



## Operating Instructions



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## The Motif ESP Character Generator

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### Introduction

This manual teaches all you need to know about the Motif ESP Character Generator.

It has been designed in such a way as to get you up and running as soon as possible and therefore assumes you have immediate and direct access to the character generator itself and, in particular, to the set of TEACH FILES, the hands on teaching program supplied with each Motif ESP.

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### A brief overview of the Motif ESP

Motif ESP is a dual plane, 32 bit single channel character generator that uses standard Postscript Type 1 typefaces to create text of any size and angle along side and over colour logos and full screen images. Images and logos can be created within the Motif ESP using the graphics facilities provided or imported from a variety of sources, including PC and Macintosh graphics systems, the Aston Wallet Stills Store and Motif's own optional RGB or 601 inputs.

The Motif ESP features two display planes - A Static Display Plane and a Dynamic Display Plane, only the latter of which can be used for dynamic presentations such as roll, crawl, zip, reveal, etc.

Normally the Dynamic Plane is displayed in front of the Static Plane and this is how you would normally work, using the Lower Display Plane for static full colour backgrounds. However, it is possible to change the priority of the two Display Planes on a page by page basis.

If you choose the Lower Display Plane as your Dynamic Plane you will be able to roll or crawl text, for example, under whatever is displayed in the Upper (static) Display Plane.

A word of caution though, if you select a solid opaque background or a full screen image in the Upper Display Plane, everything in the Lower Display Plane will be obscured. How-

ever, full screen images with appropriate key signals can be used very effectively for masking purposes.

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## The five sub planes of the two Display Planes

Both Display Planes comprise five discrete sub planes, as shown in figure 1.1. These are, starting from the back:-

### Base Colour.

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The Base Colour covers the entire screen. It can be one of over 16 million colours or gradated. It can also be either opaque, semi-transparent or completely transparent.

### Images.

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The Image plane can be used to display a full screen colour image. Images can be imported either via the 3.5 inch floppy disk drive in the TIFF file format, the Syquest Disk Drive as a Wallet file or the analogue or 601 digital grab options. The opacity of an image will be controlled by its key signal if one is present.

### Shapes.

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The Shapes plane is used to display opaque or semi-transparent shapes created by the character generator itself, using the many graphics tools provided.

### Row Shapes.

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Similar to the Shapes plane above, except that in this layer shapes can be linked to a particular row of text in the Text Plane. The result of linking shapes to a row of text is that when the row of text is moved the shape or shapes will move as well.

### Text.

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This is the plane you'll be using most of the time as it is the one in which all your text and logos are displayed and edited.

Following switch-on or logging in, the Top Display Plane is automatically selected and designated the Dynamic Plane.

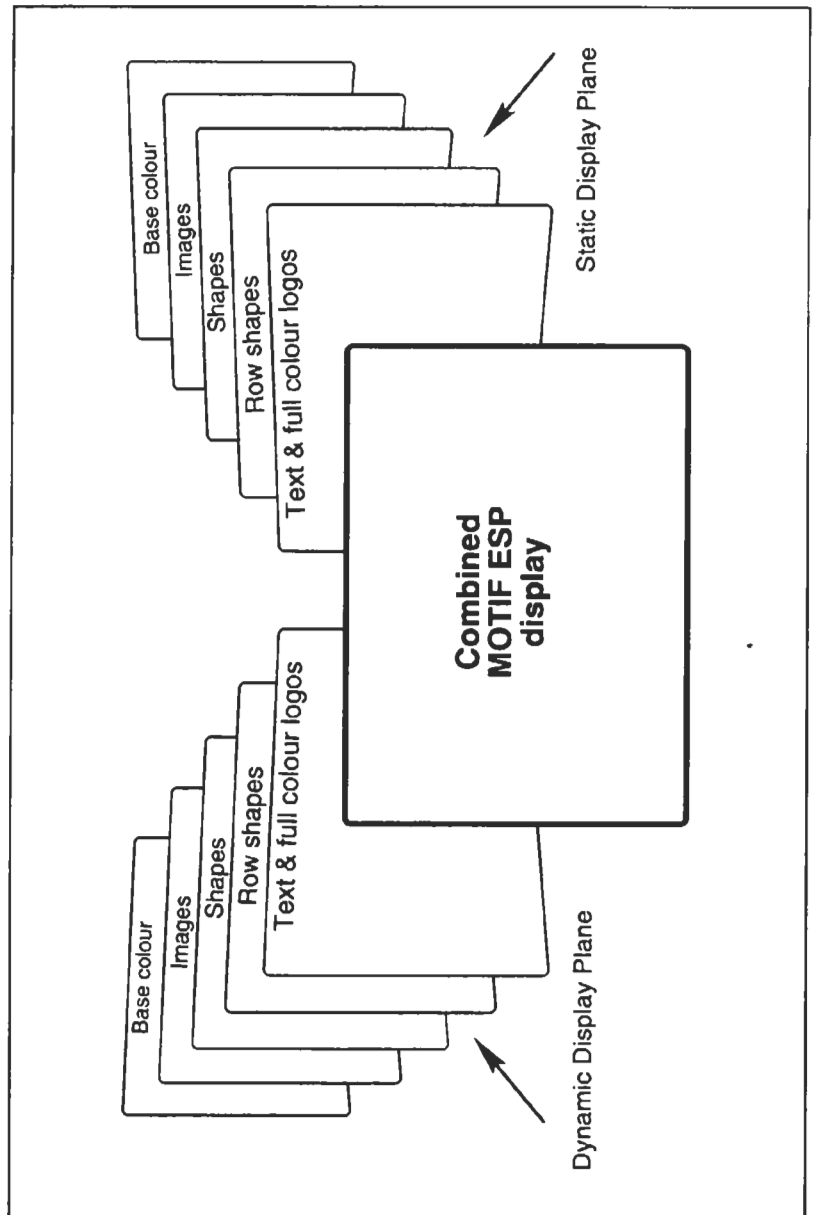


Figure 1.1. The sub planes of the two display planes

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## Getting Started

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### Switching on

The mains on/off switch is located on the rear panel of the character generator.

To turn the character generator on press the mains on/off switch from 'O' to 'I'.

As soon as you switch the character generator on, the rear extractor fan will start and a small LED on the front panel will glow green. After a few seconds the LED will flash between green and orange whilst the necessary system software is loaded from the hard disk, after which the LED will revert back to green.

*Please note: The LED will flash between green and orange whenever data is flowing to or from the hard disk memory.*

The Motif will be ready for use around twenty seconds after switching on.

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### Activating your keyboard

After switch on, the first thing you have to do is activate your keyboard by logging in.

Up to ten keyboards can be connected in series to the character generator, but only one can be assigned control at any time. You can only activate your keyboard if the 'Please Log-in' message dialogue box is being displayed on your edit monitor, as shown in figure 1.2 below.

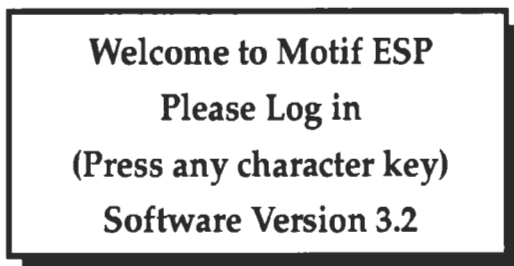
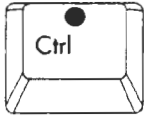


Figure 1.2. The Log In dialogue box

To activate your keyboard simply operate any alpha-numeric key.



The Ctrl LED glows red when the keyboard is selected

As soon as you have successfully 'logged-in', the LEDs in the two control keys, either side of the space bar, will glow red and the 'Please Log in' message box will disappear. In its place will appear the Edit Display as shown in figure 1.3.

Please note: *After activating the keyboard the Motif automatically goes into its character generator mode and selects the Top Display Plane and designates it as the Dynamic Plane.*

## The Edit Display

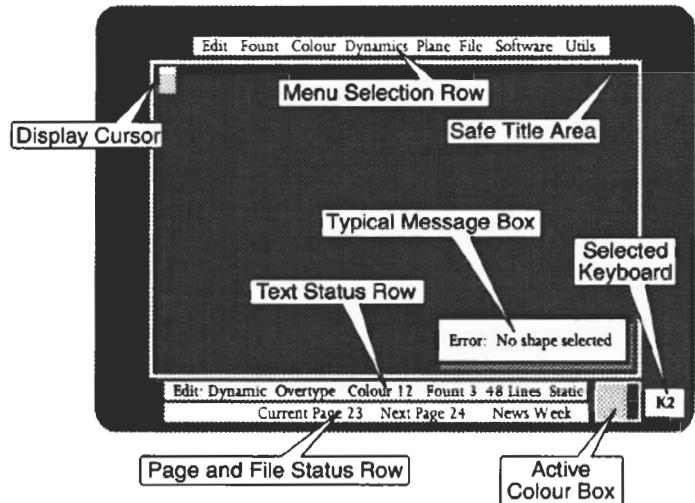


Figure 1.3. The Edit Display

### Status Rows On/off

The Status rows, as well as displayed menus, can be switched off and back on again by operating the [SHIFT] key with the [CLEAR] key. This function will be found useful when you have to edit text which is hidden by one of the Status rows or a menu.

The cursor remains visible and the editing and disk functions are still available whilst the Status Rows are switched off.

The Edit Display comprises the following:-

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## The Safe Title Area

The Safe Title Area, which occupies 80% of the screen, is represented by the large white rectangular outline. Although Codes of Practice dictate that text and logos should be displayed inside the Safe Title Area, it is possible to display text outside the Safe Title Area if you wish.

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## Menu Selection Row

The Menu Selection Row is located just above the Safe Title Area. Each menu, of which there are eight, is selected by either first pointing with the Trackerball and operating either the [ACCEPT] or [SELECT] key or by operating the control key with the highlighted character of the menu heading. For example, to select the Edit Menu you would operate the [Ctrl] key with the [E] key. Headings within the drop down menus are selected with the [SELECT] key, not the [ACCEPT] key. However, when selecting founts and colours from the side palettes you can use the [SELECT] key or the [ACCEPT] key. Using the [SELECT] key selects the fount or colour without removing the palette. The [ACCEPT] key on the other hand, carries out the selection but removes the palette from the screen at the same time.

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## Text Status Row

The Text Status Row, from left to right, shows you whether you are editing the Static or Dynamic Display Plane, if you are in the 'Insert' or 'Overtyping' mode, which colour number is selected, which fount is selected, the height of the selected fount in TV lines, and which dynamic mode is selected, for example roll, crawl or static.



Please note: *If you're working with shapes rather than textual characters, the Text Status Row will display the word 'Shapes' (or 'Row Shapes') in place of the word 'Fount'.*

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## Page and File Status Row

The Page and File Status row, which is displayed at the bottom of the screen, shows you the number of the page being displayed as well as the number of the page which will be displayed when the [NEXT] key is operated. It also displays the name of the selected Page File.

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## The Active Colour Box

The Active Colour Box is located in the bottom right hand corner of the screen. It shows you the colour of the face, edge, block and shadow of the selected character or colour. It also provides you with direct access to Motif's unique and extremely versatile ChromaBall.

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## Message Dialogue Box

As and when necessary, messages are presented in what are known as 'dialogue boxes'. The first message you will see after switching on or after the 'active' keyboard has been 'logged-off', is the one shown in figure 1.2., requesting you to 'Log-in'.

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## The Preview Display

A 'picture-in-picture' preview of the next page is displayed towards the top left hand corner of the Edit Display. The Preview Display can be set to come up after a page number has been entered or page has been recalled from disk and displayed. Alternatively, it can be set to come up only when the [PREVIEW] key is operated. Either way, the Preview Display will disappear as soon as any QWERTY key is operated or the Trackerball is touched.

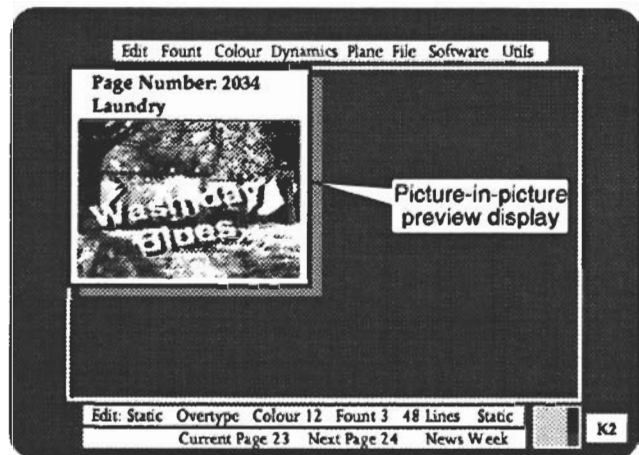


Figure 1.4. The picture-in-picture preview display

## Keyboard Number

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The number of the keyboard which has control of the character generator is shown just to the right of the Active Colour Box.

## The 'Working' symbol

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The 'Working' symbol appears in the top right hand corner of the screen whenever the character generator is processing a new character or recalling display founts and pages from the hard disk memory.

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## Selecting Functions

Throughout this manual you will see instructions like "Select Row Priority from the Edit Menu" or "Point and Select Directories from the Utils Menu". So, the first thing you must learn is how to carry out such instructions.

Just above the Safe Title Area is the Menu Selection Row containing the names of eight drop down menus and palettes. There are two ways to select a menu or palette, namely 'point and select' or 'hot key'.

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## Point and Select

To 'point and select' you need to first operate the Trackerball until the Arrow Cursor is positioned over the menu you want (the menu will highlight with a green background when the Arrow Cursor is positioned correctly) and then operate the [SELECT] key. You'll find the [SELECT] key just above the Trackerball. After operating the [SELECT] key, use the Trackerball to scroll up and down the drop down menu or fount and colour palettes. Operate the [SELECT] key to make a selection.

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## Hot Keying

To 'hot key' you need to first take a look at the name of the menu or function you want to select in order to see which character is coloured blue, (in the case of 'Edit' it is the letter 'E'). Then, press and hold down the [Ctrl] key and operate the appropriate QWERTY key. For example, to select the Utils Menu you would operate the [Ctrl] key with the [U] key.

As an exercise we'll have a go at Logging Off.

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## Logging Off

Logging Off can only be carried out from the active or selected keyboard.

To Log Off you need to select Log Off from the File Menu, as shown in figure 1.5 below.

The quickest way to do this is to use the 'hot key' method described on page 1.8, (press and hold down the [Ctrl] key and operate the [i] key followed by the [L] key). Try this and then operate any alpha-numeric key to log on again.

Also have a go at using the 'point and select' method with the Trackerball and the [SELECT] key to determine which of the two ways of selection suits you best.

*A word of caution: If you're editing or composing a caption, don't forget to store it away before logging off.*

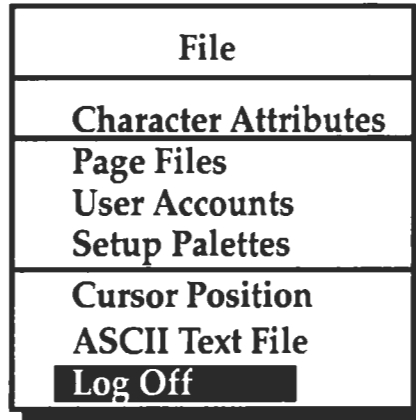
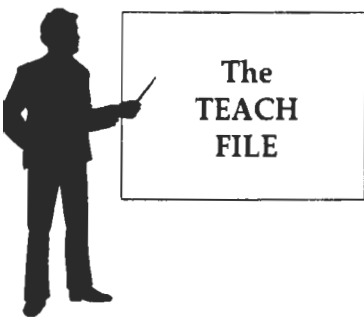


Figure 1.5. The Log Off command



## The 'TEACH FILE'

Included with your Motif is a self teach program called TEACH FILE.

'TEACH FILE' contains pages that have been designed to help you become a competent Motif operator as quickly as possible. It is a hands-on teaching aid which takes you from the basics of cursor control through to composing complex static and dynamic pages, such as reveals, zips, rolls and crawls.

Throughout the manual you will see the 'teacher' logo, as shown on the left, together with a page number displayed on the blackboard. The page number tells you the page in the TEACH FILE that relates to the text you are reading.

However, before selecting TEACH FILE, here are a few words about how captions and Page Files are stored in Motif's hard disk memory.

Pages are grouped together into Page Files, each of which can hold up to 9,999 pages. Page Files, in turn, are held in User Accounts.

The number of Page Files and User Accounts is restricted only by the amount of memory available on the internal hard disk.

If you're operating a new Motif for the first time, a page file called 'Default Page File' from within a User Account named 'STARTER' is automatically selected. If you take a look at the bottom right hand corner of the Edit Display you'll see the words 'Default Page File' in the Page and File Status Row. A 'Default Page File' is the Page File that is automatically selected whenever you activate your keyboard by Logging On. Later on we'll show you how you can instruct the Motif to select automatically one of your Page Files as the 'Default Page File'.

Page Files, including 'TEACH FILE', are selected from within the File Menu.

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## Selecting the TEACH FILE

To select 'TEACH FILE' do the following:-

a) Select Page Files from the File menu. This will display the name of the selected Page File and a list of Page Files within the selected User Account.

If this is the first time your Motif is being operated then all you will see are two Page Files, namely 'TEACH FILE' and 'TEACH FILE 2'.

b) Move the Trackerball down until only the words TEACH FILE are highlighted and then operate the [SELECT] key. This will display the selected Page File, (TEACH FILE) at the top of the menu.

c) Operate the [ACCEPT] key to change over to this Page File. To remove the File menu from the Edit Display operate the [QUIT] or [ACCEPT] key.

Take a look at the bottom right hand corner of the Edit Display to confirm that 'TEACH FILE' has been correctly selected.

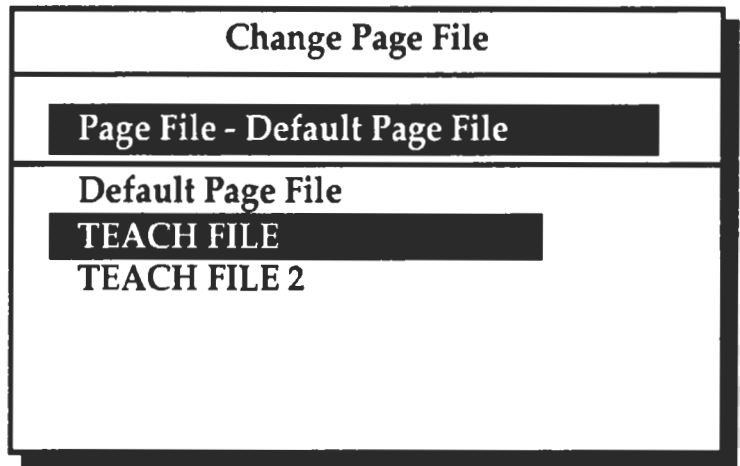


Figure 1.6. The Change Page File menu

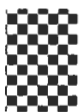
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## The Display Cursors

There are five different cursors used on Motif, although only one of them is displayed at a time. All are instantly recognisable and unambiguous in design. The five cursors are:-

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### Chequered Cursor



The chequered cursor denotes that no base line has been set up for text. You'll see it when the cursor is 'floating', rather than sitting on a character baseline.

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### Solid Cursor



The solid cursor appears whenever it is correctly positioned on an existing baseline.

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### Outline Cursor

The Outline Cursor appears whenever the cursor is correctly positioned over an existing character, logo or space.

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### Arrow Cursor



The Arrow cursor appears as soon as the Trackerball is operated. It can be used to select a particular part of the screen, an individual character, a menu from the Menu Selection Row, as well as fonts and colours from the side palettes.

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### Area Cursor



Similar to the Outline Cursor, the Area Cursor appears whenever the Shapes Plane is selected and is used to determine the aspect ratio, angle and size of the next shape to be displayed. It also appears when the area editing or area sizing functions are being used.

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### Changing the colour of the cursor

The colour of the cursors (and edit markers) can be changed in order to make them stand out more clearly. The colours available are white, yellow, magenta, red, cyan, green and blue.

To change the colour of the cursors operate the **[COLOUR]** key with the **[PREVIEW]** key until the desired colour is displayed.

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## Cursor Transparency

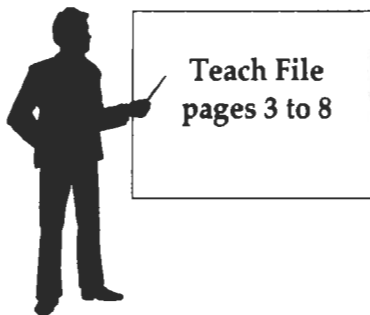
Normally the cursor is opaque. However, it is possible to make it semi-transparent in order to see text or graphics beneath it more clearly. This will be found particularly useful when working with the optional Image Editor.

Three levels of transparency are provided, plus opaque. To change the level of transparency operate the [COLOUR] key with the [CLEAR] key until the desired level of transparency (or opaque) is displayed.

---

## Cursor Position (X,Y co-ordinates)

The X, Y co-ordinates of the cursor position can be displayed by operating the [LETTER] key with the [HELP] key or by selecting 'Cursor Position' from the File menu, see figure 1.5. The co-ordinate numbers within the displayed menu can be changed using the number keys along the top of the QWERTY keyboard. When the [ACCEPT] key is operated the cursor will move to the new X,Y co-ordinate.



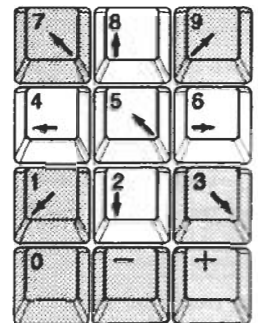
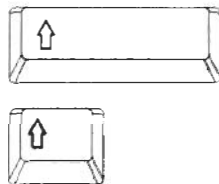
*Note: Cursor Home only works when operated with a SHIFT key*

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## The Cursor Shift Keys

The cursor shift keys are located within the numeric keypad just to the right of the QWERTY keyboard. The cursor can be moved left, right, up or down by operating the appropriate arrowed keys.

The Cursor can be returned directly to the top left hand corner of the screen by operating the number 5 key (the key with the arrow pointing towards the top left hand corner) with the Shift key.



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## The Trackerball

The Trackerball enables you to move around the screen quickly and accurately. The three keys above the Trackerball are used to select functions and items from the drop down menus and fount and colour select palettes.

As soon as the Trackerball is moved the Display Cursor will change to the Arrow Cursor.

With the Arrow Cursor and the [SELECT] key you can select characters and existing baselines, establish new baselines on any scanline, select colours and display founts from the colour and fount palettes, operate the 16 million plus colour ChromaBall, and select menus and functions from the Menu Selection Row and lower status rows.

The three keys above the Trackerball operate as follows:-

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### Select Key

The [SELECT] key is used to select existing text and logos, menus from the Menu Selection Row and to select items from within each menu, as well as colours and founts from the side palettes. It can also be used to select functions from within the lower Status Rows, (change page file, fount height, etc.).

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### Accept Key

The [ACCEPT] key confirms the changes and selections you have made. It can also be used to set new character and logo baselines.

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### Quit Key

The [QUIT] key instructs the Motif to ignore the most recent instruction.

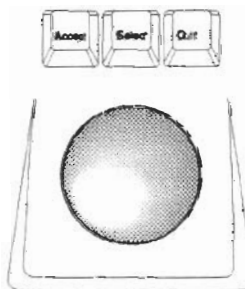


Figure 1.7. The Trackerball Control

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## Introduction

In Chapter 2 you'll get to understand the difference between a Master Typeface and a Display Fount; the different types of Master Typefaces used by the Motif ESP and how to obtain them; how to select Display Founts when composing captions and how to create new Display Founts.

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## Master Typefaces

Your Motif character generator is supplied with five Master Typefaces, each of which describes a particular type style in great detail. Master Typefaces are never displayed but are used by Motif to generate Display Founts.

There are basically two types or formats of Master Typeface that can be used within the Motif.

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### Aston 4 and Caption Master Typefaces

The first is the same format used by the Aston Caption and Aston 4 character generators. This type of Master Typeface uses 'bit map' techniques to describe the shape and weight of each Display Fount.

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### Postscript Type 1 Typefaces

The second, and by far the best, is the outline format. This type of Master Typeface is created by the Motif from the same Postscript Type 1 typeface data used by the Apple Macintosh computer, IBM PCs and clones.

To input a PC Postscript Type 1 typeface all you need to do is insert the PC Postscript disk into the 3.5" floppy disk drive and run Motif's Typeface Importer program. Mac Postscript Type 1 typefaces can be imported via the optional Macintosh FOUNTAIN typefaces utility program available from Aston. Detailed information about installing Master Typefaces can be found in Chapter 9, starting on page 9.1.

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## Display Founts

Display Founts contain the actual characters that are displayed on the screen. They can be any size from 6 TV lines to full screen and the number of Display founts you can use on a page is, in practical terms, unlimited.

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### On Line character sizing

Display characters are made as they are required and are automatically stored on the large capacity hard disk for later use; but only if the caption containing the new characters is stored as well. If you decide not to store the caption, then all new characters that are not additions to existing Display Founts are removed from the hard disk and thrown away. This is done to make sure that valuable space on the hard disk is not cluttered up with unnecessary characters and logos.

However, all new characters produced by the Full Fount Processor are permanently stored on the hard disk regardless of whether or not they are used within a stored page.

The time it takes to process a character, assuming it doesn't already exist on the hard disk, depends upon the number of attributes you've chosen, its height and whether you've selected Gaussian filtering or not. Typically, a plain character of, say, 32 lines takes well under a second to process.

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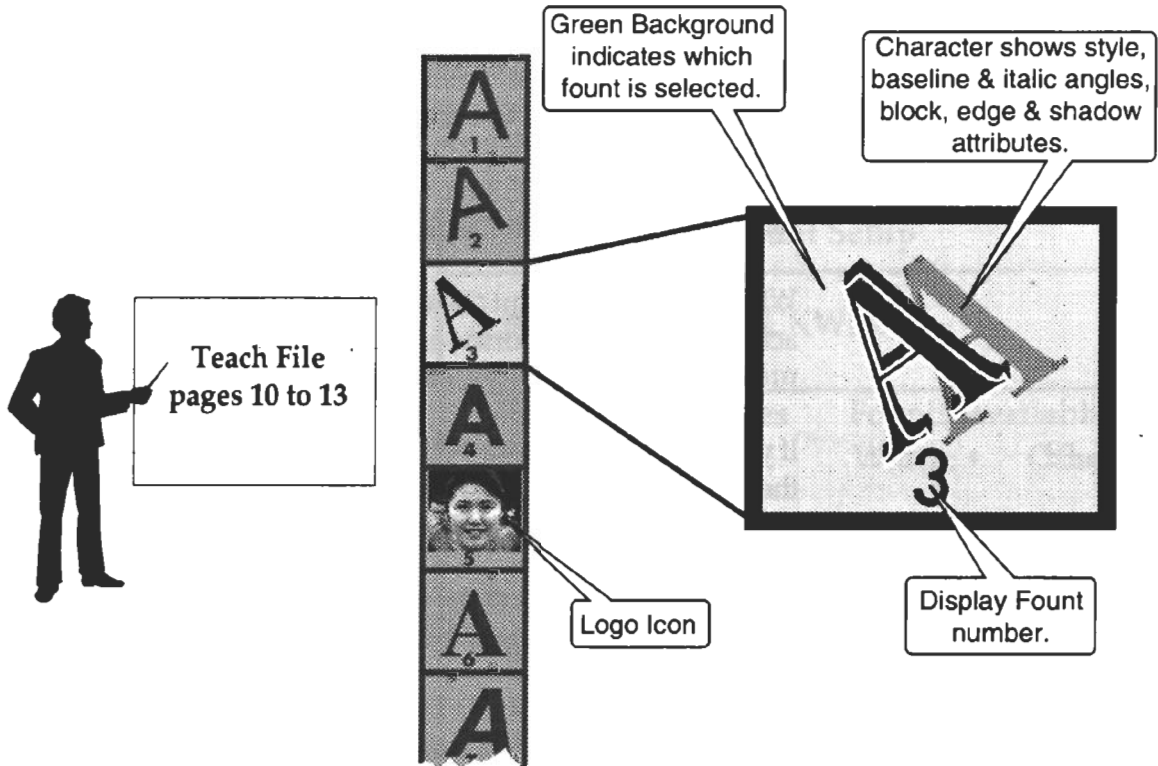
### Selecting Founts

Display Founts are selected by either pointing with the Trackerball at a display fount in the Fount Palette or by entering a fount number. Either way, the first thing to do is to display the Fount Palette to see how many Display Founts are available.

There are two ways to display the Fount Palette. You can use the 'Point and Select' method by positioning the arrow cursor over the word 'FOUNT' at the top of the screen and operating the [SELECT] key, or you can use the 'Hot Key' method by holding down the [Ctrl] key and operating the [F] key.

## The Fount Palette

The Fount Palette is displayed down the left hand side of the edit screen and, as figure 2.1 shows, comprises a number of boxes, inside each of which is displayed the capital letter 'A' or, in the case of a logo fount, a small icon.



**Figure 2.1. The Fount Palette**

The number and type of Display Founts/logos in a Fount Palette can vary from page to page. The maximum number of Display Founts/logos that can be held in a Fount Palette is 4096. The minimum is one.

Each capital 'A' shows you the style, whether or not an outline, block and or drop shadow are present, the direction of italics and the angle of the baseline. In the case of a logo fount, the letter 'A' is replaced by a small colour icon of the first logo in the Master Logo Typeface.

---

## Scrolling up and down the Fount Palette

Operating the Trackerball up and down will allow you to scroll through the Fount Palette. Notice, as you do so, the green background. This shows you the 'selected' Display Fount. Also, take a look at the Text Status Row at the bottom of the screen. There you will be able to see the fount number and the height of the 'selected' display fount/logo.

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## Selecting a Fount from the Fount Palette

To select a Display Fount from Fount Palette, operate the Trackerball until the Display Fount you want is highlighted and then operate either the [SELECT] key or the [ACCEPT] key. If you operate the [ACCEPT] key, the Fount Palette is automatically removed from the Edit Display.

When you select a fount/logo from the Fount Palette, the character (if any) your cursor is on is immediately changed or processed to the new style or size.

If you choose to leave the Fount Palette on display (by pressing the [SELECT] key instead of the [ACCEPT] key), you can return to the Fount Palette at any time with the Arrow Cursor.

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## Removing the Fount Palette

To remove the Fount Palette, without selecting a Display Fount, position the arrow cursor over the Fount Palette and operate the [QUIT] key.

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## Selecting founts by number

To select a Display Fount using the number method, press and hold down the [FOUNT] key (top left hand corner of the keyboard) and type in the fount number using either number keys along the top of the QWERTY keyboard or the numeric keypad.

*Please note: When selecting founts by number it is not necessary to have the Fount Palette on display.*

A final point worth remembering is that the selected Display Fount may not contain a complete character set, in which case Motif may have to process certain characters as you type.

## The Fount Setup menu

By looking at the Fount Palette and the Text Status Row (for the character height) you can get a pretty good idea as to how each Display Fount will look when displayed on the television screen. However, for more detailed information about a particular Display Fount you need to look at the Fount Setup Menu, as shown on figure 2.2 below.

## Selecting the Fount Setup menu

The quickest way to display the Fount Setup Menu is to use the 'Hot Key' method by operating the [Ctrl] key with the [F] key once if the Fount Palette is on display, or twice if it is not.



Teach File  
pages 14 to 21

Fount Setup			
Typeface:	<input type="text" value="M"/>	ROCKWELL	
Height	20 Lines	Founts Available	
Diagonal:	Italic:	Width: •	Other:
Quality:	Superior		
Standard Effects			
Edge:	Block:	Shadow: •	Bold:
Special Effects			
Emboss:	Neon:	Double Edge:	
Character Process			
Add	Replace	Clear	Preview

Figure 2.2. The Fount Setup menu

Looking at the Fount Setup menu in figure 2.2 you will see the name of the selected Display Fount, its display height in television scan lines, and various attribute headings, each of which has a sub-menu attached to it containing further information, such as the angle of baseline, thickness of edge, etc.

---

## Font attributes

A dot, or 'bullet mark', is displayed beside attributes which have been set. For example, an italic display fount with an outline and a drop shadow will show a black dot along side its 'Italic', 'Edge' and 'Shadow' attributes. If you select these attributes the exact angle of the italics, the thickness of the outline, as well as the depth, direction and softness of the drop shadow are shown.

An attribute sub-menu is displayed by either highlighting the appropriate attribute with the Trackerball or cursor keys and operating the [SELECT] key, or by 'hot-keying' the [Ctrl] key with the letter which is coloured in the attribute heading. For example, when selecting either 'Italic', 'Edge' or 'shadow', you would operate the [Ctrl] key with either the [I], [G] or [S] key, respectively.

After you have finished viewing or modifying a fount attribute menu, operate the [QUIT] or [ACCEPT] key.

---

## Modifying a fount attribute

A plain Display Fount (upright, horizontal baseline, no edge or shadow) contains only one attribute, its size, so we'll deal with size first.

Although there are three ways to change the size or height of a Display Fount, in this section we will show you how to change the size using the Fount Setup menu.

*Changing the size of a Display Fount using the 'Point and Select' method, as well as Area Sizing, whilst editing text are dealt with later.*

A Display Fount can be any size from 6 TV lines to full screen (576 TV lines/625 or 486 TV lines/525) and the size, or height, of the selected Display Fount is shown in the Text Status Row just below the Safe Title Area.

---

## Font height

To change the size of a Display Fount within the Fount Setup menu, first highlight the word 'Height' and enter the new size using the numeric keys along the top of the QWERTY keyboard.

If you make an error, use the back-space key (top right hand corner of the QWERTY keyboard) until the error is cleared and retype the desired size.

---

## Adding a fount or replacing a fount within the Fount Palette

Having entered a new character height you now have a choice. You can select 'Add', in which case you'll create a new Display Fount which is added to the Fount Palette or you can select 'Replace'. Selecting 'Replace' changes the height of the currently selected Display Fount, as well as all existing text using the same fount number in the current page you are working on. However, characters in other pages using the same fount number are not affected.

To select 'Add' or 'Replace', highlight 'Add' or 'Replace' at the bottom of the Fount Setup menu and operate the [SELECT] key. Alternatively, 'Hot Key' with the [Ctrl] key and the [A] or [R] key.

---

## The 'Quit' function

If you decide not to proceed with the changes made to the Fount Setup menu then operate the [QUIT] key.

Other attributes, such as Diagonal, Italic, Edge, Shadow etc., can be altered by first highlighting the appropriate attribute, operating the [SELECT] key and then making changes as follows using the number keys in the QWERTY keyboard.

---

## Block and drop shadows

When selecting a block or drop shadow, use the diagram in figure 2.3 on page 2.8 to determine the correct angle to enter. The amount of offset is entered as a percentage of the character height.

---

## Character outline

The thickness of the outline is entered as a percentage of the character height.

---

## Diagonal text

When selecting a diagonal baseline, again use the diagram in figure 2.3 to determine the correct angle of baseline to enter. If, for example, you select a 180° baseline you will end up with upside down text.

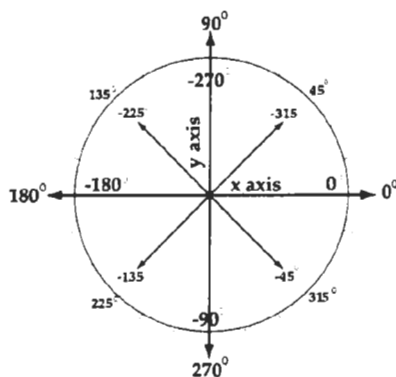


Figure 2.3. Increments of 15° around a circle

---

### Italic characters

When selecting *italics* use the diagram in figure 2.4 to determine the angle to enter. The maximum italic angle that can be entered is 45°(-45°) but for best results resist going above 15°(-15°). You'll find that 13°(-13°) is the average angle of most italicised typefaces.

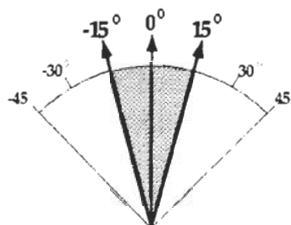


Figure 2.4. Angle of italic characters

---

### Character width

*Width* allows you to stretch or contract a typeface horizontally. It does not affect character thickness. 200% will double the width of a typeface, whilst 50% will halve it.

---

### Global Width Offset

The inter-character spacing and the space between each word can be increased or decreased in 1/16 pixel steps using the Global Width Offset function. Placing a minus sign (-) in front of a number will decrease the space in which each character resides.

---

### Leading Offset

The distance between rows of text can be increased or decreased in one line steps using the Leading Offset function. Placing a minus sign (-) in front of a number will decrease the space between rows.

---

## Overprinting

Normally, when a semi-transparent character is placed over another character, a different colour is displayed at the points where the two characters overlap. The placing of one colour over another is known as 'overprinting'. This problem can be overcome by switching the 'Overprint' function off.

Using the optional internal coder/keyer, you can fill semi-transparent text without 'Overprint' with the input video.

---

## Character inversion

Display Fount *Inversion* is available in the  $x$  or  $y$  axis or both. In the  $x$  axis characters are displayed mirror fashion. In the  $y$  axis they are displayed upside down. The Inversion function can be found in the 'Other' sub-menu. Operate the [SELECT] key until the required XY inversion is displayed.

---

## Soft edged characters

The edge of a Display Fount can be softened using the *Softness* function. To change the softness level position highlight the word 'Softness' in the 'Other' menu and operate the [SELECT] key until the desired softness level is displayed.

*Note: Applying softness to a Display Fount increases the time taken to process each character.*

---

## Bold characters

The thickness of a Display Fount can be increased (not decreased) by a percentage of the character height to achieve a 'bold' effect. To increase the thickness select 'Bold' from the Standard Effects box.

---

## Emboss, neon and double edge characters

Three special effects are provided. These are Emboss, Neon and Double Edge. Only one Special Effect can be selected per Display Fount. Before a Special Effect can be selected all 'Standard Effects' that have been set must be cleared first. This does not apply to the 'height', 'diagonal', 'width' and 'other' attributes. To assist you, the neon and emboss attribute menus already contain a set of default settings which, of course, you can change if you wish.

---

## Selecting 'default' character attributes

Selecting the 'Clear' function at the bottom of the Fount Setup menu cancels, with the exception of size, all changes made to the fount attributes.

---

## Character preview

Selecting the 'Preview' function at the bottom of the Fount Setup menu displays a character showing all the selected attributes. The maximum height of the 'preview' character is 45 TV lines.

After you have entered all the changes you want to make to an Attribute Setup menu, operate the [ACCEPT] key. This will return you to the main Fount Setup menu (figure 2.2, page 2.5) which, from now on, will show a black dot against the attributes you've just changed.

*Note: Only after you've completed all the changes you want to make to a Display Fount, do you need to select the 'Add' or 'Replace' functions. See page 2.7.*

---

## Processing quality

A choice of three Fount Processing qualities is provided, namely 'Superior', 'Regular' and 'Basic'. 'Superior', with its unique Guassian filtering, takes a little longer but guarantees typographic excellence. 'Regular' and 'Basic', on the other hand, are faster but do not feature Guassian filtering and, as such, certain characters may flicker slightly, (625/50 characters only).

To select the Quality of Fount processing, highlight the row headed 'QUALITY' and operate the [SELECT] key to select 'Superior', 'Regular' or 'Basic'.

---

## The Founts Available function

Finally, the 'Founts Available' function in the Fount Setup menu gives you a listing of all the Display Founts that have been processed from the Master Typeface. See page 2.12 for further information.

---

## Character Processor

You can instruct the Fount Processor to create a Display Fount before using it. You can choose to process the entire typeface or any of the following:-

- a) Upper and lower case characters and numbers only - no punctuation marks or accents.
- b) All those characters that can be selected by the keyboard. For example, if a French keyboard layout is selected in the User

Setup menu then the appropriate accents will be processed as well. This is not the case, of course, with an English keyboard.

- c) Those characters that can only be selected when pressing the [ALT] key.
- d) Those characters that can only be selected when pressing the [ALT GR] key.
- e) Any user selected characters.

Before using the full fount process, enter all the necessary attributes in the Fount Setup menu.

### Selecting the Full Fount Processor

Control of the full fount processor can be found within the Character Process menu. This can be selected by operating the [CTRL] key with the [F], [F] and [C] keys, or by selecting the words 'Character Process' from within the Fount Setup menu. The Character Process Menu is shown in figure 2.5 below.

Character Process			
User Choice - (enter characters below)			Execute
1234567890ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz			
Keytops	Alt Keys	Alt Gr Keys	All Characters
FOUNT - QUIT aborts process			

Figure 2.5. The Character Process menu

### Processing all characters

To process all the characters in a typeface, including all special characters, foreign language characters and accents, point and select 'All Characters' from the Character Process menu, or operate the [CTRL] key with the [C] key. The character shown at the top of the Character Process Menu is the one being processed at that time.

## Stopping the Full Fount Process

To stop the full fount process, operate the [FOUNT] key with the [QUIT] key. To resume the full fount process point and select 'All Characters' again.

It is not possible to quit the Character Process menu whilst the full fount processor is active. You have to stop the Full Fount Process first by operating the [FOUNT] key with the [QUIT] (or wait for the Full Fount Process to finish) before operating the [QUIT] key to return to the Character Process menu.

---

## Processing ALT and ALT GR characters only

Most Postscript typefaces include a selection of special characters which can only be accessed by operating the [ALT] or [ALT GR] key with the appropriate character key. The special characters that can be selected from your particular keyboard can be determined at the back of the manual where the layouts of the ALT and ALT GR keyboards can be found.

To start processing these special characters, point and select the words 'Alt Keys' or 'AltGrKeys' or operate the [CONTROL] key with the [A] or [L] keys.

---

## Processing all key top characters

To process those characters accessible from the standard language layout of your keyboard, including all appropriate accents, point and select the word 'Keytops'.

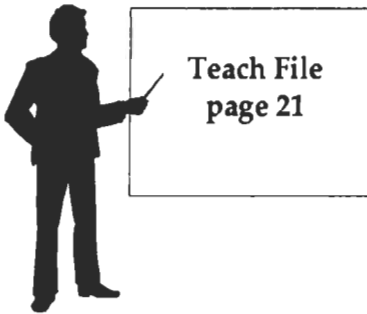
---

## Processing user defined characters

Whenever the Character Process menu is selected a row of all upper and lower case characters and numbers is shown in the upper section- see figure 2.5. To process these, point and select the word 'Execute'.

To process the numbers and upper case characters only, select and highlight the row of characters and operate the [DELETE] key until all the lower case characters have disappeared. Then point and select the word 'Execute'.

To process your own selection of characters, just enter the characters of your choice. Having done that, point and select the word 'Execute'.



## Selecting Master Typefaces

So far we've shown you how to change the attributes of a Display Fount. Now we'll show you how to select a different typeface.

The name of the Master Typeface from which the 'selected' Display Fount was processed is displayed at the top of the Fount Setup Menu - see figure 2.2.

To select a different typeface first highlight the word 'Typeface:' and operate the [SELECT] key. This will display the 'Typeface Listing' menu as shown in figure 2.6 below.

When first selected, the Typeface Listing menu will display two green selection bars; one in the 'Typeface String' box, the other at the top of the Typeface Directory.

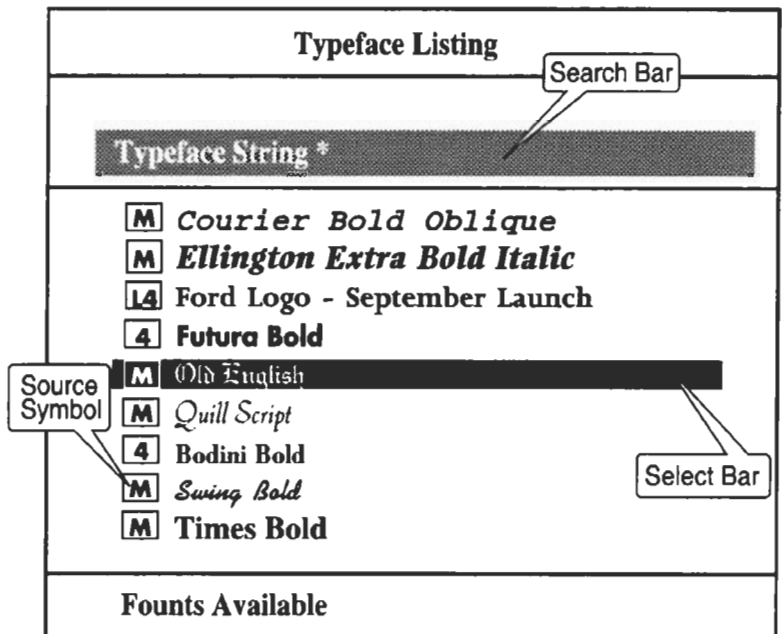


Figure 2.6. The Typeface Listing menu

---

## The 'string' search capability

The '*Typeface String*' box allows you to search for a particular typeface or a family of typefaces. The Asterisk represents a 'wild card'. If nothing is entered except the asterisk, all available typefaces will be listed, as is the case when you first select the Typeface Listing menu. If the name of a particular typeface is entered without an asterisk, for example "Times Roman Condensed", then only that typeface will be searched for and displayed if available. If, on the other hand, "Times\*" is entered then all available typefaces of the 'Times' family will be listed.

Available typefaces (and Logo Masters) are displayed in alphabetical order and can be scrolled up and down the Typeface Directory with the Trackerball or Cursor up and down keys. Those typefaces along side the 'M' and '4' Source Symbols are displayed in their own style.

Operating the cursor left and right keys toggles the green selection bar between the '*Typeface String*' box and the '*Founts Available*' box.

The meaning of the Source Symbols are as follows:-

**M** = Motif Typeface Master (Postscript Type 1 Data).

**LM** = Motif Logo Master (GBRK Data).

**4** = Aston 4/Caption Master Typeface (Run Length Data).

**L4** = Aston 4/Caption Logo Master ( Run Length Data).

To select a typeface from the Typeface Listing menu, operate the Trackerball up or down until the chosen typeface is highlighted then operate the [ACCEPT] key. After selecting a typeface the Fount Setup menu reappears showing the name of the newly selected typeface.

---

## The typeface source symbols

---

## Display Founts and Typefaces - The details

So far we've shown you how to display a list of your Master Typefaces and how to make Display Founts. Now we'll show you how the Motif can give you more detailed information about each typeface, as well as provide you with lists of the Display Founts you've processed so far.

---

### Master Typefaces and Logo Files

Detailed information about a Master Typeface or Logo file can be obtained whilst editing text. Simply select a character or logo and operate the [FOUNT] key with the [HELP] key. This will display detailed information (original name, origin, creation date, etc.), about the Master Typeface or Master Logo file from which the selected character or logo was processed. The format and layout of the typeface/logo information window depends upon the type of character or logo you've selected. For example, the Master Logo information window shows you how many logos there are in the Master Logo file, whereas the Postscript and Aston 4 Master Typeface information windows do not.

The 'Fount Help' function will be found particularly useful when trying to select a logo from a logo fount which contains several logos and you're not quite sure which alpha-numeric key to press. A quick look at 'Fount Help' will show how many logos are available, a brief description of each logo and under which keys they are located.

---

### Display Fount Information facility

The Display Fount Information facility provides you with all the details you will ever need about the Display Founts that are currently available.

For example, it will let you see which founts are available together with their attributes (size, italics, shadows, etc.); search for founts of a particular typeface; copy founts with page files and typefaces from one Motif to another using floppy disks; see how many characters are in a particular Display Fount; delete founts and determine how much memory each fount is occupying

The Display Fount information can be accessed whilst editing text, such as listing all available founts that are similar to the Display Fount you are working with or seeing which characters and logos are available within the selected display fount.

There are two ways to list available display founts; from the Directory or whilst editing text. We shall deal with the Directory method of selection first.

---

### Listing the founts available when viewing the directory

Select Directory from the Utils menu, position the cursor on the row headed Type: and operate the [SELECT] key until the words 'Typefaces' appear.

Select 'Execute' to list all available Master Typefaces.

Move the cursor bar down the screen and position it over the name of the typeface whose Display Founts you want to have a look at.

Select 'Look'. This will display the Typeface Information menu which will tell you all need to know about the selected typeface, see figure 2.7, opposite.

To list all the Display Founts that have been made from the selected typeface, select FOUNTS AVAILABLE from the bottom of the Typeface Information menu. This will display the Display Founts Listing menu as shown in figure 2.8.

The Display Founts Listing menu lists the founts in size order, followed by the founts that are used for displaying the letter A icons in the Fount Palettes. Such founts are only listed by request and are displayed along side the '◇' sign.

---

### Selective Listing

Rather than listing all the founts associated with the typeface shown at the top of the Display Founts list, you can view only those founts that include particular attributes.

For example, you may want to list only edged and drop shadowed Display Founts of a particular height. Just below the name of the typeface you will see an area in which all the fount attributes are listed.

The first attribute is 'Height'. If you position the cursor bar over the word height you can enter the size of Display Founts you want to list.

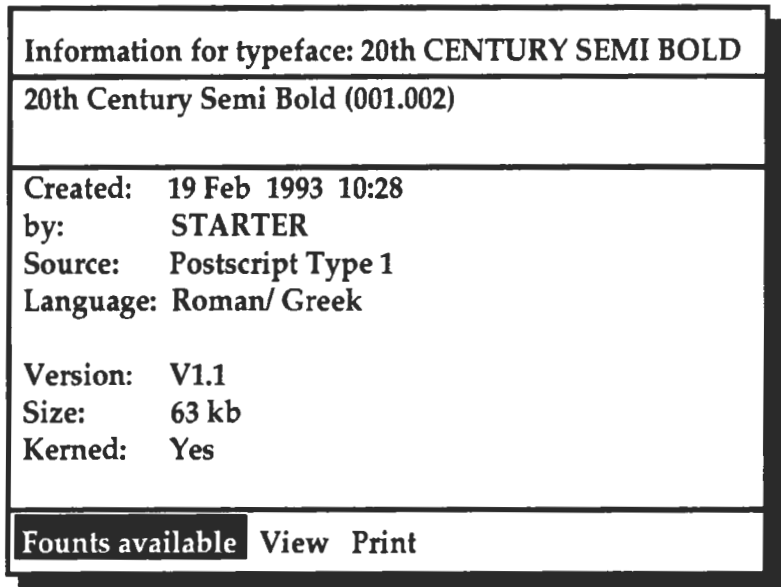


Figure 2.7. Typeface Information menu

The other attributes can be selected with the Cursor Bar and operating the [SELECT] key. Selected attributes are shown against a dot or minus sign. Operating the [SELECT] key once displays a dot; operating the [SELECT] key twice displays a minus sign; operating the [SELECT] key three times deselects the attribute.

A dot instructs the Motif to list only those typefaces of the size chosen with this attribute.

A minus sign means list everything of the size chosen that does not have this attribute.

Once all the attributes have been set, select the word 'Execute'. If the display fount you are looking for doesn't exist a message 'No founts' will be displayed.

The next or previous typeface in alphabetical order can be selected by highlighting and selecting either 'Next Typeface' or 'Last Typeface'.

FONTS FROM <b>M</b> CANTORIA SEMI BOLD										
Height	0	(0 = any height)					Quality: All			
Diagonal	Italic	Width	Invert	Soft						
Edge	Block	Shadow	Bold	Line Standard	625					
Emboss	Neon	Double Edge	◊Palette Character							
Execute	Next typeface			Last typeface						
Height	Italic	Invert	Edge	-Block-	--Shadow--	Bold	Special			
	Angle	Width	Soft	Size Dir	Size Dir	Soft				
10	.	70.0	.	.	.	.	.			
24	.	.	.	.	.	4.0	45			
36	30	70.0	.	.	.	.	.	3.0		
36	.	12	.	.	.	18.0	48	.	.	
43	.	15	.	.	.	.	.	2.0		
55	.	.	X	.	5.0	.	.	.	.	
◊	.	.	.	.	.	.	.	.	.	
Look	Delete	Copy	Compress	Print	Size					

Figure 2.8. The Founts Listing menu

Getting more detailed information

You can get detailed information about a listed Display Fount by positioning the Cursor Bar over it and selecting LOOK. This will display the menu shown in figure 2.9 which displays all the attributes of the Display Fount, the creation date, the User Account that was selected at the time it was created and the characters that have been processed since. It will also tell you if compression is required: yes or no. If 'yes' is displayed then operate the [QUIT] key once and select COMPRESS from the row headed 'Selected'. Compression is only likely to be required when dealing with logos, especially after a logo has been modified.

Deleting founts

A Display Fount can be deleted from the Fount Listing menu by highlighting it with the Cursor Bar, selecting DELETE, entering the password (if asked), and operating the [ACCEPT] key. Care is required when deleting Display Founts because, al-

<b>FOUNT FROM <input type="checkbox"/> 20TH CENTURY SEMI BOLD</b>		
<b>Height 40 lines</b>	<b>Block 20.0%</b>	<b>Edge 8.0%</b>
		<b>Direction 315°</b>
<b>Creation date: 31 Mar 1993 16:02</b>	<b>Version: V1.2</b>	
<b>User: STARTER</b>	<b>Line Standard: 625</b>	
<b>Size: 37kb</b>	<b>Quality: Superior</b>	
<b>Compression required: No</b>		
<b>Characters processed:</b>		
<b>BCDEJKSTVacdehiklmnorstwy</b>		
<b>Print</b>		

Figure 2.9. Detailed Fount menu

though you yourself may be finished with a fount, somebody else in another User Account may still need it.

---

## Copying founts

Display Founts can be copied from one user account to another or to a removable Syquest Disk or 3.5 inch floppy, or to another Motif over the optional Network facility.

---

## Tagging

Tagging is available so that more than one display fount can be copied or deleted at a time. To tag a Display Fount, highlight it with the Cursor Bar and operate the [SELECT] key. A small letter 't' is displayed next to each Display Fount that has been tagged. Repeat to untag a Display Fount. To tag or untag all Display Founts, operate the [SELECT] key with the [SHIFT] key.

---

## Copying founts and typefaces with Page Files

You might want to copy your Page File on to a 3.5 inch floppy disk for playback purposes on another Motif. If so, then it makes sense to copy the founts and the typefaces used in the Page File at the same time. This can be done via the Copy routine in the main Directory menu. Simply select the option 'Founts with typefaces and page file' when prompted to do so before copying the page file.

---

## Viewing the Founts List whilst Editing Text

It is also possible to list available founts whilst editing text. The first method is to operate the [FOUNT] key with the [HELP] key. This will take you directly to the Typeface Information menu from which you can gain access to the Available Founts list by selecting 'FONTS AVAILABLE'. Operating the [QUIT] key will return you to the Text Editing mode.

The second method is to display the Fount Setup menu, as shown in figure 2.2 on page 2.5, and to select 'FONTS AVAILABLE'. This will take you directly to the 'Available Founts List', so bypassing the Directory and Fount Information menu. The Display Founts listed will be those related to the Typeface shown at the top of the Fount Setup menu.

---

### Adding a selected fount to the Fount Palette

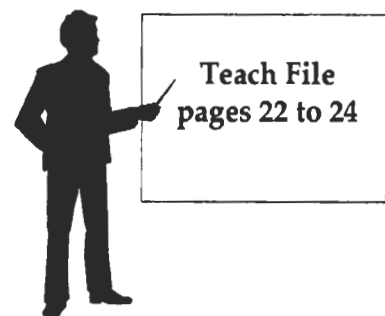
You can select a Display Fount straight from the 'Available Founts List' and add it to the Fount Palette via the Fount Setup menu. Simply highlight the Display Fount from the 'Available Founts List' and operate the [ACCEPT] key, followed by [Ctrl] + [A].

Operating the [QUIT] key also returns you back to the Fount Setup menu but without selecting a Display Fount from the 'Available Founts List'.

---

## Attribute Copy

The attributes of a character, such as its style, size, angle, colour etc., can be stored in special memory for later recall. You will find this facility particularly useful when you want to quickly copy the attributes of a particular character from one page to another or select a particular set of character attributes by name. For example, if you were working for a programme called 'News at Six', Attribute Copy will allow you to go the Character Attributes menu and select the correct display fount by name, e.g. 'News at Six - lower 3rd'.



There are two ways to copy and recall the attributes of an existing character. The first is as follows:-

---

### The first method

- a) Point and select the character whose attributes you want to copy.
- b) Press the [LETTER] key with the [SELECT] key. This will display the 'Assign Attribute Key' menu as shown in figure 2.10.
- c) Enter a number from 0 to 9 and press the [ACCEPT] key. After a couple of seconds a message will appear telling you that the attribute has been saved.
- d) To select a set of character attributes stored in this way, simply press the [LETTER] key with the appropriate number key along the top of the keyboard

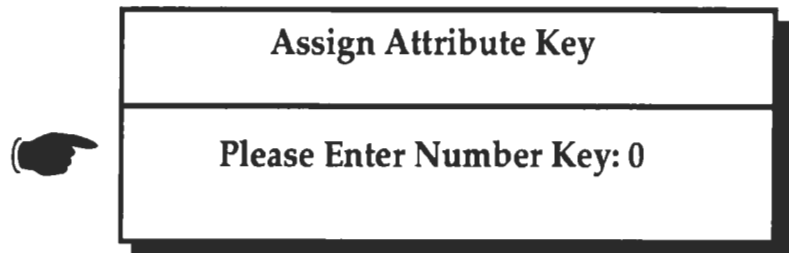


Figure 2.10. The Assign Attribute Key menu

---

### The second method

The second way to copy and select a character attribute is as follows:-

- a) Point and select the character whose attributes you want to copy.
- b) Display the File Menu and select 'Character Attributes'. This will display the Character Attributes menu as shown in figure 2.12. Select 'Save', enter the name you wish to use for recalling the set of character attributes and operate the [ACCEPT] key. The name you entered will now appear in the list of

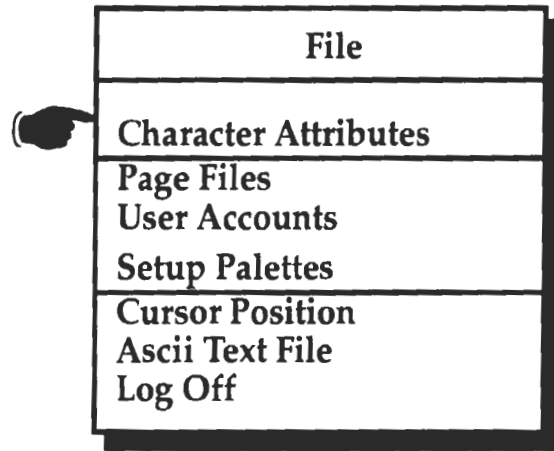


Figure 2.11. The File/Character Attributes command

attributes, indicating that the attributes have been stored successfully.

- c) To recall a set of character attributes from the Character Attributes menu, display the File Menu and select 'Character Attributes'. Highlight the appropriate attribute name, select the word 'Recall' and operate the [ACCEPT] key twice. You may now continue typing using the selected set of character attributes.

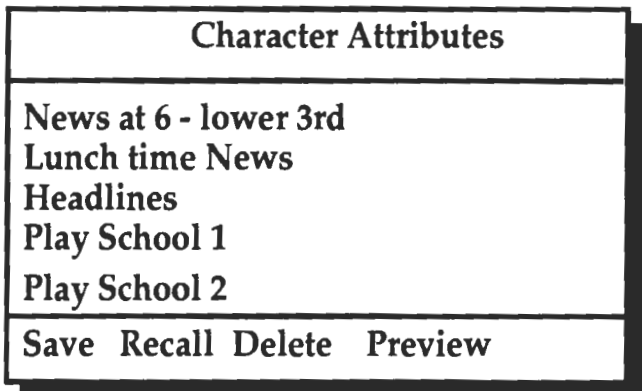


Figure 2.12 The Character Attributes menu

---

**Deleting a set of attributes**

To delete a set of character attributes from the Character Attributes menu, highlight its name then select 'Delete'.

---

**Previewing a set of attributes**

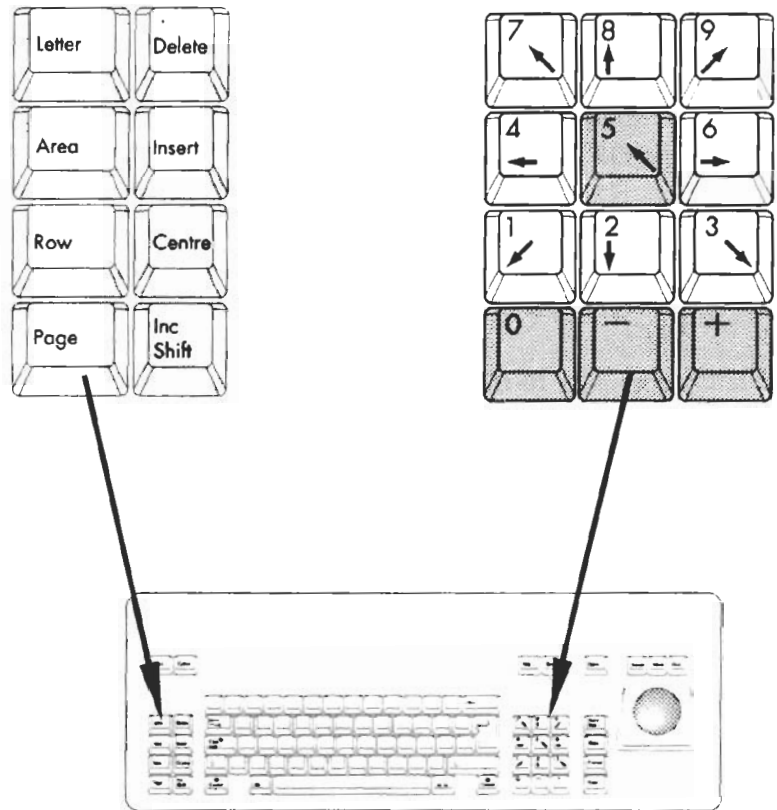
To preview a set of attributes, highlight its name then select 'Preview'. This will assign all the attributes to a capital 'A' which will be displayed over the Character Attributes menu in a maximum size of 30 TV lines.

*Please note: It is not possible to delete or preview a set of character attributes that was saved using the keyboard method (the first method). However, such a set of attributes can be overwritten at anytime by selecting a character with a different set of attributes and saving them with the same number.*

## CHAPTER 3

**Editing Text****Introduction**

In Chapter Three you'll learn how to enter and edit text, select Display Founts and text colours, as well as enter TABs, add underlines and place text in coloured boxes. This chapter also covers dynamic presentations such as roll, crawl, reveal, zip and Vector special effects.



**Figure 3.1. The editing keys**

---

**Starting with a clean page**

To completely clear the Edit Display operate the [PAGE] key with the [CLEAR] key. You'll find the [PAGE] key in the bottom left hand corner of the left hand block of keys and the [CLEAR] key just left of the Trackerball.

---

## entering text

Whenever you clear a page, Colour 1 and Fount 1 are automatically selected and the Chequered Cursor is displayed in the top left hand corner of the Safe Title Area.

The Chequered Cursor tells you that the cursor is 'floating'. In other words, it isn't sitting on an existing row of text. If it were, it would either be a Solid Cursor or an Outline Cursor, see page 1.12 for further details.

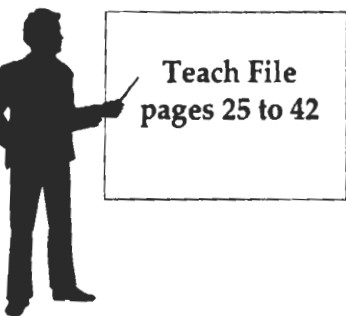
To enter a row of text in the middle of the screen operate the Cursor Down key (number 2 in the numeric keypad) until the Chequered Cursor is halfway down the screen and start typing. Alternatively, use the Trackerball to position the Arrow Cursor and operate either the [ACCEPT] key or the [SELECT] key.

When you reach the end of the row operate the [RETURN] key and type in another row of text. If you continue to type off the right hand side of the screen, operate the Cursor Left key until the cursor reappears and operate the [RETURN] key with one of the [SHIFT] keys. This will move all of the text to the right of the cursor to the next row down.

In order to carry out the editing instructions that follow you need to enter at least three rows of text.

Almost all of the editing functions require you to position the cursor either on a row or over a character or logo first. So when we say 'point and select' we mean locate the Arrow cursor over a row or word and operate the [SELECT] key. Once a row or character has been selected, you can use the cursor shift keys to move the Outline cursor around the block of text you are editing.

'Point and select' the row first, then press and hold the [ROW] key and operate any of the cursor keys, with the exception of the Cursor Home key [5]. Notice how the row swaps position with the other rows as it passes over them.



---

## row shift

---

## Incremental Row Shift

*Note: Incremental Row Shift only affects text from the cursor position to the end of the row.*

'Point and select' a character, then press and hold down the [ROW] and [Inc SHIFT] keys and operate the cursor keys (again with the exception of number 5 key) to move the text to the required position on the screen. If you wish to move a whole row in small increments, make sure the cursor is positioned on the first character of the row.

Notice how the text stops moving when the keys are released regardless of whether the text has moved as often as the number of times the cursor key was depressed. However, if you wish the text to move say 7 increments and you press the direction keys very quickly, the text will continue to move the required number of increments, but only as long as you keep the [ROW] and [Inc SHIFT] keys depressed.

---

## Row Centre

To centre a row of text, 'Point and select' the row required and depress the [ROW] and [CENTRE] keys.

---

## Horizontal Page Centre

To centre a whole page or large section of text horizontally, select the top most row of the section of text you wish to centre and press the [PAGE] and [CENTRE] keys.

*Note: Only text on and below the cursor will centre; text above the cursor position will remain unchanged.*

---

## Vertical Page Centre

Operating the [AREA] key with the [CENTRE] key will centre all the text within the selected display plane vertically.

---

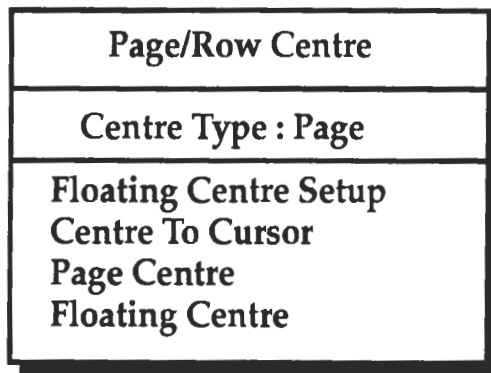
## Floating Centre Point

Normally when you centre a row or page, the text is aligned down the centre of the screen. The Floating Centre facility allows you to set up a centre point which is not aligned down the centre of the screen.

There are two ways to select your Floating Centre Point. You can either use the vertical location of the cursor or you can enter a number based upon the number of pixels in from the left hand side of the screen. The centre point of the screen is 359 pixels in from the left.

The Floating Centre Point is selected via the Page/Row Centre setup menu which is displayed by selecting 'Centre:Page' from the Edit menu. See figure 3.2.

*Note: If Floating Centre Point is already selected then you will see 'Centre:Floating' in the Edit menu instead of 'Centre:Page'. Also, if you are going to use the cursor to determine the location of your Floating Centre Point then position it using either the Trackerball or the cursor left and right keys before selecting the Page/Row Centre setup menu.*



**Figure 3.2. The Floating Centre Setup menu**

When you first select the Page/Row Centre setup menu, the row headed 'Centre Type' will display the word 'Page', indicating that the normal page centre facility is selected. Highlighting this row and operating the [SELECT] key will change the word 'Page' to 'Floating'. You can now point and select either 'Centre To Cursor' in which case the Floating Centre Point will be located in line with the cursor (the pixel location of the cursor will be displayed if you operate the [SELECT] key), 'Page Centre' to align it down the centre of the screen or 'Floating Centre'. Selecting 'Floating Centre' allows you to enter a number representing the number of pixels between the left hand side and the Floating Centre Point.

Having made your selection operate the [ACCEPT] key. The Floating Centre Point will remain selected within the current page until the type of centre is changed back to 'Page'. The position of Floating Centre Point can be stored with each page and therefore can be altered on a page by page basis.

---

## Left and Right Justify

Justification works from the cursor downwards. To justify a line or a whole section of text, first 'point and select' on or above the first row. Next, press down the [SHIFT] key and operate either the right or left cursor keys. The text will be justified as required. Part of the text may disappear off the side of the screen, due to the position of the cursor before justification. The text is not lost, however, and will reappear if the cursor is repositioned and justification is repeated.

---

## Row Insert

This function allows you to insert additional rows of text between existing rows. First, select the row which you want to be below the new row and press the [ROW] and [INSERT] keys. The row you selected moves down and an empty row appears above. The Row Insert function can be used to move a whole block of text down the screen, simply by holding the keys down until you have the required number of blank rows.

---

## Row Delete

Row Delete works in two ways. You can either delete just the text to the right of the cursor or the whole row. In either case, the two keys to operate are [ROW] and [DELETE]. To delete the whole row make sure the cursor is located on the first character of the row, because the function only works from the cursor position to the end of the row.

If you operate the [ROW] and [DELETE] keys twice, the whole row is deleted, regardless of the position of the cursor, and all the rows below move up by one row to fill the space.

---

## ow compress and pand (tracking)

There are two ways to compress or expand a row of text; either by decreasing or increasing the spaces between each word or the space occupied by each character.

Position the cursor on the row of text, press and hold down the [ROW] key and operate the plus key to increase the interword spaces or the minus key to decrease the interword spaces.

If you press and hold down the [ROW] key with the [INC SHIFT] key whilst operating the plus and minus keys, you increase and decrease the character spaces as well as the interword spaces.

The plus and minus keys can be found within the numerical keypad.

---

## inter-row Spacing (leading)

The space between all rows of text below the cursor row can be increased or decreased by operating the [AREA] key with the plus and minus keys.

---

## etter Shift

To move an individual character, select it and then press and hold down the [LETTER] key and operate the cursor shift keys. The character will move according to how often you press the cursor keys. If you release the [LETTER] key before the character has moved the number of times pressed, the character will stop moving.

---

## cremental Letter Shift

To position the character more precisely, depress the [LETTER] key with the [INC SHIFT], together with the appropriate Cursor shift key.

*Note: Characters and rows can also be moved around the screen in small increments by using the Trackerball instead of the Cursor shift keys.*

---

## Letter Insert

To insert a space in a row of text, 'point and select' the character to the right of where you wish to add the space and press the [LETTER] and [INSERT] keys. You can now type in a letter in the space you have created. If you hold the [LETTER] and [INSERT] keys down for more than half a second, the function will repeat until you release the keys.

---

## Insert Mode

Another way to add characters or words in amongst existing text is to select the 'Insert' Mode. When in the 'Insert' mode, text to the right of the cursor is moved one place to the right each time a new character is entered.

To select the 'Insert' mode, operate the [LETTER] key with the 'I' key in the QWERTY keyboard. The word 'INSERT' at the left hand end of the Text Status row will tell you when the 'Insert' mode is selected.

---

## Overtyping Mode

When the 'Overtyping' mode is selected, as opposed to the 'Insert' mode, any existing character can be changed for another by positioning the cursor over it and typing in a new one.

To select the 'Overtyping' mode, operate the [LETTER] key with the 'O' key in the QWERTY keyboard. The word 'OVERTYPE' at the left hand end of the Text Status row will tell you when the 'Overtyping' mode is selected.



*Note: The 'Insert' and 'Overtyping' modes can also be selected using 'point and select'. Simply 'point and select' the word OVERTYPE or INSERT in the Text Status row and the two functions will toggle.*

---

## Letter Delete

To delete a character, 'point and select' the character you no longer require and depress the [LETTER] and [DELETE] keys. If you keep the keys depressed the machine will continue to delete characters until the keys are released.

**space**

The **[BACKSPACE]** key, which is located in the top right hand corner of the QWERTY keyboard, works in much the same way as 'Letter Delete'. The only difference being the cursor must be located on the character to the right of the one you wish to delete, rather than on it. Motif will continue to delete characters and spaces until the key is released.

---

**Change**

The Case Change function allows you to change existing text, without retyping, from lower case to upper case, and vice versa, on a character, row or page basis.

To change the case of a single character, first 'point and select' the character and then operate the **[LETTER]** key with one of the **[SHIFT]** keys.

---

**Change (row)**

To change the case of a row of text operate the **[ROW]** key with the **[SHIFT]** key. The function works from the cursor position to the end of the row, so if you want to change the case of the whole row, locate the cursor on or before the first character.

---

**Change (page)**

To change the case of a page of text operate the **[PAGE]** key with the **[SHIFT]** key. Again, the function works downwards from the row and character cursor position, so if you want to change the case of the whole page position the cursor on or before the first character of the top row of text.

---

**Changing the fount of a single character**

'Point and select' the character, display the Fount Palette, operate the Trackerball or cursor up and down keys until the required fount in the Fount Palette is highlighted and then operate the **[SELECT]** key, (the Fount Palette is displayed by operating the **[Ctrl]** key with the **[F]** key). For further information about the Fount Palette please refer to pages 2.3 and 2.4.

After the **[SELECT]** key is operated the character your Cursor is on will change to the selected fount and the Text Status Row will display the number of the newly selected fount.

Alternatively, operate the **[ACCEPT]** key. This has the same

effect as operating the [SELECT] key except that the Fount Palette disappears from view.

---

### Changing the fount of a word

Repeat the above instruction and then operate the [FOUNT] key. This will change the fount of all the characters to the right of the cursor up to the next character space.

---

### Changing the fount of a row

Repeat the above instruction for changing the fount of a single character and then operate the [FOUNT] key twice. This will change the fount of all the characters to the right of the cursor up to the end of the row.

*Note: When pressing the "Fount" key to change the fount of a word or row, only the line of text selected will change. You must move the cursor to the next row of text and repeat the operation to change the fount on that row.*

---

### Selecting Founts by Number

If you are familiar with the numbers of the founts in the Fount Palette, you can bypass the Fount Palette altogether by holding down the [FOUNT] key and entering a fount number using the number keys in the QWERTY keyboard or the numeric keypad. The rest of the word or row can then be changed as described above.

---

### Removing the Fount Palette

To remove the Fount Palette whilst editing text, use the Trackerball and position the cursor over one of the fount cells and operate the [QUIT] key.

---

### Changing fount height whilst editing text

On page 2.6 we told you how to select a fount height from within the Fount Attributes menu. Now we'll show you how you can change the height of a Display Fount whilst editing text.

First 'Point and Select' the character whose height you want to change, then 'Point and Select' the number to the left of the 'Lines' in the Text Status Row, (the number will be highlighted by a green background). Operate the [SELECT] key, enter the required height using the number keys along the top of the QWERTY keyboard and finally operate the [ACCEPT] key.

The selected character will change to the new height and the new Display Fount will be added to the Fount Palette.

The height of the rest of the word or row can be changed to the new Display Fount by immediately operating the [FOUNT] key once for the rest of the word or twice for the rest of the row.

*Note: Changing the size of a character in the above described manner only affects the height. All other attributes such as italics, shadows, etc., are not affected.*

---

## Area Editing

Area editing allows certain editing functions to be applied to a group of text as defined by an outline cursor.

The editing functions that can be applied with Area Editing are Fount Change, Colour Change, Case Change and Area Centre. Area Editing only works with existing text. Avoid including logos within the selected area, especially if the intention is to fount or case change.

There are basically two ways to set the size and shape of the area in which Area Editing will take place. You can use either the Cursor left, right, up or down keys or the Trackerball. Whichever method you use, the first thing you must do is select your start character from which the editing area can be defined. This is done in the normal way by pointing and selecting and encasing the selected character within an Outline Cursor.

To draw the editing area out from the selected character, press and hold down the [AREA] key and operate the Trackerball or the Cursor left, right, up or down keys until the desired area of text is defined by the outline cursor. As you are doing so, a quick look at the Lower System Status row will confirm that you are in the Area Editing mode and not the Area Sizing. If the word 'Sizing' is displayed then you will have to operate the [QUIT] key and access the main Edit Menu, from which you will be able to select the correct function. This can be done quickly by operating the following in sequence:- [Ctrl] [E], [A], [SELECT], [ACCEPT].

Within the editing area now displayed you can change the display font and colour, as well as changing the text from upper to lower case characters, and vice versa, using the Case Change function. Area Centre is also available, but only on a full row basis. No other editing functions are available when Area Editing is selected.

Operate the [QUIT] key to return to the normal editing mode.

---

## Area Sizing

Area Sizing allows part or all the text in a single row to be resized to any aspect ratio and angle. It also offers a very quick way of moving part or all the text in a single row from one part of the screen to another. It is not possible to use the Area Sizing function on more than one row of text at a time.

Before using the Row Sizing function make sure that the main Edit menu is displaying the words 'Area Sizing' and not 'Area Editing'. If necessary, point and select 'Area Editing' to change to 'Area Sizing'.

The first step toward using the Area Sizing function is to select the first or last character of the text you want to resize, then press and hold down the [AREA] key and operate either the Trackerball or the Cursor left and right keys to encompass the text with the Area Outline Cursor.

Next, operate the [SELECT] key and adjust the shape of the Area Outline Cursor to match the size and aspect ratio of the area in which you want the encompassed text to reappear after processing. Do this by holding down the [AREA] key and operate the Trackerball or Cursor right and left keys.

To move the Area Outline Cursor from one part of the screen to another, press and hold down the [SHIFT] key and operate the Trackerball. Alternatively, just use the Trackerball to position the arrow cursor and then operate the [SELECT] key. The

Outline Cursor will reappear with its bottom left hand corner at the point of the arrow cursor.

To change the angle of the Area Outline Cursor, press and hold down the [AREA] key and operate either the plus key or minus key located within the numeric keypad. For each key push the angle of the box will change by 10 degrees. If you hold the [AREA] key down with the [INC SHIFT] key, the angle will change in one degree steps.

Having set the position, size, shape and angle of the Area Outline Cursor, operate the [ACCEPT] key. After a few seconds the selected text (above the base line) will appear as a tight fit within the Area Outline Cursor. All descenders will appear outside and below the Area Outline Cursor.

To move a block of text quickly from one part of the screen to another, simply encompass the text with the Area Outline Cursor, operate the [SELECT] key, press and hold down the shift key, use the Trackerball to position the Area Outline Cursor and finally operate the [ACCEPT] key. The text will then jump to the new location as dictated by the position of the Area Outline Cursor.

---

### Selecting a single character for area sizing

---

Prior to selecting a single character or logo for row sizing, you have to point and select in the usual way but then hold down the [AREA] key and operate the Cursor left key followed by the Cursor right key.

---

### Row Priority

---

Row Priority lets you select a row of text and then display it in front of, or behind, other rows of text.

If you've been following the instructions in the Teach File you will know that it is possible to type as many rows of text as you like, one upon the other. To move a row forwards or backwards you need to:-

- a) 'Point and Select' the row.

b) Select Row Priority from the Edit menu. This will display the Row Priority menu shown in figure 3.3. The priority number of the selected row is shown at the bottom of this menu. You can move a row of text right to the back or to the front, or backwards and forwards, one row at a time.

c) Highlight the appropriate function and operate the [SELECT] key.

Note as you do so how the Current Row Priority number changes at the bottom of the menu. If you are moving a row of text backwards or forwards one row at a time then operate the [SELECT] key until the required priority number is displayed.

d) Operate the [ACCEPT] key to return to the normal edit mode.

A final word about row priority. When starting with a clear page, the first row you type will be 'priority 1', the second will be 'priority 2', the third will be 'priority 3', etc. This applies even if the rows are typed one upon the other. This fact is worth remembering, especially when you want to change the order in which text is displayed when using the dynamic functions such as 'Zip' and 'Reveal', both of which are described in the chapter dealing with Dynamic Presentations.

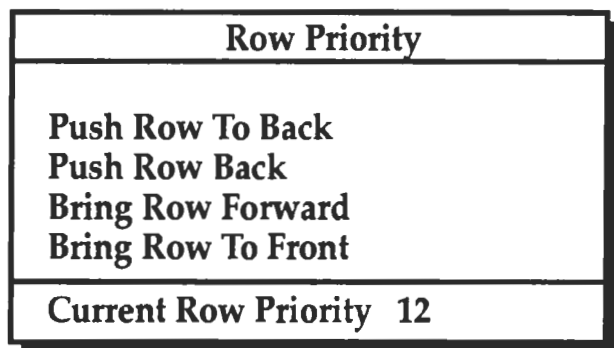


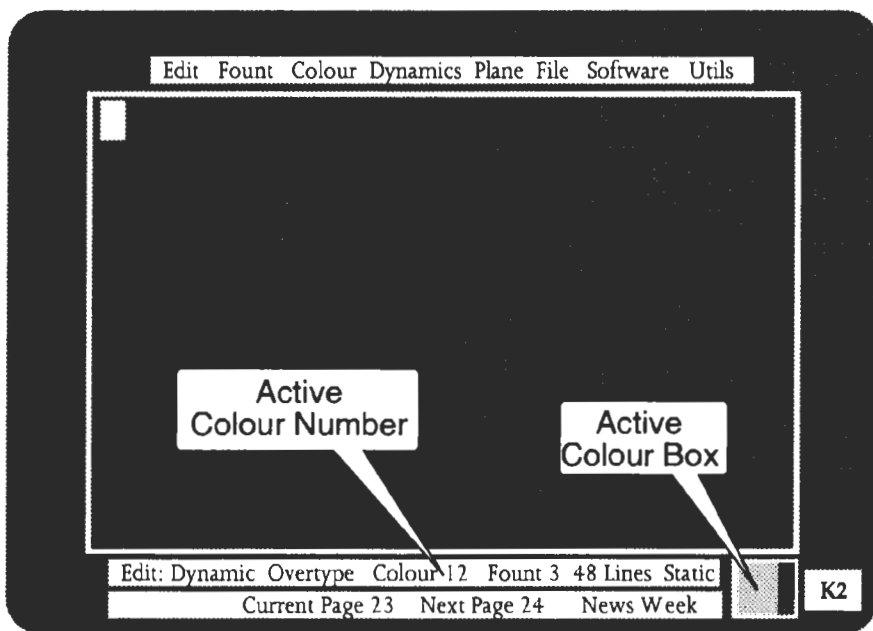
Figure 3.3. The Row Priority menu



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page 44

## Colour

The Text Status row at the bottom of the screen shows you the number of the currently selected colour (the active colour). Just to the right of the Text Status Row is the active colour box. The active colour box comprises four colours. The large colour square is the colour of the face of the character. The three smaller squares, from top to bottom are the colours of the character edge, the block and the shadow.

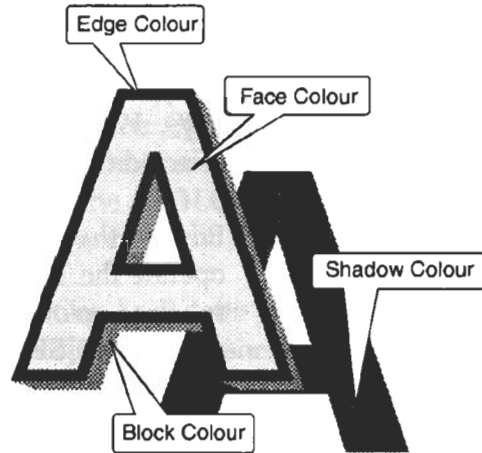


**Figure 3.4. The active colour number and colour box**

As you move the cursor over existing text, the active colour number in the Text Status row will change according to the colour of the character over which the cursor is positioned. This is demonstrated in Teach File on page 44.

---

## The Colour Attributes



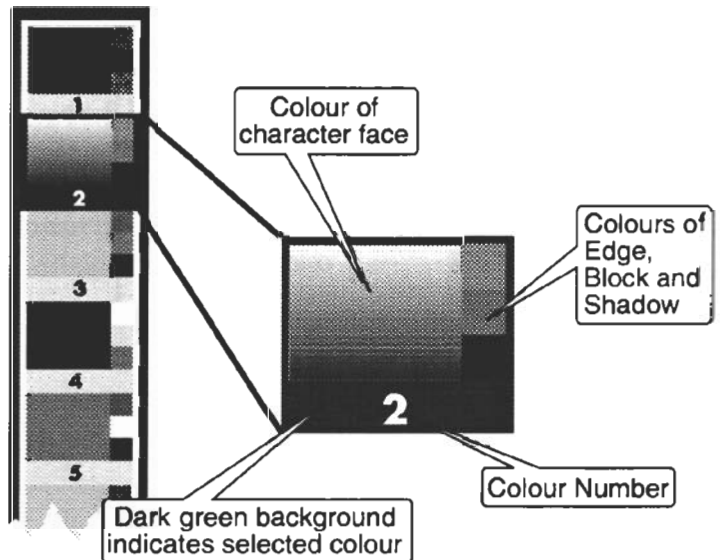
**Figure 3.5. The colour attributes of a character**

---

## The Colour Palette

The available colours can be seen by displaying the COLOUR PALETTE. To display the Colour Palette, select the word 'Colour' from the top of the screen either by using the Trackerball or by pressing [Ctrl] [C].

After selecting the "Colour" menu, the Colour Palette will appear down the right hand side of the screen, as shown in figure 3.6.



**Figure 3.6. The Colour Palette**

The Colour Palette comprises a number of colour cells, each of which can be highlighted and selected by scrolling up and down the palette using the Trackerball or the Cursor up and down keys. When you first display the Colour Palette, the currently selected colour is highlighted.

---

### Changing the colour of single character

Position the cursor over the character, display the Colour Palette, operate the Trackerball or cursor up and down keys until the required colour in the Colour Palette is highlighted and then operate the [SELECT] key.

After the [SELECT] key is operated the selected character will change to the new colour and the number of the new colour will appear in the Text Status Row.

Alternatively, operate the [ACCEPT] key. This has the same effect as operating the [SELECT] key but also removes the Colour Palette from the Edit Display.

---

### Changing the colour of the rest of the word

Repeat the above instruction and then operate the [COLOUR] key. This will change the colour of all the characters to the right of the cursor up to the next character space.

---

### Changing the colour of the rest of the row

Repeat the above instruction for changing the colour of a single character and then operate the [COLOUR] key twice. This will change the colour of all the characters to the right of the cursor up to the end of the row.

*Note: When pressing the "Colour" key to change the colour of a word or row, only the line of text selected will change. You must move the cursor on to the next row of text and repeat the operation to change the colour on that row.*

---

## Selecting colours by number

If you are familiar with the numbers of the colours in the Colour Palette, you can bypass the Colour Palette altogether by holding down the [COLOUR] key and entering a colour number using the number keys in the QWERTY keyboard or the numeric keypad. The rest of the word and then row can be changed as before by pressing the [COLOUR] key once for the rest of the word, twice for the rest of the row.

---

## Removing the Colour Palette

To remove the Colour Palette whilst editing text, use the Trackerball to position the cursor over one of the colour cells and operate the [QUIT] key.

---

## Selecting New Colours

---

### The Active Colour Box

Apart from showing you the colour attributes (face, edge, block and shadow) of the selected colour, the Active Colour Box can be used to gain access to the Colour Setup menu which will allow you to select new colours and levels of opacity with the Trackerball.

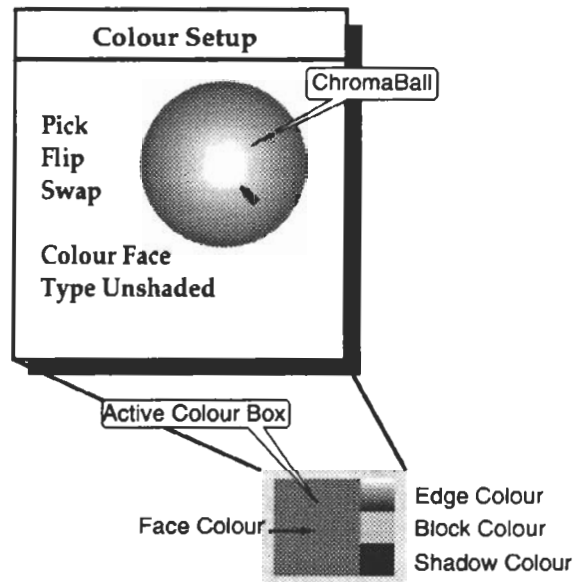
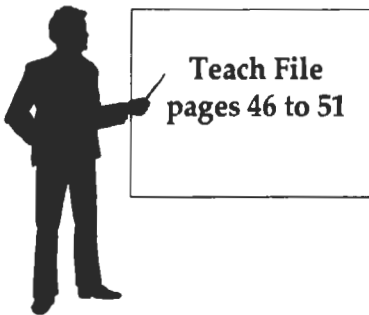


Figure 3.7. The Colour Setup menu

---

## Selecting the Colour Setup menu

There are two ways to select and display the Colour Setup menu as shown in figure 3.7.

First, using the Trackerball, move the arrow cursor to the Active Colour Box, position it over the appropriate colour attribute cell (face, edge, block or shadow) and operate the [SELECT] key.

Alternatively, operate the [COLOUR] key with the [HELP] key.

---

## The ChromaBall

The Colour Setup menu contains the ChromaBall and a number of headings, each of which can be activated with either the Trackerball or the cursor shift keys.

Colours are chosen using the Trackerball. Luminance and opacity levels can also be selected when the ChromaBall is active.

---

## The Colour Setup functions

### Pick

---

Pick is a function which allows you to select colours from text and logos etc., which are displayed on your current page. It provides an ideal way of exactly matching colours.

### Flip

---

Flip allows you to move the Colour Setup menu from the bottom right hand corner to the top left hand corner, and vice versa.

### Swap

---

Swap can be used when selecting gradated colours (shading). Gradated colours are selected by choosing 'start' and 'end' colours. SWAP allows you to swap the 'start' colour with the 'end' colour.

### Colour

---

When activated, COLOUR allows you to select Face, Edge, Block (2D edge) or Shadow by operating the [SELECT] key.

### Type

---

Type allows you to elect whether a colour attribute should be shaded or unshaded.

---

## Activating a Colour Setup function

Functions in the Colour Setup menu can be activated by operating the Trackerball or the cursor shift keys until the required function is highlighted by a green background or, in the case of the ChromaBall, with a green square outline.

Once activated, single function headings, such as Pick, Flip and Swap can be selected by operating the [SELECT] key. With multi-function headings, such as Colour and Type, operate the [SELECT] key until the desired function is shown.

---

## Selecting an unshaded colour

First, make sure that the word "Unshaded" is displayed alongside the word "Type". If it is not then activate "type" and operate the [SELECT] key until it is.

Next, highlight the ChromaBall then operate the Trackerball to move the arrow cursor around the multi-coloured disk until the desired colour is displayed in the Active Colour Box below.

---

## Adjusting the luminance level

To change the luminance level of the colour, press and hold down the [COLOUR] key and operate the cursor up and down keys. Cursor up to increase the luminance level and cursor down to lower it.

*Note: Luminance levels can only be changed when the ChromaBall is activated.*

---

## Adjusting the opacity

To change the opacity (transparency) level of the colour, press and hold down the [COLOUR] key and operate the cursor left and right keys. Cursor right to increase the opacity level and cursor left to lower it.

*Note: Opacity levels can only be changed when the ChromaBall is activated.*

---

## Applying the colour

To apply the newly selected colour on a temporary basis to all text assigned with the same colour number, operate the [SELECT] key. Continue selecting colours and operating the [SELECT] key until the desired colour has been found, then operate the [ACCEPT] key. This will finally assign the newly selected colour and remove the Colour Setup menu.

---

## Returning to the original colour

Operating the [QUIT] key instead of the [ACCEPT] key, returns you to the original colour without applying your changes.

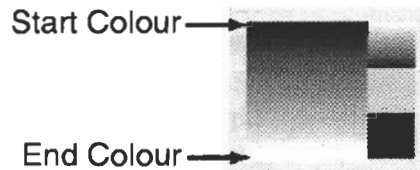


Figure 3.8. The start and end colours of a shaded colour

---

## Creating a shaded colour

Shaded colours, which can be applied to all four colour attributes of a character, are created by selecting a 'Start' colour and an 'End' colour. The 'Start' colour is the one at the top of the selected colour cell in the Active Colour Box.

Before selecting a 'Start' or 'End' colour make sure that the word 'Start' or 'End' is displayed along side the heading 'Type'. If it is not then activate the word "Type" and operate the [SELECT] key until 'Start' or 'End' is displayed.

Having made sure that the word 'Start' or 'End' is displayed along side the heading 'Type' select the colour, luminance and opacity in the way already described.

---

## Swapping the start and end colours

The 'Start' or 'End' colours can be swapped around by first activating the heading "Swap" and operating the [SELECT] key.

---

## The Colour Pick function

To pick up a colour from within a logo or colour image, display the Colour Setup menu if you haven't already done so, activate the heading 'Pick' and then operate the [SELECT] key. This will place the arrow head cursor back into the edit display. Use the Trackerball or the cursor shift keys to position the cursor over the desired colour. The actual colour at the tip of the arrow head cursor is shown in the Active Colour Box.

When you've found the colour you want, operate the [SELECT] key to assign it to the selected text on a temporary basis or the [ACCEPT] key to assign it permanently.

When in the 'Pick' mode, operate [Ctrl] [P] to recall the Colour Setup menu.

## The Main Colour Setup Menu

So far we've shown you how to change the colour of the Active Colour Box using the Trackerball. Now we'll show you how to change colour using colour reference numbers and slider controls. For this we need to display the Main Colour Setup menu, shown below.

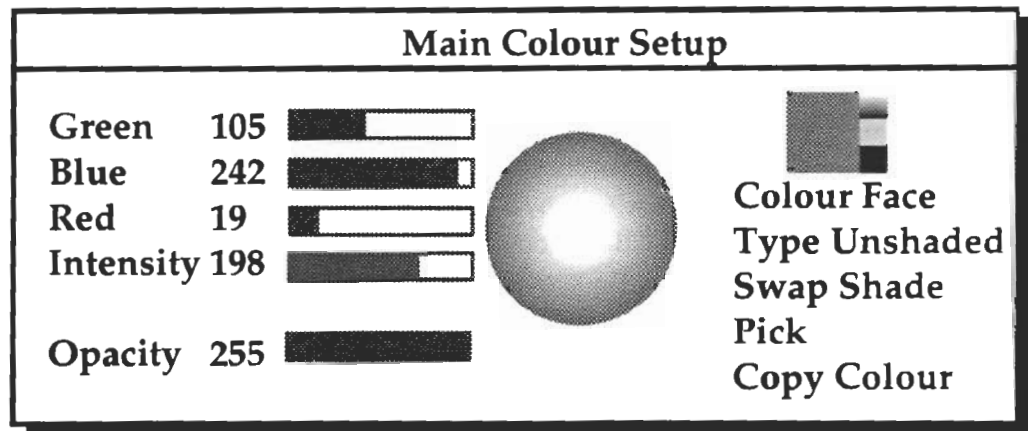


Figure 3.9. The Main Colour Setup menu

The Main Colour Setup menu can be displayed by holding down one of the [Ctrl] keys whilst operating the [C] key twice. Alternatively, the Main Colour Setup menu can be displayed by selecting 'Colour' from the Menu Selection Row at the top of the screen and then operating one of the [Ctrl] keys with the [C] key once.

### Selecting colours by number

Each of the 16.7 million colours available is made up of levels of red, green and blue and this is graphically demonstrated by the level indicators down the left hand side of the Main Colour Setup menu.

To the left of each level indicator is a three digit number. These show you the exact intensity of each of the colour components, as well as luminance and opacity levels.

To change a number, first select the number and the heading (red, green, blue, etc.). This is done by operating the cursor keys until both are highlighted by a green background. Once activated, a number can be changed with the Trackerball or by first operating the [BACKSPACE] key until the number has been deleted and then entering a new number using the number keys along the top of the QWERTY keyboard, (do not use the numerical keypad as this will activate one of the other headings).

The maximum number that can be entered is 255.

The ChromaBall, Pick and Swap functions all work in exactly the same way as described on page 3.18.

---

### The Copy Colour function

The Copy Colour function lets you copy all four colour cells (face, edge, block and shadow) to the Colour Palette.

Proceed as follows: First activate the heading 'Copy Colour' and operate the [SELECT] key. This will display the Copy menu as shown in figure 3.10 below.

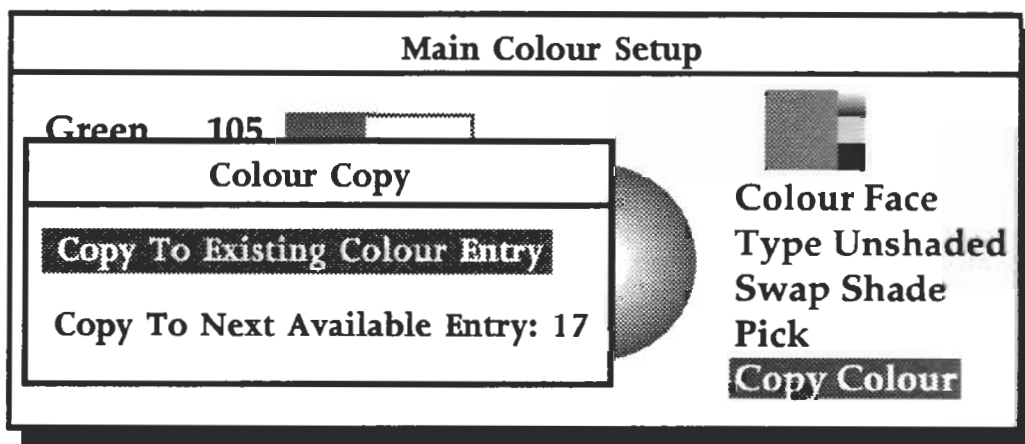


Figure 3.10. The Copy Colour menu

The Colour Copy menu provides two choices. You can either copy to an existing colour in the Colour Palette, in which case you are prompted to enter the number of the colour you wish to replace, or you can elect to have the colour added on to the end of the Palette.

---

### Replacing an existing colour in the Colour Palette

To replace an existing colour in the Colour Palette, select the heading 'Copy to Existing Colour Entry'. This will result in the Colour Copy Entry menu being displayed, as shown in figure 3.11.

Enter the number of the cell where you want the colour to appear in the Colour Palette using the number keys along the top of the QWERTY keyboard. If you make a mistake, operate the [BACK-SPACE] key. Operate the [ACCEPT] key to copy the colour to the Colour Palette.

---

### Adding a new colour to the Colour Palette

To add the colour to the end of the Colour Palette, select the heading 'Copy to Next Available Entry' from the Colour Copy menu and operate the [ACCEPT] key.

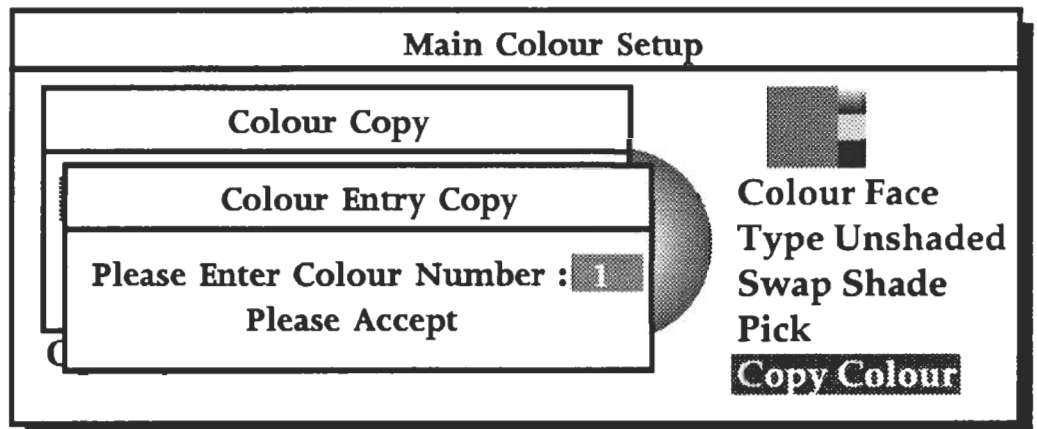


Figure 3.11. The Colour Entry Copy menu

---

## Installing Fount and Colour Palettes

Whenever you create a new User Account File, the Default Fount and Colour Palettes incorporated within the Default Page File are unlikely to be the founts and colours you would choose yourself.

To create your own Fount Palette you need to do the following:-

1) Let's say your Default Fount Palette contains 13 display founts of which you only want to keep fount number five and add six founts of your own choice.

The first thing you have to do is 'replace' the first four display founts with founts of your own choice using the Fount Setup menu. Here's how.

Select Fount One(0), display the Fount Setup Menu, enter the fount attributes for the new Display Fount and select 'Replace'. This will replace the original Display Fount with the new fount.

2) Repeat the above for the all other founts you want to replace. In our example, this will be founts 2,3,4 and 6.

3) Select 'Setup Palettes' from the 'FILE' menu. This will display the Palette Control menu as shown in figure 3.12.

4) Highlight and select the heading 'Save Fount Palette'. This will display the 'Save Palette' menu, as shown in figure 3.13. Enter the number of entries you want to save (in our example this will be '7'), and operate the [ACCEPT] key.

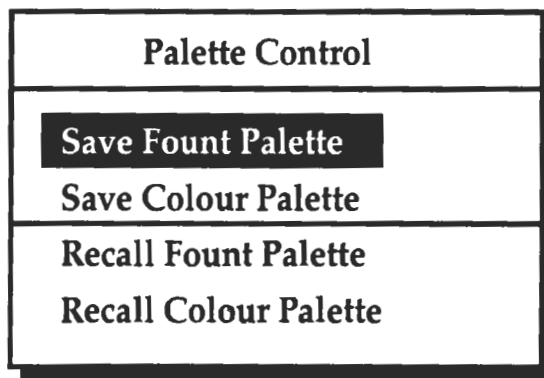


Figure 3.12. The Palette Control menu

Save Palette	
Current number of entries in palette	13
Enter number of palette entries to save	7

**Figure 3.11. The Save Palette menu**

*Note: The number shown in the heading 'Current number of entries in palette' refers to the number of entries in the current Fount Palette, not the Default Fount Palette.*

*Also note: If your Current Palette has entries in say, 0,1,2,3,4,6,7 and 8 but location 5 is empty, the Save Default Palette routine will only save entries 1 to 4. In order to save the other entries a fount will have to be added in location number 5. The easiest way to do this is to select Display Fount number 4 and select the 'Add' facility in the Fount Setup menu. The 'Add' facility automatically adds the Display Fount to the next vacant space in the current Palette.*

5) From now on, as long as you don't make any further changes to the Fount Palette, the Default Palette you have just created will be stored with every page.

6) If you change the Fount Palette you can, if you wish, recall the Default Fount Palette by repeating steps 3 to 4 but highlight and select 'Recall Fount Palette' instead of 'Save Fount Palette'.

Setting up a new Colour Palette is done in the same way, using the same menus.

Finally, two points worth remembering are:

a) When you save the Fount or Colour Palette of the 'Current' page, it becomes the new Default Palette (make sure there are no empty palette cells in between the first and last entries).

b) You can use the Setup Palette menus to transport palettes from one page to another in the same file, or to a page in another file in the same or different User Account File.

---

## Tabs

The following Tab types are provided:-

---

### Left hand margin Tab

The position of this tab determines the left hand margin and is usually positioned just inside the left hand side of the Safe Area. Whenever the Line Feed Carriage Return key is operated the Cursor will move left and down one row to the position of the Left Hand Margin Tab.

---

### Left hand Tab

Text entered from a Left Hand Tab position will be left justified. The Cursor will move one character location to the right as each new character is entered.

---

### Right hand Tab

Text entered from a Right Hand Tab position will be right justified. The Cursor remains in the Right Hand Tab position and all existing text so tabbed will move one character to the left as each new character is entered.

---

### Centre Tab

Text entered from a Centre Tab will be automatically centred to the Centre Tab position.

Up to nine horizontal tabs can be set across a page. Each tab is represented by a particular tab icon to indicate the tab type. The tab icons are positioned just above the Safe Title Area. The left hand margin is represented by a solid inverted triangle. The tab icons are shown in figure 3.14. Tab positions are stored with each page. Clearing a page does not affect tab positions. The [TAB] key is located above the Caps Lock key.

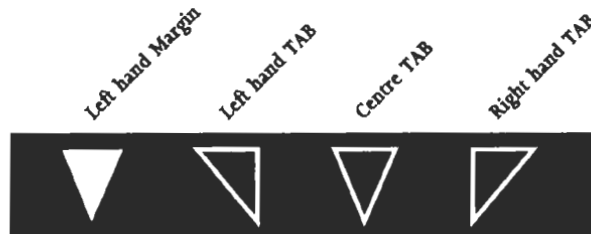
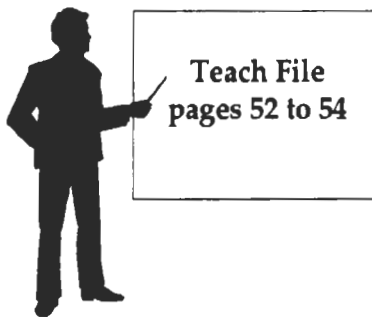


Figure 3.14. The Tab Icons

---

## The TAB key

When the [TAB] key is operated the cursor will jump right to the next tab location. When the [TAB] key is operated with the [SHIFT] key the cursor will jump left to the next tab. If no tabs are set, the tab key is inoperative.

If the cursor is located over a character, the character, as well as all text to its right up to the next tabbed character, will jump to the next tab position when the [TAB] key is operated

---

## Inserting and deleting Tabs

First, select TAB SETUP from the Edit menu. This will display all existing tabs that are currently set, together with the Tab Setup menu. If no tabs are set then only the left hand margin tab will be shown by a solid inverted triangle, see figure 3.15.

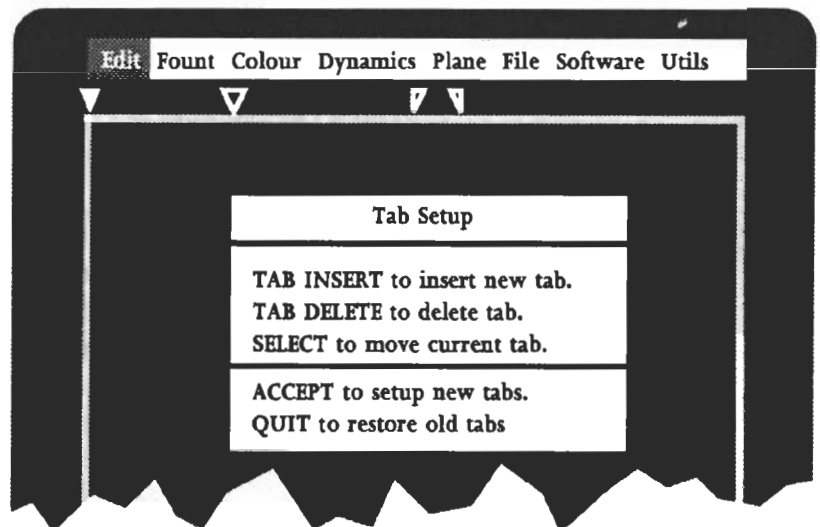


Figure 3.15. The Tab Setup menu

---

## Tab Insert

To insert a tab, point with the Arrow Cursor where you want the tab to be positioned and operate the [INSERT] key with the [TAB] key. This will display the Setup Tab Type menu as shown in figure 3.16. From the Setup Tab Type menu use the Trackerball to highlight the required tab type and operate the [SELECT] key. This will set the chosen tab type and display the appropriate tab icon.

Up to nine tabs can be set. A warning message will appear if you try to set more than nine tabs. You can insert tabs to the left of the left hand margin tab if you wish.

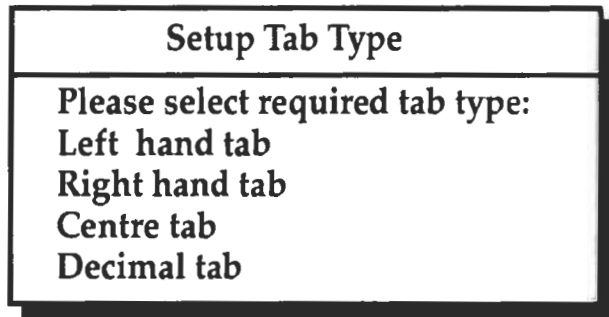


Figure 3.16. The Tab Setup menu

---

### Tab Delete

To delete a tab, point at it with the Arrow Cursor and operate the [DELETE] key with the [TAB] key. The left hand margin tab cannot be deleted.

---

### Moving a Tab

An existing tab, including the left hand margin tab, can be moved by first entering the Tab Setup menu then pointing at it with the Arrow Cursor and operating the [SELECT] key and then pointing at the new location and operating the [ACCEPT] key.

When all the tabs have been set operate the [ACCEPT] key to return to the normal editing mode. Any text associated with a relocated tab will move to the new tab position when the [ACCEPT] key is operated.

---

### Inserting and deleting tabs whilst editing text

Tabs can be also inserted and deleted whilst editing text.

To insert a Tab whilst editing text, position the cursor first and then operate the [INSERT] key with the [TAB] key. This will display the Setup Tab Type menu as shown in figure 3.16. Highlight the required tab and operate the [SELECT] key. This will set the tab and return you straight back to the editing mode.

To delete a tab whilst editing text, operate the [TAB] key until the cursor is positioned at the tab point you want to delete, press and hold down the [DELETE] key and then operate the [TAB] key.

*Note: When in the normal editing mode, the Tab Markers are not displayed. Also, tabbed text cannot be moved left or right using Row Left and Right Shift functions.*

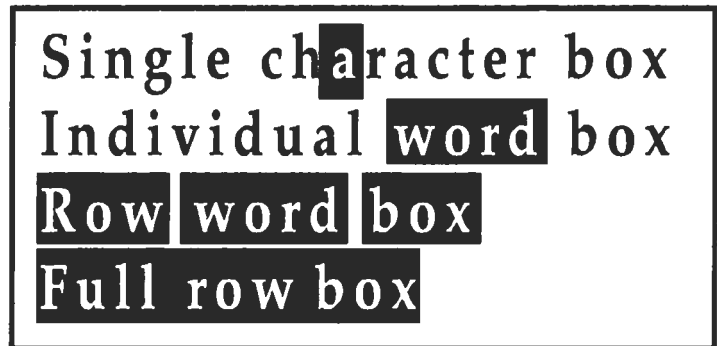
---

## Boxed Text

Existing text can be 'boxed' using the Boxed Text facility. Text can be boxed on a character, individual word, row word or full row basis.



Text cannot be boxed as it is typed.




---

### The height of the box

The height of the box depends upon the characters being boxed and whether or not 'Height Lock' has been selected. With 'Height Lock' unselected the height of the box is strictly controlled by the character or characters being boxed. This is demonstrated in figure 3.17. With 'Height Lock' selected the height of the box is based upon the number of pixels between the descender line and the ascender line of the largest display font

Up to nine tabs can be set. A warning message will appear if you try to set more than nine tabs. You can insert tabs to the left of the left hand margin tab if you wish.

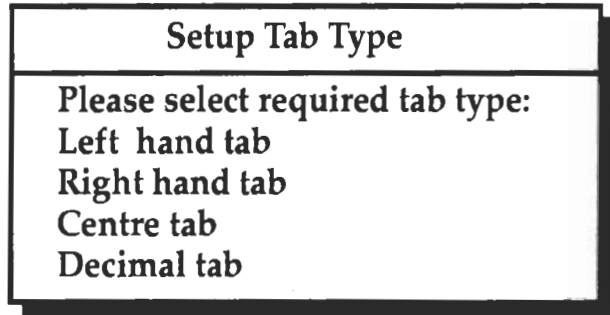


Figure 3.16. The Tab Setup menu

---

### Tab Delete

To delete a tab, point at it with the Arrow Cursor and operate the [DELETE] key with the [TAB] key. The left hand margin tab cannot be deleted.

---

### Moving a Tab

An existing tab, including the left hand margin tab, can be moved by first entering the Tab Setup menu then pointing at it with the Arrow Cursor and operating the [SELECT] key and then pointing at the new location and operating the [ACCEPT] key.

When all the tabs have been set operate the [ACCEPT] key to return to the normal editing mode. Any text associated with a relocated tab will move to the new tab position when the [ACCEPT] key is operated.

---

### Inserting and deleting tabs whilst editing text

Tabs can be also inserted and deleted whilst editing text.

To insert a tab whilst editing text, position the cursor first and then operate the [INSERT] key with the [TAB] key. This will display the Setup Tab Type menu as shown in figure 3.16. Highlight the required tab and operate the [SELECT] key. This will set the tab and return you straight back to the editing mode.

To delete a tab whilst editing text, operate the [TAB] key until the cursor is positioned at the tab point you want to delete, press and hold down the [DELETE] key and then operate the [TAB] key.

*Note: When in the normal editing mode, the Tab Markers are not displayed. Also, tabbed text cannot be moved left or right using Row Left and Right Shift functions.*

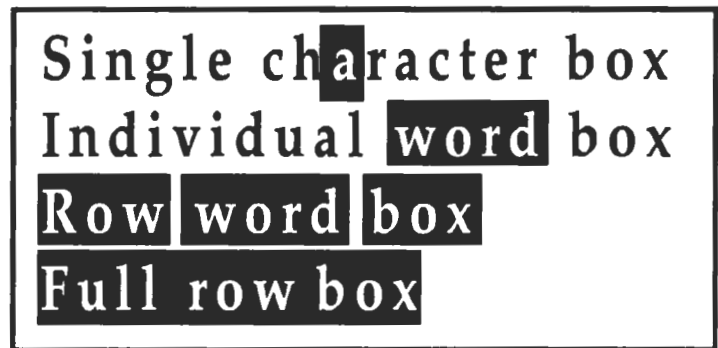
---

## Boxed Text

Existing text can be 'boxed' using the Boxed Text facility. Text can be boxed on a character, individual word, row word or full row basis.



Text cannot be boxed as it is typed.




---

### The height of the box

The height of the box depends upon the characters being boxed and whether or not 'Height Lock' has been selected. With 'Height Lock' unselected the height of the box is strictly controlled by the character or characters being boxed. This is demonstrated in figure 3.17. With 'Height Lock' selected the height of the box is based upon the number of pixels between the descender line and the ascender line of the largest display font

within the row if row boxing is selected or within a word if 'word' or 'Row - broken' is selected.

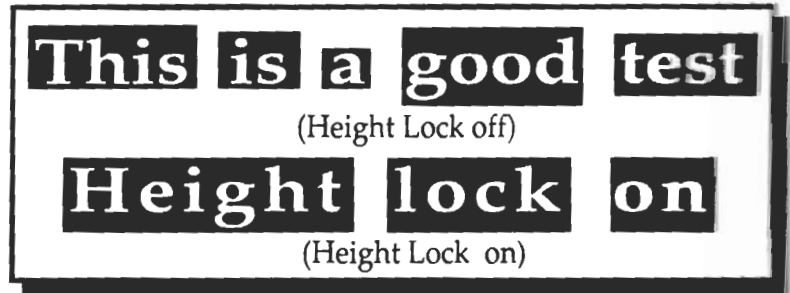


Figure 3.17. The effect of Height Lock

---

### Standard box and Fast Box

There are two types of box available - 'standard box' and 'fast box', the latter of which was developed for subtitling purposes via the serial port.

'Standard box' is more flexible than 'fast box' but it takes longer to display. However, it has superior anti-aliasing, can be filled with a gradated colour and will precisely follow the angle of the text.



For most applications though, the 'fast box' will be found more than adequate.

---

### Boxing a single character

To box a single character 'Point and Select' the character first, then select "Box Text" from the Edit menu. This will display the Box Text menu shown in figure 3.18.

Adjust the width and height of the box by highlighting the 'Oversize width' and 'Oversize height' headings and entering the appropriate number of pixels and lines required. A number of between 2 and 4 for both is more than adequate for most jobs.

Select the colour of the box by highlighting the 'Colour number' heading and entering the colour number. It helps to have the Colour Palette on display at the time.

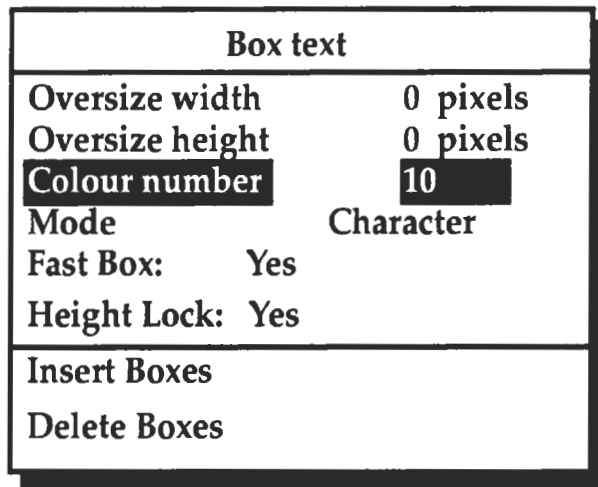


Figure 3.18. The Box Text menu

Highlight the heading 'Mode' and operate the [SELECT] key until the word "character" is displayed.

Select 'Fast Box' if you are not using a gradated colour fill and your text is horizontal.

Select 'Height Lock' if you want the box height to match the overall font height.

Select 'Insert Boxes' to apply the box to the character. If your text is hidden by the menus and you want to see if the box has been applied correctly then operate the [SHIFT] key with the [CLEAR] key to temporarily remove the menus from the edit display - repeat to bring them back.

---

### Boxing a single word

To box a single word 'Point and Select' the word first (any character in the word will do), repeat the above instruction for a single character except when selecting 'Mode' operate the [SELECT] key until "Word" is displayed.

---

**Boxing a row on a word basis**

To box a row on a word basis 'Point and Select' any character in the row first, repeat the above instruction for a single character except when selecting 'Mode' operate the [SELECT] key until "Row - Broken" is displayed.

---

**Boxing a complete row**

Repeat the above instruction for boxing a row on a word basis, except select the mode "Row - full".

---

**Box Delete**

Box delete works on a row basis only regardless of the type of boxes displayed within the row.

To delete the boxes within a row, 'point and select' a character within the row and select 'Delete Boxes' from within the Box Text menu - see figure 3.18.

Please note: *Edge, block and shadow attributes can be added to a box using the 'Shapes' facility. Please refer to page 4.7 for details.*

## Text Underline

Existing text can be underlined using the Underline Text facility. Text can be underlined on a character, individual word, row word or full row basis. When an underline is added it automatically takes on the attributes (but not necessarily colour) of the text above it.



Text can only be underlined after it has been entered.

Underline text	
Oversize width	0 pixels
Height	12 lines
Depth below base	15 lines
Colour number	10
Mode	Character
Fast underline:	Yes
Insert underlining	
Delete underlining	

Figure 3.19. The Underline Text menu

---

### Underlining a single character

Like Boxing, there are two types of underline, namely 'standard underline' and 'fast underline' and the same rules apply. Please read page 30 for further details.

---

### Underling a single character

To underline a single character, 'Point and Select' the character first, then select 'Underline Text' from the Edit menu. This will display the Underline Text menu shown in figure 3.19.

If necessary, adjust the width and height of the underline by highlighting the 'Oversize width' and 'Height' headings and entering the appropriate number of pixels and lines.

Adjust the distance between the underline and the character baseline by highlighting the 'Depth below base' heading and entering the appropriate number of TV lines.

Select the colour of the underline by highlighting the 'Colour number' heading and entering the colour number. It helps to have the Colour Palette on display at the time.

Highlight the heading 'Mode' and operate the [SELECT] key until the word 'Character' is displayed.

Highlight the row headed 'Fast Underline' and operate the [SELECT] key if you want to switch fast underline on.

Select 'Insert Underline' to add the underline to the text. The underline will be displayed beneath the text and the drop shadow if the latter is present.

---

### **Underlining a word**

To underline a single word, first 'Point and Select' any character in the word, then repeat as above except select 'Word' from within the Underline Text menu.

---

### **Underlining a row on a word basis**

To underline a row on a word basis 'Point and Select' any character in the row first, then repeat as above except select the word 'Row-broken' from within the Underline Text menu.

---

### **Underlining a complete row**

Repeat the above instruction for underlining a row on a word basis, except select the mode 'Row - full'.

---

### **Deleting the underline**

To delete all the underlining in a row, first 'Point and Select' a character in the row, then select 'Delete Underline' from within the Underline Text menu.

*The dynamic functions that follow are only available in the Dynamic Display Plane. The Static Display Plane, as its name implies, can only be used for static presentations. See Chapter 4 for details.*

---

### A few facts first



Teach File 2  
page 2 to 4

---

## Dynamic Presentations

The rest of this chapter deals with dynamic presentations such as rolls, crawls, zips, reveals and Vector special effects. Teach File 2 contains several examples of each, but by far the quickest way to master these is to have a go yourself so, after you've had a look at the examples in Teach File 2 and read how we composed them, create a new Page File for yourself and compose your own dynamic presentations. You'll be surprised how easy it all is.

---

### Roll

#### Direction

Text can roll up or down the screen, as well as over or under static text and graphics in the other Display Plane. A roll can start from a blank screen, or with stationary text on display.

#### Manual or auto start

You can start the roll manually, or have it start when you recall the roll page from the disk memory, either instantly or after a predetermined delay.

#### Smooth start and stop

A unique feature of Motif is its ability to accelerate and decelerate smoothly.

#### Pause

You can instruct the roll to pause at any number of points by adding pause markers as required.

#### Speed

Variable - you can adjust to almost any speed and all speeds are smooth.

#### Timing

Timed roll is provided. After the roll has been composed you can enter the number of seconds you want it to run for. When calculating the speed required, Motif takes into account any pauses which may have been included and adjusts accordingly. What ever speed of roll is required, movement remains smooth.

### **Length** \_\_\_\_\_

Although a roll is identified by a single page number, it can be as long or as short as you like.

### **Post editing** \_\_\_\_\_

You can copy your roll and add and delete as much text as you like.

### **Colour images** \_\_\_\_\_

You can include logos, full colour images and background shapes, but care should be exercised when running the roll. Do not choose a speed which is too fast. It takes more time to download large full colour images than it does ordinary text.

---

## **Learn by example**

Our first roll example, which can be found on page 3 of TEACH FILE 2, starts with a 'parked' or stationary yellow coloured caption in the middle of the screen. The roll starts as soon as the [START/STOP] key is operated and accelerates up to a speed of 1.2 lines per field.

As soon as the roll starts, the next block of text (coloured grey) begins to appear at the bottom of the screen. This is followed by a white block of text which slows down to a stop in the middle of the screen. The roll waits for you to operate the [START/STOP] key. The next block of text (blue) starts to decelerate to a slower speed as it approaches the top of the screen. After a couple of seconds the roll accelerates to a faster speed which is maintained until the roll slows down to a final stop at the end.

---

## **How the first roll was composed**

**Step One.** The Page was cleared, the founts and colours were chosen and added to the fount and colour palettes, as necessary.

**Step Two.** The opening caption (yellow) was entered in the usual way.

**Step Three.** The Dynamic Page menu was selected from the 'Dynamics' menu and the [SELECT] key was operated until the word 'Roll' appeared in the box headed 'Page Type', see figure 3.20. Next, the [ACCEPT] key was operated to display the Roll Setup Menu, as shown in figure 3.21.

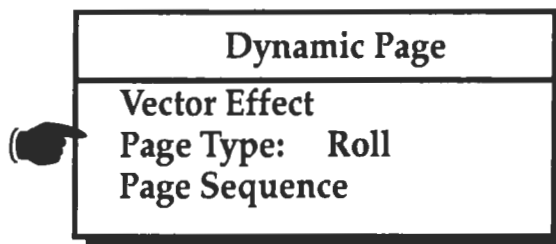


Figure 3.20. The Dynamic Page menu

Roll Setup			
Direction	:	Forward	
Start Speed	:	1.2	Lines/field
Timed Roll	:	0.0	Seconds
Pause Type	:	User Start	
Pause Delay	:	0.0	

Figure 3.21. The Roll Setup menu

**Step Four.** The Roll Setup menu was filled in by highlighting each row in turn and entering the following:-

*Direction:* The [SELECT] key was operated until the word 'Forward' appeared.

*Start speed:* A speed of 1.2 lines per field was entered in the box.

*Timed roll:* This was left at zero.

*Pause type:* The [SELECT] key was operated until the words 'User Start' appeared in the box.

*Pause delay:* This was left at zero because we wanted to start the roll manually.

Finally, the [ACCEPT] key was operated. This placed the character generator in its Roll Edit mode and, at the same time, a 'Top of the Roll' marker, (see figure 3.22), was inserted in the top left hand corner of the screen.

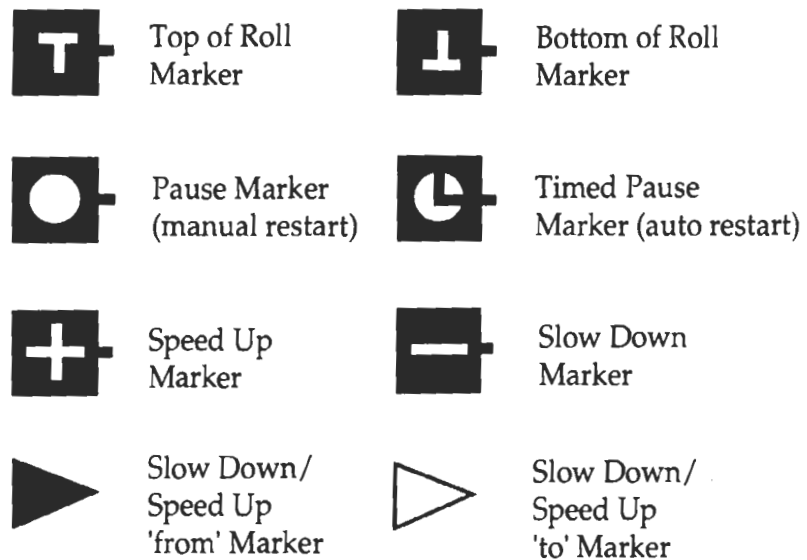


Figure 3.22. The Roll Markers

**Step Five.** The cursor was moved down from the top left hand corner, by one complete page, by operating the [SHIFT] key with the Cursor Down key. This positioned the cursor on the row that would ensure that the next block of text, coloured grey, would appear at the bottom of the screen as soon as the roll was started.

After we had typed in the grey block of text, we operated the [RETURN] key ten times before typing in the next block of text (white).

**Step Six.** After we had entered all the blocks of text, we operated the cursor up and down keys until the last line of the roll was roughly in the middle of the screen, i.e. where we wanted it to be when the roll came to a stop. We then held down the [SHIFT] key and operated the cursor home key.

**Step Seven.** We displayed the Edit Setup menu and selected 'Edit Markers'. This displayed the Marker menu, as shown in figure 3.23. We highlighted the row headed 'Marker Type' and

Marker	
Marker Type:	Bottom
Edit Marker	
Delete Marker	
Accept:	Inserts marker or modifies Current marker

**Figure 3.23.** The Marker menu

operated the [SELECT] key until the word 'Bottom' appeared in the box. We then operated the [ACCEPT] key. This placed the Bottom marker next to the cursor. We now had a Top marker at the start of the roll and a Bottom marker at the end.

**Step Eight.** An empty page was selected (not displayed) and the roll was stored.

**Step Nine.** The roll page was run a couple of times to check it. At this stage, the roll contained no acceleration, deceleration, speed change or pauses.

**Step Ten.** Acceleration and deceleration information, Pause Markers and speed change markers, were next added as follows:-

The Cursor was moved up to the beginning of the roll. Then, using the Trackerball, the arrow cursor was positioned over the 'Top of the Roll' marker and selected by operating the [SELECT] key. We then displayed the Top Marker Setup menu by operating the [CONTROL] key with the [E] key three times and entered an acceleration distance of 80 TV lines.

We operated the [ACCEPT] key twice to display the Marker menu shown in figure 3.23 and to add the acceleration rate of 80 TV lines to the 'Top of the Roll' marker.

**Step Eleven.** We moved the cursor down until the white block of text was roughly in the middle of the screen and then operated the [SHIFT] key with the Cursor Home key to position the cursor in the top left hand corner of the screen. The Marker menu was selected, the row headed 'Marker Type' was highlighted and the [SELECT] key was operated until the word 'Pause' appeared in the box.

The row headed 'Edit Marker' was highlighted next and selected to display the Pause Marker Setup menu as shown in figure 3.24. The Pause Setup menu was filled in as follows:-

*Lines to slow down:* 150 was entered.

*Pause Type:* The [SELECT] key was operated until the word 'User Start' appeared in the box.

*Pause Delay:* zero seconds was entered.

*Lines to speed up:* 160 was entered.

*Speed:* 0.7 was entered as we wanted to decrease the speed slightly.

After the Pause Marker menu had been filled in, the [ACCEPT] key was operated twice to redisplay the Marker menu and to insert the Pause Marker.

**Step Twelve.** Finally, using the techniques described in Step Ten, the two Speed Change markers were added and the Roll was stored.

Pause Marker Setup			
Lines to slow down	:	150	lines
Pause type	:	User Start	
Pause Delay	:	0.0	Seconds
Lines to speed up	:	160	lines
Speed	:	0.7	lines/field

Figure 3.24. The Pause Marker Setup menu

---

## The second roll example

The second roll example on page 4 in TEACH FILE 2 is fairly straightforward and can be used to try out some of the other roll functions that are available, such as Timed Roll and Reverse Roll. If you want to modify the roll examples, may we suggest you make a copy of them first and modify the copies rather than the originals. You can copy a roll by displaying it first and then storing in an empty page.

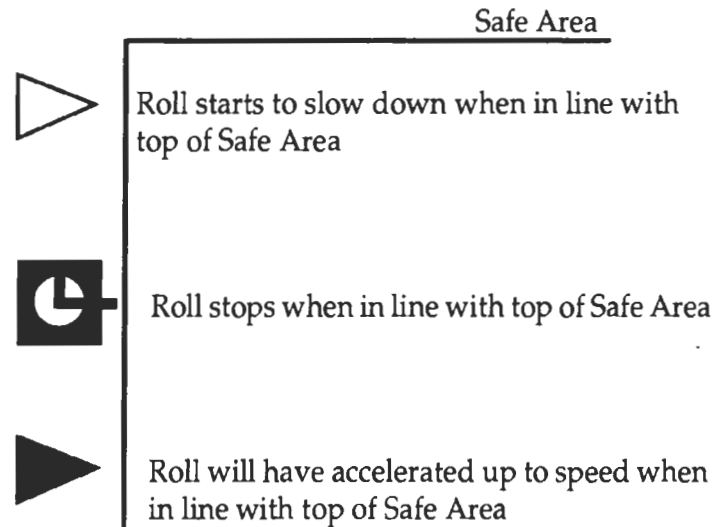


Figure 3.25. Accelerate, Pause and Decelerate Markers

---

## Modifying a Roll

Before a roll can be modified, the roll edit mode must be selected using either one of the following two methods:-

---

### Selecting the Roll Edit mode

Method 1. Wait until the roll finishes and then operate the cursor up key.

Method 2. When the roll is running, operate the [SPEED] key with the zero key in the numeric keypad.



After you've modified your roll, remember to resave it otherwise all your changes will be lost.

---

## Modifying the Top Marker

The Top of the Roll marker determines the start speed of the roll, its rate of acceleration and how the roll starts. A roll can start automatically, either the instant it is recalled from disk or after a number of seconds, or when the [START/STOP] key is operated.

Unlike the other markers, you don't have to select the Top of the Roll marker with the Arrow Cursor before making changes to it. All you do is select 'Page type: Roll' from the 'Dynamics' menu and operate the [ACCEPT] key to display the Roll Setup menu, then operate the [ACCEPT] key again.

You can now change the acceleration rate of the Top of the Roll marker. First display the Marker menu (Control + EE), highlight the row headed 'Marker Type' and operate the [SELECT] key until the word 'Top' appears in the box. Then point and select 'Edit Marker' to display the Top Marker Setup menu. Enter the number of TV lines over which you want the roll to accelerate. Finally, operate the [ACCEPT] key twice.

All other markers have to be selected first before they can be modified, as follows. Place the arrow cursor over the marker, operate the [SELECT] key and then operate the [CONTROL] key with the [E] key twice. This will display the appropriate Marker menu.

---

## Moving a Marker

Before a marker can be moved it must be selected and then deleted using the 'Delete Marker' function in the Marker menu, see figure 3.23.

After the marker has been deleted, operate the [ACCEPT] key to remove the 'Edit' menu. Using the Trackerball, position the Arrow Cursor where you want the marker to be moved to, and operate the [SELECT] key. Display the Marker menu (Ctrl E + E) and press [ACCEPT] to insert the Marker.

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## Page Scrolling

When editing a Roll, you can move up or down one complete page by holding down the [SHIFT] key when operating the Cursor up and down keys.

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## Timed Roll

After a roll has been composed and stored it can be instructed to start and end within a specified time. This is done via the Roll Setup menu as follows. Whilst in the Roll Edit mode, select 'Page type: Roll' from the 'Dynamics' menu and operate the [ACCEPT] key.

This will display the Roll Setup menu as shown in figure 3.21. Highlight the row headed 'Timed Roll' and enter the number of seconds you want between the start and end of the roll. Operate the [ACCEPT] key and resave the page.

From now on the roll will run at a speed which ensures that the bottom marker will arrive at the top of the Safe Area at the end of the time specified.



Use the Timed Roll facility with caution. Always try your 'Timed' roll out before committing it to 'air'. If the time selected is too short for the length of the roll then the roll will 'stutter', particularly when large full colour logos are included.

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## Reverse Roll

Normally a roll runs up the screen (forward), rather than down. However, any roll can be made to roll down the screen as follows. Whilst in the Roll Edit mode, select 'Page type: Roll' from the 'Dynamics' menu and operate the [ACCEPT] key.

This will display the Roll Setup menu. Highlight the row headed 'Direction' and operate the [SELECT] key until the word 'Reverse' appears in the box. Operate the [ACCEPT] key and resave the page.

From now on the roll will run from top to bottom, starting with the end of the roll.

This function can be selected before the roll is created.

## Speed change

Whilst a roll is running its speed can be changed directly from the keyboard. You have two choices. The first allows you to half, quarter, double or quadruple the speed. The second allows you to slowly accelerate or decelerate the roll. In other words one provides a sudden change of speed and the other a smooth transition.

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### Instant speed change

To half, quarter, double or quadruple the speed of a running roll, press and hold down the [SPEED] key and operate the following number keys in the numerical keypad-

- [1] = Quarter speed
- [2] = Half speed
- [3] = Double speed
- [4] = Quadruple speed



If you keep operating the number [1] key or hold the minus key down for too long the roll will eventually stop and the message 'WAITING FOR START' will appear. When this happens, press and hold down the [SPEED] key and operate the number [4] key, release and then operate the [START/STOP] key. This will restart the Roll, albeit at a very slow speed.

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### Smooth speed change

To slow down or speed up a running roll smoothly, press and hold down the [SPEED] key with the '+' or '-' key in the numerical keypad. As soon as you release the keys the roll will stop slowing down or speeding up and will continue at a steady speed.



If you select 'Speed Zero' whilst the roll is running, the roll will stop and go into its 'Roll Edit' mode. It is therefore important to avoid pressing the zero key when changing speed.

## Crawl Captions

The facts we listed about Roll on page 3.35 apply equally to Crawl. The markers used and the way in which they are entered are the same, the only real difference being that Crawl markers are entered along the top of the Safe Area, rather than up the left hand side.

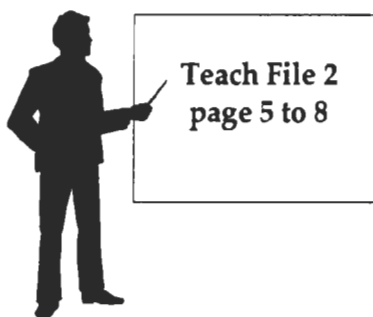
### Learn by example

You will find two examples of Crawl in Teach File 2 on pages 6 and 7. This is how we composed the crawl in page 6.

### How the first crawl example was composed

**Step One.** The page was 'cleared' and the opening caption was entered in the usual way (Static Edit mode).

**Step Two.** The Dynamic Page menu, see figure 3.20, was displayed (Control + D) and the [SELECT] key was operated until the word 'Crawl' appeared in the box headed 'Page Type'. Next, the [ACCEPT] key was operated to display the Crawl Setup menu, see figure 3.26 below.



Crawl Setup		
Direction	:	Forward
Start Speed	:	2.0 pixels/field
Timed Crawl	:	0.0 Seconds
Pause Type	:	User Start
Pause Delay	:	0.0

Figure 3.26. The Crawl Setup menu

**Step Three.** The Crawl Setup menu was filled in by highlighting each row in turn and entering the following:-

*Direction:* The [SELECT] key was operated until the word 'Forward' appeared in the box.

*Start Speed:* A speed of 2 pixels per field was entered in the box.

*Timed Crawl:* This was left at zero.

*Pause Type:* The [SELECT] key was operated until the words 'User Start' appeared in the box.

*Pause Delay:* This was left at zero because we wanted the crawl to start the instant the [START/STOP] key is operated.

Finally the [ACCEPT] key was operated. This placed the character generator in its Crawl Edit mode and, at the same time, the 'Left Hand' marker was inserted in the top left hand corner of the screen. See figure 3.27 below.

**Step Five.** The cursor was moved to the right in order to shift the opening caption left. When most of the opening caption had moved off the left hand side of the screen we started typing. As each character was entered, the text to the left of the cursor moved to the left. Different text rows were set up by simply moving the cursor up or down the screen and continuing to type. Different fonts were selected and new ones processed, including the three MOTIF logos, whilst in the Crawl Edit mode.

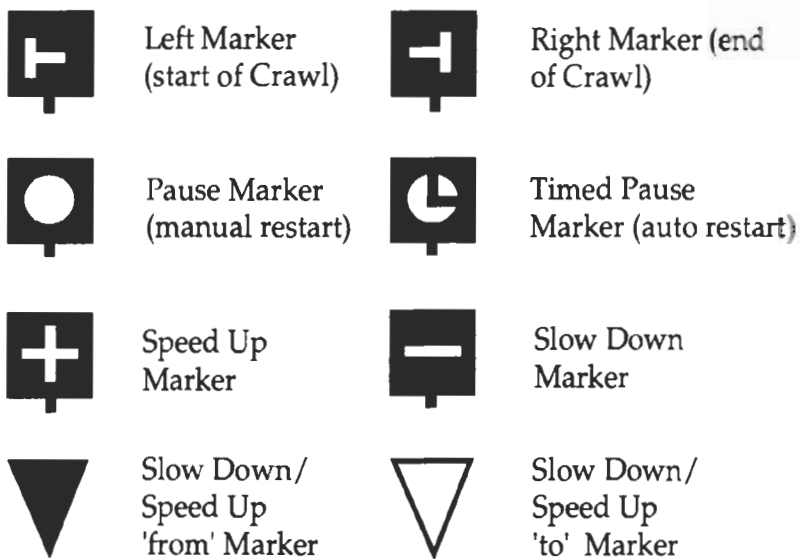


Figure 3.27. The Crawl Markers