen but only *working* has a hyphen in it on the preview screen. These are soft hyphens and were inserted using **Alt+**. They only show in preview or printouts if the word is split at the end of a line. If you insert the words *most of* in front of the *products* and press **Relay** to update the preview screen you'll see that *currently* is now hyphenated.

On line 19 of the document is a dim **C** to start condensed printing. Notice how in the table below it, although in Edit mode the columns don't seem to line up with the tabs, in preview mode the smaller text lines up in the correct positions. On the edit screen you can look at the right-hand entries by panning the screen right using **Alt+→**.

The paragraph starting on line 30 is in the wrong place. Move the cursor to the start of the line and press **Cut** to put a block marker there and then move down three lines and press **Cut** again to place the other block marker. Move the cursor to the start of line 46 and press **Paste** to move the paragraph to its new position.

The paragraph between lines 32 and 37 contains several errors for

Size	Shows how big the current document is in K (1K=1024 characters).
Lines	Gives the number of lines in the current document.
Pages	Gives the number of pages in the current document if paged mode is selected.
Page	Shows the current page number if you are in paged mode.
Line	Gives the line number of the current cursor position.
Column	Gives the column number of the current cursor position.
Marker	Shows which pair of markers is currently active. Markers are discussed in detail later.
Free:	
Lines	Shows how much room you have left for your document.
Pages	Shows the maximum number of lines left for your document.
f1-f8	Reminds you of the use of the function keys. These are: f1 Takes you directly to the Load/Save menu with Save document already selected. f2 Takes you directly to the Load/Save menu with Save block already selected. f3 Toggles paged mode on and off. While <i>off</i> the full screen is used for editing your text, but when <i>on</i> the bottom half gives a display of how your document will look including such features as double height and italics. f4 Toggles the edit screen between normal and wide mode. In wide mode characters are displayed in double width on the Edit screen. f5 Compacts the document at present in memory. Although you will always see the document as it should be, during editing gaps are generated in the memory. These are automatically removed from time to time, but the memory occupied can become larger than the actual document and compacting it can speed up editing. You should note that compacting destroys the current format and, until the document re-formats, it will take longer to scroll down initially. f6 Removes all embedded commands from the currently selected block. If a file is loaded from another word processor it may contain unknown commands that can be removed with this key. f7 Takes you directly to the Load/Save menu with Merge document already selected. f8 Takes you directly to the Word Processor menu with Clear document already selected.
Ruler	Shows the positions of the margins, paragraph indents and tabs. Its use is explained later.

The start and end of the text are marked appropriately with START and END and if the text is of any significant length either or both of these may not be on screen at a particular time. The position where any letter you type will appear is shown by a flashing cursor which can be moved around the screen with the arrow keys. Note that if the cursor is positioned beyond the actual end of a line any key press moves it immediately to the start of the next line before inserting the character.

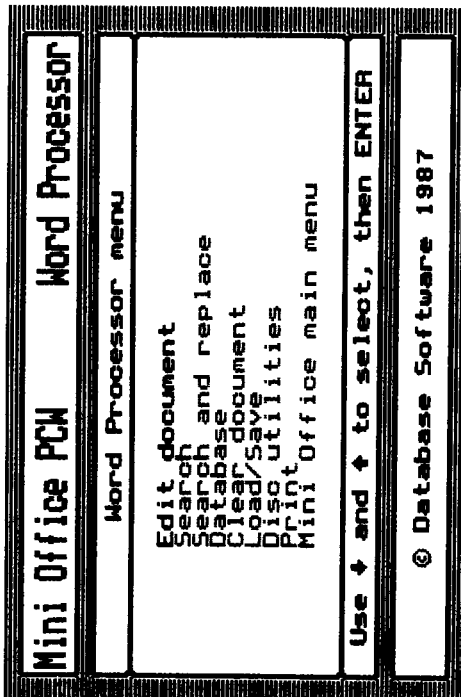
At the bottom of the screen one line is used as a status line. Mess-

frequently as one insertion of the date covers all the letters. The other strings are set to the various database fields that we'll be using in our letter.

Now return to the Word Processor menu and select Edit. You'll notice that there are several dim D characters in the text. These were inserted by pressing Alt+D followed by Alt with a number. These cause the appropriate assigned string to be printed out so, for example, D1 causes the date to be printed.

You'll find notes in the document to help you understand this powerful feature but if you preview the document now you'll see the effect of all those codes.

The best way to learn about the Word Processor is to use it, so take the two demonstration files we've given you and extend them, move blocks, change styles and try all the features. You'll soon be able to produce well-formatted, professional-looking documents very easily.



The menu

ON entry to the module, you'll be presented with the Word Processor menu which lists the various options. Let's look at these in detail, starting with the option that you'll spend most of your time within as you use the Word Processor:

Edit Text

IMMEDIATELY after you select Edit Document the top of the screen will display the following header:



This screen header, as it is known, is shown constantly while you're editing your document. It gives you the following information:

Drive	Shows the currently selected drive.
File	Gives the name of the file you're working on.
INSERT	Text can be entered in two ways, or modes - Insert or Overwrite. We'll go into what this means later. Suffice to say that this part of the header shows which mode we're in.

Shift+← or Alt+Word Alt+→	Moves the cursor to the start of the previous word.
Alt+← Shift+Alt+→	Moves the cursor right 32, 16 or 8 characters along the line. The number of characters moved depends on the pan value selected in the Set up printer options. If the cursor cannot move the full number of characters, it moves as far as it can without moving to another line. Moves the cursor left 32, 16 or 8 characters along the line.
Shift+Alt+← Extra+→ or Eol Extra+← or Line Shift+↑ or Para	Moves the cursor along the line in the same way as Alt+→ but the screen pans right by 32, 16 or 8 characters at the same time. (A pan is the horizontal equivalent of a scroll). Moves the cursor and pans the screen left. Moves the cursor to the end of the current line.
Shift+Alt+← or Para	Moves the cursor to the start of the current line.
Shift+↓ or Alt+Para	Moves the cursor to the start of the previous paragraph. If there is no previous paragraph the cursor moves to the start of the document. Moves the cursor to the start of the next paragraph. If there is no next paragraph the cursor moves to the end of the document.
Alt+↑	Moves the cursor up 20 lines in normal edit mode or 10 in paged edit mode.
Alt+↓	Moves the cursor down 20 or 10 lines depending which Edit mode you are using.
Shift+Alt+↑	Scrolls the text up leaving the cursor in the same position.
Shift+Alt+↓ Extra+↑ or Alt+Unit or Alt+Doc Extra+↓ or Unit or Doc Page or Extra+Q	Scrolls the text down one line. Moves the cursor to the start of the document.
Alt+Page or Extra+W Find or Extra+F	Moves the cursor to the end of the document.
Alt+Page or Extra+W	Moves the cursor to the start of the next page when in paged edit mode. The key has no effect in normal edit mode.
Alt+Page or Extra+W Find or Extra+F	Moves the cursor to the start of the previous page.
Extra+B	Moves the cursor to the next occurrence of a word or phrase. See the section on search and replace for more information.
Extra+G or Extra+Line	Moves the cursor to the next block marker or the end of text if there are no more block markers to move to.
Extra+H	Gives a prompt for a line number in the screen header. Entering the line required moves the cursor to that line. Pressing Can Cancels the operation.
Extra+I	Moves the cursor to the next header, footer or remark marker. See the section on Paging commands for more information. Moves the cursor to the next integrity marker. See the section on Paging commands for more information.

ages such as *formatting line 51* are shown here to indicate that actions are happening. At any time you can press Stop to abort an operation and a message to confirm this will also be displayed here.

There are many powerful features available from the keyboard in Edit mode and these are obtained with various combinations of keys and will be looked at in detail over the next few pages.

MODES: There are two editing modes – normal and paged – and to flip between them simply press f3 while you are in either. The paged editing mode employs a split screen with the top part for editing and the lower part as a preview screen which displays, almost exactly, what the text will look like when it is printed. The section of the document displayed in the preview screen is only updated when requested by pressing Relay and it displays a section of the document where the cursor is at that moment. Pressing Relay also updates the edit screen, but this is rarely out of date.

The editing screen in the two modes is very similar with the main difference being that dotted lines show the page boundaries in the paged edit screen. Editing in this mode is a little slower because of the extra work involved in keeping track of page boundaries.

There are two variations of the editing screen – normal and double width – and to change between them simply press f4 (Shift+f3). Double width is easier to read but it is a lot slower and causes panning to occur more frequently as only half the normal line length can fit on the screen.

As we've mentioned, text can be edited in either Insert or Overwrite mode. In insert mode, if a character or word has been missed out it can be inserted by simply moving the cursor to the place where the text should be and typing the word in with any spaces or punctuation as required. The characters typed in are inserted at the cursor with the rest of the line moved along to accommodate them. Words at the end of the line are moved on to the next line automatically if they no longer fit on the current line and all the document is adjusted accordingly.

In Overwrite mode the character under the cursor is replaced by new characters as they are typed in. Overwriting reverts temporarily to insertion whenever an attempt is made to overwrite a dim character and this is signalled by a beep. Dim characters are control characters that do special things, so overwriting cannot accidentally obliterate them.

Pressing Extra+O will swap the method of character entry between insert and overwrite and the current mode is displayed in the centre of the top line of the screen header.

MOVING WITHIN TEXT: The arrow keys (the cursor movement keys) move the cursor one character or line at a time in the direction indicated. The horizontal arrow keys move the cursor on to the next or previous line as appropriate when the end of the current line has been reached. Char or Alt+Char serve the same purpose as the horizontal arrow keys.

Attempting to move the cursor to the top or bottom line of the screen causes the screen to scroll up or down so that the cursor is always at least two lines from the top or bottom.

There are ways of moving quickly through text using keys or combinations of keys as follows:

Shift+→ or Word	Moves the cursor to the start of the next word.
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The paragraph character also forces a number of blank lines before it when the document is printed or previewed depending on the value of paragraph spacing set up in the Set up printer menu.

DELETING TEXT: Sometimes you may wish to erase, or delete, characters, words, lines or even whole blocks of text from your document. This is done using the following keys:

Del←	Erases the character to the left of the cursor and closes up the gap created and the cursor remains on the same character. The first word on the next line will be automatically moved on to the end of the current line if there is now enough room for it.
Del→	Erases the character under the cursor and closes the gap.
Shift+Del←	Erases the word the cursor is currently on and leaves the cursor in the space where the word was. A repetition of Shift+Del← deletes consecutive words to the left of the cursor position.
Shift+Del→	Erases the word under the cursor and moves it to the first character of the word that was to the right of the deleted word. A repetition of Shift+Del→ will therefore delete consecutive words to the right of the cursor position. If the cursor is not on a word when Shift+Del← or Shift+Del→ is pressed the word to the left of the cursor's position is deleted.
Extra+Del←	Erases the line that contains the cursor and leaves the cursor at the end of the line above.
Extra+Del→	Erases the line that contains the cursor and leaves the cursor at the start of the line below.
Shift+Alt+Del← Shift+Alt+Del→ or Extra+D	Deletes the entire block defined by block markers. (See the section on Reorganising text for more information.)
Alt+Del← or Alt+Del→ or Extra+N	Deletes both markers of the current set. Markers can also be removed by deleting them like any other character.

Most key presses gives rise to a single character in the edit screen. (Alt, Shift and Extra with a key is still counted as one key press). This makes inserting, overwriting and deleting of characters easy to follow as there is a one-to-one correspondence between keyboard and edit screen. The only exceptions are tabs and paragraph indents.

When these are used it is not clear whether there are actually spaces in the gap created so when you try to delete a space in such a situation, the character before the apparent space is deleted instead because there is not really a space there. A similar situation also applies at the end of lines: The cursor can end up beyond the last character on the line by moving up or down from another longer line.

Pressing the Grid (at the centre of the cursor movement keys) causes the space characters to be shown as a faint dot, so distinguishing them from apparent or virtual spaces. Pressing Grid again returns them to normal (Pressing Extra+Space has the same effect).

REORGANISING TEXT: The following features will assist you in carrying out major re-structuring of your text. They allow you to copy, move or delete whole sections of the document that are defined by

Extra+J	Moves the cursor to the next joined marker. See the section on Line commands for more information.
Extra+P or Extra+Page	Gives a prompt for a page number and then a line number within that page to move to if you are in paged mode. In normal edit mode it results in a prompt for a line number in the same way as for Extra+G.
Extra+Y	Moves the cursor to the next ruler or the end of text if there are no more rulers to move to.

RULERS: Besides using spaces to arrange your text horizontally you can also use tabs, paragraph indents and margins and the position of these is determined by rulers. To generate a new ruler either press Extra+R to force a new line at the cursor and insert the default ruler or copy one from elsewhere in the document using block copy. The ruler can then be edited by moving the cursor on to it and deleting characters or inserting them as follows:

Space or - or .	Using - characters, spaces out the indent, tabs and margin.
T or Tab	Inserts a tab position shown by a broad T. Inserts the paragraph indent position shown by a broad I.
<	Places the left margin marked by <.
>	Places the right margin marked by >.

If you try to set up an invalid ruler such as attempting to place a left margin to the right of the right margin and vice-versa, your input will not be accepted and the computer will beep. Also attempting to make the ruler longer than the paper width (as defined in Set up printer) or shorter than five columns, is forbidden as is trying to delete a margin character. Tabs cannot be placed outside any margin, and indents cannot be placed outside the right margin.

Rulers can only be deleted by deleting the entire line on which the ruler resides by using Extra and a delete key or by deleting a block containing the ruler line. See the section on deleting.

The current ruler for a particular line of text is always the ruler which is nearest to, but before, that line. The most recent ruler above the top line of the edit screen is always shown in the screen header and shows the following:

Margins: The left and right-most columns that a character can occupy in a line are set by the margin. You should note that although often the margins do not seem to be being obeyed, control characters or a character size that the edit screen does not mimic can cause apparent faults, but on preview or printing the document will be correct.

Tab: Pressing Tab places a broad dim T in the text and the effect of this symbol is to make the next character following it appear in the column of the next tab position. This is defined on the ruler currently in operation and if there are no more tab positions for the tab character to line up to it behaves as a space.

Indents and paragraphs: Pressing Alt+Return forces the previous line to end, places a paragraph marker – a broad dim ¶ – in the text and indents the first character of the new line to the position defined in the ruler. Indents can be to the left of the left margin, giving you the opportunity to bring lines out from the main body of text.

shown as dim characters. These embedded commands won't appear in the preview or final printing of the document — but they'll have a marked effect on it.

Line spacing commands: These determine how the lines of your text will be spaced in the final document:

Return	Forces the end of a line and is signified by a dim, bent arrow.
Shift+Alt+Return or Alt+Return	Forces a new paragraph or indent with the starting position under the broad I on the previous ruler and the number of lines skipped sets on the Default settings menu.
Shift+Alt+V	Sets the vertical spacing of lines between 1 and 4. Follow Shift+Alt+V by Alt+1, 2, 3 or 4. This results in a dim Vs character and a dim digit. For instance, Shift+Alt+V followed by Alt+2 will cause subsequent lines when printed or previewed to have a blank line between them. If the line spacing character is not followed by Alt + 1, 2, 3 or 4, it behaves as though an Alt + 1 was there.
Alt+V	Sets the vertical height of lines. Follow Alt+V by Alt+0, 1, or 2. This results in a dim Vh character and a dim digit. Alt+V followed by Alt+0 will cause subsequent lines when printed or previewed to have the normal height between them while 1 causes a 3/4 height spacing, by reducing the gap between the lines, and 2 gives a 7/12 height. If the line gap character is not followed by Alt + 0, 1, or 2, it behaves as though an Alt + was there.
Shift+Alt+L or Alt+L	Using the vertical spacing and gap together can give a wide variety of line spacing. For example, double line spacing with 3/4 gap is equivalent to a gap one and a half times the usual size between lines. Allows you to skip up to 99 lines by following the dim L character by a dim number entered by pressing Alt and one or two digits. The gap created is either the set number of lines or up to the end of the page.

Paging commands: New pages occur automatically when there is insufficient room on the current page for the next line. However there are several ways you can control the paging of your final document:

Shift+Alt+N or Alt+N	Puts a new page character , a dim Np in the text and causes the next new line to start on a new page.
Alt+{	Signifies the start of an integrity block with a dim {. This is a section of text that must not be split across two pages and if such a section cannot fit on the existing page the whole section will start printing on the next page. There can be any number of these integrity markers, and they do not have to be paired with the end

block markers. A block marker is displayed as a dim square bracket with a number which indicates which marker set this particular block marker belongs to. There are eight sets and the current set is displayed in the screen header as the word *Marker* followed by a digit with a value 1 to 8. The current marker set can be changed by pressing Set or Unset or by pressing Extra together with + or -. The following keys are used as you manipulate blocks:

Extra+M or Cut	Inserts a marker (it is inserted even if in overwrite mode). The first marker of a set will appear as a dim left square bracket and digit, the second will appear as a dim right square bracket with the same digit. An attempt to place a third marker of the same set anywhere in the document will be signalled by a beep as only two markers per marker set is allowed. However, all eight markers can be used at once if desired. On some occasions, the left and right block markers of a marker set may both appear as left square brackets or even be the wrong way round. This often occurs if one of the markers is deleted and then inserted elsewhere or if the second marker is inserted before the first one. However it does not matter and they will be treated sensibly and pressing Relay to update the screen will sort them out.
Extra+C or Copy	Duplicates the defined block to the current cursor position, leaving the cursor at the first character of the moved block. You cannot copy a block when the current marker set does not define a block or when the cursor lies within the block and an attempt to do so will result in a beep. Doing a block copy in this way will copy everything that was contained in the original block except for the current or other block markers. The original block is unchanged and will still have the current block markers around it.
Extra+T or Paste	Moves the defined block to the cursor position. This transfer operation is identical to block copy followed by block delete.
Extra+K or Alt+Copy or Extra+Copy or Shift+Copy	Copies a block of text but does not copy the control (dim) characters within the block.

CASE CHANGING: As you type your document you will occasionally type letters in the wrong case — capitals instead of lower case and vice-versa. The following keys can be used to change the case of the character under the cursor:

Extra+U	Makes the letter under the cursor upper case.
Extra+S	Swaps the case of the letter under the cursor — upper to lower or lower to upper case.
Extra+L	Makes the letter under the cursor to lower case.

EMBEDDED COMMANDS: These are instructions to the printer that you type in along with your ordinary text, for instance, to change to italics. So that you do not confuse these with the text itself, they are

