

IMPRESSION III



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About this manual

This manual describes the installation and use of the Impression software package. It is divided into the following sections:

1. Introduction

Basic information about Impression.

2. Installation

How to install the software and configure your system for best performance.

3. Using dialogue boxes

A brief description of how the dialogue boxes are used.

4. Building blocks

Explaining the various building blocks used in documents.

5. Using Impression

A summary of the features available in Impression. This is the section to read if you are not sure which command to use.

6. Commands and menus

This is the section to read if you want details of a specific command.

7. Tutorial

A simple to follow guide to producing several different types of document.

8. Advanced features

How to use the more advanced features and how to personalise Impression.

9. Disc 2 utilities

Describing the utilities supplied with the Impression package.

10. Appendices

1. A glossary of Impression jargon and typesetting terminology.
2. Keyboard short-cuts - a list of the commands that can be typed in.
3. Recommended equipment - our suggestions on useful hardware.
4. Hints and tips - things that we've found useful when using Impression.
5. Character set - the entire character set illustrated.
6. Greek - the Greek font illustrated.
7. Dingbats font - this font illustrated.
8. Qume CrystalPrint Printer - how to use this type of printer with Impression.
9. Clip Art samples - those supplied on disc 3.

Typographic conventions

This section describes the conventions used in this manual.

Menu options

Where you can choose an option from a menu, the name of the option is shown in **bold**: e.g. **Save document**.

Dialogue box switches

These are also shown in **bold**: e.g. **OK**.

Keyboard characters

Where you use the keyboard for control, the name of the key is shown in *italics*.

Return means the key marked 'Return'

Space means the Space bar

F1 to *F12* means the function keys along the top of the keyboard

Ctrl-A means hold down the *Ctrl* key and then press *A* or *a*

Shift-A means hold down the *Shift* key and then press *A* or *a*

Mouse buttons

We use the Acorn convention for the three mouse buttons:

the left-hand button is called **Select**,

the centre button is called **Menu**,

the right-hand button is called **Adjust**.

Where we say click on something and don't specify a mouse button, use **Select**.

Archimedes and A3000

When we talk of the Archimedes we also mean the BBC A3000.

1. Introduction

Where word-processing and desktop publishing meet

The microcomputer has brought the way we record our thoughts and ideas on paper firmly into the modern-day domain of wordprocessors and, more recently, desktop publishing (DTP) systems.

A desktop micro running a word-processing program, in conjunction with a suitable printer, is nothing more than a computerised typewriter. A DTP package, on the other hand, takes the textual output of a word processor and lets you arrange it on a page virtually as you wish, complemented by illustrations made from scanned images, diagrams, etc., with the facility to re-size everything, including pictures, in order to fit the page precisely.

Then, with the aid of the latest hardcopy technology, your work can be reproduced, as you see it on screen, using dot-matrix printers, laser printers, or even professional type-setting machines.

Now, using the sheer power that the Acorn Archimedes has brought to personal computing, the concepts of word processor and DTP have been completely and successfully married to produce *Impression*.

As an example, this manual was written and laid out entirely using *Impression* on an Archimedes. It was printed out on a Computer Concepts' LaserDirect printer, and photographically reduced for printing.

A complete document processor

Impression is a powerful word processor and a fully featured, extremely fast, DTP package - a comprehensive *document processor*.

With *Impression* you can write letters, booklets, business reports, design advertising copy and posters. Pages can be laid out precisely on screen whilst retaining all the advantages of a true word processor, such as text editing with crisp cursor responses and spell-checking as you type, word counting, search and replace, cut and paste, and more.

Text, graphic images (sprites), and draw files can all be imported into *Impression* documents, and the Archimedes windowing system is exploited to the full.

Impression is entirely written in hand-optimised ARM (Acorn RISC Machine) code, which means it can update the screen extremely fast. It is possible to zoom in or out to any scale from 1 to 975 percent, either to magnify a portion of your document for detailed study, or to zoom out for a stepped back view of one, two, or many more pages on screen at once.

Impression uses the RISC OS outline fonts to ensure that the representation of the page on the screen is as accurate as possible. Even large characters are shown smoothly, and smaller text is displayed using *anti-aliasing*, a technique intended to make small text more readable by 'smudging' the edges.

And of course everything you see on the screen will be a true representation of what is printed out; in other words, true What You See Is What You Get (WYSIWYG).

Desktop publishing is a very wide-ranging discipline. Whilst Impression gives you all the tools necessary to produce remarkable documents, making the fullest use of the technology requires a certain amount of experience. You will probably find it useful to read one of the many books available on the subject. If you are fairly new to DTP, we recommend the book '*DTP at a glance...*' which is supplied with this package.

Help desk

We hope that you have no difficulties using Impression. However, if you do and you cannot find the answer in this manual, we operate a technical help-desk. It is available Monday to Friday, between 1.30 p.m. and 4.30 p.m. on 0442 63933. You will be asked for the serial number at the top of your registration card so remember to keep a note of it. You will also be asked for the version number of your Impression software. To find this, refer to the section of this manual describing the **Info** box in the **Program Menu**.

This service is only available to you if you have returned the registration card.

Be prepared to give as much information as possible as to what the problem is and when it occurred. With a complex program like Impression there are usually several different ways to perform an operation. The more information you can give us, the easier will be our job of helping you.

2. Installation

Important: Please check in any addenda supplied with this software for possible changes to the installation procedure.

About RISC OS

This manual assumes you are familiar with the use of the standard RISC OS applications.

If you do not know how to use floppy discs in the Archimedes, then you should read the *Welcome guide* that comes with your machine. It explains how to find your way around the Archimedes.

The discs

The Impression package has the following discs:

Disc 1: *!Impress* – the Impression application program

Pdrivers – printer drivers for:

- *!PrinterDM* – dot matrix printers such as Epson FX/LQ,
- *!PrinterIx* – Integrex colour printer,
- *!PrinterLJ* – Hewlett-Packard LaserJet, and
- *!PrinterPS* – PostScript compatible laser printers.

Disc 2: Some example documents and these utility programs:

!Chars - to display the characters in a font.

!FontDraw - to produce a draw file from a text string.

!NewModes - extra screen modes better suited to Impression.

!SuperMono - enhanced grey scales on monochrome monitors.

Disc 3: Some example line-art files and scanned images.

Illustrations of these can be found in the appendices.

Disc 4: *!Fonts* – the outline fonts.

Disc 5: Some more draw files and demonstration documents, and

Extensions – modules to convert the input or output format

The discs are unprotected, so you can make backup copies, or copy the files onto a hard disc. In fact, we recommend you make backups of all files and put the originals in a safe place.

To guard against accidental deletion of the software, these discs are normally shipped write-protected but occasionally a disc slips through with the tab in the wrong position. Please make sure that the write-protect tab is in the **protected** position before using the discs.

The Hardware Key (dongle)

The hardware key supplied in this package must be plugged into the parallel printer port at the rear of your machine. The key can be screwed in to prevent it being accidentally knocked out. If you already have a printer attached to this port, it will plug into the back of the key. The key has no effect whatsoever on the operation of the printer, or the operation of any other program. Only Impression needs to have the key plugged in before it will work.

When you run Impression, an Alert box will tell you if the hardware key is not properly fitted.

The !Fonts directory



The *!Fonts* directory contains the outline font descriptions used by RISC OS to display different styles and sizes of text on the screen and on the printer. Disc 4 contains a new *!Fonts* directory which should supersede all other *!Fonts* directories you have.

Installing Impression



The exact sequence of installation depends upon the type of disc(s) you have on your system.

Floppy-disc systems (one or two drives)

We recommend that you generate two discs:

1. A **program** disc containing:
 - *!Impress* from Impression disc 1,
 - *!System* from the RISC OS disc, and
 - a printer driver suitable for your printer. The printer drivers are supplied on Impression disc 1.

The **program** disc is only required to start-up Impression. We would suggest making this disc write-protected for safety.

2. A **documents** disc containing:
 - *!Fonts* from Impression disc 4, and
 - any documents you are working on.

This disc will be your working disc when you are using Impression.

As you create more documents you will fill up the **documents** disc. You can then generate another **documents** disc by copying

!Fonts onto a blank disc and then using that as your working disc.

Hard Disc systems

Install as follows:

1. Copy *!Fonts* (supplied on disc 4) into the root (top-level) directory. This allows all applications to use the fonts.
2. Similarly, copy *!System* (supplied with RISC OS) into the root directory if this has not already been done.
3. Create a new directory. Copy *!Impress* into it. As you produce documents, they can also be stored in this directory.
4. Also copy into this directory any applicable printer drivers. The printer drivers are supplied on disc 1.

Solid Scroll

One of the programs provided with the RISC OS operating system (*!Configure*) has a feature that controls whether windows have a *solid scroll* (also called *instant effect*) or not. This can make a considerable difference to the usefulness of a windowing system.

If the *!Configure* program is run and its icon clicked on to open its control window, the last option is named **Instant effect window drags**. When this option is selected, dragging the scroll bars of a window causes the contents of the window to move instantly with the scroll bar. If the instant effect option is turned off, then (like other computers) the window contents will only scroll when you have finished dragging the scroll bar.

Instant effect window drag results in a far more responsive and a more interactive system, especially with programs like *Impression* where it is often necessary to locate portions of a document quickly.

Configuring the font cache

You will probably use several sizes and styles of text in your documents and it is important to allow sufficient space for the font cache. Failure to do this will result in slow screen updates as the fonts are read off disc into the cache. There are three parameters that can be changed:

- **FONTSIZE** - the starting size of the cache. This amount of memory is permanently allocated to the cache.
- **FONTMAX** - the cache grows in size as more fonts are cached. This parameter defines the maximum size to which the cache may grow. It prevents the cache grabbing

excessive amounts of memory. You can think of `FONTSIZE` and `FONTMAX` as being the low and high watermarks of the font cache.

- `FONTMAX3` - the maximum size of text that will be cached. In most documents, very large characters are only rarely used and storing them in the cache wastes memory.

Before changing any of these parameters, load the new font manager by double-clicking on the *!Fonts* icon. After making any changes using the command line, reset your Archimedes by pressing *Ctrl-Break*; this will put the changes into effect.

FONTSIZE

For average documents a cache of 80Kb is sufficient. Never set it to less than 8Kb and a minimum of at least 48Kb is recommended. `FONTSIZE` can be changed either via the command line mode or, more conveniently, via the RISC OS task manager. Using the task manager only changes the value temporarily – when you switch off your Archimedes, any change to `FONTSIZE` is lost.

To enter a new value using the command line, press function key 12. Type in:

```
*CONFIGURE FONTSIZE 128K
```

Press *Return* to enter the new value. Press *Return* a second time to return to the normal desktop mode.

To enter a new value via the RISC OS task manager:

1. Click on the task manager's icon (which is usually the right-most icon).
2. Choose **Task display**.
3. Scroll down until you can see **Font cache** (it is in the block headed **System memory allocation**).
4. Use **Select** or **Adjust** to set the required value for the cache. The cache instantly adjusts to the new value; there is no OK button to click on.
5. When satisfied, click on the Close icon to close the task manager's window.

FONTMAX

A recommended minimum value is 128Kb. Larger values are acceptable and can be used without problems on 2Mb and 4Mb machines. `FONTMAX` declares a maximum value - the font cache will only grow to that value if it needs to - so a larger value carries no inherent penalties.

The value can only be changed by using the command line. Press function key 12. Type in (assuming the required value is 200Kb):

```
*CONFIGURE FONTMAX 200K
```

Press *Return* to enter the new value. Press *Return* a second time to return to the normal desktop mode.

FONTMAX3

For a 1Mb or 2Mb machine a value of 30 pixels is recommended; for 4Mb machines a larger value can be used.

The value can only be changed by using the command line. Press function key 12. Type in:

```
*CONFIGURE FONTMAX3 30
```

Press *Return* to enter the new value. Press *Return* a second time to return to the normal desktop mode.

Maximising available memory

Under RISC OS it is recommended that no memory is allocated to the System Sprite area and the minimum possible to the Module area (RMA). These areas can be temporarily altered using the **Task Manager** (described under FONTSIZE) or more permanently altered using the command line. For example, pressing function key 12 and entering the following star commands;

```
*CONFIGURE SPRITESIZE 0K
*CONFIGURE RMA SIZE 32K
*CONFIGURE SYSTEMSIZE 16K
```

and then resetting the machine, should permanently provide a large amount of memory for use by Impression.

More advice about memory management when running Impression can be found in the appendix *Hints and tips*.

Screen modes

Selecting an appropriate screen mode can greatly improve the readability of the page on screen. Some modes cannot display a full width A4 page at 100% scaling (full size). Supplied on disc 2 is a module called *!NewModes* which provides extra screen modes. We suggest that you try different modes to find those most suitable for your monitor. If you have a 1Mb machine, you should avoid those modes which require large amounts of memory.

Hints & Tips

We recommend reading the Impression document on disc 2 called *!Hints*. This has answers to many of the commonly asked questions about using Impression.

3. Using Dialogue Boxes

Dialogue boxes are the most important way in which you communicate with Impression. Nearly every important function, apart from entering text, is carried out through the use of a dialogue box. The dialogue boxes in Impression have all been designed to look and act in the same way so that they never do anything unexpected.

While we have tried to make our dialogue boxes look distinctive, they broadly follow the Acorn conventions. If you have never used dialogue boxes before, the following descriptions should help you to understand how they work. If you are familiar with dialogue boxes you can probably skip the rest of this chapter, since Impression dialogue boxes will hold no great surprises for you.

Every box that you click on or type into in a dialogue sets up a new value or does something inside the program. You can tell roughly what is going to be done by the shape and colour of the box you are clicking or typing into. You can also tell what the current setting of a value is by the shape, colour and text of the boxes.

Switches

Switches are small squares with text immediately to the right or left of them. Switches only have two positions - clicking on the switch or the text beside it will flip the switch from on to off or vice versa.



- When a switch is on, it is drawn as a dark grey square with a red square in the middle and looks as if it is pushed into the dialogue box. In this state it means that the value named by the text of the switch is **on** or **set** or **true**.



- When a switch is off, it is simply a light grey square which looks as if it is raised up from the dialogue box. In this state the value is **off** or **unset** or **false**.

Radio Switches

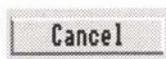
Radio switches are small diamonds, once again with text immediately to the right or left of them. Radio switches are always shown in groups of two or more and only one switch in the group can ever be on. They are used to set one value from a small range of possible values. The radio switch which is **on** shows which of the values is selected



- When a radio switch is **on** it is drawn as a dark grey diamond with a red diamond in the middle and looks as if it is pushed into the dialogue box.
- When a radio switch is **off** it is just a light grey diamond which looks as if it is raised up from the dialogue box.

Action Buttons

Action buttons do not set values. They are drawn as if they are raised up from the dialogue box and the text inside them describes what will happen when they are clicked.

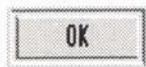


- Most have a **Cancel** action button. When you click on this button any changes that you have made by clicking or typing in the dialogue box will be cancelled - all the values shown by the dialogue box will revert to what they were before the dialogue box appeared on screen.

The Default Action Button

The default action button can be clicked like any other action button. The difference between this and other action buttons is that it also responds to the *Return* key being pressed. When the dialogue box has the text cursor in one of its editable fields and the *Return* key is pressed, the dialogue box acts as if the default action button had been clicked.

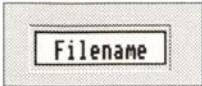
There can only be one default action button in a dialogue box and it is drawn much like other action buttons but with a yellow 'moat' around it.



- Most dialogue boxes have a default action button and it is usually named **OK**. Clicking the **OK** button (or pressing *Return*) means that you want to use the changes that you have made in the dialogue box.

Editable fields

Editable fields are white rectangles with black borders which look as if they are indented into the dialogue box. A textual value is shown inside the white rectangle and this can usually be altered by typing in a new value. The text cursor must be in the editable field that you wish to alter before any changes can be made.


 Filename

The text cursor can be put into an editable field in one of two ways. The simplest method is to click on it. Any subsequent typing will appear in the editable field where the text cursor is and the text cursor will move along with them.

It is usually necessary to delete the old value before typing in the new one and this can be done by pressing the right arrow key to move to the right hand end of the text and then pressing the *Delete* or *Backspace* keys a few times until the text has been cleared. An easier way to delete the text from an editable field is to press *Ctrl-U*. (*Ctrl-U* means hold down the *Ctrl* key and press *U* or *u*.)

The other way of getting the text cursor into an editable field is to use the keyboard. There are some keys on the keyboard which will move the text cursor around between the editable fields in a dialogue box. They are

<i>Cursor Down</i>	Move on to next field
<i>Cursor Up</i>	Move back to previous field
<i>Tab</i>	Move on to next field
<i>Shift Tab</i>	Move back to previous field
<i>Ctrl Cursor Down</i>	Move to first field
<i>Ctrl Cursor Up</i>	Move to last field

The 'next' field is usually below or to the right of the current field.

The 'previous' field is usually above or to the left of the current field.

The 'first' field is usually the one nearest the top of the dialogue box.

The 'last' field is usually the one nearest the bottom of the dialogue box.

If the text cursor is in the last field and you try to go to the next one it will go to the first field. Similarly, if the text cursor is in the first field and you try to move to the previous one the text cursor will be placed in the last one.

Note that these keys only work if the text cursor is already in an editable field in the dialogue box.

- Pressing the *Return* key when the text cursor is in an editable field does not move it on to the next one as it does in most Acorn dialogue boxes. Instead, it always selects the default action button.

Bump icons



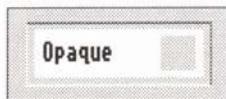
These can point either up & down or left & right. Clicking on the arrows increases or decreases the value in the adjacent editable box. Usually each click changes the value by 1.

Page units and style units

These are also called **Measurement units**. Editable fields which display measurements will display them in default units. Measurements relating to the position on that page are usually given in millimetres, and those relating to styles, such as font size, are given in points. These default units can be changed using the **Preferences** dialogue box but, regardless of the units displayed, numbers can be entered in any unit recognised by Impression. If you type the number followed by the abbreviation for the unit, Impression will convert into its internal units. The units recognised by Impression are:

in	inches
ft	feet
yd	yards
pt	points (1/72 inch)
pi	pica (1/6 inch)
mm	millimetres
cm	centimetres
m	metres

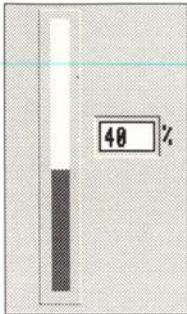
Colour Fields



Colour fields let you enter colour values and look a lot like editable fields - they are inset into the dialogue box and have black text on a white background but they also have a coloured spot to the right of the text. The colour of the spot is the closest screen colour to the actual colour defined and the shape of the spot describes which colour model was used to define it. For more information on colours see the *Colour Editor* in *Using Impression*.

- To alter the colour shown by a colour field just click in it and the Colour Editor dialogue box will appear.

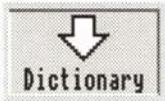
Sliders



Sliders are used as a quick way to enter numbers and they also show the number graphically. Sliders are drawn as a thin coloured bar on a white background which is raised up from the dialogue box. At either end of a slider there is some text which tells you the range of numbers which the slider represents. Quite often there will also be an editable field close to the slider which gives the actual number the slider is showing graphically.

- To alter the value of a slider click on it and keep the mouse button pressed. Then move the mouse pointer along the slider and the coloured bar will follow the pointer. When you let go of the mouse button the slider will set the value according to the last position of the mouse pointer.

Load Targets

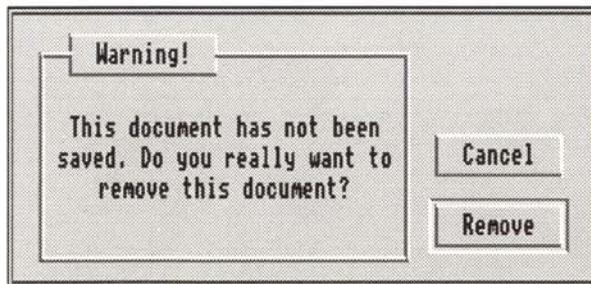


Load targets are visual reminders that something can be loaded into Impression by dropping a file icon into a dialogue box. They are drawn as large downward pointing arrows above the name of the type of object which can be loaded.

- To use a load target you should drag the file icon of the file you want to load from one of the directory windows onto the load target. If you click on a load target a small dialogue box will appear to remind you how to use that load target.

Alert Boxes

Alert boxes are a special type of dialogue box. They are used to tell you something important or to ask a question which must be answered before the program can continue.



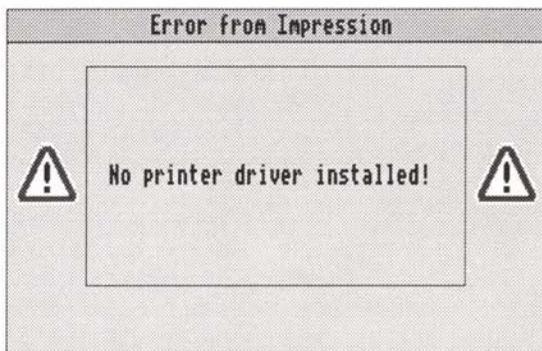
An alert box is a small window with no title bar or close box and appears in the centre of the screen. It has some text in a box on the left and up to three action buttons on the right. The text explains what the problem is and what you can do to deal with

it. The buttons allow you to choose one option to deal with the problem.

When an alert box is on the screen you will not be able to move the mouse pointer beyond the box and you will not be able to type characters into any other window or dialogue box on the screen. This ensures that you respond to the alert immediately.

Report Boxes

Report boxes are similar to alert boxes but they usually report much more serious problems. Report boxes look different because they are not drawn by Impression but by RISC OS. They are large windows with text in the centre, two exclamation marks on either side and buttons at the bottom.



- Report boxes often appear when there has been an error inside Impression. **It is strongly recommended that whenever you see a report box you save your documents immediately afterwards!**

4. The Building Blocks

Here we look at the fundamental building blocks that form all Impression documents.

Cursors and pointers

Two vertical bar-cursors will be visible in the window:

- the blinking *text cursor* (or '*caret*') which responds to normal cursor control such as arrow-keys, *Return*, etc.
- the *mouse pointer* which is controlled by the mouse.

Impression tries to keep the area of text immediately around the text cursor position constantly visible in the editing window. Even if you scroll the cursor out of the window, typing will cause the window to display the area around the cursor. If you use the arrow keys to move the text cursor up or down your document, the window will scroll automatically to keep the cursor in sight.

Automatic pointer modes

The shape of the mouse pointer changes according to which area of the document it is over:

- 
 • when over a text frame or an editable field in a dialogue box, it becomes a vertical text cursor,
- 
 • when over a master page frame (except a *null* frame), it becomes a page shape. This shows that you cannot type into these frames,
- 
 • when over the handle or the edge of a frame, it changes to an eight-pointed 'snowflake' showing that the handle or frame can be moved,
- 
 • when over an unused part of the document, it changes to a hand, showing that the document can be dragged,
- 
 • where clicking on a mouse button will display a menu, it changes to a menu shape,
- in other positions, it is the usual arrow shape.

We say the mouse pointer is *context sensitive*. (*Frames, master pages and handles* are described later)

A page

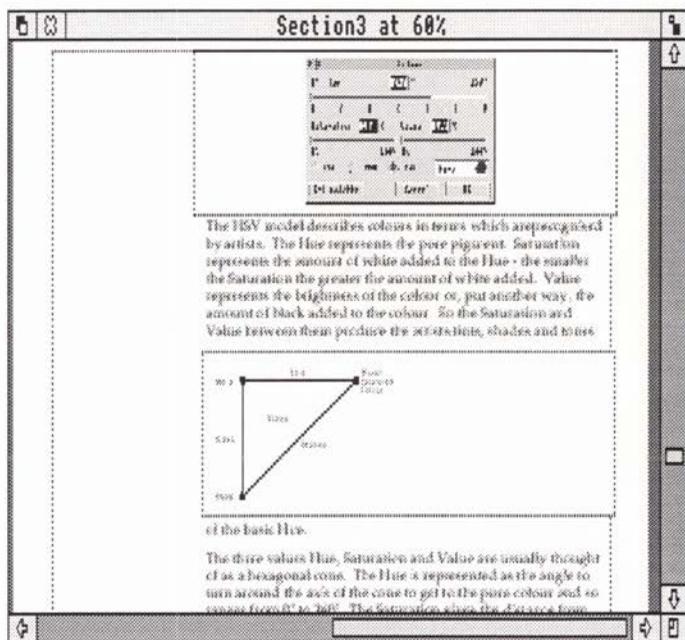
As its name implies, a page is the representation of the sheet of paper upon which a document is laid out - an A4 sheet for example. A document consists of a sequence of pages containing text and possibly pictures (which we call graphics). We refer to these pages as *normal pages*.

There are also *Master pages* (described later) which control the overall appearance of your document.

Frames

Impression is frame based. Everything in a document is contained within frames and any editing action occurs within a frame.

A frame is a rectangular box which contains either text or a graphic. You cannot mix text and graphics inside a single frame, but by overlaying text and graphic frames you can produce a page that appears to freely mix text with graphics.



Example text and graphic frames

A frame cannot be larger than the page it exists on nor can it extend onto another page. Within these limits, you can create, move and adjust frames as you wish.

There are four types of frame:

- null
- text
- graphic

- guide,
- and they can be used as
- master page frames
 - local frames
 - repeating frames.

You create a frame either as a **null** frame or as a **guide** frame.

Null frames

If you type or drop text into a null frame, it becomes a **text** frame.

If you drop a graphic into a null frame, it becomes a **graphic** frame. A graphic can be a sprite graphic or a drawn object from Acorn's *!Draw* program.

Once a frame has become a text or graphic frame, you cannot change its type. You cannot later drop a graphic into a text frame or put text into a graphic frame.

Guide frames

These are used to position other frames and cannot themselves hold text or graphics. They are used to create magazine-type page layouts which are usually multi-column. Guide frames would then show the positions of these columns, and text and graphic frames would fit to the column outlines.

Guide frames cannot be used as repeating frames.

Master page frames

Any frame on a master page is a **master page frame**.

Local frame

A local frame appears only on a single normal page (that is, a page that is not a master page).

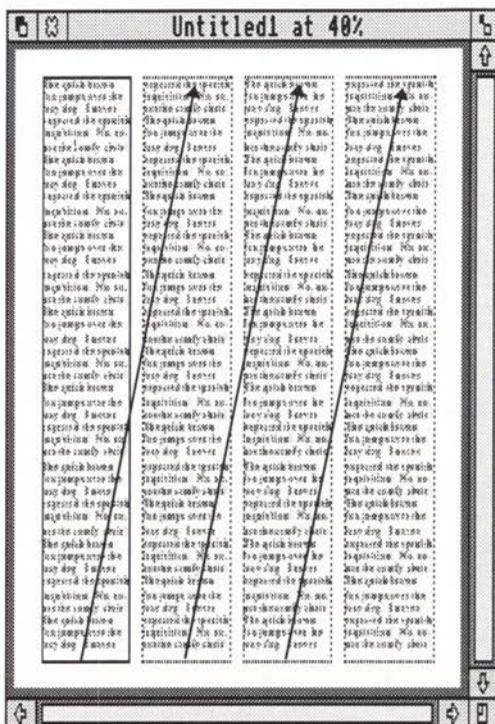
Repeating frame

You sometimes want to repeat information on several consecutive pages (like the heading to this page – 4. *Building blocks*). To do this you use a **repeating frame**.

Guide frames cannot be used as repeating frames.

Flowing text

Where you want text to flow from one frame to another, you can link those frames. The text can then flow from frame to frame and from page to page as you require.



Text story frames linked

Although a frame may appear to be empty on screen, it could be a text frame linked to others in a chain of text. (There is a menu option that shows you how frames are linked in the area of the doc currently in the window.)

Frames can be re-sized and this has the effect of either cropping or re-sizing the contained graphic, or reformatting text inside the frame.

Clicking the mouse pointer within a frame will select it, changing its outline from dotted to solid. The outline colour changes to green. Eight *frame handles* will border the selected frame if it is a local or repeating frame.

You can switch the frame outlines on or off to make frame borders visible or invisible. (The outline of the selected frame will always be visible.)

Frames can have a printable border on one or more sides. You can allocate a different border to each side of the frame (for example to create an offset or drop frame effect). There are ten predefined borders available. Other borders can be created using *!Draw* and imported into Impression.

Master pages

The fundamental layout of your document is dictated by a master page or pages. A master page acts like a template which contains a pre-selected arrangement of frames, empty or containing either text or graphics, which will be reproduced on all the actual document pages. Master pages enable the user to achieve a consistent appearance in all the pages of a given document.

A *normal page*, when created, is a copy of the current master page. The difference is that a normal page can be printed whereas a master page exists only inside Impression.

All documents must, by default, have one master page, though different chapters can use different master pages.

Logos, messages, or graphics framed in a master page will be reproduced identically on every page that uses that master page. For example, if you needed a multi-column page layout then you would choose a master page layout with text frames arranged as columns, linked so that the text story will flow from the bottom of one column frame to the top of the next.

A library of pre-set master pages is supplied with Impression, with a portrait (vertically) orientated blank A4 sheet being the default.

To alter some aspect of a page which is dictated by a master page, you must alter the master page itself, and any changes will be reflected throughout the document on all pages based on that master page. Frames that occur on the master page are referred to as *master page frames*.

Frames that you want to type or drop text into on a normal page must be *null frames* on the master page. A master page *text frame* can only be edited on the master page and cannot be changed on a normal page.

Of course, new frames containing text or graphics can be introduced into any pages throughout a document, and these may be altered at any time. These are known as *local frames*.

The story

A story can be crudely described as a piece of text within a document. It can flow from frame to frame and across page boundaries, rather like an article which wanders through a magazine.

Any modifications that you make affect only that particular story. The other stories are unchanged. They are separate entities within your document. One story cannot flow into a frame claimed by another.

Graphics cannot flow from frame to frame, but several frames can use the same graphic, so that changing the original would change any of its subsequent representations. (Using the same linked graphic in several frames also uses less memory than storing it separately each time.)

Chapters

It is sometimes useful for different sections of a document to have a different layout. Starting a new chapter within an Impression document provides this opportunity because a new master page (or any of the existing master pages) can be used.

New chapters always start at the beginning of the next available page. This is a bit like having several mini-documents inside one large master document. A preceding chapter may grow and this simply pushes the next chapter to the beginning of the next page.

Chapters also improve performance when using Impression on a 1Mb Archimedes as chapters that are not being edited can be saved away to disc, freeing memory for the current chapter.

The Clipboard

One of the most common features of a word processor is the ability to move text from one part of a document to another, and from one document to another.

Impression uses an area of memory called the *Clipboard* to transfer items from place to place. It works as follows:

- An item is selected; this could be a piece of text, or a graphics frame etc.
- That item is copied or cut to the clipboard using the Cut or

Copy menu options.

(Cut removes the item from the Document after copying it to the clipboard, Copy leaves it in place.)

- The cursor is positioned where the item is needed (in another document if necessary).
- The item is 'pasted' into the document at that point using the Paste menu option.

The *Delete* key performs the same operation as a **Cut** command and so deleting a large amount of text might fail due to lack of memory. If this should happen, **delete** the text as deletes do not save a copy.

The clipboard can only hold one item. When you put something on it, any existing contents are overwritten.

The Impression editing window

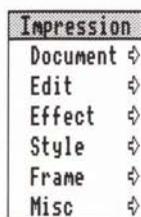
This is just like any other re-sizable RISC OS window. It has a Close icon, Back icon, Title bar, Toggle Size icon, a pair of scroll bars, and a size-adjust icon. Except for the Close icon, these all work in the same way as any other RISC OS window. (If you are unsure about their function, refer to the Archimedes *User Guide*.)

The Close icon operates differently to most other Archimedes applications. When you click on it, the document is not deleted from memory as it would be in, for example, *!Draw*. Instead the window is closed but the document is retained in memory. To reopen a window on the document or to delete the document, use the Program Menu options **New view** and **Remove document**.

Dragging the edit window

However, there is one significant difference compared with usual RISC OS windows; you can drag most of the editing window off the screen in order to have convenient and uncluttered access to any other windows on the screen. The edit window can be dragged off the bottom of the screen and also off either side, as far as the mouse pointer will allow.

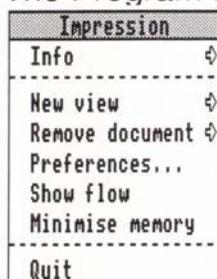
The main menu



The Main Menu controls selection of the various options for individual documents. To access it, position the mouse pointer over an Impression window and click the **Menu** mouse button.

The Main Menu is described later in this manual

The Program Menu



There is a second menu, called the Program Menu, which controls options which apply to Impression as a whole. This is the menu you use when you want to quit Impression.

To access it, position the mouse pointer over the *Impress* icon on the icon bar and click the **Menu** mouse button.

Effects

You use effects to change the appearance of text in the document. For example, you may want larger characters so you would change to a larger font-size. You may want the characters to have a different outline (typeface) so you would change the font.

Either action would apply an **effect**; a different font size is one effect, a different font is another effect. Some effects can be combined; the heading to this section ('Effects') is a combination of two effects: (1) the font Homerton.Medium and (2) a font size of 18pt.

If you are unclear about fonts, font-sizes, and justification, you will find that they are explained in the accompanying book '*DTP at a glance..*'.

Styles

A style is a collection of effects. The example we just used is of section headings, which are in 18pt Homerton Medium. Because this combination is frequently used, the two effects are grouped together in a **Style**. All Styles are named; the Style for section headings is called **Sub-Heading**. The name can show its use (Sub-Heading) or its appearance (Bold). Impression has several styles

already defined but you can modify these if required as well as create totally new styles.

Whenever a new section heading is required, the Style **Sub-Heading** can be applied to it. The section heading then appears with the required combination of effects.

The big advantage of Styles is that if you change them, all text in that Style automatically changes to match. For example, if we changed **Sub-Heading** to 24pt instead of 18pt, every section heading in this manual would automatically change to 24pt.

Rulers

Rulers allow you to set margins and tabs. A style can have a ruler associated with it; you can also create rulers which are independent of any particular style. You can also create extra rulers as you need to. If you look through this manual, you will see that we use a number of different rulers. For example, sub-headings have their own ruler which positions them to the left of the body of the text.

Similarly, sections are often indented to the right like this, to emphasise something. This requires a different set of margins and tabs to the default ruler which controls the main body of the text.

Rulers have names and it is possible to set the margins and the tabs on a particular named ruler. You can then use that ruler again and again in different places in the document. Rulers are like styles in that changing a ruler reformats all text that is controlled by that ruler. You can call the rulers any names you want that may make them easy to remember.

5. Using Impression

This chapter tells you how to load Impression and how to use the various facilities provided by it.

Where we talk of choosing items from a menu this refers to the **main menu**. To display this, position the mouse pointer over the Impression window and click on the **Menu** mouse button.

Loading Impression



This section describes loading Impression onto the icon bar from disc. You can also load Impression by double-clicking on the icon for the document (see *Opening a window*).

How you load Impression onto the icon bar depends on the discs you have on your system.

Hard disc

1. Click on the hard-disc icon on the icon bar.
2. Double-click on the icon for the directory you created for *!Impress*.
3. Double-click on the *!Impress* icon; after a few seconds, its icon will appear on the icon bar.

Twin-floppy disc system

If you have followed the installation procedure, you will have two discs:

- a **documents** disc containing *!Fonts* and your documents, and
- a **program** disc containing *!Impress*, *!System* and your printer driver.

1. Load the two discs and click on both the floppy disc icons. Windows will appear showing the contents of the two discs.
2. Double-click on the *!Impress* icon. After a few seconds the Impression icon will appear on the icon bar.

Single-floppy disc system

If you have followed the installation procedure, you will have two discs:

- a **documents** disc containing *!Fonts* and your documents, and

- a **program** disc containing *!Impress*, *!System* and your printer driver.
1. Load the **documents** disc. Click on the floppy disc icon on the icon bar. This brings up a window showing what files are on the disc.
 2. Double-click on the *!Fonts* icon. A window will appear showing the available fonts. When prompted, press the *Space* bar or click a mouse button to remove the window.
 3. Replace the **documents** disc with the **program** disc. Click on the floppy disc icon. Another window will appear showing *!Impress*, *!System* and your printer driver.
 4. If you intend to print anything, double-click on the printer driver icon. After a few seconds, its icon will appear on the icon bar.
 5. Double-click on the *!Impress* icon. After a few seconds, it will ask for the disc with *!Fonts* to be reloaded. Replace the **program** disc with the **documents** disc. The Impression icon will now appear on the icon bar.
 6. Close the directory window containing the *!Impress* icon.

Opening a window

To start a new Impression document click once on the *!Impress* icon on the icon bar. A window will appear with a blank A4-sized page; this is the default page. If you click in the blank frame and start typing, the necessary fonts are loaded from disc and then the typing appears at the start of the frame.

To edit a previously saved Impression document, either:

- Double-click on the document's icon in the directory window. (If you have not already loaded Impression, it is loaded automatically.)

or

- Drop the document's icon onto the Impression icon on the icon bar.

For either method Impression loads in the document and displays it in a window.

Both the default page size and the scaling of the default window can be altered if required. Details are given in *Customising Impression* (for the default page size) and the **Preferences** section *Program Menu* chapter (for the scaling).

Loading Impression release 1 documents

You can load documents created using the original version of Impression (release 1). An alert box tells you that they will be converted into the new format. The document is then read in and converted. When you next save the document to disc, it is saved in Impression 2 format. From then on, you can reload the document as an Impression 2 document.

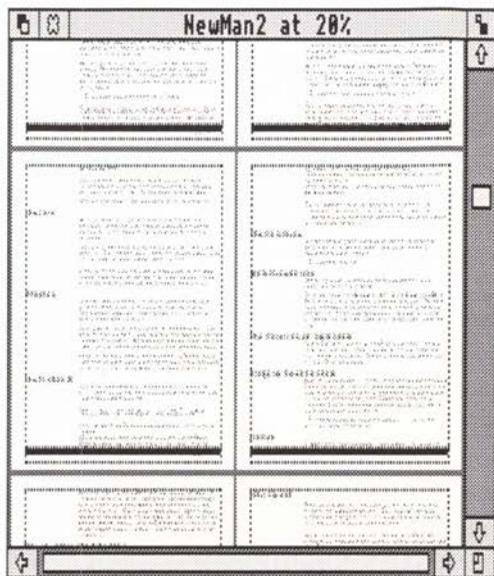
Note that you cannot then reload the document into Impression release 1 – the new format contains too many new features.

Therefore, if it is possible that you may later want to use the original version of Impression, you should archive your documents to a spare floppy disc before reading them into Impression 2 and saving them out again.

Full details of the format used to store documents (the *document description format* or *DDF*) can be found in *Advanced features*.

Working on your document

While Impression doubles as a comprehensive desktop publishing (DTP) program, its basic mode of operation has been designed to be as word processor like as possible. For example, whilst many DTP packages only allow you to work on one page at a time (with no text flow across page boundaries), Impression gives you full access to your document from top to bottom. The text cursor can be moved line by line up or down your document, across page boundaries, and the edit window behaves like a sliding window onto the document.



A window showing multiple pages

You can zoom in or out on your view of the document in the window. Your view could be of a small part of one page, or of several pages. It depends upon the size of the window and the magnification that you select. For example, in the picture above, the magnification is 20% (1/5th full size) and you can view several pages. (The current scale is shown on the Title Bar.)

The Title Bar

The title bar may look like this

NewMan2 2 at 20% *

where

NewMan2 is the name of the document.

2 shows that this is the second window currently open on the document. (The original window has a space in this position and not **1**.)

at 20% is the current scaling of the window (1/5th full size).

***** shows that you have made changes but not yet saved them.

Sliding the document

There are several ways to move the document around in the window:

- Use the scroll bars and arrows as normal; these are described in the *Archimedes User Guide*.
- Press and hold down the *Ctrl* and *Shift* keys. The arrow keys on the keyboard then act like the scroll arrows on the window. Using *Ctrl-Shift-arrows* does not move the cursor, only the area of the document in the window.
- When the mouse pointer is over an unused area of the document it changes shape to a hand. Press and hold down the **Select** or **Adjust** mouse key and you can slide the document.

Text handling

Entering Text

You can only enter text in the selected frame. Position the mouse pointer where you want to insert text and click **Select**. The text cursor then appears at that point. You can now start typing and, as you type, the cursor moves along the line.

When you reach the edge of the frame, the cursor automatically drops down to the next line – you don't need to type *Return* as you would on a normal typewriter. This means that if you later add or delete something in the middle of a paragraph, the line lengths are automatically adjusted to suit the new text.

Pressing *Return* indicates the end of a paragraph and an extra vertical gap appears between the end of the last line and the beginning of the next. The size of this gap depends on the **Space below paragraph** setting of the current text style (see *Styles*).

You can also import text from a disc file. This is described later in *Importing text*.

Moving around the text

You can move around by using the four arrow keys.

Using the arrow keys by themselves moves the cursor one line up or down or one character left or right.

If you hold down the *Shift* key and then press the arrow keys, they now act as follows:

- *left arrow* - move left one word,
- *right arrow* - move right one word,
- *up arrow* - move up one page,
- *down arrow* - move down one page.

The *PageUp* and *PageDown* keys act the same way as the *up* and *down arrow* keys.

If you hold down the *Ctrl* key and then press the arrow keys, they now act as follows:

- *left arrow* - move to start of line,
- *right arrow* - move to end of line,
- *up arrow* - move to the start of the story, and
- *down arrow* - move to the end of the story.

The *Home* key acts the same way as the *up arrow* key.

Deleting characters

You can delete characters by using these keys:

- *Delete* - deletes the character to the left of the cursor,
- *Backspace* - same as *Delete*,
- *Ctrl-H* - same as *Delete*,
- *Copy* - deletes the character to the right of the cursor,
- *Ctrl-A* - same as *Copy*.

(*Ctrl-H* means hold down the *Ctrl* key and press *H* or *h*).

Selecting a region of text

At some stage you will want to delete or copy some text. Before you can do this you have to **select** that text. There are several different ways of doing this. Two ways can be used to select text of any length; the others select a defined length of text (a word, a line, a paragraph, or a story). The selected text is always shown highlighted.

With any of the methods, if you want to alter where the selected region ends, position the mouse pointer to the required place and click **Adjust**. This allows you to extend or reduce the selected region.

Selecting any length of text

Position the mouse pointer over the start of the area. Press and hold down the **Select** mouse button and drag the mouse pointer to the end of the required area. Release the mouse button when you reach the end of the area. As you drag the mouse, the selected area becomes highlighted.

Alternatively, position the mouse pointer over the start of the area. This time, just **click** the **Select** mouse button. Now move the mouse pointer to the end of the area. Click the **Adjust** mouse button and the area becomes highlighted. This is the easiest way of all for selecting a large area of text.

Selecting a word

Either

- double-click on the word, or
- type *Ctrl-Q*.

(*Double-click* means press and release the **Select** button twice in quick succession.)

Selecting a line

Either

- position the mouse pointer anywhere on the line and triple-click (three times) on the **Select** mouse button, or
- type *Ctrl-Copy*.

Selecting a paragraph

Either

- position the mouse pointer anywhere in the paragraph and quad-click (four times) on the **Select** mouse button, or
- type *Ctrl-@*.

Selecting the whole story

Either

- type *Ctrl-T*, or
- there is a menu option (**Edit** then **Select text story**).

Deselecting a region of text

If you no longer want the region of text selected, you can

- type *Ctrl-Z*, or
- click **Select** anywhere inside a frame, or
- press one of the arrow keys.

Replacing text (overwrite mode)

Unlike many word-processors, Impression does not have a replace or overwrite mode. Instead, select the area that you wish to replace (see above). When you start typing, the selected area is cleared and your new typing appears in its place.

The selected area is copied to the clipboard so, if you have made a mistake, you can restore it by pasting it back. (See *Cut and Paste*.)

Importing text

You can import text from outside of Impression. If the frame already contains some text, you must first position the cursor where you want to make the insertion. No action is needed if the frame is empty.

Plain text or text from other Impression documents can be incorporated simply by dropping their file icon onto the required frame.

Text in certain other formats can be imported but you must first load an appropriate loader module. In the Impression package, modules are included for a number of formats such as Acorn DTP, FirstWord Plus, Inter-Word, WordStar, WordPerfect and BASIC formats.

See the section *Loading alien file formats* for more details of importing text.

Cut and paste

If you want to move items around your document (or between documents), you use the clipboard. (An item can be a region of text, a graphic, or a frame.) To place an item on the clipboard you can either **copy** it (which leaves the item in place) or **cut** it (which removes it from its original position).

Copying items to the clipboard

If the item is a region of text, it must first be selected. If it is a frame, first select the frame by clicking inside it.

There are two ways to copy an item. Either

- type *Ctrl-C*, or
- there is a menu option (**Edit then Copy**).

Cutting items to the clipboard

If the item is a region of text, it must first be selected. If it is a frame, first select the frame by clicking on it.

To cut an item either

- type *Ctrl-X*, or
- there is a menu option (**Edit then Cut**).

There are two other cut options; **Cut line** and **Cut word**. To use these, position the cursor anywhere inside the line or word. You do not have to select the text to use these options.

- To cut the line containing the cursor, type *Ctrl-L*.
- To cut the word under the cursor, type *Ctrl-D*.

Deleting an item

Deleting an item removes it completely; no copy is made to the clipboard. This is useful if you want to delete a large area. It also saves memory because no copy is held on the clipboard.

To delete a selected item, either

- type *Ctrl-K*, or
- there is a menu option (**Edit** then **Delete**).

An Alert Box appears asking you to confirm that you do want to delete the item.

Pasting (Inserting) an item

It is always the item held on the clipboard that is pasted.

If the item is a region of text, then it is inserted at the current cursor position.

If it is a frame, the mouse pointer tracks two cross-wires. Move these cross-wires to where the top left-hand corner is to be and then click the **Select** mouse button.

You insert an item by

- pressing the *Insert* key,
- typing *Ctrl-V*, or
- there is a menu option (**Edit** then **Paste**).

Hard space

Sometimes you don't want the end of a line to divide two pieces of text. Examples are telephone numbers (0442 63933) and word pairs like *RISC OS*. In such cases, use a hard space (*Alt-space*) between the two parts. This has the appearance of a normal space but Impression never splits text joined by a hard-space.

Also, when text is justified, normal spaces may be stretched to increase the separation between words. A hard-space is treated as a fixed-width character and is never stretched.

Using effects

If you are uncertain about fonts, font-sizes, and justification, you will find that they are explained in the accompanying book *'DTP at a glance...'*.

Effect	
Plain text	
Text font	↕
Text size	↑^S ↕
Line spacing	↑^L ↕
Text colour...	
Underline	↑^U
Subscript	
Superscript	
Left align	F5
Centre	F6
Right align	F7
Fully justify	F8

The merits of when to use effects and when to use styles are described in the section *Effects & Styles*.

Unless it is a simple letter, a document appears uninteresting if all the text is in the same style. To change the appearance of the text in Impression, you can apply one or more **effects** to alter plain text. Effects can be categorised into these seven groups:

1. Make the characters wider or narrower than usual.
2. Change the font size (increase or decrease the size of the characters).
3. Change the font (and thus the appearance of the characters).
4. Change the space between lines of text.
5. Underline characters.
6. Display the text as superscript or subscript.
7. Change the justification (left, centre, right, or full).

Effects from different groups can be combined. For example, the heading at the top of this page combines three effects: 24pt (from group 2), Homerton Bold font (group 3), and left-justified (from group 7). (The type size is 24pt on the original pages; when these are reduced for printing, the headings shrink to about 17pt.)

If you apply an effect, any other effects from the same group already applied are cancelled. For example, if you apply an effect of 18pt to an area of text, then any other font size effects in that area of text are cancelled. Effects from other groups remain unchanged.

How you change effects depends upon whether you are entering new text or changing existing text.

Effects and new text

If you are typing in new text, you apply or cancel effects at the cursor and then continue typing. To change an effect, choose the required option from the effects menu. If the effect is already applied, its name on the menu is ticked; to cancel the effect, click on the name.

You can apply or cancel several effects at once. For example, to create a headline you might press *Return* to start a new line and then apply a new font, a larger font size, and centre-justification. You then type in the headline. To cancel all three effects at once, choose **Plain text** from the menu. If you want to continue with the new font but revert to normal font size and justification, cancel only those two effects.

To apply or cancel effects you can use either **Select** or **Adjust**. If you use **Select**, the change is made and the effects menu disappears from the screen. If you use **Adjust**, the change is made and the menu remains on the screen. This is useful if you want to make a number of changes. In most places in Impression, you can make several changes using **Adjust** to keep the menu or dialogue box on the screen.

Effects and existing text

Before you can change which effects are applied, you must first select the region of text that you want the change to apply to. Selecting regions of text has already been described in this chapter.

When the effects menu is displayed, any effect which is used anywhere within the selected region has a tick against its name. You could have several effects in the same group ticked. For example, if you selected this page, you would see two different font sizes and four fonts ticked. A tick just means that the effect has been used *somewhere* in that region, not necessarily over the entire region.

If you want to remove all effects, choose **Plain text** from the menu. This sets all the text in the selected region to be in the basic text style.

If you want to remove an effect from the entire selected region, click on its name in the menu. Its name will then no longer be ticked.

Similarly, to apply an effect over the entire selected region, click on its name. A tick appears against the name. If the effect is used anywhere in the region, its name is already ticked on the menu. In this case, click once to remove the effect from those areas of the text where it is currently used and then click a second time to apply it over the entire region.

The Impression fonts

These are a special family of fonts for use only with documents that are to be printed as pure text using the **Draft print** option. (Draft printing is described in *Advanced features*.) Unlike the other fonts, they are not outline fonts and should not be used with the conventional RISC OS printer drivers. (If printed using the RISC OS printer drivers, they will give a poor-quality result.)

Use them at 16pt size only; at this size they will appear as crisp sharp characters.

Characters in the Impression monospaced fonts are (as the name suggests) all of the same width. They are suitable for 9-pin and those 24-pin printers that cannot support proportional printing. They are almost identical in appearance to the Archimedes system font.

The other Impression fonts are proportionally spaced (the characters vary in width), and are suitable for those printers that support proportional printing. You will probably find that the proportional fonts are easier to read when displayed on the screen.

Using styles

This is an important section; worth reading through carefully at least once. If you master Impression's powerful style function, you will have come to terms with arguably the most important feature of the Impression system.

Style	
New style...	^F5
Edit style...	^F6
Clear all styles	^B

New ruler...	⇧^M
Edit ruler...	⇧^E

Main Heading	
Sub-Heading	
Italic	
Bold	
lin indent	
Hanging indent	

The merits of when to use effects and when to use styles are described in the section *Effects & Styles*.

What is a style?

Styles determine how all the text in your document appears, from which font is selected to the size of individual characters, the position of margins and tabs, the space between paragraphs, text centering, etc.

A brief but technically accurate description of an Impression style might be something like: 'a user named collection of stylistic attributes that may be applied to any part of the text.'

A particular style can be selected to dictate the appearance of as little as a single character, or as much as the entire text in your document. Many different styles can be selected in a single line of text, and styles can be overlaid - that is, text can be modified by more than one style. In addition a style can (and usually does) set more than one attribute. By 'attribute' here we mean one of the visible characteristics, such as underline, text colour, font size etc. that can be set from the style editor.

Style attributes

All Impression text will be governed by at least one named style. If you have not applied one of the supplied pre-set styles or attributes, then text will be in its basic form of BaseStyle.

BaseStyle sets all of the possible attributes as follows:

- The text font Trinity.medium
- Font size of 14 points
- Line spacing of 16.8 points
- No space above paragraph
- Space below paragraph of 0 points
- A font aspect ratio of 100%
- Displayed black on white colours
- Left justification
- A ruler setting the left and 1st line margins to about 5mm
- Underline off
- Strikeout off
- Superscript and subscript off
- Hyphenation off
- No tab leadering character
- A keyboard short-cut for BaseStyle of *Ctrl-B*.

BaseStyle is a relatively complex style with a wide range of attributes set. However a style can be very simple if that is all you need. The supplied style Bold only changes text in this style to appear emboldened. The only attributes set in this style are a font name of Trinity Bold and the keyboard short-cut of *F4*.

The base style

The definition of this style controls the appearance of the normal 'background' text that has no other styles or effects.

Since all text starts in the base style it must have all its attributes set. Therefore you will find it is not possible to switch off any style attributes from the base style when using the style editor. (The style editor is described later.)

The BaseStyle name does not appear in the main style menu. This is because it is not possible to either turn off the base style or overlay this style on others. It is however possible to edit the base style by using the **Edit style** menu option.

The importance of style names

Two important points should be noted. First, an Impression style is user-named; a style, including the built-in styles, can be referred to by any name you choose.

The second point is that a style is a collection of attributes grouped under one name - for example, one style may set the

text to be 18 point Trinity. In fact two attributes are being set, namely the text size (18 point) and the font (Trinity).

Overlaying styles

It is important to realise that more than one style can be applied to any given region of text. So, for example, a style that sets the text colour to green can be applied to a region of text that already has a style that italicises the text. This region of text will then have both styles applied and the visible result will be italic, green text.

Things get a little more complicated when two styles that 'clash' are applied to the same region of text. By this we mean two styles that set the same attributes. For example, one style may set text to be in Homerton font, while another sets it to be in Trinity font. Now if both these styles are applied to the same region of text, the result on screen may not be obvious. In fact the rule Impression uses is that the most recently applied style takes precedence over previously applied styles, so if a Homerton style is applied over a Trinity style, the text will be displayed as Homerton.

Global re-styling

Styles also ensure that all stylistic changes made by the user in a document are re-programmable.

If, for example, you have many headings used throughout a document, and you want to see how they would look if they were all slightly larger, then all that is needed is one simple style edit. It is not necessary to wade through the whole document changing each and every occurrence of the heading.

Fonts

A font is a meticulously designed set of character definitions. Each character will have been designed to fit neatly with any combination of other characters from the same font.

Impression uses the Acorn outline font manager which controls, amongst other things, the display of text on screen. This is supplied with several basic outline fonts including Pembroke (the style used in this manual), Trinity (similar to Times Roman), Corpus (similar to Courier), and Homerton (similar to Helvetica).

Oblique (leaning) or italic, medium, bold and bold oblique versions of most of these fonts are available.

Pembroke: abcxyz ABCXYZ 123789

Trinity: abcxyz ABCXYZ 123789

Homerton: abcxyz ABCXYZ 123789

Corpus: abcxyz ABCXYZ 123789

A style can have any available outline font assigned to it. It is important to realise that a style is not confined to the one font which may have been assigned to it originally. If you do not happen to like 14 point Trinity, the default in BaseStyle, you can use the style editor to change BaseStyle to use any other available font.

Acorn's traditional System font, which is made up from the familiar 8x8 pixel design first featured on the original BBC Micro and still used in Archimedes system messages, is not available to the font manager, and so cannot be used in Impression documents. However, the **Impression** fonts are similar in appearance. The Impression fonts are described in this chapter – see *Effects*.

Styles without fonts

A style need not have a font assigned to it at all. Like the 'Green' style previously mentioned, for example, a style may simply be designed to have an effect on another style without changing the displayed font. One exception to this is BaseStyle, which must have a font selected since all text in Impression is based on this style, hence its name.

Where is the ruler?

Impression has no conventional embedded ruler to control the margins. Instead it has a ruler associated with each style. In other words, a style not only sets the visible characteristics of the text, but may also set the margins and positioning of the text. This has considerable advantages over a traditional embedded ruler since it avoids having to insert a new ruler every time the margins have to be altered. This manual is a typical example. The side-headings consist of a style that sets the position of their left margin to hang to the left of the main body text, which in turn has a left margin set in by an inch or more. As a result the side headings are automatically positioned as required whenever they are used.

In addition to a ruler being associated with a style, it is possible to have a ruler on its own. These stand-alone rulers can, like styles, have their own names.

Some style examples

Here are examples of some of the pre-defined styles supplied with Impression :

Sub-Heading

Main-Heading

Bold

The style menu

The style menu controls the application of any style to any region of text, the removal of styles from portions of the text and the editing of style definitions. It also shows what styles are applied to regions of text or those styles that are 'on' at the cursor.

What styles are where?

If the cursor is positioned within a region of text that has one or more styles (other than BaseStyle) applied to it, then you will notice that the style or styles applicable to the cursor position will be shown separated from the main style list by a couple of dashed lines, and individually ticked.

Style	
New style...	^F5
Edit style...	^F6
Clear all styles	^B

New ruler...	⇧^N
Edit ruler...	⇧^E

✓ Main Heading	

Main Heading	
Sub-Heading	
Italic	
Bold	
1in indent	
Hanging indent	

The style list showing 'Main Heading' applied at the cursor

Similarly, if a region of text is selected that covers text containing one or more applied styles other than BaseStyle, then the style list will show a list of the applied styles marked by a dash.

Style	
New style...	^F5
Edit style...	^F6
Clear all styles	^B

New ruler...	⇧^N
Edit ruler...	⇧^E

- Sub-Heading	
- Italic	

Main Heading	
Sub-Heading	
Italic	
Bold	
1in indent	
Hanging indent	

Style list showing two styles present in the selected region

It is important to understand the distinction between *dashed* and *ticked* styles on style menus. Ticks show styles applied at the cursor position. When a region has been selected, dashes show styles applied within that selected region.

This differs slightly from RISC OS menu conventions, but its significance soon becomes clear as the style function is grasped.

Applying or switching on styles - selected text regions

Any style may be applied to any region of text by first selecting the text as previously described, and then selecting the appropriate style name from the menu.

Once a region of text has had a style applied to it then each individual character in that region will be altered to appear as specified by the style.

Selected text is always shown highlighted on screen. Once a style has been applied to a region in this way, the menu will show it dashed.

Assigning styles to the cursor

There is an alternative way to apply styles to parts of text. When typing or editing text it would be inconvenient to have to type the text, then select it, and then apply the required style, especially if you know in advance that a particular piece of text is to appear in a certain style.

A style may therefore be turned on before the text is entered. Any subsequent typing will appear in the required style as it is entered. The style may then be turned off again if it is no longer required. In fact the same menu option is used to control both methods of setting styles. The operation of the menu simply depends on the context in which it is used.

If there is a selected region anywhere in the text, then selecting a particular style from the style menu will apply this style to that selected region.

If there is no selected region of text, then the style is turned on at the cursor position, so that subsequent typing at this position will appear in the style.

One point to note is that there can never be a selected region of text at the same time as an text cursor. Whenever a region of text is selected the cursor will vanish, and, if a pointer is clicked in the text, the cursor will re-appear at the specified spot and the selected region will vanish.

Deselecting styles

Styles may be removed from any portion of text as easily as they were applied in the first place. For example, if a selected region of text exists and the style menu is displayed, it shows with a dash all the styles in this region. If one of these dashed names is chosen from the menu, then this style will be cleared, or turned off, from all characters within the region.

Once applied, a style is inherent in every single character in the selected region. This means you can deselect a given style from as little as one character at a time, even if that style was originally applied to a large selected region.

If there is no selected region, then the styles which are on at the cursor position are shown ticked. Selecting a ticked style name will deselect the style from the cursor position so that subsequent typing at this position will no longer be in this style.

Changing styles between paragraphs

When you regularly change styles between two paragraphs, try to be consistent as to where you make the change. It helps to keep a consistent appearance to your document. (Remember, a paragraph can be a single word or line such as a heading.)

An example to show what we mean. You may have a style with the rule-off attribute set. If we type some text in this style and press *Return*, and then change style, we get this result:

Rule-off style

and back to BaseStyle again.

If we change the style before pressing *Return*, we get this;

Rule-off style

and back to BaseStyle again.

You can see that in the second example there is no rule-off. This is an extreme (and obvious) illustration but remember that each style can have a different *Space below paragraph* value. Your document could have some paragraphs with only a small space below them and others with a much larger space below them.

A good practice is to type *Return* then change style.

Clear all styles

It is not possible to apply the base style over any existing styles, but the same result can be achieved by clearing all styles from the selected region, so only the base style remains. The **Clear all styles** menu option will do this.

If there is no selected region then it turns off all styles that are currently on at the cursor so that subsequent typing will only be in the base style.

Clear all styles has a keyboard short-cut of *Ctrl-B*.

Key short-cuts

To make life even easier, every style can be associated with a key short-cut. This means it is not necessary to use the menus to turn styles on or off.

For example, if a style has the *F1* key as a short cut, then pressing this key has the same effect as selecting the style from the style menu.

So, if there is a selected region of text, pressing *F1* will turn the style on over this region.

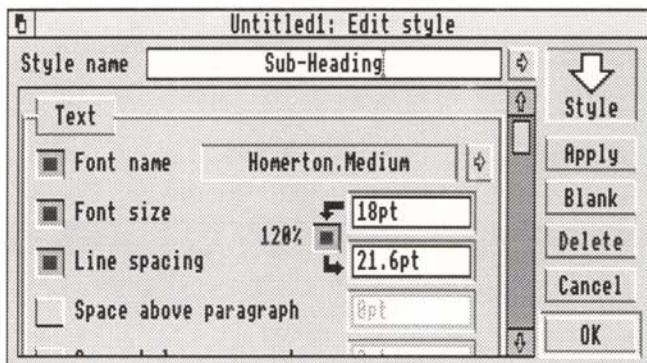
If *F1* is pressed again it will remove the style from the region, or turn it off. In other words, the key short-cut has a 'toggle' effect - it reverses its condition each time it is pressed.

Similarly, if there is no selected region, pressing a style short-cut key will turn the style on at the cursor. If the style is already on at the cursor then pressing the key will turn it off.

To find out exactly which style or styles are on at the cursor, bring up the style menu. As described previously, those styles 'on' at the cursor will be ticked.

Editing styles

You can see that styles are determined by a large number of parameters or attributes, and to edit the style conveniently there is a style editor dialogue box which can be accessed from the **Edit** style menu.



The Edit style dialogue

The full mechanism of the Style editor dialogue is described later.

New styles

The style editor is not limited to editing existing styles; an empty style editor dialogue box can be summoned via the **New style** menu option and this can be used to construct your own custom styles.

It is not good practice to have a large number of different styles within one document. Well designed documents tend to have a

few styles used again and again rather than having a very large number of different type faces and sizes. The use of styles should encourage a consistent look and feel to documents.

Advanced style operations

If two different styles are applied to the same area and the cursor is placed in this area then the style menu will show these two styles ticked.



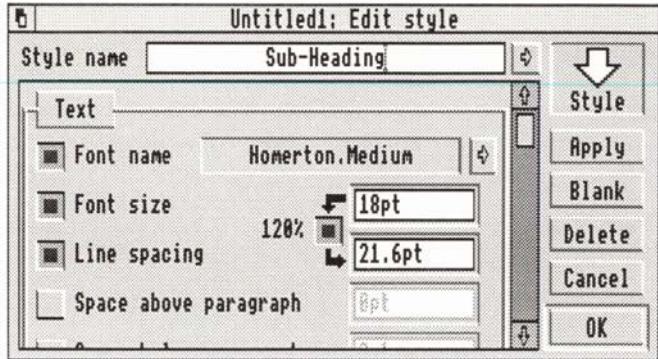
Style menu showing styles '18 point' and '24 point' applied

The order in which the ticked style names appear indicates the order in which the styles were applied to the text. The most recently applied styles appear at the top and, as mentioned earlier, the most recently applied style always takes precedence over previously applied styles. In the above example it can be seen that the style '18 point' has been applied over some text that already had the style '24 point'. The result will be text shown in 18 point. (Normally, if you only wanted to change the font size, you would use Effects – we have used Styles purely for illustration.)

Basic style rules.

- A style sets only certain stylistic attributes. Attributes not set by a style take their appearance from the styles and effects applied earlier to the text.
- A style may be applied to a selected region by choosing its un-dashed style name from the menu.
- A style may be cleared (turned off) from the selected region by choosing its dashed name from the style menu.
- A style may be turned on at the cursor by choosing its unticked style name from the menu. Subsequent typing at this cursor position will appear in this style.
- Selecting a style that is already on at the cursor (it has a tick) will turn it off. Subsequent typing at this cursor position will no longer appear in this style.
- One or more styles may be turned on or off by right clicking on the menu, i.e. use the **Adjust** mouse button.
- Pressing the style short-cut key with a selected region will apply the style over this region if it does not occur anywhere within the region. If the style does already occur within the region then it will turn it off.
- Pressing the short-cut key for a style will turn that style on at the cursor if it is not already on, and turn it off if it is already on.
- The styles on at the cursor (and the order in which they were applied) are indicated by ticks in the style menu.
- The styles that occur in a selected region are shown on the style menu by dashes. (No information can be inferred from the order of the list.)

The style editor



This dialogue box is displayed when you create or change styles. While the style editor is on the screen you can continue to edit the document.

When you edit an existing style you are actually working on a copy of the style. Any changes you make are not applied to the document until you click on either the **Apply** or **OK** buttons. If you want to quit the style editor and leave the original style unchanged, you can click on **Cancel**.

Similarly, if you are creating a new style, it is not copied into the document until you click on **Apply** or **OK**. Therefore, if you decide you don't need the style you are creating, click on **Cancel** and the document will be unchanged.

Style name

To change an existing style either

- click on the arrow button to the right of the style name, or
- click **Menu** on the style name editable box

to display a complete list of the available styles. To change the style displayed, click on the name of the required style in this list. If you click using **Adjust**, this list remains on screen and you can browse through several styles.

If you are creating a new style, it initially has the name *Untitled*. You can either change it by typing in a new name or let the style editor assign it a name when it is copied into the document. Automatic style naming is described later. You can base a new style on an existing style – see *Merging styles* later in this section.

Style names can be up to 31 characters long and you can use any character including *Space*.

Loading styles

At the top right-hand corner of the style editor is the *Load target* for styles. If you drag an Impression document from a directory window onto this target, the styles in that document are loaded into the current document. **Never drag the icon from the save box of an Impression document onto this load target – the results would be unpredictable.**

All the styles of the dragged document will be loaded into the current document including *BaseStyle*. Where there are then two styles with the same name (like *BaseStyle*), the newly loaded styles will have a number added to their name. This lets you see all the styles that have been loaded and allows you to delete those you don't want.

This facility is useful for loading pre-prepared style templates. For example, a blank document could be created that has one or more new styles defined (and any styles not required deleted). If this is then saved, it can be used as a 'style file' and loaded into other documents.

The action switches

These are the five switches on the right of the style editor window:

Apply
Blank
Delete
Cancel
OK.

If you click **Select** on any of these, the selected action takes place and the dialogue box is removed from the screen.

If you click **Adjust** on any of these, the selected action takes place but the dialogue box remains on screen so that other changes can be made. This is useful if you are trying out changes and want to see how they will look. Remember that you only see a change if some text in that style is displayed in the document window.

Apply

If you have a selected area of text, clicking on this button applies the style to that selected area. This is a short-cut to changing a

style and then, as a separate operation, applying it to the selected region.

If you do not have a selected area, the style is applied at the cursor.

The style, complete with any changes, is copied into the style list as if you had clicked on **OK**.

Blank

Click on this to clear all the attributes of a style except for the name. This is useful if you want to make major changes or to merge (see later) another style with this one.

If you click this button by mistake, click **Cancel** to cancel the whole operation.

Delete

Use this to delete an unwanted style. Delete only works if the style is not used anywhere in the document. If it is, an Alert box appears telling you so.

To find out where the style is used, select each story in turn and use the style list to see if the style is used in that story. The style list is described in *Main Menu*. (*Ctrl-T* is a quick way to select an entire story.)

Cancel

Click on this to cancel any changes you have just made to the style. If you are creating a new style, the style is deleted as it does not currently exist in the document.

If you are editing a style, clicking **Adjust** on this button discards any changes you have made and then copies the existing version of the style from the document into the style editor again.

OK

Pressing *Return* has the same effect as clicking on this button.

If you have created a new style, it is added to the style list.

If you have edited an existing style, the changed version is copied into the style list and overwrites the old version of that style. Any text in that style is reformatted to match any changes you have made. This reformatting can take several seconds for a long document.

The scrolling window

If the switch to the left of an attribute window is **off**, the attribute is not defined in the style (it is 'don't care'). That attribute is then controlled by other styles already applied to the text (such as BaseStyle). If the switch is **off**, the attribute is shown in light-grey (it is 'greyed') and you cannot enter a value.

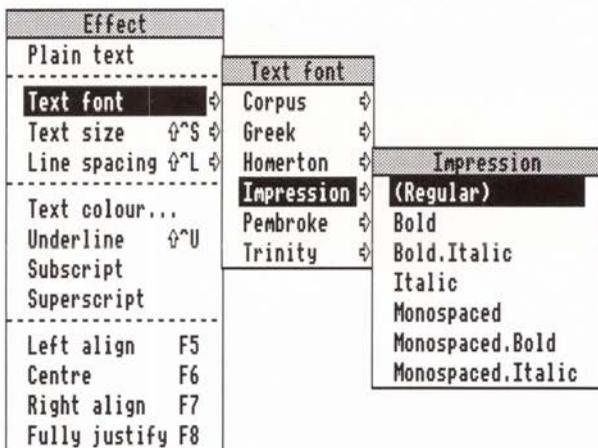
Where you can type in a value (such as font size) you can use any of the units recognised by Impression. (These are listed in *Using dialogue boxes*.) The displayed units (by default points, pt) can be changed – see the *Program Menu* chapter for details.

Text

Font name

Either

- click on the arrow to the right of the font name, or
- click **Menu** on the window itself to display the font list.



The list is displayed in two parts:

- First, the font family names (*Corpus*, *Greek*, *Homerton*, etc.). The currently selected font family is ticked. Slide over the arrow to the right of the required name to display:
 - a submenu of the font variants (*Regular*, *Bold*, *Bold.Italic*, etc.). The currently selected font variant is also ticked.
- To choose a font from the list, click on its variant name on the submenu.

Click anywhere on the style editor window to remove the font list.

Font size

The font size is the size of the characters. The larger the font size, the larger the characters.

Line spacing

This is the space between the top of one line of text and the top of the next line. This is traditionally called *leading*. Note that the line spacing is related to the font size. If you change the font size, you should also change the line spacing to match.

120%

This switch does not really control a style attribute. It is used to make the style editor automatically calculate the line spacing from the font size. When the 120% switch is on and you change the font size, then the line spacing automatically changes to 120% of the new font size.

120% is the traditional value for line spacing and so this switch is normally selected. Deselect the switch if you want to use a different line spacing value.

Space above paragraph

This sets the amount of space left above a paragraph.

Space below paragraph

This is the amount of space left below a paragraph. (Remember that a paragraph ends when you press *Return*.)

If you want a blank line below each paragraph, set **Space below paragraph** to the same value as **Line spacing**.

If you do not want any extra space below a paragraph, set this value to 0.

Font aspect ratio (X:Y)

This controls the relative width of characters. It is a percentage and so does not have any units.

As an example, if the value is set to 50% then characters appear half their normal width. The height of the characters is unchanged.

Font colour

This controls the colour of the characters and is, by default, black. To change the colour, click on the colour icon. This calls up the colour editor, which is described later in this chapter.

Font background colour

This defines the colour of the background on which the text is displayed. Change the colour as described for **Font colour**.

Advanced users should note that the font manager's anti-aliasing tries to anti-alias between the font background and the font foreground colours.

Keep together

Use this to prevent a heading being the bottom line in a frame and so detached from the text it refers to. If there is less space than the **Keep together** value between text with this attribute set and the bottom of the frame, then the text is moved to the start of the next frame.

The value entered is the distance from the bottom of the line. So, for example, if you want to keep one line of text below a heading, make **Keep together** equal to the line spacing. If you want to keep two lines, make **Keep together** equal to twice the line spacing.

The default styles, *Main Heading* and *Sub Heading*, use this feature to keep at least one line with each heading.

Snap to line spacing grid

On complex, multi-column documents, you often want to ensure that lines of text are aligned across the columns.

With this option selected, the line position is not calculated from the previous line, but from an invisible grid covering the entire page. The result is that any text in a style with this grid-snap attribute set is guaranteed to align across columns regardless of where the tops of the frames are positioned or what text occurred before or what objects occur over the frames.

Text format

This controls the way text is formatted across the page.

Justification

For a description of the various types of justification, refer to '*DTP at a glance...*'. The small window to the right of the radio switches gives you an impression of how the text will appear in the selected justification style.

Show ruler

The **Show Ruler** switch is not really an attribute. It simply turns on or off the display of the ruler dialogue box. The ruler dialogue sets the attributes controlling left margin, right margin,

return margin, and all tabs. The operation of the ruler is explained in the next section.

Text attributes

Underline

This is a useful way to underline headings.

Off - no underline is drawn

1 - a single line is drawn under text in this style

2 - a double line is drawn under text in this style.

Strikeout

When this attribute is **on**, a single line, centered vertically, is drawn through the characters. The line is drawn in the **Underline/strikeout line colour**.

Underline/strikeout line colour

This controls the colour of the underline and strikeout lines. You could create a style that sets only this one attribute (although it would probably not be very useful).

Script

Off - characters are displayed at their normal height,

Sub - characters are displayed in a smaller font size and in the subscript position; thus, _{1 2 3}.

Super - characters are displayed in a smaller font size and in the superscript position; thus, ^{1 2 3}.

The line spacing is unchanged.

Note that superscript 1-3 are available in the standard character set as codes 185, 178, and 179, respectively. You can also use *Alt-1* to *Alt-3* to select them.

Hyphenation

This turns on or off the automatic hyphenation. For hyphenation to work, the hyphenation module must be loaded; see *Hyphenation* for more details.

Leadering string

The leadering string can be from one to four characters long and contain any printable character. This string is drawn by Impression whenever it meets a tab character in text with this style applied. When a tab is encountered, the space between the tab character and the next tab position on the current ruler is filled with the leadering string. A commonly used string is a space and three full stops ('').

Its most common use is in contents pages to draw the eye across to the page numbers.

Rule-off

A rule-off is a horizontal line drawn between the left and right-margins of the current ruler whenever a *Return* (end of paragraph) is met in this style.

Note the difference between this and the underline attribute. The underline attribute only draws a line under those characters where the attribute is set. Rule-offs are drawn from margin to margin only when a *Return* character in this style is seen.

Thickness

This controls the vertical width of the rule-off line.

Offset

This value controls the vertical position of the rule-off. The normal position for a rule-off is directly below the line where the return character is placed. A negative value for **offset** moves the rule-off upwards; a positive value downwards.

Rule-off colour

Controls the colour of the rule-off.

Style label

Style labels are not true attributes because they do not change the format of the text. They mark text for inspection by the index and contents compilers. Any text with these attributes set will be found by the compilers even if they are overlaid by other styles that do not have this attribute set. Index and contents compilation is described later.

Index label

This marks text that is to appear in the index. Normally you create a style that has only this attribute set and apply it to appropriate words or phrases.

It is sometimes useful to set the background colour so that you can see which text has this attribute set. Remember to reset the background colour before printing anything.

Contents label

This marks text that is to appear in the contents list.

Typically, the styles used for main headings and sub-headings would have this attribute set so that they are automatically included in the contents list.

The editable box contains a number in the range **0** to **15**. You can create styles named **Contents0** to **Contents15** and these are then used when compiling the contents pages. All text marked with the contents label **5** will then appear in style **Contents5** and so on. These special **Contents** styles are not essential; **BaseStyle** is used in place of any that are missing.

Style control

These also do not change the format but control how you access the style.

Show on Style menu

When this switch is set, the Style Name appears on the style list.

You may decide not to show a style if you want to reduce the length of the style list. If the style does not appear on the style list, then you can only select it by using the keyboard short-cut.

Key short-cut

This editable value is used to tell Impression that you want to apply the style whenever a certain combination of keys is pressed. To allocate a short-cut click in the editable field and then press the combination of keys that you want to use.

For example, try pressing the function key **F9**. The editable field should now read

F9.

From now on, when the cursor is in the text of the document, pressing will apply that style to the text. You can use the function keys **F1** to **F12** directly and in combination with **Ctrl-Shift**. We do not recommend using **F12** as this is normally used to access the command line in RISC OS. Note that if you allocate a short-cut to a style, it over-rides any other use of that key. For example, if you allocate a style short-cut of **Ctrl-W**, then that key is no longer the short-cut for **check word at cursor**.

To remove a key short-cut from a style, click in the Key short-cut field and delete the contents. (**Ctrl-U** is a quick way of doing this.) Remember to click the **OK** button to implement this change.

You sometimes want to apply a temporary short-cut to a style. For example, if you are reading through the document and

marking text for inclusion in the index, you may allocate a short-cut to the appropriate style. When you have finished this task,

you can then remove the short-cut and use it elsewhere. *F9* is normally unallocated and can be used as a temporary short-cut key.

Merging styles

You can only merge styles when you are creating a new style or after pressing **Blank** when editing an existing style. This allows you to base a new style on an existing style.

If you click on the arrow to the right of the Style name or click **Menu** on the Style name editable box, a list of all available styles is displayed. If you then click on a style name, its attributes are copied into the style editor. If you click on a second name, the attributes from that style are merged with those in the style editor. If this second style has an attribute that is incompatible with one already in the style editor, then the attribute in the style editor is overwritten. For example, if the font size in the style editor is 24pt and you merge a 12pt style with it, the new merged style will be 12pt. You can merge several styles in this way.

The new Style name is a combination of the names of the styles that were merged into it. For example, if you merge **Style1** and **Style2**, the new style in the style editor is **Style1/Style2**. You can, of course, edit this name if you wish.

Automatic Style naming

When you create a new style, the name in the Style name is *Untitled*. If you do not change the name before clicking on the **OK** button, the style editor will give it an appropriate name. This name is based on

- font name
- font size
- justification
- underline
- X:Y aspect ratio.

If you have not set any of these, the name remains as *Untitled*.

The new name comprises the attributes from these fields separated by /. For example:

**Trinity.Medium/28pt/Centre
Underline/X:Y 80%.**

This facility makes style definition quicker because you do not have to give your style a sensible name when you create it.

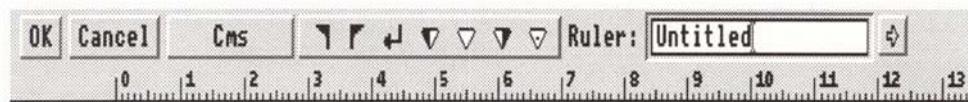
The Rulers

There are two completely separate types of ruler:

- page rulers, and
- style rulers.

Page rulers are displayed along the top and left-hand edges of the frame. They allow you to measure items but they have no effect on the format of the document. Normally, page rulers are not displayed because they have to be redrawn every time the document moves in the window. This slightly slows down screen updating. There is an option in **Preferences** on the **Program Menu** to turn the page rulers on and off.

Style rulers allow you to adjust the margins and tab positions for the document. A ruler can be either associated with a style (accessed in the **style editor**) or stand-alone (accessed from the **Ruler** menu option). You can also create a style that only defines a ruler; doing this is the same as creating a stand-alone ruler.



Rulers are always displayed at the top of the Impression window. The zero point on the ruler always aligns with the left-hand edge of the selected frame. If you click in a different frame, the ruler moves to keep its alignment with the frame edge.

Rulers act like styles. Any text that has a ruler applied will automatically reformat if you make changes to that ruler. This feature allows you to experiment with different text layouts especially when creating tables.

OK

Pressing *Return* has the same effect as clicking on this button.

When you edit a ruler you are working on a copy of that ruler. The original ruler, which is stored in the document, does not change until you click on **OK**. The changed version of the ruler is then copied into the document and any necessary reformatting takes place. Similarly, a new ruler is only copied into the document when you click on **OK**.

If you click on this button with **Select**, the ruler is cleared from the screen; if you use **Adjust**, it remains on screen and you can make further changes. Using **Adjust** is useful if you want to see

the effect of making a change. (You only see the text change if that ruler is applied to some text displayed in the document window.)

Cancel

Again, this acts as usual in that any changes you have made are discarded. If you were creating a new ruler, clicking on **Cancel** discards that ruler and it does not appear in the document. If you are editing an existing ruler and you click using **Adjust**, any changes are discarded and the original version of the ruler redisplayed.

Units

Click on this box to step through the available ruler measurement units. These are

- inches
- centimetres
- picas (1/6th inch).

Ruler icons



These icons represent (from left to right):

- left margin
- right margin
- 1st line margin (also called the *return margin*)
- left tab
- centre tab
- right tab
- decimal tab.

The tabs are described later.

Left margin. Except for the first line in a paragraph (which is controlled by the **1st line margin**), this defines the left margin for all text using this ruler.

Right margin. This defines the maximum right-hand margin. The right margin is relative to the right-hand edge of the frame, so it really defines the gap between the edge of the text and the edge of the frame.

1st line margin. When you press *Return*, the cursor moves to this position on the next line. If you want all left-hand margins to be

in line, set this margin to align with the **left margin**. (If you are creating or editing a ruler and you do not place the **1st line margin** on the ruler, it is automatically aligned with the **left margin**.)

If the **left margin** or **1st line margin** is not defined, the left-hand edge of the frame is used as the margin.

If the **right margin** is not defined or lies outside of a frame, the right-hand edge of the frame is used as the margin. Normally you want the right-hand edge of the frame to act as the margin and you rarely need to define **right margin**. (Use **inset** to prevent text actually touching the frame's edge - refer to **Alter frame** in the *Main Menu* chapter.)

Be careful about placing small text actually touching a frame's edge. It can be very difficult when using the mouse to position the text cursor between the frame's edge and the adjacent letter. For this reason the default ruler has approximately 1mm left and 1st line margins.

Placing items on the ruler

There are three ways to place these items on the ruler.

- Clicking on one of the items highlights it. Then, clicking on the graduated scale will cause one of those items to appear at that position on the ruler. This mainly applies to tabs, since you can have up to 32 tabs (of varying kinds) on the ruler at once. With margins, you can only have one of each type on the ruler, so clicking with a margin highlighted will move that margin to the new position on the ruler. A further restriction is that you are not allowed to place the right margin to the left of either the return margin or the left margin (and vice versa). Thus, the margin will not appear if you are clicking in an illegal place.
- The items can also be dragged, either from their current positions on the ruler, in which case that item's position will be changed, or from the icons at the top of the ruler, in which case a new item will be placed on the ruler. If there is already one of those items on the ruler (in the case of margins) or there are already 32 tabs on the ruler (in the case of tabs) then you will be unable to drag an item from the icons at the top of the ruler.
- The **Ruler set-up** dialogue box allows you to accurately place the icons. To display this dialogue box, click on the **Ruler** with the **Menu** mouse button. This displays a

submenu, the top item of which reads **Enter values**. Choose this and the dialogue box appears.

Each of the three margin icons has its own position box (because you can only have one margin set of each type). Click on the button to the left of the name to put the icon on the ruler. Once the icon is placed on the ruler you can position it by typing a value into the editable box to the right of the name.

To create a tab, click on the down arrow until the editable box on the right is greyed. This shows that you can create a new tab. Choose the tab type you want by clicking the **Menu** mouse button over the tab type field (or the adjacent menu icon) to display a menu. From that menu, choose the type of tab you want. This will appear in the tab type field, and the editable field will be ungreyed, allowing you to type in a new value.

Remember to click on the dialogue box's **OK** button to implement any changes you have made.

You can combine dragging icons with using the dialogue box. You could drag or drop icons on the ruler in approximately the required position and then accurately position them using the dialogue box.

When dragging items around the ruler, notice that they appear to 'stick' to the ruler, as if the ruler were magnetic. This means it is always possible to tell if an item is being placed correctly: if it sticks, it will stay on the ruler if dropped.

Removing items from the ruler

To remove an item from the ruler, drag it from its current position upwards, until it no longer sticks to the ruler. If you drop the item when it is still sticking to the ruler, you will only alter its position, not remove it.

Alternatively, use the **ruler set-up** dialogue box. To remove one of the three margin icons, click on the button to the left of the name. To delete a tab, use the arrow keys to select the tab and then click on the arrow to the right of **Tab type**. This displays a small submenu, the first item of which reads **Remove tab**. Click on this to remove the tab.

Changing tab types

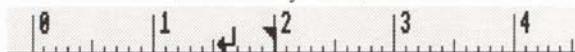
If you want to change an existing tab to a different type (for example, from a **left tab** to a **decimal tab**), you can use the **ruler**

set-up dialogue box just described. Changing the tab type is similar to deleting a tab except that, instead of clicking on **Remove tab**, you click on one of the four tab types (**left align**, **centre**, **right align**, **decimal**). This changes the tab type but does not change its position. How the types of tab affect text is shown later.

Hanging indents

It is quite a common requirement to have a series of numbered paragraphs where the numbers hang to the left of the main text left margin. This is sometimes referred to as 'outdents'. Impression can create this attribute very easily by using the *1st line margin* control on the ruler (this is sometimes called the return margin indicator since it affects the 1st line after a *Return*). The position of this symbol on the ruler controls the left edge of the 1st line of every new paragraph. This is often useful if the first line of each paragraph is to be indented, in which case the symbol would be positioned a small amount to the right of the left margin indicator.

A hanging indent would be the opposite. The *1st line margin* symbol would be positioned slightly to the left of the *left margin* symbol, thus-



This would create the following result.

1. This is a numbered paragraph. Since this line is at the start of a new paragraph it starts slightly to the left of this second line. Indeed all subsequent lines will use the left margin until the start of the next paragraph.
2. In fact we can go one better than this by using the tab feature as well. With the ruler shown above, the first line of every paragraph will start outdented. However this may not always be wanted.

For example, a paragraph that does not start with a number would normally look better if it lines up with the normal left margin and is not outdented. Of course this can be achieved simply by typing a few spaces at the line start but it can be quite difficult to get accurate results. However, if a tab symbol is positioned exactly coincident with the left margin thus:



then it is only a matter of pressing the tab key at the start of a paragraph to move the line start to the normal left margin position. In the above diagram the left tab symbol is positioned directly over the left margin symbol mostly obscuring it.

1. This is an outdented numbered paragraph.

Whereas this paragraph starts with a tab so that its left edge aligns with the left margin.

2. Whereas this is a normally outdented line again.

Tabs

Impression supports four different types of tab. This diagram shows how they are used:



This	is	some	1.0
text	that	illustrates	123.45
the	various	types	.0123
of	tab.	The	67.89
last	column	is	.00004
a	decimal	tab	56.768

- The first column is controlled by the conventional *left tab*. Text entered at a left tab will be left aligned.
- The second column is controlled by a *centre tab* meaning that the entire column is centered around the tab position.
- The third column is controlled by a *right tab* so the text has its right edge aligned to the tab point.
- The last column is controlled by a *decimal tab* which is only usually used for columns of numbers. In this case the whole column is aligned around the decimal point as is traditional for tables of figures.

The tab markers on the ruler may be dragged around with the mouse in the conventional way. Pressing the **OK** button on the style editor will then re-format the text to the new tab positions.

(Note: pressing the **OK** button with **Adjust** will do the same, but keep the style editor on screen - this is especially useful for experimenting with tabs since it enables a new tab arrangement to be tried and re-tried while keeping the ruler on-screen.)

How to remove a ruler from a style

Whenever the style editor is displayed it will automatically display the ruler at the same time if it has any margins or tabs set on this ruler. The only way to stop this happening is to remove all the tab and margin settings from the ruler. This can be done by dragging the tab and margin symbols off the lower 'rule' part of the ruler. (That is click on the symbol and hold down the mouse button, then drag the pointer above the lower portion of the rule.)

When there are no margins or tabs set on the ruler the style will have no affect on these features. Setting even one tab on a ruler means that this style will have a ruler associated with it and that its settings will supersede the tabs and margin setting of previous styles.

Effects & Styles

This section provides guidance as to when to use an Effect and when to use (or create) a Style. In many cases it is obvious which is better but there is a grey area where the two overlap. Often the decision will be on personal preference.

- If you want to make a simple change, such as centre justify some text, then use the Effect provided rather than create a new Style.
- Some changes cannot be made using Effects such as setting rule-offs or background colour. For these changes you must create a Style.
- If you are producing a simple document, for example a letter, it is easier to use combinations of Effects. If you want to change the application of an Effect, this is reasonably quick in a short document.
- If you are producing a long document, using Styles rather than combinations of Effects is easier. Remember that you can alter a style and all text in that style is reformatted to match. The heading at the top of this page (**Effects & Styles**) is in the Style **Main heading**. We wouldn't use a combination of Effects (24pt and Homerton Bold) because Main heading is used so often in this document. If we wanted to change to, say, 22pt, it would be tedious to go through and change every example. In some places the heading is centre justified and we have used the Effect **Centre** where necessary.
- If you are producing a master document that will be used to produce other documents (for example, a basic newsletter layout document), then creating a range of suitable Styles helps to maintain a consistent appearance to documents produced from it. You need a good memory to remember that main titles are always in 20pt, centre-justified Homerton Medium and subtitles in 16pt Trinity Medium Italic. It's a lot easier to create suitable Styles and give them the names **Title** and **Sub-Title**. You will then know later what their use is.

Chapters

Impression prefers to have documents split into chapters. From Impression's point of view a new chapter is any section of a document that has to start on a new page. In traditional books, chapters always start on page boundaries, but a new chapter should also be used with Impression whenever a new section is to be started.

As with normal word processors, text that starts on a new chapter or section is 'pushed' along by the text of the previous chapter. If text is entered into the previous chapter that causes it to flow out of the last page then it creates a new page before the next chapter starts.

Therefore if you want to start a new section or want to ensure that text will start at the top of a new page then select the menu option **New chapter**. This will cause a new page to be started at the end of the current chapter.

When starting a new chapter it is possible to change the master page on which the chapter is based. This mechanism allows the page size to be altered within a document and the look of the pages in each section to be different. For example, this technique is used for creating indexes and contents pages where it is usual to have a different layout than that of the main document.

If you want to produce a small leaflet of a few pages where each page will look completely different then this could be done by starting each new page on a new chapter. However, in this case it is probably better to use the **Insert new page** option, along with a master page containing no frames, or only guide frames, allowing you to create the frames differently on each page.

Internally, Impression numbers the chapters in sequence, starting from one. In the **New chapter** and **Alter chapter** dialogue boxes, you can allocate a different number to a chapter. You would do this if you wanted to insert a chapter number into the text (there is an **Insert** option to do this) which did not agree with the internal chapter number. As an example of this, the section in this manual on the menus (chapter 6) is actually seven separate Impression chapters (chapters 8 to 14). If we wanted to insert the chapter number 6 into some text, we would need to renumber the relevant chapter to be 6. You do not change the number that appears as the title of the **Alter frame** dialogue box, only any chapter number that you insert in the text.

You should divide documents into chapters where ever possible because this helps to minimise the memory requirements when you are editing the document. Chapters other than the current one can be saved to disc and you only need to hold the current chapter in memory. This is especially useful if you have a 1Mbyte Archimedes.

Frame handling

The selected frame

You can normally only move or change the size of a frame when it is the **selected frame**. The selected frame has its outline shown as solid green lines rather than dotted and, if it is a local frame, has the eight grab handles. If necessary, click **Select** inside a frame to select it.

(You can also move or change the size of a frame if it is a grouped frame. Grouping frames is described later.)

Creating new frames

When you choose this menu option, the mouse pointer tracks a pair of cross-wires. Position them where the top left-hand corner of the frame is to be. **Press and hold down** the **Select** mouse button. Drag the cross-wires to where you want the bottom right-hand corner to be. When in position, release **Select**. The newly created frame is always the selected frame and has the eight frame-handles around its edge.

Dragging frames about the page

Frames can only be physically moved about a single page. To move a frame to another page or document, you use cut and paste.

Frames can be moved by either using the mouse or using the menu. Using the mouse is generally easier but is not so precise as using the menu.

Using the mouse

This method will not work if the frame has been locked in place. (**Lock frame** is set using the **Alter frame** menu option – refer to the *Main Menu* chapter for more details.)

Position the mouse pointer inside the frame and then either

- hold down the **Select** button for at least a second, or,
- for immediate effect, first hold down the *Ctrl* key and then press the **Select** mouse button. (This only works if the frame is the selected frame.)

In both cases, the mouse pointer changes into a hand shape to signify that the frame can be moved about. You must keep the mouse button held down as you move or drag the frame about.

Alternatively position the mouse pointer over any edge of the selected frame, avoiding the frame handles. The mouse pointer changes shape to a snowflake. You can now slide the frame as just described. This method requires precise positioning of the mouse pointer. You may not be able to pick up some of the edges (particularly vertical edges).

For moving graphic frames we suggest using either the *Ctrl-Select* method or the 'snowflake' method. This is because you use **Select** to move the graphic in the frame.

Using the menu

Choose **Frame** then **Alter frame**. You can type new values for the frame's position and size into the editable boxes. These boxes are fully described in the *Main Menu* chapter.

Re-sizing frames

There are two ways of changing the size of the selected frame. You can either:

- Use the mouse to drag one of the eight frame handles. Moving on-screen this way allows you to see how the resized frame will look as you alter it. You cannot use this method if the frame has been locked in place.
- Use the **Alter frame** menu option. This option allows you to alter the x-y co-ordinates, the height, and width of the frame. (The x-y co-ordinates are relative to the top-left corner of the frame.) Although you cannot preview how the resized frame will look, this method permits precise control of the frame's position. This menu option has a keyboard short-cut of *Ctrl-F10*.

If you resize the frame by dragging, you can use either the **Select** or the **Adjust** mouse buttons. If the frame contains text or is empty (null), both buttons have the same effect. If the frame contains a graphic, the **Adjust** button will resize the graphic; the **Select** button only moves the frame boundary and leaves the graphic size unchanged.

Impression attempts to reformat any text within a frame when it is re-sized and hyphenates text if required.

Transparent frames and repelling text

Normally, any underlying text flows up to and around the boundaries of the frame. If required (by using the **Alter frame**

dialogue), text can be repelled away from a frame's boundaries or can flow under the frame.

If you want underlying text to be repelled away from the borders of a frame, set the **Repel text outside** option and enter the required values in the editable boxes.

If you want to see text or a graphic that is underneath the frame, set the frame background to transparent. (This option is on the View page of the **Alter frame** dialog box.)

If you want the frame to hide any text or a graphic that is underneath it, make the frame opaque by setting a background colour.

Changing the stacking order of frames

When you create a frame (other than a guide frame), that frame is always the 'front' frame and masks any parts of other frames that it overlaps. You can change the frame order by using the menu options **Put to back** and **Bring to front**.

Be careful when using the **Put to back** option as you may accidentally hide a frame behind a larger frame. If this happens, the next section explains how to retrieve the frame.

Selecting overlapping frames

If you have a frame hidden by another overlapping frame, you cannot select it by clicking on it because of the overlapping frame. There are two ways you can select the underlying frame:

- Use the **Put to back** menu option to move the overlapping frame to the back. This allows you to select the previously hidden frame as normal.
- Position the mouse pointer over the underlying frame. Hold down *Alt* and then click on a mouse button to select the frame. Using *Alt*-click allows you to alternate between the two frames. This method can be used on any number of overlapping frames.

Flowing text stories

If, as in this manual, there is one main master page text frame on a page, then when text overflows the bottom of the page, Impression automatically creates another, identical page on which to continue the story. No action is needed on your part.

If you use a complicated page layout, you may want text stories to flow between two or more frames on the same page. To do this you must link the frames together. Click **Select** in the first frame and then click **Adjust** in the other frames to be linked. The frames

are now linked and a text story can flow freely between them as changes are made. You can link frames together either before any entering any text or while you are typing in the text.

You can also link in more frames this way. Click **Select** in the last frame in the story and then click **Adjust** in the frame to be added. (You can add more frames at any point in the chain in exactly the same way.) You can only link in *null* frames – never frames that already contain text.

If you subsequently delete one of the frames, the text story reformats itself in the remaining frames.

There is an option in the **Program Menu (Show flow)** which shows the text flow of those frames currently displayed in the editing window. Arrows from the bottom-right corner of a frame to the top-left of the next frame indicate the text flow.

Repeating frames

These are a special type of frame and can contain either text or graphics. If you put a repeating frame on a page, it appears on that page and on subsequent pages in the chapter. It is a useful way to add a heading to all or part of a document.

To show its application, assume you have a six-page document and you want a repeating frame on pages 2, 3, & 4.

If you put a repeating frame on page 2, it will initially appear on pages 2 to 6 but not on page 1.

To stop the frame appearing on pages 5 and 6 of the finished document, remove it from page 5 by selecting and then deleting it. It then disappears from pages 5 and 6 but remains on pages 2 to 4.

There are certain rules with repeating frames:

- You can move or resize a repeating frame on any page where it is used. This changes the other copies of that frame.
- You can move a graphic in a repeating frame on any page where the frame is used. This changes the graphic in the other copies of the frame.
- You can only edit text in the first frame and not in any of the copies. A quick way to move to the first frame is to double-click in any of the copies.
- Repeating frames cannot be grouped. (Grouping and multiple selection of frames is described later.)

Embedded frames

These are text or graphic frames that are embedded in the story. They retain their relative position in the story regardless of any edits that may be made to earlier text. Most of the pictures of menus and dialogue boxes in this manual are in embedded frames.

You can increase or decrease the size of embedded frames, except that they cannot be wider than the current text margins.

Embedded frames act like text. Thus, you can apply styles and effects to them, such as centering them within a column of text. Cut and paste operations on text that includes embedded frames also copies those embedded frames.

To embed a frame, you

- Create a local frame of approximately the required size. (Final adjustments to the size can be made after the frame is embedded.)
- Cut the frame to the clipboard.
- Position the cursor where you want to insert the frame.
- Embed the frame, either by typing *Ctrl-Shift-F* or using the menu option (**Frame** then **Embed frame**).

Guide frames

These are a special type of frame. They cannot hold text or graphics and they cannot be used as repeating frames. They act purely as guidelines for other frames. Guide frames have an orange frame outline to distinguish them.

An example of their use would be a two-column magazine layout. The various stories would be in frames of different sizes but they all have to follow the two-column layout. For this you would create a master page containing two guide frames the size of the two columns. Then, on each page of the magazine, you would position the story frames in line with the guide frames. When finished each page would have the side margins of the columns perfectly aligned and the top and bottom margins also aligned across both columns.

To help with the alignment there is a menu option **Snap to guides**. When this option is set, any frame edge brought close to a guide frame will snap to the guide frame as though drawn to a magnet.

If you change the position of a local guide frame, you then have to reposition any frames previously aligned to it.

If you change the position of a master page guide frame, then any local frames already snapped to it will follow it to its new position.

Multiple selection of frames

As an example of the use of multiple selection, a graphic frame may be overlaid with several text frames containing captions or comments. If you later want to move the graphic you can link all the frames together and then move them as though they were one frame.

To do this, select any of the frames in the usual way by clicking **Select** inside it. Then hold down the *Shift* key and click **Select** in each of the other frames in turn. As you click inside a frame, its outline changes from dotted to solid.

When you have selected all the frames you can move them as a single frame by dragging or cut and paste and so on.

You can also detach a frame from the group by *Shift-clicking* in it a second time.

This has only grouped the frames temporarily. If you click in another frame that is not part of the group, the grouping ends and the frames again become independent of each other. To make the grouping permanent use the menu option **Group**. If this is done, then the frames always move as if they were a single frame.

To cancel the **Group** option, click **Select** in one of the frames and then choose the menu option **Ungroup**. Do this if you want to reposition one frame relative to the others in the group.

Multiple selection is useful if you want to delete several frames on a page. Instead of selecting and deleting each frame in turn, you can quickly multiply-select them and then delete them all at once. It is also useful if you want to move several independent frames together by the same amount (for example, to make space for inserting a new frame).

Grouped and multiply-selected frames can be cut, copied, deleted, pasted, and dragged exactly the same as normal frames.

Group frames also scale together in proportion. This feature is very powerful in two ways:

- Suppose you have three columns of text and you want to make them all slightly wider. By grouping all three frames,

the group now acts as one, three-column frame. If you now resize the group, all three columns change in proportion.

- If a selection of graphic frames are grouped, they then behave like a single graphic frame. Resizing the group changes the size of all the individual parts.

Drawing lines

Impression does not have a separate line drawing function. Instead there are two ways if using frames to draw lines:

- put a border on one or more edges of a frame, or
- create a separate frame and set an appropriate background colour.

Borders

Borders are described in the next section.

The lines at the top and bottom of this page are frame borders.

Frames

You can create lines of any size and in any position by creating a long, thin frame the length and width of the required line. You will find it easier to adjust the frame using the **Alter frame** dialogue box rather than dragging the frame handles.

When you have created the frame, go to the **View** page of **Alter frame**. Click on the **Colour** radio button and then click on the **Colour** editable box. This displays the colour editor (described later) and you can use this to change the frame's background to black.

You can also create faint lines this way by changing the frame colour. For printing, you may need to experiment using different colours to get the required density of line.

Once a thin frame has been created, it can easily be used again and again by copying it to the clipboard and then pasting it where required.

Borders

You can put a border around any type of frame (except a Guide frame). Each edge of the frame can have a different border design or can have no border. For example, the horizontal lines at the top and bottom of this page are frame borders. No borders are applied to the vertical edges.

Ten border designs are provided as standard by Impression. These are:

- | | |
|----|--|
| 1 | 1/4 pt black line |
| 2 | 1 pt black line |
| 3 | 4 pt black line |
| 4 | 1/4 inch Dark grey mitred slab |
| 5 | 1/4 inch Light grey mitred slab |
| 6 | 1/8 inch Black drop shadow left |
| 7 | 1/8 inch Black drop shadow right |
| 8 | 1/4 pt black line and 1/8inch offset 2pt black line |
| 9 | 1/8 inch offset, centre and corners only, 4pt black line |
| 10 | 1/4 inch offset 4pt black line with curved corners. |

You can also create other border designs using *!Draw* and then include them in a document. There can be up to 30 of these borders (numbered 11-40).

There are some differences between the standard borders 1-10 and the draw-file borders 11-40:

- You cannot delete borders 1-10 from the borders list. Borders 11-40 can be deleted.
- Borders 11-40 occupy space in the document. A complicated border can require large amounts of storage space. This can make even simple documents occupy a lot of disc space. Borders 1-10 do not occupy space in the document.

Putting a border around a frame is described in *Alter frame*. (Main Menu, Frames, View dialogue section of this manual.)

Controlling the border list is described in *Borders setup*. (Main Menu, Frames section of this manual.)

Creating new borders using *!Draw*

There are some rules to follow when creating a new border design using *!Draw*. These are

- Create the left-hand border. That is, make it tall and thin and designed so that it touches the left-edge of the frame.

When Impression uses this border on the other edges of a frame, it rotates the border as required.

- You can have several objects in your draw-file. If so, there are differences between how the backmost object and the other objects are handled:
 - The edge of the frame is aligned with the right-hand edge of the backmost object. The other objects are positioned relative to this edge.
 - The backmost object is stretched so that it exactly fits the edge of the frame. The other objects do not change shape but slide to a scaled position along the edge of the frame.

The backmost object is, by default, the first object created. You can change the stacking order in *!Draw* using the **Select** command. For more information on *!Draw*, refer to the *Archimedes User Guide*.

Graphics handling

Loading graphics

Graphics can be loaded into Null or Graphic frames by dragging and releasing Sprite or Draw object icons over the desired frame. If a frame already contains a graphic, that graphic will be replaced by the new one.

No distinction is made between *sprites* (bit images) or *draw objects* (re-scalable drawings) when loading graphics. However, neither type can be loaded into a text frame even if it happens to be empty.

Re-sizing graphics

As described in *Re-sizing frames*, graphics can be resized by changing the size of the frame using the **Adjust** button. They can also be re-sized by using the **Alter graphic** menu option. This allows precise control of the size and position of the graphic.

Alter graphic has a keyboard short-cut of *Ctrl-F11* or you can double-click on a graphic frame.

Repositioning graphics

There are two ways of moving the position of the graphic in the frame without moving the frame itself:

- Position the mouse pointer over the frame. Hold down the **Select** mouse button and slide the graphic around. You can slide the mouse pointer outside of the boundaries of the frame for larger movements of the graphic. Release **Select** when the graphic is in the correct position.

Note: if you hold **Select** down for more than a second before you start moving the graphic, Impression thinks that you want to move the entire frame and not slide the graphic. The frame's edges are then continued as dotted lines and the frame's dimensions displayed. If this happens by mistake, release **Select** and retry.

- Use the **Alter graphic** dialogue box. This allows you to change the X-Y co-ordinates of the graphic and is useful for large movements of the graphic. (The X-Y co-ordinates are relative to the bottom-left corner of the graphic – this is different to the X-Y co-ordinates of frames.)

If you have the **Alter graphic** dialogue box on screen while you slide the graphic with **Select**, you will see the X-Y co-ordinates are continuously updated as the graphic moves.

Linking graphics

Graphics can occupy a lot of memory. Where you require the same graphic in more than one place, it saves memory if they are linked. In this way, the graphic is stored only once but can be used in several frames. As the complete graphic is always stored, each view can show a different part of the same graphic.

To link graphics, first create a frame and drop in the graphic. Then, next time the graphic is required, create a null frame. Click **Select** on the original graphic and click **Adjust** on the null frame. The complete graphic will now appear in the second frame; the view in the first frame will be unchanged. You can now re-size or crop the second view as normal.

The graphic is always stored separately from the frame information. This allows you to delete the original frame without affecting the second view of the graphic. Only when all frames that use the graphic are deleted is the actual graphic removed from memory.

Rotating graphics

If you use **Adjust** to move a graphic, the graphic rotates around the centre of the frame.

You can also type in an angle (in degrees) into the **Angle** editable box in the **Alter graphics** dialogue box.

Clicking on the **Fit to frame** box in the **Alter graphics** dialogue box cancels any applied rotation.

Hiding graphics

Complicated graphics can be slow to redraw on the screen. To speed up screen updating you can hide graphics. Hidden graphics appear as just the frame outline containing two diagonally crossed lines.

You can either

- hide an individual graphic by using the **Alter graphic** dialogue box, or
- hide all graphics in the document by using the **Hide graphics** option in the **Misc** menu.

Master Pages

Master pages serve four main purposes:

- They allow a variety of different page sizes to be used in a document.
- They determine whether the pages appear as left/right pairs on screen or as single pages.
- They provide a high degree of control over the overall look of a document and allow simple changes to a master page to affect the appearance of entire chapters.
- Any changes you make to a master page are reflected in all pages that use that master page. This retro-active editing is an important feature of Impression and gives it much of its flexibility.

Impression master pages appear very like conventional pages on screen. You can scroll around them and put frames on them containing text or graphics. However, master pages always appear in a window of their own, selected with the **View master pages** menu option in the **Edit** menu.

A selection of pre-defined master pages are always available within Impression - these cover a variety of different paper sizes and orientations, such as A4 portrait, A4 landscape (on its side), A5 etc. Impression master pages not only control the page size, but also the layout of text on each page, and whether the pages are meant to be bound as left/right pairs or as single pages.

When a new document is being created, the user can choose the master page type on which to base the document. More unusually, Impression also allows the master pages to be changed for each chapter within a document. While it may be unusual to have one chapter of a document printed on paper of a different size from other chapters, it is more likely, indeed usual, to have chapters of different appearances within one document. For example, this manual is mostly based on one style of master page (one main text frame on each page), but the index chapter is based on a two column master page. The number of a master page is shown in grey at the top-left corner of the page.

Whenever a new chapter is started (with the **New chapter** menu option) you can choose whether the new chapter uses the same page design as the current chapter, or a different page design. If a new page design is required it can be chosen from the collection of built-in master page definitions, or a new master page design

can be created from scratch and used as the basis for the new chapter.

New frames may be placed on a master page in just the same way as on a normal page. However, any frame that occurs on the master page will also automatically appear on every page based on this master page. For example, if the master page has a small graphic in a frame in one corner then this graphic will also appear on each page in the document that is based on this master page.

Master page editing

The most significant feature of Impression master pages is that all alterations made to the master pages are reflected throughout the document in every chapter based on that master page. Herein lies the power of master pages. If a frame is re-positioned, or some text edited on the master page, then when the master page window is closed, Impression will update all pages based on that master page to reflect the changes.

Frames that are placed on the master page appear on conventional pages. However, because they are copies they cannot be edited or moved around on the conventional page, although they can be deleted. Master page frames can only be edited on the master page. It is possible to put a new frame on any page, so to distinguish master page frames from newly created *local frames*, Impression displays eight *grab handles* around local frames. This reinforces the idea that master page frames cannot be re-sized on conventional pages, whereas local frames can.

Master pages may have different sorts of frames on them, just like normal pages. If the frame is made to contain text or graphics then this will appear on all pages of the document based on this master page.

If, however, the master page has some blank 'null' frames on it then these frames will appear on normal pages, but text can be entered into these frames on the normal page. This text will also flow across frames that are linked. In this case the master page is just defining where on the page these frames are to appear and how they are linked. The master page will also dictate how text flows between frames and between pages.

Text flow

In order to have a full understanding of Impression it is vital to completely understand the rules for text flow.

When text is entered in a frame, or has to be re-formatted in a frame, then it may no longer fit in the frame. In this case the text is said to 'flow' out of the bottom of the frame.

In this case, text tries to flow into the next frame that is associated with the same textual story. (See *Flowing text stories* for how to connect a sequence of frames.) If there is another frame on the current page with the same story associated with it then it flows into this frame. If there is no frame that should have the same story then it tries to find a suitable frame on the next page, and so on until the end of the chapter.

By definition, text on a new chapter always starts at the top of a new page, and so does not flow back onto the previous page. Nor does text from the previous page flow onto any page of a new chapter. Therefore any text added or removed from one chapter simply creates or deletes pages from that chapter, and does not affect the contents of subsequent chapters.

Automatic page creation

There are two options as to when a new page is automatically created:

- **Copy master page.** When text flows out of a master page frame and there is no other frame for it to flow into, Impression creates a copy of the current master page. (This is the usual option.)
- **Copy previous page.** When text flows out of any frame and there is no other frame for it to flow into, Impression creates a new page with copies of the frames from the previous page. Local text or null frames are copied from the previous page but text frames are empty. Local graphic frames are only copied if they are grouped frames. This is the system used in *Impression Junior*, the word-processing version of Impression, and allows you to edit Impression Junior documents.

The choice of options is controlled by the **New chapter** dialogue box. The page creation rule used in any chapter is shown in the **Alter chapter** dialogue box.

Impression Junior documents don't have master pages and so if these documents are loaded, they will always use the *Copy previous page* method.

Truncated text

If text is placed in a newly created 'local' frame then it will attempt to flow out of this frame as usual. If this frame has not been connected to any others, and there is no place for it to flow to, then the text is said to be *truncated*. If the **Alter frame** dialogue is displayed, it will indicate that this frame is a truncated text frame, even showing the number of words left unplaced.

If you click on the **Show flow** option in the **Program Menu**, any local frames currently displayed in the editing window that have truncated text, are shown with a downward pointing arrow under them. The number to the right of the arrow is the number of unplaced words.

Changing the first page of a document

When a new document is started (by clicking on the Impression icon) it displays one new blank page based on a particular master page. If it is required that the document be based on an alternative master page, it is possible to change this by using the **Alter chapter** menu option.

The master page used by the chapter can be changed by changing the number in the **Master page** field. (The number of each master page is displayed at the top-left corner of the page in the **View master pages** window.)

See the **Alter chapter** menu description in *Main Menu*.

You can change the default master page so that Impression always starts-up with either a different size page or a different page layout. Refer to *Customising Impression* for details.

Master page summary

Master pages are powerful tools that enable an entire document to have a consistent appearance. Basing pages on the same master page saves time for the user and also allows one alteration to the master page to affect the entire document. In this sense master pages have the same sort of flexibility as styles.

A typical example might be a two column document. This would be created by having two frames on the master page with text flowing from frame to frame and page to page across identical looking pages. If you want to make the columns slightly narrower, alter the frame outlines on the master page, and the entire document will change to match.

Of course it is possible to insert a new frame onto any page. If you want a frame to be at a particular position on a particular page then this would not be done using the master page mechanism - you would simply put a new frame on the page using the **New frame** option - this frame would be a *local frame*.

The default master are:

- 1 single column, A4 portrait
- 2 single column, A4 portrait, left/right pair
- 4 two column, A4 portrait
- 5 two column, A4 portrait, left/right pair
- 7 three column, A4 portrait
- 8 three column, A4 portrait, left/right pair
- 10 A4 landscape
- 11 single column, A5 portrait
- 12 single column, A5 portrait, left/right pair
- 14 two column, A5 portrait
- 15 two column, A5 portrait, left/right pair
- 17 A5 landscape.

Master pages 7 and 8 only have guide frames on them and not null (empty) frames.

Master pages 3, 6, 9, 13, and 16 are the right-hand pages of the left/right pairs. You can enter 3, 6, etc. into the **New chapter** and **Alter chapter** dialogue boxes and Impression will still recognise that you want the left/right pair.

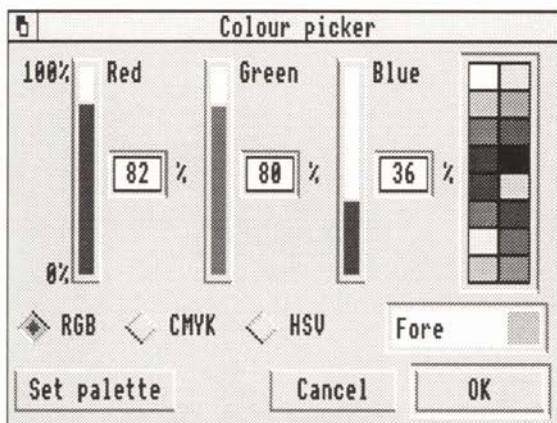
Master page rules

- The master pages can be seen only in the master page window, selected with the **View master page** menu option in the **Edit** menu.
- All pages in a chapter have to be *based on* a particular master page, or a particular left/right pair of master pages.
- Master pages, like normal pages, may have null (blank), guide, text or graphic frames placed at any position.
- Alterations to master pages are reflected throughout a document.
- Blank frames, connected together on the master page, indicate the positions of flowing text in the main document.
- New master pages may be created with the **New master page** menu option.
- The number of the master page is displayed in grey at the top-left corner of the page.
- Alterations to the master page do not affect the main document *until* either the master page window is closed, or you click in a document window.
- The first page of a document can be changed to use an alternative master page by using the **Alter chapter** menu option.

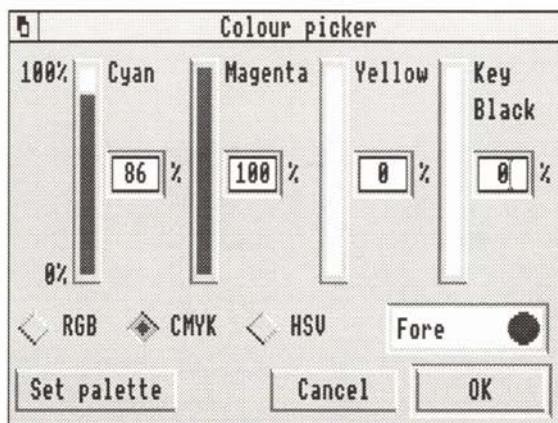
The Colour Editor

The colour editor appears whenever you click on a *colour field*. Colours can be specified in one of three common models, Red-Green-Blue (RGB), Cyan-Magenta-Yellow-Key (CMYK) and Hue-Saturation-Value (HSV).

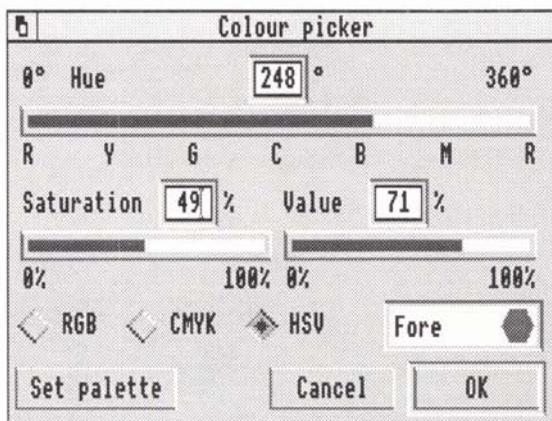
Colour Models



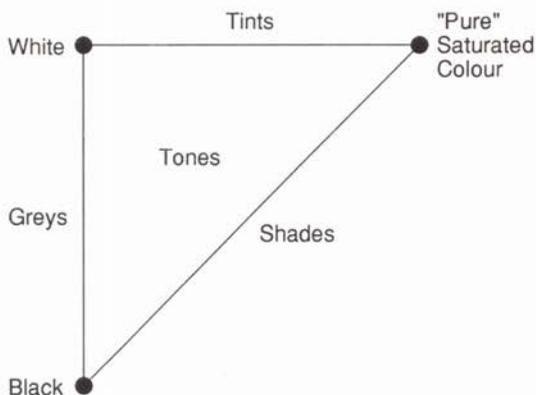
RGB is the model used by the computer screen to display its colours and may also be useful in producing film slides.



CMYK is the traditional colour model used by commercial printers (they are the colours of the four inks used to print full colour documents). The Key (K) component is black which printers use to reinforce dark colours which cannot be printed properly using only the Cyan, Magenta and Yellow inks.

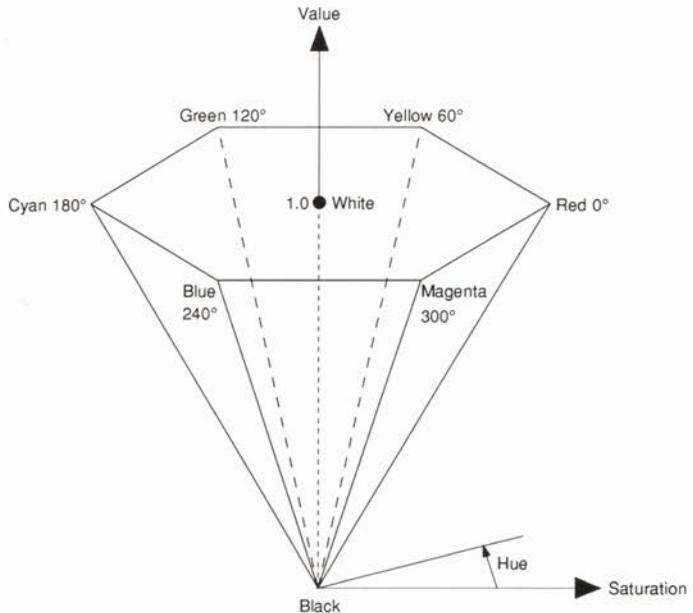


The HSV model describes colours in terms which are recognised by artists. The Hue represents the pure pigment. Saturation represents the amount of white added to the Hue - the smaller the Saturation the greater the amount of white added. Value represents the brightness of the colour or, put another way, the amount of black added to the colour. So the Saturation and Value between them produce the artists' tints, shades and tones of the basic Hue.



The three values Hue, Saturation and Value are usually thought of as an hexagonal cone. The Hue is represented as the angle to turn around the axis of the cone to get to the pure colour and so ranges from 0° to 360°. The Saturation gives the distance from the axis to the outside of the cone and the Value gives the distance up the cone. So, if the cone is coloured it will have the full

spectrum around the outside, darkening to black at the bottom. On the top face the colours will all fade to white in the centre.



To get pure colours from the HSV model both Saturation and Value must be set to 100%. The Hue gives the colour.

To get greys the Saturation must be set to 0 and Value then gives the amount of white. The Hue doesn't matter.

Altering colours in the colour editor

In the RGB display is a colour picker. This shows the 16 colours on the default palette (eight greys, two blues, two greens, red, orange, yellow, and cream). To select a colour from this palette, click on the appropriate colour panel.

You may want a colour or shade that is not on the default palette. In this case, use the most suitable colour model for your particular application to precisely define a colour.

The values shown in the colour editor can be altered by dragging the fader bars or by typing into the editable fields. When an alteration has been made, the colour editor will find the closest colour in the current screen palette and show it in the colour field just above the **OK** button.

The colour shown on screen might be quite different from the colour that will actually be printed. This is because the Archimedes can only show a limited range of colours at a time, either 2, 4, 16 or 256 depending on the screen mode. In two-colour modes, like mode 0 and mode 18, all colours have to be shown as one of the two available colours, usually either black or white! The sixteen colour modes (modes 12 and 20) do a bit better with a palette of eight greys, two blues, two greens, red, orange, yellow and cream to choose from. However, many colours, such as cyan and magenta still have no really close match in this palette. Obviously for the best match to the edited colour use the 256 colour modes such as modes 15 and 21.

To see the colour you are editing more accurately in 4-colour and 16-colour modes use the Set Palette button. When this button is clicked, the screen palette changes to include the exact colour you have just changed. Some colours already on the screen may change when you do this. To return the colours back to normal just use the palette utility on the right of the icon bar. (Click the **Menu** mouse button on the palette icon and then select the 'Default' menu option.)

When you are satisfied with the colour, click the **OK** button. If you don't want to keep the edited colour, click the **Cancel** button and the original colour will remain unchanged.

The shape of the colour spots in the colour fields of the style editor and frame editor indicates which model was used to define them. The spots are square for RGB, round for CMYK and hexagonal for HSV.

You can convert between the three colour models at any time by clicking one of the **RGB**, **CMYK** or **HSV** radio buttons at the bottom of the dialogue box.

The Dictionaries

There are five types of dictionary in Impression:

- The Main dictionary. About 60,000 words long, this is used for general spelling checking.
- User dictionaries. There can be several of these each holding up to 1,500 words. These contain specialised words you have added that are not in the main dictionary. (For example, names of car manufacturers if that is what you write about.) There can be any number of user dictionaries on disc but only eight can be loaded into Impression at any one time.
- The Ignore dictionary. This is a temporary dictionary used, for example, to hold someone's name when you are typing a letter. This name is used only for the current document and can be discarded afterwards.
- The Abbreviations dictionary. You will find that you often use certain words and phrases. The abbreviations dictionary allows you to type in a shortened form which Impression automatically expands.
- The Exceptions dictionary. If hyphenation is switched on, then, when necessary, words are hyphenated at the end of lines. The exceptions dictionary controls where the words are split.

These dictionaries are described in more detail in the next three sections.

The Main and Exceptions dictionaries can be automatically loaded by using the **Preferences** dialogue box. The other dictionaries are automatically loaded if they are in the *Auto* directory. Refer to *Customising Impression* for more details. If you add or delete words from any of the dictionaries in the *Auto* directory, they will be automatically updated on disc when you quit Impression.

The spelling checker

The spelling checker supplied with Impression is similar to the separate program, Spell-Master, which is available from Computer Concepts.

A ROM version of Spell-Master – available as an optional extra – can also be used by Impression. The ROM version requires about 90Kb less memory than the disc-based versions. There are minor differences between the two versions and these are described later.

Pitfalls of a spelling checker

A spelling checker compares text against a list of correct words and indicates any words which it cannot recognise. This does not necessarily mean that the word is spelt incorrectly, merely that the spelling checker does not recognise it.

Consequently, if vital words are missing from the spelling checker's 'dictionary' they are an unnecessary distraction. Most spelling checkers, including Impression's, therefore allow you to add words.

Because a spelling checker only compares each word against its dictionary, it cannot spot a correctly spelt word used in the wrong context. For example,

'The **Whether** is sunny today'

uses 'whether' when the correct word should be 'weather'. This is a common mistake in written English, but because the word exists and is correctly spelt, a spelling checker does not spot the mistake.

A similar problem can arise from a genuine typing error, for example:

'I didn't eat my **super** last night.'

in which a letter 'p' has been accidentally omitted from the intended word 'supper'. Once again, because the resulting word 'super' does exist, a spelling checker does not spot the mistake.

Describing the pitfalls of the spelling checker may seem a peculiar way to introduce it, but it is important to be aware of the limitations in order to appreciate the benefits.

Letter transposition

Of course the majority of mistakes are caused by pressing the

wrong key, rather than an inability to spell correctly. This sort of error is regularly picked up by the spelling checker.

Transposition is the most common typing error, e.g. typing 'exmaple' instead of 'example'. The spelling checker is very good at spotting such mistakes. Whilst spell checking it even tries to make a guess at the misspelt word and in most cases the guess will be accurate. With the above misspelling of the word 'exmaple' the guess is correctly made as 'example'.

The spelling checker's dictionary

The built in dictionary is made up of almost 60,000 words, with each different word ending treated as a separate word. As a rough guide, a base dictionary of about 10,000 words would be adequate for most people, but it would have to be increased to hold words specific to their particular requirements.

The spelling checker's dictionary is an English (UK) dictionary and is meant to be a list of words which covers the basic vocabulary of an average person. Some terms peculiar to the Archimedes and computers in general are included, such as 'Archimedes', 'podule', 'RAM' and 'Epson'. Most country names and UK county and city names are included.

Disc-based dictionaries are very slow in operation, and a fast data storage device such as a hard disc becomes essential for reasonable operation. For this reason Impression builds and loads any user dictionaries into main memory and then uses the version in memory for spell checking.

User dictionaries

Up to nine *extension* or *user dictionaries* are allowed in memory simultaneously.

One of these is a special *Ignore dictionary* which contains words that are to be ignored during checking but not integrated into the main dictionary for other operations such as guessing the correct word. An example of what the Ignore directory may contain is the name of a person to whom a letter is being written. It is not a spelling error but once the letter has been finished it can be discarded. The Ignore dictionary can be thought of as a temporary user dictionary.

When a word is added to a user dictionary, it is added to that dictionary in memory. The amended dictionary is not written back to disc automatically. If you want to use the amended dictionary in the future, you must save it to disc.

One user dictionary, when loaded, occupies 8Kb of memory. This is sufficient for approximately 1,500 words. With a capacity for eight dictionaries it is possible to add approximately 12,000 words. This should be more than sufficient. It is more likely that just one dictionary will be sufficient with, perhaps, others containing specialist vocabularies for use on specific documents. It is possible to have more than eight user dictionaries built and stored on a disc but only eight can be reloaded and used at any one time.

Preferences

If required, Impression can automatically load the spelling checker and one or more user directories. See the chapter *Customising Impression*.

No Spelling checker present

If Impression cannot find a requested dictionary, a dialogue box appears and invites you to load the spelling checker. The box has three buttons:

SPELL (default) - this loads Impression's spelling checker from disc.

ROM - loads the ROM version from a ROM expansion card.

CANCEL - cancels the operation.

If the necessary hardware is not fitted, the **ROM** button is greyed.

Once **ROM** or **SPELL** is chosen and the spelling checker loaded successfully, operation continues.

Possible errors

'No room in RMA' - There is insufficient space to load the spelling checker. Remove any application programs (apart from Impression) that may be loaded and try again. If necessary, reset the Archimedes to free more memory.

'RFS:Spell not found' or 'ROM:Spell not found' - this means a ROM expansion card is fitted, but the ROM version of the spelling checker is not present on the expansion card.

Check Word at Cursor

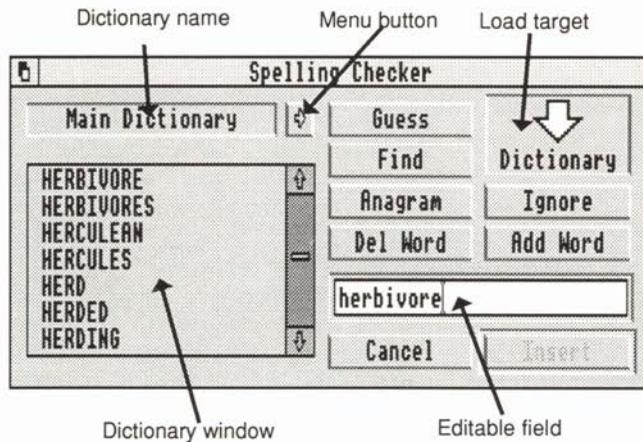
Keyboard short-cut: *Ctrl-W*

This function cannot be accessed from the menus. This check has three possible results:

1. The word is correctly spelt. In this case, you hear a 'happy' beep.
2. The word is not found in the dictionaries. Then:
 - the normal 'error beep' sounds,
 - the word in the text is highlighted,
 - the spelling dialogue box is displayed with the incorrect word in the editable field, and
 - the guess option invoked.
3. The word is only one or two letters long. Then you hear the 'error beep' and the word is ignored.

The Spelling checker dialogue box is described below.

Spelling checker dialogue box



Menu Button

Pressing this button with either the **Select** or **Adjust** mouse button acts the same as clicking the **Menu** button on any portion of the dialogue box. Either action brings up the menu for the spelling checker, which controls which dictionary to display and the setting up, deleting, and saving of user dictionaries.

Guess

Guess again

This button performs a guess operation on the current word in the editable field. The hourglass is displayed if the operation takes more than a few seconds. A list of any words that are found is displayed in the dictionary window. If no matching items are found, 'no words found' is displayed in the window.

After the operation, the button changes to **Guess again**, which provides a different guessing facility. Both **Guess** and **Guess again** highlight the top item in the list.

Guess uses *typo matching*. This assumes a single typing error such as two characters transposed or one missing letter or one extra letter, and searches the dictionary for close matches.

Guess again uses *fuzzy matching*. This performs a 'sound-alike' search through the dictionary noting any close matches.

Find Find next

This button finds the closest match to the word in the editable field in the main dictionary and displays the dictionary from this point onwards in the scrolling list. If the word is in the dictionary then it will be the top item in the list.

If the editable field contains a * or a # character, then the button performs a wild card matching operation on the current word in the editable field against words in the main dictionary. The hourglass is displayed if the operation takes more than a few seconds.

The # character represents one unknown character whereas a * character represents multiple unknown characters. Some examples of these wildcards are shown below:

Comput#r - will list the word **Computer**.

Fr#a* - will list all words that start with the letters **FR** and have an **A** as their fourth letter.

Relev#nt - will show whether the correct spelling is **relevent** or **relevant**.

If no items are found then '*no words found*' is displayed. If the number of words that match the current specification is more than can be stored in memory, the last word that was checked is noted and the operation is stopped.

The words up to this last word are displayed in the scrolling list and the button changes to **Find Next**. If the button is pressed again then the operation continues from the point at which it left off. The button is reset to **Find** if either all words in the dictionary have been matched against or you change the word in the editable field.

Anagram

This button performs an anagram operation on the current word in the editable field. This searches through the entire dictionary for any words which have exactly the same letters as specified in the editable field. The hourglass is displayed if the operation takes more than a few seconds.

The words found are then displayed in the scrolling list. If no items are found then it displays *'no words found'*. This option also highlights the top item in the list.

Ignore

Pressing the **Ignore** button adds the word to the Ignore dictionary. This is a special form of user dictionary which provides the means to forget about a word during a spell check operation without having to add it to a user dictionary. If an ignore dictionary is absent, Impression tries to create one.

If the word was added to the dictionary correctly with no errors, and the main dictionary is on display in the scrolling list, then a 'find' operation is performed on the word in question. This displays the main dictionary in the scrolling list starting with the closest word at the top of the list.

Possible errors include:

'No room in RMA' = there is insufficient room to create the dictionary.

'Illegal character' = a * (star) or # (hash) character is present in the word (hyphens are ignored).

'String too short' = word is 1 or 2 characters long.

If the dialogue box was displayed because either **Check entire text** or **Check from cursor** found an unknown word, then click on **Ignore** to resume searching. The dialogue box remains on screen and searching continues from the next word in the text. The pointer changes into the hourglass until the next unknown word is found. Use either **Select** or **Adjust** to click on the button.

If the dialogue box was displayed because of a **Check word at cursor** or **Dictionary** operation, the two mouse keys operate differently:

Select removes the dialogue box from the screen

Adjust keeps the dialogue box on the screen and allows more operations on the dictionary to be carried out.

Add Word

The **Add word** button adds the word to a user dictionary. If no user dictionaries are present then a default one is created.

Possible errors are the same as for **Ignore**.

The **Select** and **Adjust** mouse button operate as in **Ignore** except that **Adjust** updates the main dictionary, if this is displayed. In this case the top item in the list is the word that has just been added to the user dictionary.

Del Word

The **Del word** button deletes the word from all user dictionaries. Since clicking in the scrolling list in the dictionary window will put the specified word into the editable field, this feature can be used to delete selected words. It is only possible to delete words from the extension dictionaries - attempting to delete a word from the main dictionary will fail.

Clicking with the **Select** or **Adjust** buttons works in the same way as for the **Ignore** or **Add word** buttons.

Possible errors include:

'Illegal character' = a - (hyphen) , * (star) or # (hash) character is present in the word.

'String too short' = word is 1 or 2 characters long.

'Word not found' = there are no matching words present in any user dictionaries.

'Unable to delete word' = the word is in the main dictionary or is not present in either the main or user dictionaries.

Cancel button

This button removes the dialogue box and stops any current checking process. When the dialogue box is selected, pressing *Esc* has the same effect.

Replace Insert

When it says **Replace** and there is a highlighted word in the list, the highlighted word in the text is replaced by the word in the list. When replacing the word, notice is taken of the *case* of the letters. If the new word is longer, then the case of the new letters on the end reflects the case of the last letter of the old word.

However, if no word is highlighted, an error message is displayed in an Alert box.

When the button says **Insert**, the same applies but the word is inserted into the text at the cursor position.

Editable field

This provides the word for all dialogue operations. When the dialogue box is brought up onto the screen, the cursor is placed into this field and, when spell checking, the unknown word is copied into this field. Amendments can be made to the word using the normal editing keys. The characters which can be typed into the field are:-

A-Z, a-z, * (star), # (hash), ' (apostrophe) and - (hyphen).

As you type into the editable field, the scrolling list will be switched so that the main dictionary is on display. This is then kept up to date so that the top item in the list is the nearest match in the dictionary. If there are * or # characters in the word, there is no update of the scrolling list.

If *Return* is pressed it acts as if the **Insert/Replace** button has been clicked. This is useful whilst spell checking since when the guess has been completed and the list of sound-alike words is shown, the top word is often correct, so pressing *Return* will select that word.

If there is a space in the editable field, then operations such as **Guess**, **Guess Again**, **Find**, **Find on * and #** and **Anagram** all treat the space as the terminator for the word. For example, if *hello there* is the text in the editable field and the **Find** button is clicked on, this means that a browse operation on the main dictionary will be performed on the word 'hello'.

Scrolling list

This either contains a display of the chosen dictionary or of words created from other options such as a **Guess** operation. If a single click is made on an item in the list, then the selected word is transferred into the editable field and that word in the list is highlighted. If an item is double-clicked, this acts as if the **Insert/Replace** button had been clicked. This action is therefore the same as pressing the *Return* key.

Load Target

This is the icon on the top right hand side of the dialogue. Any user, ignore, exception or abbreviation dictionaries which have been previously saved can be re-loaded by picking up a file icon, dragging it to the load target and dropping it. If the file is recognised then it will be loaded in.

Possible errors include:-

'No room in RMA' - no space to create dictionary in relocatable module area.

'Illegal Character' - The filename contains characters other than A-Z or a-z.

Spell Dialogue Menu

This is invoked by pressing the menu button on the **Spelling** dialogue box.

Dictionary	
√Main dictionary	
Exception	↕
Abbreviation	↕

Create	↕

Ignore	↕
USERDICT	↕

If no ignore dictionary is present then the ignore option will be greyed.

There may be up to eight user dictionaries loaded, and each of them will have a menu option. (In the above example, there is one user dictionary loaded called USERDICT.) If you click on the name of a user dictionary in this menu, a tick appears against the name. Then any words you save using **Add word** in the **Spelling checker** dialogue box will be saved into that dictionary. This is useful if you have more than one user dictionary. For example, you may have two user dictionaries: 'general' and 'technical'.

Main dictionary

If you choose this option it becomes ticked, and the main dictionary will be displayed in the dictionary window.

Exception

If this option is chosen, the hyphenation exception dictionary will be displayed in the dictionary window and the option will become ticked. If the hyphenation program is not present, a warning box will appear allowing you to load it in.

The **Save** option on the submenu allows the exception dictionary to be saved by dragging the icon of the exception dictionary to a filer window.

Abbreviation

This refers to the abbreviation dictionary and operates in the same way as the exception menu option.

Create

The **Create** option allows the creation of up to eight user dictionaries by moving onto the submenu and typing a name for the user dictionary. Note that the name you give it can be up to 10 letters long and that you can only use A-Z or a-z; numbers cannot be used.

Once *Return* has been pressed or a mouse button has been clicked, a user dictionary is created with the given name.

Possible errors which can occur during this creation process are:

'No room in RMA'

'Already eight dictionaries'

Ignore

This option will be greyed if no ignore dictionary is present. It has two sub menus: **Save** and **Delete**.

Save allows you to store away a copy of the current ignore dictionary by dragging the icon from the sub-window. Unlike the normal saver windows, you cannot change the filename; this is because the spelling checker uses this filename as the name of the dictionary. This is limited to the letters A-Z and a-z, whereas filenames allow a greater range of characters. If the dictionary needs to be re-named then the normal file re-naming process can be used. If an illegal name is encountered on loading a dictionary then an error message is given.

Delete removes the current ignore dictionary, whether it is empty or not.

User Dictionaries 1 - 8

Choosing one of these options selects the user dictionary to which new words will be added. This option has a slightly different submenu:

Save

Save as text

Delete.

Save and **Delete** act in the same way as for the **Ignore** menu option. **Save as text** allows you to save the dictionary as plain text. You can then edit the file using applications such as *Edit*. Give the modified file a suitable name and drop its icon on the load target on the Spelling Checker dialogue box. This creates a new user dictionary. Note that the name you give it can be up to

10 letters long and that you can only use A-Z or a-z; numbers cannot be used.

Technical Notes on the spelling checker

The disc version of the spelling checker supplied with Impression loads the dictionary into main user memory, in fact into a place called the module area, and can take up approximately 112k of RAM.

If a Computer Concepts ROM/RAM expansion card or Acorn ROM expansion card is fitted to your machine then it is possible to use the ROM-based program Spell-Master, available as an optional extra.

This has the advantage of reading the dictionary from the ROM rather than copying it into main memory. The ROM actually only uses about 26k of module space and hence can be a big advantage to users with a 310, 410, or unexpanded A3000, each of which only has 1Mbyte of memory.

Abbreviations

When typing a long document, you will often find that you are typing many of the same words or phrases repeatedly. Impression offers a method of speeding up your typing by allowing you to define abbreviations for often used phrases, which are then automatically expanded as you type. For example the phrase *for example* could be abbreviated to *eg*. Then, every time the word *eg* is typed on its own, it will be expanded to *for example*.

One particular use for this option is expanding frequently used, long telephone numbers. By entering, for example, *tn1* as an abbreviation for *010 1 415 684-7729*, you not only save yourself typing but also ensure that the number is correct each time it is used. (When typing it is very easy to transpose two numbers such as 7792.)

Abbreviations are only expanded if they are terminated by a space, full stop, *Tab* or *Return*. If you move off the word using the arrow keys, the abbreviation will not be expanded. Abbreviations are not expanded if preceded by a character such as a bracket. Also, they are case-sensitive – in the examples above, only *eg* and *tn1* would be expanded; *Eg* or *TN1* would not.

Abbreviations can be entered and saved from the **Dictionary** option in the **Abbreviations** menu.

An abbreviations dictionary can be automatically loaded when Impression starts up. See *Customising Impression* for details.

To turn on the expansion, click on the **Expand as you type** option in **Abbreviations**. You can also customise Impression to set this option on every time Impression is loaded. See **Preferences** in the *Program Menu* chapter for more details.

Hyphenation

When a word runs over the end of a line, it can be either moved to the next line or split over the two lines and the two parts separated by a hyphen. Hyphenation is the splitting of words over two lines.

Hyphenation in Impression is provided by a separate program. If you do not wish to use the hyphenation facility, the program does not have to be loaded in, and around 17K of memory will be saved. Words can also be hyphenated using soft hyphens; these are described later.

Impression can be made to automatically load the hyphenation program when it starts up by setting the **Auto load Hyphenation** switch in the **Preferences** dialogue box. See the *Program Menu* chapter for more details.

If the hyphenation program has not automatically been loaded, you can do so by bringing up the spelling checker dialogue box (from the **Spelling** menu or by typing *Ctrl-F8*) and clicking the **Menu** button over the dictionary window to bring up the **Dictionary** menu. Choose the **Exception** option. This will bring up an Alert box saying *'No hyphenation module present. Use the Load button to install it.'*

Clicking the **Load** button will load in the hyphenation program and display the hyphenation exception dictionary in the window.

Using hyphenation

The hyphenation module is used when a style has the **Hyphenation** attribute on and a word will not fit at the end of a line.

The word is passed to the program for hyphenation. The program first checks to see whether the word is in the exception dictionary, and if not it attempts to apply its own built-in hyphenation rules to the word. The hyphenation system uses a combination of dictionary look-up and a sophisticated hyphenation rule method. In addition you may specify the exact position of hyphenation points in any word by using the hyphenation exception dictionary.

Of course, not every word that does not fit will be hyphenated. The likelihood of a word being hyphenated depends on a variety of factors. The larger the gap left at the end of the line by a word not fitting, the more likely it is to hyphenate. Also if there are

hyphens already at the end of previous lines then it is less likely to hyphenate since a run of hyphens is undesirable.

Only if the ideal conditions are met AND suitable hyphenation points in a word can be found will the word be hyphenated.

Special cases

- If the word being checked will not fit into the column width for that frame e.g. the word will not hyphenate using the rules and the line width is too small, then it will be forcibly hyphenated.
- If the word is shorter than 4 characters then it will not be hyphenated.
- If the word is longer than 32 characters then the word will be forcibly hyphenated.
- Any non alphabetic character or hyphen already in the word means that the word will not be hyphenated.
- The last word in a paragraph will not be hyphenated.
- A word containing a soft-hyphen (*Ctrl-hyphen*) will be hyphenated at the soft-hyphen.

Special Words

Some words are special cases where the point of hyphenation depends on the context in which the word is used. Examples would be:-

I gave my aunt a pres-ent.

I pre-sent you with this item.

In such cases the word should not be automatically hyphenated and the word should be entered as an exception into the exception dictionary with no hyphenation points present. If hyphenation is required then this should be entered manually using a soft hyphen (described below).

Adding words to the exception dictionary

Words are added to the exception dictionary in the same way as they are added to other dictionaries in Impression. The word should be typed into the editable field as normal, and any hyphenation points should be indicated by a number (1, 3 or 5 with 1 being the worst point and 5 being the best). For example:

night3mare

would make sure the word *nightmare* is only hyphenated between *night* and *mare*.

Deleting words from the exception dictionary

To delete a word, click on the word in the dictionary window to put the word in the editable field, then click the **Del word** button, and the word will be removed.

Soft hyphens

A soft hyphen is inserted in the text by pressing *Ctrl-hyphen*. This special character allows you to override the automatic hyphenation on any required word or to force a hyphen to occur when the hyphenation program is not present.

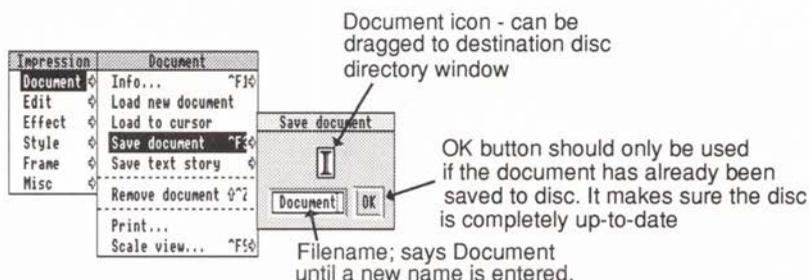
When a word is likely to be hyphenated because it appears at the end of a line, insert the soft hyphen at the point where you want the word to hyphenate. In the example word *nightmare* you would put a soft hyphen between *t* and *m*. If the word is hyphenated, the break will be between *night* and *mare* and the soft hyphen replaced by a normal hyphen. If the word is not hyphenated (later edits may move the word to the middle of the line), the soft hyphen is invisible and has no effect.

If you step the cursor through a word containing a soft hyphen, you will see it pause at the soft-hyphen. This is because the soft hyphen is a character in the word even though it is invisible.

Saving documents

An Impression document is saved as a directory containing a number of files, rather than as a single file. This is because Impression supports a virtual memory system where a document that is too big to be kept in memory is kept partially on disc, with the sections that you are currently working on automatically loaded from disc and retained in memory. The directory structure makes it possible to alter parts of the document on disc with ease. This directory is actually set up as an application so that it is treated as one object by the filer. Unfortunately this means that document names have a ! appended to the beginning of the document name.

Impression does not require a 'work' disc or 'slave' disc - if you have saved a document, the program will automatically save information to that file when the memory becomes full. The document on disc to which information is saved is known as the *virtual* or *open* document.



When you begin a new document, it will, of course, not exist on disc. Although Impression may be able to make room by saving something not immediately required out to disc, there must first be an open document to save it to. If you save the document, that copy will become the open document and you can then re-try the operation.

If you save the current document to the open document using the **Save Document** menu option, then Impression only saves the information which has changed since the last save. Therefore saving to the open document is the quickest way of saving and should be used during normal work. The easiest way to do this is to click on **OK** in the save document dialogue box, since the name presented to you is always that of the open document. There is also a keyboard short-cut of *Ctrl-F3*.

Saving a document either to a different directory or with a different name generates a new document on disc and is much slower than saving to the open document. When you save a document under a new filename, Impression uses that new file as the open document. Therefore, to backup a document you save the document to the current open disc file and then save the document using a new name. The old disc file is now your backup and the new disc file is the open document. If you number your files (such as *Manual1*, *Manual2*, *Manual3* etc.) you will find it easy to keep track of the backups.

We cannot stress too strongly that you should always make ample backups. Even if you have a hard-disc, you should regularly save documents to floppy discs for security. Similarly, on a floppy disc system, you should use several different floppy discs for storage. Modern discs are reliable but failures do occur. Remember that an Impression document can represent many hours of typing and layout work.

On floppy-disc systems, if the open document is on one disc and the document is being saved to another, you may be prompted to swap floppy discs.

If Impression needs to save text or graphics to disc to make more space in memory, an Alert box warns you that the file on disc is about to be changed. If you press **Cancel** on this Alert box, Impression may not be able to carry out the operation that required the extra memory. (You would press **Cancel** if you were, perhaps, just trying out some changes to an important document.)

Saving stories

The menu option **Save text/graphics/selected** allows you to save the currently selected story.

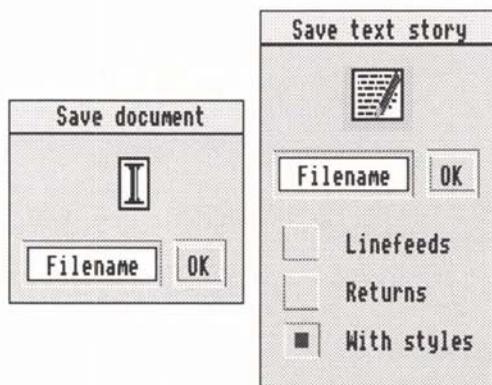
If you have clicked in a graphics frame this menu option will read **Save graphics**.

If you have clicked in a text frame and there is no selected region then this option will read **Save text**.

If there is a selected text region then this option will read **Save selected**.

Moving to the right of this option brings up a save dialogue box; in the case of graphics this will be the standard dialogue box with an **OK** button, an icon and an editable field. The graphics are saved as Draw files.

The save text box is more complicated, with three extra buttons on it: **Linefeeds**, **Returns**, and **With styles**. For details of how to use these buttons to save text for other application programs, refer to the *Main Menu* section.



If the **Linefeeds** button is pressed, then the text is saved with line feed on the end of every line.

If the **Returns** button is pressed, then the text is saved with return on the end of every line.

If both buttons are pressed, then the text is saved with return and linefeed on the end of every line.

If neither button is pressed, then the text is saved with only those return characters that you specifically typed in. This is probably the most useful option for saving plain text into another word processor.

The **With styles** button saves text in Impression's own format including information about text styles, effects, and rulers. (More information on this format can be found in the section *Document Description Format*.) This allows you to incorporate the text into Impression in the future and all styles and effects will still be present.

Printing

Remember, you must have the appropriate printer driver loaded before Impression can print anything. The printer drivers are loaded in the usual manner by double-clicking on their icon.

The time taken to print a page depends on the type of printer and on the complexity of the page. Some printers (such as dot matrix) can take 4-5 minutes to print a complex page; others such as Computer Concepts' LaserDirect, a few seconds. Printers such as PostScript retain the page image in their memory and so printing multiple copies of the same page takes only slightly longer than printing a single copy.

If you are printing a page that contains only text, then it can be quicker to use the printer's own character sets. Impression calls this 'draft printing'. The final result will not be exactly as seen on screen but does allow you to print letters and memos quickly. Certain printers, such as PostScript and Computer Concepts' LaserDirect, do not benefit from draft printing. They can print pages with text and graphics as fast as they can print text-only.

Impression can handle all these different characteristics by providing two modes of printing:

- a high-quality mode which uses the fonts displayed on screen and prints the graphics, and,
- where useful, a text-only mode which uses the character sets provided by the printer and does not print graphics.

With either mode, you have these options:

- printing single or multiple copies
- printing all pages or only a selection

and, for high-quality mode only:

- reducing the page size and so allowing you, for example, to reduce an A4 page on screen to A5 on paper.

The print selection that you set is stored with the document and is redisplayed when you next call up the print dialogue.

Some printer drivers need setting up to define the type of interface (serial or parallel) and protocol required. To do this, click on the printer driver icon on the icon bar. You may need to refer to the Archimedes *User Guide* and the manual for your printer for interface details.

Compile index/contents

Indexing is one of the most time-consuming tasks when writing a book or manual, so Impression has the facility to automatically generate an index from a document.

In order for Impression to create an index or a contents page, it must know which references to include. You indicate words and phrases to include by marking them with a specific style, then Impression can go through the document finding those entries, and creating an index complete with page numbers.

Style labels

When building indexes or contents pages, Impression looks for styles which have either the **Index** or **Contents** style label switches set in the style editor. See *The Style Editor* for more details.

Compile index

This menu option will create a new chapter at the end of the document containing an index for the document.

To make an index chapter, some parts of the document must have been labelled with a special style to show that they should be included in the index. This style is usually called *Index* and normally has just the **Index** attribute set (see *The Style Editor*). However, it can be useful to set the text background colour for the index styles temporarily so that all the words which will appear in the index are shown on a coloured background. It is up to you to decide which words and phrases you want in the index by applying the *Index* style to those words.

The index compiler works by going through all the text stories in a document searching for any text labelled with the **Index** style label.

Each unique piece of text marked with one of the index style labels will be given an entry in the index (the case of alphabetic characters is ignored). Entries can contain any character including spaces but any leading and trailing spaces are removed before they are entered in the index. A list of the page numbers containing each entry is constructed after the entry. If an entry appears on two or more consecutive pages a range is shown.

Entries are arranged alphabetically under category headings of the letters A to Z. If an entry does not start with an alphabetic

character it will either appear before the A category or after the Z category, depending on the character.

Compile contents

This menu option will create a new chapter at the beginning of the document containing contents pages for the document.

Making a contents chapter is very similar to making an index chapter. Areas of the document have to be labelled with special styles to show that they should be included in the contents pages. These areas are usually the various headings and sub-headings used in the document and so the styles which control headings usually have the **Contents** style label set.

The contents compiler searches the document for any text labelled by the **Contents** style label. There will usually be several styles with the **Contents** label set, and along with each of them is a contents level number. This level number is used to control the style in which the entry will appear in the contents pages. Unlike index compilation where the same style is applied to all entries, the contents compiler can apply different styles to the entries depending on the contents level number. This is usually used to show the relative importance of headings and sub-headings within the document by indentation of the entries in the contents pages.

Each piece of text marked by one of the **Contents** style labels will appear in the contents pages as it is found in the main text, except for any styles or effects applied to it. The entry will be given a new style in the contents chapter depending on the contents level with which it was labelled. Entries can contain any character including spaces but any leading and trailing spaces are removed before they are entered in the index. The entry text will be followed by space and tab characters and then by the page number on which it appears. The whole line will have the style *ContentsN* applied over it, where *N* is the contents level number from the labelling style.

The *Contents* styles must be defined before the contents pages are compiled. If a contents style cannot be found the entry will be in *BaseStyle*. There are sixteen contents level numbers available in styles ranging from 0 to 15.

Common aspects of index and contents compilation

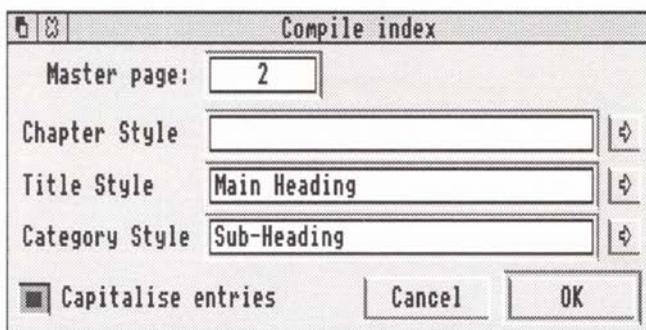
Text stories which exist only on master pages, such as headers and footers, are not included in the index/contents search. If the

document is very large the index/contents compiler may have to bring in text stories which have been shuffled out of memory - so there may be some disc access while the new chapter is being compiled.

The **Style labels** area of the style editor allows any style to take part in the compilation of index or contents chapters. The *Main Heading* and *Sub-Heading* styles are set by default to label text for contents compilation. There is no index label style defined by default but a suitable style can be created by selecting **New style**, giving the style the name *Index* and setting the **Index** style label.

The label styles do not need to have any effect on the format of the text to generate entries in the compiled chapters. For instance, you may have marked some text in *Sub-Heading* style and subsequently applied another style over it so that the effects of the *Sub-Heading* style are completely hidden. The text in *Sub-Heading* style will still appear in the contents pages.

The compile dialogue



The **Compile** dialogue lets you control the styles used in the index chapter - it would be very tedious to have to apply styles to the entries by hand!

The **Chapter Style** gives the name of the style that will be applied to the whole chapter. This style should be appropriate for the layout of the chapter. Each entry in the chapter is followed by a space character, a tab character, then the list of page numbers on which that entry exists. If the **Chapter style** is defined to have no tabs then the page list will be displayed directly after the entry text. If the **Chapter style** defines a tab position it should be set so that it is beyond the end of the longest entry text. Then all the page number lists will line up vertically. The left margin and return margins can be used to control the wrapping of long page

number lists. It is also probably a good idea to set the **Space below paragraph** of the **Chapter style** to zero since the entries may otherwise be spaced out too much.

The **Title style** is applied to the word *Index* or *Contents* which is always placed at the start of the chapter.

The **Category style** is only used in index compilation and is applied to each of the category headings, the letters *A* to *Z*. This style should set the **Space above paragraph** so that each category is separated from the preceding entries.

Style names can be typed in to all three fields. Alternatively, clicking Menu over the editable fields or clicking on the menu arrows to the right of them will bring up the style list to let you select the style.

The **Master page** field allows you to choose which master page the index or contents chapter will be created with. Since index entries are usually fairly short, a two column master page can make better use of the space on the page.

When the **Capitalise** button is on it will force entries to have an upper-case first letter. Otherwise the entries are shown as they first occur in the document.

Once the index or contents chapter has been created it can be edited just like a normal chapter but remember that if you ever need to re-compile it, any edits that you have made will not appear in the new version. It is for this reason that the creation of a new index/contents chapter will not delete the old one. This gives you the opportunity to examine the changes between the old and new chapters. The old chapter can then be deleted using the **Alter chapter** dialogue.

What happens when I run out of memory ?

It is unusual to have very large documents consisting entirely of text. Graphics, especially sprites, can take very large amounts of memory for just a single picture. For example a mode 20 screen image takes 120K, that's equivalent to over 15,000 words.

Therefore Impression has the ability to temporarily remove graphics from memory, in order to allow the maximum free memory for text. The menu option **Minimise memory** does this, saving away all graphics back to the disc file. Alternatively the **Hide graphics** button in the **Alter frame** dialogue will also have the same effect. In both cases it is necessary that the document has already been saved once so Impression knows where to save the graphics.

Whenever a graphics has been temporarily removed, a cross is shown. Simply clicking in the frame should then bring that graphic back into memory again, assuming there's enough room.

If memory runs out when editing text, Impression displays an error message indicating that the operation is not possible. Quite often at this point Impression will hide some of the text in the document, and keep it hidden until some more memory is made available. This text has not been lost; it is simply hidden from view. If some more memory is made available by deleting other programs, or by memory management, then attempting to edit the text again should re-format and bring all the text back again.

If an error such as "*Heap full*" should occur, this indicates the operating system is seriously short of memory and so it will definitely be necessary to recover some memory.

For more information on memory management, see the appendix *Hint and Tips*.

6. Commands and Menus

Keyboard short-cuts

You can perform many operations by using a single keystroke on the keyboard. Appendix 2 contains an alphabetic list.

Where a short-cut is equivalent to a menu option, this is detailed in the *Main Menu* chapter - it will be only briefly mentioned here. Full descriptions are reserved for those operations which you cannot select via the menus.

The usual notation is used:

- *F1* to *F12* denotes the function keys,
- *Shift-F1* means hold down the *Shift* key and then press function key *F1*, and
- *Ctrl-F1* similarly means hold down the *Ctrl* key and press *F1*.

Where a character A to Z is shown, this can be either upper-case or lower-case. (For example, *Ctrl-D* and *Ctrl-d* have the same effect.)

Deleting and Copying

- Ctrl-A* - delete the character after the cursor
- Ctrl-C* - copy the selected item to the clipboard (see *Main Menu*)
- Ctrl-D* - cut the word at the cursor to the clipboard
- Ctrl-H* - delete the character before the cursor
- Ctrl-K* - delete the selected item (see *Main Menu*)
- Ctrl-L* - cut the entire line to the clipboard
- Ctrl-X* - cut the selected item to the clipboard (see *Main Menu*)

Dialogues

- Ctrl-F1* - document info (see *Main Menu*)
- Ctrl-F4* - find (see *Main Menu*)
- Ctrl-F5* - new style (see *Main Menu*)
- Ctrl-F6* - edit style (see *Main Menu*)
- Ctrl-F7* - new chapter or new master page (see *Main Menu*)
- Ctrl-F8* - dictionary (see *Main Menu*)
- Ctrl-F9* - scale view (see *Main Menu*)
- Ctrl-F10* - alter frame (see *Main Menu*)
- Ctrl-F11* - alter graphics (see *Main Menu*)
- Ctrl-Shift-A* - alter chapter (see *Main Menu*)

Effects

Ctrl-Shift-L - line spacing edit box (see *Main Menu*)

Ctrl-Shift-S - text size menu (see *Main Menu*)

Ctrl-Shift-U - underline effect (see *Main Menu*)

Kerning

Ctrl-E - extend space between characters (horizontal kerning)

Ctrl-J - move baseline down (vertical kerning)

Ctrl-R - reduce space between characters (horizontal kerning)

Ctrl-U - move baseline up (vertical kerning)

Page movements

Ctrl-N - move to next page (if any)

PageDown - equivalent to *Ctrl-N*

Ctrl-P - move to previous page (if any)

PageUp - equivalent to *Ctrl-P*

Ctrl-Shift-G - go to page (see *Main Menu*)

Paste

Ctrl-V - paste clipboard contents (see *Main Menu*)

Insert - equivalent to *Ctrl-V*

Ctrl-Shift-F - embed frame (see *Main Menu*)

Rulers

Ctrl-Shift-E - edit ruler (see *Main Menu*)

Ctrl-Shift-N - new ruler (see *Main Menu*)

Ctrl-Shift-P - toggle page rulers on and off

Select text

Ctrl-Q - select word containing cursor

Ctrl-Copy - select line containing cursor

Ctrl-@ - select paragraph containing cursor

Ctrl-T - select entire story containing cursor

You can also select using the mouse:

double-click to select a word,

triple-click to select a line,

quad-click to select the entire paragraph.

Spelling

Ctrl-F - check spelling of the story from cursor (see *Main Menu*).

Ctrl-W - check spelling of word at cursor. If the spelling is correct, then you will hear a short beep to confirm. If the spelling is wrong, then you hear an alert beep and a

dialogue box appears with suggested alternative spellings.
(See *Spelling checker* in *Using Impression*.)

Miscellaneous

The remaining commands don't fit into any particular heading.

Ctrl-G - force to next frame (see *Main Menu*)

Ctrl-I - insert new frame (see *Main Menu*)

Ctrl-O - turn frame outlines on and off (see *Program menu*)

Ctrl-S - swop case of character at cursor (from *lower-case* to *UPPER-CASE* or vice versa)

Ctrl-Z - de-select the selected region.

Ctrl-F2 - open master page window

Ctrl-F3 - save current document (see *Main Menu*). You can only use this option if the document already exists on disc.

Ctrl-Shift-B - put to back (see *Main Menu*)

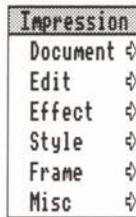
Ctrl-Shift-C - close window (this is the same as clicking on the Close icon on the editing window)

Ctrl-Shift-R - insert new repeating frame (see *Main Menu*)

Ctrl-Shift-T - save text story (see *Main Menu*)

Ctrl-Shift-Z - remove document (see *Main Menu*)

The Main Menu



Use this menu to select options relating to individual documents. You access it by moving the mouse pointer over an Impression window and clicking the **Menu** mouse button.

Commonly used options can also be accessed directly from the keyboard. Where this applies it is shown in the description of the particular option. (A full list of the Keyboard Short-cuts is given in the previous section.)

At times some menu options are not available for use. For example, those controlling graphics are only available if the selected frame is a graphics frame. An unavailable option is displayed in light grey on screen; this is termed *greyed*.

Some menu options are followed by ellipsis (...) such as **Info ...**. This shows that clicking on the option name displays a dialogue box rather than just setting an option.

Some menu options have a small arrow to their right. Slide over this to display a submenu of further options.

Some menu options can have two or three different wordings. For example, the cut option reads **Cut text** if a region of text is selected and **Cut frame** otherwise. Where this applies, all possible wordings are shown followed by an explanation of when each appears.

Keyboard short-cuts are shown on the menus. The Archimedes conventions are used where '^' represents the *Ctrl* key and an up-arrow represents the *Shift* key.

To help you find descriptions in this section, each item on the Main Menu is described in turn (*Document*, *Edit*, *Effects* etc.). The heading at the top of the page shows which Main Menu item the page applies to. For example, the heading *6. The Main Menu - Document* tells you that page describes an option on the **Document** menu.

Document

Document	
Info...	^F1 ⇄
Load new document	
Load to cursor	
Save document	^F3 ⇄
Save text story	⇄

Remove document	⇄^Z

Print...	
Scale view...	^F9 ⇄

The **Document** menu deals mainly with the whole document. It allows you to:

- save the whole document or only parts of it,
- display information on the document,
- remove the document from memory,
- print the document,
- zoom in or out on your view of the document.

Info

Keyboard short-cut: *Ctrl-F1*

Info on 'keystroke' Original			
Document			
Pages	2	Size	12 Kbytes
Cur page	2	Memory	12 Kbytes
Text			
Stories	1	Memory	5 Kbytes
Chapters	1	Words	190
Graphics			
Pictures	0	Memory	0 Kbytes

The info dialogue box

This has three sections and gives details about the current document. You can only select this option if there is a selected frame; you may have to click on a frame first.

To display the Info box either click on the option name or slide over the arrow to the right of the name.

To remove the Info box from screen, perform some action on the main window. This could be typing something, moving the window, or moving the cursor.

The title bar may read

Info on 'document' Original

if the document has not changed since the last save, or

Info on 'document' Modified

if you have made changes and not yet saved them. If you have unsaved changes, the document title bar also has an asterisk (*) to the right of the document name.

Document

Pages - the total number of pages in the document.

Cur page - the number of the page containing the selected frame.

Size - the total size of the document including all text and graphics. This is the amount of space the document will occupy on the disc.

Memory - the amount of memory occupied by the current document. For smaller documents, **Memory** and **Size** will be equal, showing that the whole document is resident in memory. If there is insufficient space for the entire document in memory, part of it is saved to disc. The program is then operating in *Virtual Mode*.

This value for memory usage is always greater than the sum of data memory and graphics memory. This is because additional space is required to hold details of the document's structure.

Text

Stories - the total number of text stories in the document.

Memory - the total memory required by all the text stories currently resident in memory.

Chapters - the total number of chapters in the document.

Words - the number of words in the current story.

Graphics

Pictures - the number of pictures (graphics) in the document.

Memory - the memory occupied by those graphics currently resident in memory. This is 0 if all graphics have been saved to disc.

Load new document

This option simply displays a reminder of the correct way to load a document.

A document can be loaded by either:

- dragging a document icon from a directory window onto the Impression icon, or
- double-clicking on a document icon.

If Impression is not already loaded, the second option automatically loads it.

Loading adds a new document to the *Resident Document List*. Use the **Program Menu** to obtain a list of all currently resident documents. It also opens a default window on the start of the document and displays the document name in the title bar.

Load to cursor

Load into frame

Load to cursor if the selected frame is a text frame.

Load into frame if the selected frame is a null or graphic frame.

This menu option simply reminds you that loading is performed by dropping a file icon onto the frame.

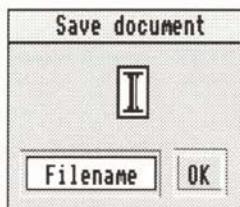
If a Sprite or Draw file is dropped onto a graphic frame, then it will replace any graphic already present. No warning is given. A sprite from any screen mode is accepted, as is any Draw file. If the Draw file contains formatted text, then this is not displayed. If you want to use formatted text, then it is better to put the text in an Impression frame, rather than use the somewhat cumbersome text box facilities offered by *!Draw*.

If a text file is dropped onto a text frame, then the text is inserted into the document at the cursor position, leaving the cursor at the end of the loaded text. If you want to replace the current text story with another, then the current one will have to be selected first.

If there is a selected region, then this operation will *replace* the selected region with the newly loaded text.

Only 'text' files are automatically recognised by Impression. If an unknown file type is dropped on the frame, then the *extension loader modules* are used to translate from the unknown file type into text. See the section on *Loading alien file formats* for more information.

Save document



This displays a typical RISC OS-style file icon that may be dragged and dropped over any window, usually a directory window. You cannot drop entire documents into other applications because they would be unable to make sense of Impression's format.

The complete document is saved including all stories and any graphics.

A document is saved as an Application directory containing sub-directories. The advantages of treating an Impression document as an application are numerous, but the most obvious is that the document may be treated as one 'file' object. This means that it may be dragged and copied to other discs exactly as if it were a single file. It also means that double-clicking on the file will load it (rather than simply moving down the directory) and, if necessary, start Impression at the same time.

Because an Impression document is saved as an application, RISC OS appends ! to its filename when it is saved to disc.



All Impression documents may be easily identified by the 'big I' file icon.

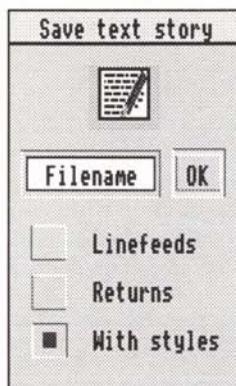
The current document will exist on disc if it was originally loaded from disc or it has already been saved. You can resave to an existing file using the keyboard short-cut *Ctrl-F3*.

You can save a complete copy of the document under a different name. Change the name in the *Save* box and then either click on *OK* or drag the icon. This is equivalent to 'Save as' on other systems. Subsequent use of *Ctrl-F3* or this menu option will save to the **new** document name.

Save text story

Save selected text

Save graphic



Save text story if the selected frame is a text frame and there is no selected region of text.

Save selected text if there is a selected region of text.

Save graphic if the selected frame is a graphic frame.

If the selected frame is a null (empty) frame, then this option is greyed.

Save text story

Keyboard short-cut: *Ctrl-Shift-T*

This saves the complete story rather than just the contents of the frame. A simple way to determine exactly which frames contain a particular story is to select the entire story (use *Ctrl-T*).

The dialogue box gives you control over the inclusion of returns or line-feeds in the file. Unfortunately, there is no standard convention for text files on the Archimedes and so it is necessary to offer this additional control.

If the **Return** button is selected then a Return (code 13) will be placed at the end of every line. If it is not selected, then a return code is only inserted where you have specifically typed *Return*.

If the **Linefeed** button is selected, then a Linefeed (code 10) is placed (possibly in addition to a Return code) at the end of every

line. Any *Returns* typed in, for example after paragraphs, will also be converted to linefeeds.

If the **With styles** button is selected then any effects and styles used in the text are output as an ASCII control sequence.

- If text is going to be re-loaded into **Impression**, then select only **With styles**.
- If text is going to be used in **Edit** or **Twin**, then it is usually preferable to select **Linefeeds**.
- If text is going to be used for sending to an electronic mail system, then select **Returns**.
- If text is going to be used by **Wordwise**, **Wordwise Plus** or **Inter-Word**, then select nothing.

Once saved as text, the position on the disc is remembered so that subsequent saves can be performed simply by clicking the **OK** button in the dialogue box - it is not necessary to drag the file icon.

The save text option supports in-memory transfer, so you can drop the file icon onto another program's window to transfer the text directly to the other program.

Save selected text

This menu option is offered only when there is a selected region of text.

This acts in exactly the same manner as the previous **Save text** menu option, except it will only save the selected region.

You are offered control over returns, linefeeds and saving effects and styles as described above.

This menu option also supports in-memory data transfer to co-operating RISC OS applications.

Save graphic

This option is offered only if a graphic frame is selected. This will save the graphics as a Draw file, even if it was originally a Sprite (since Draw files can contain Sprites).

This menu option also supports in-memory data transfer to co-operating applications.

Remove document

Keyboard short-cut: *Ctrl-Shift-Z*

This option removes the current document from memory. It does not delete the file from disc. There is also a similar option in **Program Menu**.

If the document has been changed but not saved, then you are asked to confirm that you wish to remove it. If you confirm, then all changes since the last save are lost. Pressing *Esc* has the same effect as clicking on **Cancel**.

This option (or **Remove document** on the Program Menu) is normally the only way to remove a document from memory. Simply closing the window does not remove the document as it would in, for example, *Draw* or *Edit*. The exception is when you open a new document by clicking on the Impression icon on the icon bar. If you have made no changes to the document (that is, it is still a blank document), when you click on the Close icon the document is deleted.

Use the **New view** option in the **Program Menu** to see a list of all documents currently in memory.

Print

Keyboard short-cut: *Print*

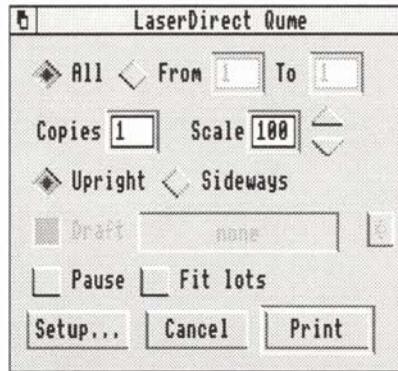
You must have a printer driver or a printer module loaded before you can print anything. Printer drivers and modules are loaded in the usual way by double clicking on their icons.

You can also display this dialogue box by typing *Ctrl-Print*. This resets the print options to their default states.

Pages and Paper

To avoid confusion, throughout this section the pages of an Impression document will be referred to as 'pages', and the sheets of paper produced by the printer will be referred to as 'paper'.

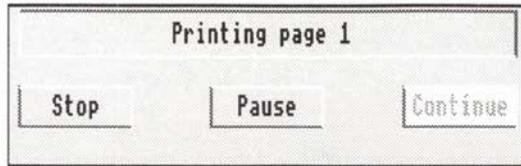
The Print Dialogue Box



The print settings are stored with the document. You may want to set these up and store them but not to print anything now. To do this

1. make any required changes,
2. click on **Print** with the **Adjust** mouse button,
3. click on **Cancel** to exit the print dialogue,
4. save the document.

Clicking on **Print** (or typing *Return*) will start printing. All Impression windows will be blanked, the pointer will turn into an hourglass, the dialogue box will disappear, and a smaller information box will appear as shown below.



While printing, the hourglass will occasionally turn back into a pointer for a short period. At this point, Impression is giving other programs a chance to operate, offering a small amount of multi-tasking.

Clicking **Pause** (even while the hourglass is up) it will pause printing after a few seconds, allowing other programs to be used. (Note: One thing you cannot do when the program is paused is close or resize Impression windows.)

Clicking **Continue** will continue printing.

Clicking **Stop** will terminate the printing, although it will wait for the next round of multi-tasking, which could be as long as a few minutes on a PostScript printer.

Print All From-To

When the **All** button is selected, all pages in the document are printed. (The **To** box displays the number of pages in the document.)

When the **From** button is selected, the range given in the adjacent boxes is printed. Click in the boxes to edit either of these. The page numbering used when printing is Impression's own page numbering scheme.

Remember that Impression's internal page numbers always start from one and are independent of any page number shown on the document. If you are unsure of the actual page number of a page, click on any frame on the page and then type *Ctrl-F1* to display the Info box. This box displays the actual page number.

Copies

The **Copies** editable box determines the number of copies of each page to be printed.

For multiple copies of a multi-page document, Impression can either:

- print each page *n* times (1,1...,2,2...), requiring you to sort

the pages into order by hand, or

- print *n* copies of the document in order (1,2...,1,2...).

This is controlled by the **Collated** switch (described later).

Scale

The scaling field affects how large the page will appear on the paper. 100% is full size but the actual size depends also on how large the pages are in Impression. By default, the page size is exactly A4. However, if you require an A4 page to be printed at A5 size, the scaling factor can be reduced to 70% or 66% dependent upon the setting of **Ignore page boarders** (see later). At 100% measurements made on the page should always be accurate on all printers; for example, a frame of 100mm width should always print as 100mm wide.

The two bump icons to the right of the scaling field allow the scale to be increased or decreased in steps of 1%.

Upright Sideways

The **Upright** and **Sideways** buttons tell Impression whether to print upright (portrait) or sideways (landscape) on the page. Print sideways to fit two A5 pages onto an A4 sheet of paper.

Draft

Draft printing uses the text mode of your printer and is often much quicker than using the high-quality print mode. However, there are a limited number of fonts available and you cannot print illustrations.

Before you can use this facility you must have a special printer module loaded. (These modules are different to the standard RISC OS printer drivers.) The field to the right displays the current type of printer module loaded. To display a list of available printer modules either

- click **Menu** on the editable box, or
- click on the arrow to the right of the name.

Printer modules are not provided for every type of printer as many printers are no faster in draft mode.

For more information on draft printing, refer to *Advanced features*.

Pause

When this switch is selected, printing suspends after each page. This is useful if you want to print on single-sheet paper without a sheet feeder. Press **Continue** on the print information box to continue printing.

Fit lots

When this switch is **off**, Impression will print one page on one sheet of paper. When it is **on**, it will try and put as many pages as it can on one sheet. For this option to be of any use, the **Scaling** field should be set to less than 100%, so that more than one page can fit on the paper.

The scaling required to fit several pages on one sheet of paper depends on the **Ignore page border** switch. If this is **off**, account is taken of the non-printable margins around the edge of the page. If this is **on**, these margins are ignored.

As a guide the number in brackets to the right of **Fit lots** tells you how many pages can fit on a sheet of paper. (Impression assumes all the pages are the same size as the first.)

So, for example, one particularly useful option is to print two pages of an A4 document on a single sheet of A4 paper. For this, use these settings:

Sideways

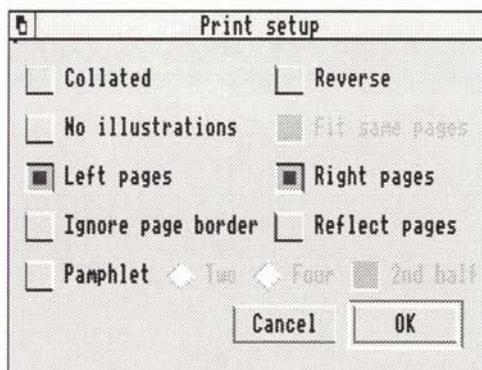
Fit lots (the **2** after Fit lots tells you that Impression can fit two pages on one sheet of paper)

Scale 66%

Setup

Click on this to display the Print Setup dialogue box.

Print setup dialogue box



Collated

When this switch is selected, and the number of copies is set to more than one, the document is printed *n* times, with all the pages in the right order. Without the **Collated** switch set, each page in the document will be printed *n* times.

The reason for allowing both options is that some printers, such as dot-matrix printers, take the same time to print a page, even if that page has already been printed once, while other printers, notably laser printers, keep an image of the current page. As a result, one copy of a page might take several minutes to print, but subsequent copies of that page considerably less time. So for more than one copy of a large document, it is faster on some printers to leave the **Collated** switch **off**, while for others no advantage is gained. In the latter case the switch may be turned **on**, allowing Impression to stack the pages in order.

Reverse

When using a printer that automatically feeds single sheets, you will find that the printer will always stack the pages in a particular order. On some printers this is adjustable, so that pages may be stacked in the correct order, or in reverse order. However, for printers that only stack in one order, it is nice not to have to reverse the order of sheets as they come out of the machine. If your printer stacks in the correct order (that is, the papers are stacked with the first sheet printed on the top) then the **Reverse** option should be left **off**. If your printer stacks in reverse order, the **Reverse** button should be **on**, so that Impression will print the pages in reverse order.

No Illustrations

When printing a page to certain printers (notably PostScript) the more information there is on the page, the longer a page takes to print. Frames containing graphics often take a particularly long time, especially large sprites. It is often useful to print out just the text on a page, and the **No illustrations** switch can be used to speed up this function. When it is selected, any graphic frames on a page are replaced by boxes with a cross through them. This can dramatically reduce the time it takes to print pages for PostScript based printers.

Fit same pages

This has no effect unless **Fit lots** is selected and the scaling allows more than one Impression page to be printed on a sheet of paper.

If this option is **off**, as many different pages as can fit on the paper are printed.

If this option is **on**, as many copies of the same page as can fit on the paper are printed.

Left pages

Right pages

These two associated switches allow you to print only left-handed pages, only right-handed pages, or all pages. Note that the 'handedness' of a page has nothing to do with the page number, but depends on whether it has been created as a left/right pair. There is an option in **New chapter** and **Alter chapter** which allows a chapter to start on either a right or a left-hand page. It is this option which determines which is the left-hand page of the pair.

When using **Pamphlet** mode, these two switches are ignored, since **Pamphlet** mode only makes sense if you are printing left and right pages.

Ignore page border

There is usually a small border around the edge of the page where the printer cannot print. This is called the *print border* or the *page border*. Impression takes account of this border when printing and centres the printing between the page borders. Some printers have a larger border on the left than on the right and this results in the printing being offset to the right.

With this option **on**, the page borders are ignored and the page is printed centred between the edges of the paper.

This has an effect on **Fit lots** which normally tries to fit the pages within the borders. With this option **on**, Impression prints pages within the actual page edges. This allows a slightly larger scaling. For example, to exactly fit two A4-sized pages on an A4-sized sheet of paper with this option **off** requires a scaling of 66%; with this option **on**, you can use 70%.

Reflect page

Pages are printed as mirror-images. This is useful when producing typeset film for printing plates.

Pamphlet

One application for which a program like Impression is often used is to produce small booklets or leaflets. Quite often these are sized A5, but printed on both sides of an A4 sheet, then folded over and stapled. On most DTP programs this involves printing the pages out individually, then photocopying two pages onto one in the correct order. For a booklet of any size, this is an almost impossible job.

Impression can perform this function automatically for you. Selecting the **Pamphlet** switch gives you the option of 'Two-up' or 'Four-up' printing. Selecting the **Two** button, tells Impression that you wish to print a pamphlet with two Impression pages on each side of a sheet of paper, ready to be folded. This option should be used in conjunction with the scaling, and usually with the **Sideways** mode as well. For example, when printing two A5 pages on one A4 sheet, the scaling should be set to 66%, and the **Sideways** button should be selected. 'Four-up' printing will print four pages on each side of a sheet of paper. This would normally be used in **Upright** mode. For example, to print an A6 pamphlet from A4 pages, scaling should be set to 46%, and the **Upright** button should be selected.

When Impression starts printing, it will first print all the odd pages on one side of the sheet. When it has finished those, it will beep, and ask you to turn the pages over and feed them back into the printer. Then it will print the other side, with the even pages.

Note: If you are using a page printer such as a Laser printer, the message to turn the paper over might appear before all the pages have been printed. You should wait until the printer has finished printing.

It is important to turn the pages over so that they are the right way round.

2nd half

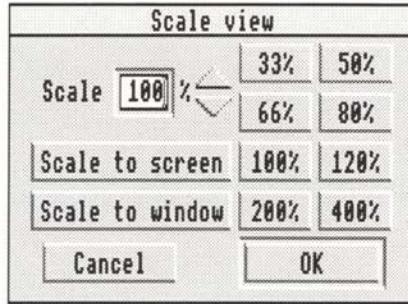
When this switch is **on**, Impression prints only the second side of the pamphlet. This makes pamphlet printing easier as you no longer have to print the second side immediately after the first (which can lead to paper jams).

If you only want to print the first half, turn the **2nd half** switch off. When the first half has been printed press the **Stop** button on the dialogue box.

Scale view

Keyboard short-cut: *Ctrl-F9*

This displays a dialogue box which allows you to zoom in and out on your view of the document.



Either click on **Scale view** or slide over the arrow to the right of the name.

Initially the windows are scaled to 100%. (This initial scaling can be changed – see **Preferences in Program Menu.**) This should mean that what appears as one inch on screen is printed as one inch on the paper. Unfortunately, due to physical differences between monitors, this is not always accurate. Also, some screen modes have a distorted scale, in particular screen modes 16, 17 and some of the modes provided by *!NewModes*.

There are several ways to change the scaling:

- Click on one of the preset boxes in the dialogue box and then click on **OK**.
- Enter a value between 1 and 975% in the edit field of the dialogue box and then click on **OK**.
- Use the bump icons (to the right of the edit field) to make 1% changes and then click on **OK**.
- Click on **Scale to screen**. This selects the best scaling to fit a complete page (or pair of pages) on the screen.
- Click on **Scale to window**. This selects the best scaling to fit a complete page (or pair of pages) in the window.
- *Shift-Fkey* allows you to scale between 10% (*Shift-F1*) and 100% (*Shift-F10*) with the keys *F2-F9* giving you intermediate 10% steps.
- *Shift-F11* halves the current scale (say from 150% to 75%).
- *Shift-F12* doubles the current scale (say from 60% to 120%).

50% shows the document at half size; 200% at twice normal size. These options only scale the current view. Any other document windows remain at their existing scale.

In screen modes 12 and 20 one full width A4 page is slightly larger than the normal screen width. In these modes it is useful to scale the view to 90%.

For a large change in the scaling, it is often quicker to use the dialogue box rather than repeated use of *Shift-F11* or *Shift-F12*. This is because each step requires the newly scaled fonts to be cached.

It is important to realise that this option only affects the visible page as seen on screen. It does not alter the size of the printed result.

Edit

Edit	
Cut frame	^X
Copy frame	^C
Paste frame	^V
Delete frame	^K
Select text story	^T

New chapter...	^F7
Alter chapter...	⇧^A
Delete chapter	

Insert new page	
Delete page	

View master pages	^F2

The **Edit** menu offers options dealing with many aspects of altering documents. It allows you to:

- move, copy, and delete blocks of text or frames,
- insert, delete, and alter chapters,
- insert, delete, and alter master pages,
- insert or delete pages.

Cut frame

Cut text

Cut frame if there is no selected area of text.

Cut text if there is selected text.

If the menu is displayed over a document other than that with the currently selected frame, this option is greyed.

Cut Frame

Keyboard short-cut: *Ctrl-X*

If there is no text selected and the cursor is in a text (or null) frame, then this option will copy the frame to the clipboard and delete it from the document.

If the frame contains a complete story or a graphic, or an embedded frame, then the story, graphic, or embedded frame is cut as well.

If the frame contains a text story that flows into other frames, then removing this frame will cause the text to re-flow in the remaining frames.

If the frame is a master page frame, it can also be deleted from the page on a local basis. This does not cut the frame from the master page – it simply removes the local copy of it on this page. To delete the frame from the master page, go to the master page and use this option or the similar **Delete frame** option.

A frame is cut with all its attributes including border style, dimensions, background colour and story type.

Cut Text

Keyboard short-cut: *Ctrl-X* or any delete key

This option will remove the selected text to the clipboard.

Effects and styles are always preserved intact when cut to and pasted from the clipboard.

All clipboard operations can occur between documents, if necessary copying effects and styles to the other document.

Cutting text may fail because of lack of memory; an Alert box tells you if this happens.

Copy frame

Copy text

Keyboard short-cut: *Ctrl-C*

These two options act exactly like the equivalent **Cut** options except that they merely copy the frame or text to the clipboard. The frame or text is not deleted from the document.

If you want to copy a frame or some text to another part of this document or to another document, then it is a two-stage process:

1. copy the item to the clipboard using this option, and then
2. paste the item at the required position using the **Paste** option (described next).

Paste text

Paste frame

Keyboard short-cut: *Ctrl-V* or *Insert*

Paste text if the clipboard holds text.

Paste frame if it holds a frame.

The usual way to move text or a frame is to **cut** the object to the clipboard so removing it from the document, and then **paste** it back in the required new position.

Paste Text

This is greyed if you cannot paste text: for example when a graphic frame is selected.

If there is no selected region, it copies the text from the clipboard (with all effects and styles) into the text at the cursor position, leaving the cursor at the end of the pasted section.

If there is a selected region, then this option deletes that text and replaces it with the clipboard contents. The deleted text is not stored and cannot be retrieved.

Pasting does not remove the object from the clipboard, so you can paste more than once.

Paste Frame

The pointer tracks a pair of cross-wires. Position them to where you require the top left-hand corner of the frame. When in position, click **Select** to paste the frame.

If the frame holds a complete story, then the story is also pasted. Similarly, if the frame contains a graphic, that is also pasted.

Delete frame

Delete text

Keyboard short-cut: *Ctrl-K*

These two options act exactly like the equivalent **Cut** options, except the object removed is not placed on the clipboard. This is useful when it is known that it will not be required in future.

Deleting an object saves memory space (a copy is not put on the clipboard) but it is a more dangerous operation than cutting since it cannot be undone.

If there is a selected region, then typing or pressing a delete key will *cut* the selected region to the clipboard. It does this rather than delete since it is then possible to select the **Paste** option to undo the action. However, since cutting things to the clipboard means that they are not deleted from memory, there will be times when this operation will fail due to lack of memory. In this case it will be necessary to delete the text, using the **Delete text** menu option rather than the **Cut text** option.

Select text story

Keyboard short-cut: *Ctrl-T*

The contents of a text frame may flow across many frames. The total extent of this piece of flowing text is known as one *text story*. Textual stories are broken into chapters. Textual stories cannot flow across chapters as text in one chapter must 'push' subsequent chapters along the document (whereas normal flowing text does not push pages along; it merely flows through the frames on the page). The result is that text in different chapters is treated quite separately – it is not possible, for example, to select text in more than one story at once; that is, it is not possible to select text across chapters.

Therefore it should be noted and understood that chapters contain quite separate text stories.

If it is required that text is broken into sections that are still 'flowing', then the **Force to next frame** option can be used to ensure that, for example, a heading line is always at the top of a new frame.

Impression can handle any number of text stories, each quite separate.

This menu option selects all the text in the current story and displays it highlighted as is normal for selected text. This is much quicker than putting the cursor at the start of the story and drag-selecting the entire story.

This option would normally be used if a style or effect is to be applied to the entire story or perhaps the entire story deleted or copied.

New chapter

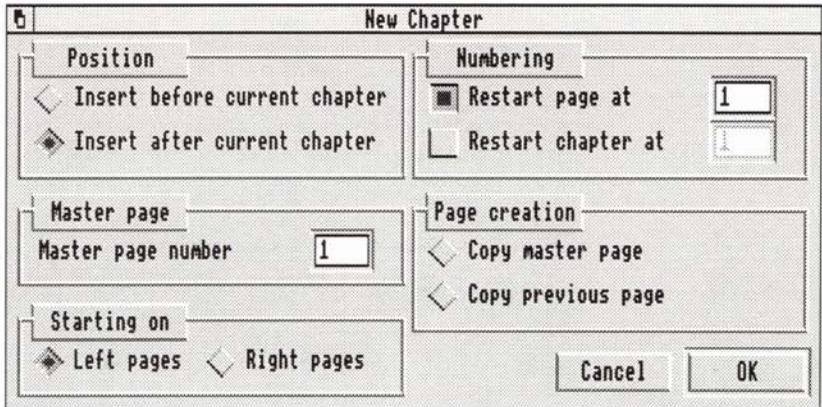
New master page

Keyboard short-cut: *Ctrl-F7*

New chapter when the window is open on the main document.

New master page when the window is open on the master pages.

New chapter



The New chapter dialogue box

Position

A new chapter may be inserted either before or after the current chapter, but by default a new chapter is placed after the current one.

Master page

New chapters may be based on any master page. It is therefore possible to alter the page size of a document part way through a document. More typically a new master page could be used to alter the layout of the new chapter. For example, an index nearly always has a different layout from the rest of a document.

The current master page number is displayed in the editable box; if you want to continue using that master page, no further action is needed. If you want to use a different master page, type its number into this editable box. Master page numbers are displayed in the top-left corner of the page in **View master pages**.

Starting on

Left pages

Right pages

These two options control how left/right pairs are displayed on the screen.

For many documents (such as this manual), new chapters always start on the right-hand page. For such documents, select **Right pages**. Other documents start on left-hand pages; for these, select **Left pages**.

Numbering

Restart page

It is possible to restart page numbering on any chapter boundary. This is particularly useful for sections of a document that are to be numbered separately from the main document. For example, the introduction pages may be numbered in Roman i, ii, iii etc. the main document may then start from page 1.

If a document is to be split into several files (not really necessary with Impression) then this mechanism can be used to start the page numbering of a document at any required number.

Page numbers may be displayed in Roman (upper or lower case) or conventional numbers. They can be inserted at any point in the document by using the **Insert page number** menu option.

Restart chapter

This allows you to renumber chapters. Chapter numbers can be inserted at any point in the document by using the **Insert chapter number** menu option.

Chapter numbering is similar to page numbering in that, in both cases, Impression maintains its own internal numbering system which always starts from one. What you change in the **restart page** and **restart chapters** is the displayed page or chapter number, which is separate from Impression's internal numbers.

Page creation

This option controls when a new page is automatically created.

Copy master page

A new page is created when text fills a master page frame and there is no other master page frame for it to flow into.

The new page is a copy of the master page and contains only master page frames and repeating frames from the previous page. This is the normal option.

Copy previous page

A new page is created when text fills any frame, local or master page, and there is no other frame for it to flow into.

The new page is a copy of the previous page except that any local frames are empty. A graphic frame is only copied if it is a grouped frame (that is, it is one of several frames which have been grouped together). This is how pages are created in the companion software package, *Impression Junior* and this option allows you to work in a manner consistent with *Impression Junior*.

New master page

This option is only displayed when viewing the master pages.

All new master pages are added to the list of master pages already available from *Impression*. Once a master page has been defined it will be saved with the document.

Remember that any chapter can use any master page.

Outline

Rather than being limited to one page size, or 'master page', *Impression* provides facilities for creating and using multiple page sizes in a single document. In addition to the page size, the frame layout, column guides and headers and footers may be changed for each master page.

Creating a new master page

On selecting **New master page** from the **Edit** menu a dialogue box will appear:

New Master Page

Page size

A3 A4 A5 US Letter
 US Legal International fanfold
 Custom width depth

Format

Portrait Landscape

Facing pages Guttering
 Margins Top Bottom
Left Right
 Header Footer depth

Columns

Number width Gaps
 Guide frames
 Vertical rules

Cancel OK

The New master page dialogue box

Paper size

The **Paper size** area contains buttons that allow you to use one of several standard paper sizes. Click on one of the paper size names and the size will appear in the width/height boxes. The unit used to display the page measurement is configurable as the **Page size unit** in the **Preferences** dialogue box.

Custom paper sizes

Click on **Custom** and you may type in your own paper size. The units will be displayed in the current preferred **Page** units, but typing, for example, **10cm** into editable fields will be correctly recognised and converted to the preferred unit. See the chapter *Using dialogue boxes* in section one for a full list of units recognised by Impression.

Format

Portrait

Paper is orientated with the longest sides vertical. (Pages in this manual are portrait orientated.)

Landscape

Paper is orientated with the longest side horizontal.

Facing pages

Selecting **Facing pages** allows the creation of pairs of master pages. These are shown as two pages side by side. When **Facing pages** is selected, you may type in a measurement for the **Guttering**. This is the additional space that is added to the inner margins to allow for the binding the pages. This measurement is ignored when creating only single master pages.

The right-hand page is a mirror image of the left-hand page.

Margins

Margins allow control of the white space round the frames that are automatically placed on the master page. This does not restrict the positioning of user inserted frames.

Margins may be turned on and off by clicking **Margins**. When margins are selected, the left, right, top and bottom margin dimensions may be entered in their respective fields. No created frames will overlap the margins. When the margin switch is not selected, no margins will be used.

Headers

Footers

Header and footer frames may be created on the page by clicking their switches. If either is enabled, then the depth of the header and/or footer frame may be entered in the editable field.

The vertical gap left between the header or footer and any columns on the page is set to be the same as the horizontal gap between columns.

Columns

You can generate simple one frame master pages, or pages with multiple columns and header and footer frames.

The number of columns can be changed by editing the **Number** field. The column width field will be updated as you type.

To control the column spacing, edit the **Gap** measurement. Again, this changes the **Width** measurement.

Changing any of the page width related measurements such as left or right margins and page width, will also update the column width measurement.

Guide frames

Selecting this button creates guide frames rather than null frames. If a master page requires both guide and normal frames, it is usually best to create the guide frames first. You can then add the null frames to the page later and, if the **Snap to guides** option is **on**, you can easily align them with the guide frames.

Vertical rules

When this switch is on, the new page will have thin black lines between each column. These lines are 0.141 mm (0.006 in.) wide.

Generating the master page

Once the desired layout has been set up, clicking **OK** will create the master page, and a dialogue with the message *'You have just created master page n'* will appear.

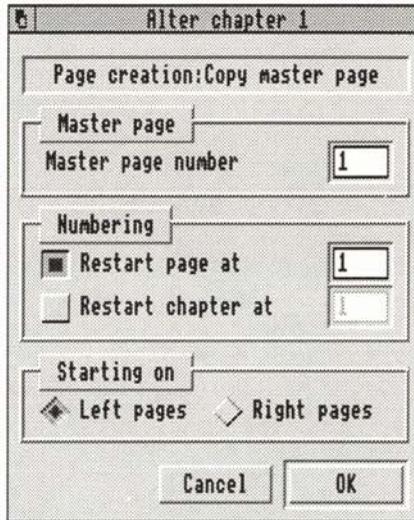
Using a master page

You can create a new chapter based on your new master page or use **Alter chapter** to change the master page used by a chapter. See the descriptions of these two options.

Alter chapter

Keyboard short-cut: *Ctrl-Shift-A*

This option is greyed when the menu is brought up over the View master pages window.



The first field in this dialogue box shows the current page creation rule. This rule is described in **New chapter**.

Master page

The number in the **Master page** field is the master page on which the chapter is based. Changing this number will change the master page used for the chapter. For example, you might want to change the number of columns on the page, or to change from single pages to left/right pages.

Numbering

Restart page at

Clicking the **Restart page at** switch and typing a new page number in the editable field will make sure the pages always starts numbering at that number. This is often useful for numbering sections in a book separately, or for numbering a preface separately from the main book.

If you want to continue the page numbering from the previous chapter, set this switch off.

Restart chapter at

This option is similar to **Restart page at**. It allows you to allocate this chapter a number different to Impression's internal numbering scheme. You would do this if you wanted to display the chapter number in the document. (There is an **Insert** option to insert the chapter number into the document.)

Starting on (left page - right page)

This option is described in **New chapter**.

Cancel

The **Cancel** button will remove the dialogue box without performing any action.

OK

The **OK** button will change the chapter according to the new settings of the dialogue box. A large chapter may take several seconds to reformat.

Delete chapter

This deletes the entire chapter complete with any text and graphics. Since this operation cannot be undone, a warning box appears before the chapter is deleted.

Use this option with care!

Insert new page

This option will put a new page after the current page, containing all the frames and guides from the master page. If your document consists solely of pages created automatically as text is entered, then this option will not have any use - Impression will always create pages as you type. However, if you have pages with local frames on, inserting a master page will shift all those pages along.

If you create a new page by using this menu option, any frames on that new page are not linked to other frames, as they would normally be if the page was automatically created. This means that if you want a flowing text story to use a frames on this page, you must link it in by clicking **Select** in one of the existing frames of the flowing text story and then clicking **Adjust** on the required frame on this page. The frame where you clicked **Adjust** then follows the frame where you clicked **Select** in the text story.

Another use is when the master page only consists of *Guide frames*. In this case, there will be no master text frame, so no new pages are created as you type. Every time you wish to start a new page, you can use **Insert new page**, then add any frames necessary to your page. This method is likely to be used when creating a magazine, where column widths may be fixed, but the height and layout of the columns will vary from page to page.

Delete page

Delete master page

Delete page when the window is open on the main document

Delete master page when the window is open on the master pages.

This option deletes the page that contains the currently selected frame and all frames on that page. Because text and graphics may be irretrievably lost, you are asked to confirm the action.

Do not try to delete a page that was automatically created. The text story will no longer fit within the available frames and so another new page will be automatically created. If the amount of text is reduced so that there are surplus pages, these are deleted by Impression.

Therefore, it is only likely that the **Delete page** option will be used to delete pages that have no flowing master text frames or pages that have new local frames placed on them.

You cannot directly delete a blank page as, by definition, a blank page has no frame to select. You must first create a new frame on the blank page and then select this option.

If the page is based on two facing pages, both pages are deleted.

If a chapter has only one page, you cannot delete that page using this option. Instead use **Delete chapter**.

View master pages

Keyboard short-cut: *Ctrl-F2*

This opens a new window that shows all the possible master page definitions for the current document. There is a variety of built-in master page definitions and only these are shown if no additional ones have been defined.

The text of certain menu options depends on whether the menu has been opened-up over a normal page view or a master page view.

The text of the window title bar can help distinguish a master page window from a conventional page view.

When the window is first opened on the master page definitions, it is scaled to 40% in order to easily show the complete page on screen. The normal **Scale view** menu option can be used in the usual way to view the pages at a different scale.

Each master page is numbered, and that number is displayed in grey at the top left of the page. This is the number to use in dialogue boxes that require a master page number.

To close the master page window click on the Close icon.

A new master page can be created by selecting the **New master page** option from the **Edit** menu. This option is only available if the menu is selected over a master page window. Once a new master page has been defined, it is added to the list of master pages already present.

Master pages can be edited in much the same way as normal pages. New frames may be placed on the page, and text or graphics may be put in these frames. Text may even flow across frames on the master page. However text cannot flow from one master page to another or, to put it another way, frames on different master pages cannot be linked.

Headers and footers

The main difference between master pages and normal pages is that anything that appears on the master page will automatically appear on all normal pages based on that master page. Therefore any graphic or text placed in a frame on the master page will appear in the same place on every normal page based on this master.

Impression can use this mechanism for headers and footers. If a three line header is required on every page, then it is simply placed in a frame on the appropriate master page. This heading will then automatically appear on all pages based on this master page. If a page number is inserted into any text on the master page then it will appear on the conventional page as the current page number. Since any frame can be placed anywhere on the master page, Impression is not limited to conventional simple headers or footers. A header or footer could consist of any amount of text or graphics, at any position on the page.

When text or graphics on the master page appears on conventional pages, it does not require additional memory because only one copy of the text or graphic is kept.

If a particular frame of a master page is not required on a conventional page then it is possible to delete the frame on the normal page, by using the **Delete frame** menu option. Therefore pages based on a particular master page do not have to be exact copies of that master page, but can be tailored or customised in individual cases.

If any text or graphic frame is altered on a master page then this change is reflected throughout the document - on all pages based on this master page.

Facing pages.

If it is required that a document be laid out as left/right pairs of pages then the chapters should be based on one of the left/right master pages, rather than single pages.

When creating a new master page it is possible to specify whether it is to be a single or a left/right pair of master pages.

Left/right pairs would typically be used when the two sides are to have different layouts. For example, the left may have a larger right margin, and the right a larger left margin, to take account of any binding; or page numbers may be required to be always on the outside edge of the pages. In both cases it would be necessary to use a left/right pair of master pages and then tailor them as required.

When a new document is started, by clicking on the Impression icon, it will use a default master page. If you require a different master page, use **Alter chapter** to change it. See the chapter entitled *Customising Impression* for instructions on how to change the default master page

Effect

Effect	
Plain text	

Text font	↕
Text size	↕^S ↕
Line spacing	↕^L ↕

Text colour...	
Underline	↕^U
Subscript	
Superscript	

Left align	F5
Centre	F6
Right align	F7
Fully justify	F8

Use this menu to change the application of effects. Any changes you make using this menu are applied to

- the selected area if there is one, or
- at the cursor if there is no selected area.

The rules are very simple:

- If you want to change some text that has already been entered –
you must first select it, then
apply one or more of the effect options.
- If you want to change the text you are about to type –
position the cursor where you want to type,
choose one or more of the effect options, then
start typing.

If you choose an effects option and then move the cursor, the option you have just chosen is ignored.

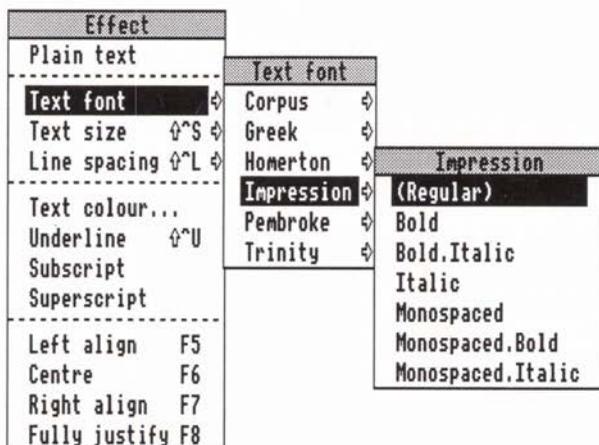
If you are making several changes on this menu, remember that clicking with **Select** removes the menu from the screen; clicking with **Adjust** retains the menu on the screen and allows you to make more changes.

Explanations of some of the terms used in this section can be found either in the *Glossary* or in the accompanying book '*DTP at a glance...*'.

Plain text

This cancels all effects currently set. This option does not change any styles that may also be applied.

Text font



This displays a list of all the fonts available to you. To select a font, slide over the arrow to right of the font family-name (*Corpus*, *Greek*, *Homerton*, etc.). This displays a submenu of the variants of the font (*Regular*, *Bold*, etc.). Click on the variant to select the font. (In the illustration, *Impression Regular* is about to be selected.)

The *Impression* font is for documents that are to be printed as pure text in draft-mode (see *Draft printing* for details). Unlike the other fonts, it should only be used in 16pt and is unsuitable for high-quality printing. For more details, see *Using Impression*.

Text size

Keyboard short-cut: *Ctrl-Shift-S*

Use this option to change either the width or the height (font size) of the characters.

Width

Characters can be condensed (narrower), or expanded (wider), or normal width. **Condensed** is 75% of normal width, **Expanded**

120%. To select either option, click on its name; a tick then appears to the left of its name showing it is selected. To revert to normal width, click on the selected name; the tick against the name then disappears showing that it is deselected.

You cannot have both effects set at the cursor because you cannot have text that is simultaneously expanded and condensed. If one effect is already set, clicking on the second deselects the first.

If you have a selected region of text, then you could have both effects ticked showing that some part of the text is condensed and another part expanded.

Height

If there is no height option ticked, then text is in the height (font size) defined by BaseStyle (usually 14pt).

If you require a height that is not provided on the menu, choose **Other** and type the required size into the editable box.

Note that the *Impression* family of fonts should only be used at 16pt.

Line spacing

Keyboard short-cut: *Ctrl-Shift-L*

When you change the font size, the **Line spacing** automatically changes to 120% of that font size. (120% is the traditional spacing.) You only need to type a value into this editable box if you want some other value. (This text is spaced at 120%.)

For no extra space between lines, set **Line spacing** to the font size.

For double line spacing, set **Line spacing** to twice the font size.

Text colour

Use this option to change the colour of the characters.

This displays the *Colour Editor*, which is described in *Using Impression*.

Underline

Keyboard short-cut: *Ctrl-Shift-U*

This effect underlines any text to which it is applied.

Subscript Superscript

These have the keyboard short-cuts of:

subscript	<i>Ctrl-Shift-K</i>
superscript	<i>Ctrl-Shift-J</i> .

You cannot have both options simultaneously selected at the cursor because text cannot be both in superscript and in subscript. Choosing these options is similar to choosing the width options already described. If neither of these options is ticked, then text is normal height.

Superscript 1-3 (^{1 2 3}) are available in the standard character set as codes 185, 178, and 179, respectively. You can also use *Alt-1* to *Alt-3* to select them.

Left align Centre Right align Fully justified

These four options have keyboard short-cuts of:

left align	<i>F5</i>
centre	<i>F6</i>
right align	<i>F7</i>
fully justified	<i>F8</i>

(*F5* means the function key alone – you do not need to press down the *Ctrl* or *Shift* keys at the same time.)

These effects determine the *justification* of the text. The various types of justification are illustrated and described in '*DTP at a glance...*'.

You can only have one of these options selected at the cursor because you can only have one type of justification in use at a time. If there is a selected region of text, then more than one option could be ticked; this means that different parts of the selected region use different types of justification.

If none of the options is ticked, then the justification defined by *BaseStyle* is used.

Style

Style	
New style...	^F5
Edit style...	^F6
Clear all styles	^B

New ruler...	⇧^N
Edit ruler...	⇧^E

Main Heading	
Sub-Heading	
Italic	
Bold	
1in indent	
Hanging indent	

The **Style** menu deals with all aspects of Impression's style feature. It allow you to:

- create new styles,
- edit existing styles,
- apply and edit rulers,
- apply or remove existing styles.

New style

Keyboard short-cut: *Ctrl-F5*

This brings up the blank style editor ready to accept a new style definition. See the *The style editor in Using Impression* for complete details of how this operates.

Initially the new style has the name '*Untitled*' but you can enter any new name up to 31 characters in length (which may contain spaces). The style name should be as descriptive as possible.

If the style name is left as *Untitled* when the style is created, Impression will give it a name based on the attributes used in the style. For example, a style that sets the font to *Trinity.Medium* and the font size to 14pt will be called *Trinity.Medium/14pt*.

One of the options in the style editor controls whether this style appears on the main style menu. Usually this is set to be **on**. It is all too easy to define new styles for every occasion and quickly build a large list of styles - a sure sign of an unplanned document. Styles are not only great time savers, but they are a good way to ensure a document has a consistent design. Too many different styles dotted throughout a document usually leads to an untidy and inconsistent looking document.

There are times however when it is useful to have a number of styles defined which are not available from the main style menu. In this case the **Show on Style menu** switch in the style editor would be set to off.

Styles can be used for more than just altering the visible text. It is not necessary to always set one or more attributes of a style. It can sometimes be useful to keep track of altered or edited sections of an existing document; in this case a new style can be created with, for example, the name, '*Changed after 12-8-89*', that sets no attributes whatsoever, other than the name. If this style is applied when any new sections of the document are added, it is possible to permanently attach this date information to the changed parts of the text. If the cursor is placed in a section of text and the main style menu list is displayed then it gives an instant indication of whether the text was created before or after this date. Similarly, styles can be used to invisibly attach a person's name to portions of text.

It then becomes very easy to see exactly which parts of the text have this style applied by changing the style definition. For

example the text could be shown in a different colour or it could have a *strikeout* line put through it.

Styles are also used in the creation of indexes and contents pages. See the descriptions of the **Compile index** and **Compile contents** options under the **Misc** menu.

Edit style

Keyboard short-cut: *Ctrl-F6*

This option is used to alter the definition of an existing style. Choosing this option will bring up the edit style dialogue box with the most recently applied style ready for editing. To edit a different style, click the **Menu** button on the style name field or the small button to its right to bring up a menu containing every defined style.

For further details, refer to *The Style Editor* in *Using Impression*.

Clear all styles

Keyboard short-cut: *Ctrl-B*

This will remove all styles applied to a selected region of text or, if there is no selected region of text, then it will clear all styles at the cursor, so that subsequent typing will be in the BaseStyle.

This option does not alter the style definitions in any way.

The effect of this option is exactly the same as applying the BaseStyle to a region of text. Therefore, this menu option would be used whenever text has to be entered in the BaseStyle, or when you want to remove all other styles from an area of text.

If the cursor is placed in the centre of some text that has one or more styles applied to it, and the **Clear all styles** option is chosen, there is no visible immediate change. It is only when you start typing that it becomes obvious that the option has taken effect. Therefore, this behaves in the same fashion as selecting a style from the style menu. The style change is said to be *pending* and will only take effect when some more text is entered.

If this option (or any style from the style list) is chosen while the cursor is in the text, and the cursor is then moved from that position, the pending style change is discarded. This is because the cursor has moved away from the position at which this menu option was selected.

New ruler

Keyboard short-cut: *Ctrl-Shift-N*

Rulers are used to alter the margins and tab settings for any region of text. You can have a maximum of 128 different rulers in a document but you can use a ruler in any number of different places.

The normal procedure is to select the region of text to be affected, then choose the menu option **New ruler**.

The margin and tabs would then be altered as required. This ruler can even be given a name. Click on the **OK** button to apply the ruler to the selected text region.

If you want to set a region of text to have the same margins and tabs as another area of text then you

- select the region of text, then
- select the name of the ruler from the list.

Using the same ruler in different places encourages design consistency in your documents.

The chapter *Using Impression* gives more information about how to use rulers.

Creating & editing rulers

Click on **New ruler** to create a new ruler; click on **Edit ruler** to edit an existing ruler. Either option brings up the same display:



If you select **New ruler**, the name in the **Ruler** box will be *RulerN* with *N* as the next available ruler number. You can edit this name if wished; we recommend that you use a name that describes the ruler's function, such as *Left a bit*. Ruler names can be up to 31 characters long and you can use any character including *space*.

If you select **Edit ruler**, the name shown will either be the currently selected ruler (if there is one) or the default ruler. To edit a different ruler, click **Menu** on this box to display a menu of available rulers. Click on the ruler name you want to edit to

display that ruler. The top entry on this menu (**Enter Values**) is described later.

OK

When you edit a ruler you are working on a copy of the ruler. The original ruler, which is stored in the document, does not change until you click on **OK**. The changed version of the ruler is then copied into the document and any necessary reformatting is done. Similarly, a new ruler is only copied into the document when you click on **OK**.

If you click on this button with **Select**, the ruler is cleared from the screen; if you use **Adjust**, it remains on screen and you can make further changes. Using **Adjust** is useful if you want to see the effect of making a change. (You only see the text change if that ruler is applied to the text displayed in the document window.)

Cancel

Again, this acts as usual in that any changes you have made are discarded. If you were creating a new ruler, clicking on **Cancel** discards that ruler and it does not appear in the document. If you are editing an existing ruler and you click using **Adjust**, any changes are discarded and the original version of the ruler redisplayed.

Units

Click on this box to step through the available ruler measuring units. These are

- inches
- centimetres
- picas (1/6th inch).

Ruler icons

Left margin. Except for the first line in a paragraph (which is controlled by the **1st line margin**), this defines the left margin for all text using this ruler.

Right margin. This defines the margin relative to the right hand edge of the frame.

↵ **1st line margin** or **Return margin**. When you press *Return*, the cursor moves to this position on the next line. If you want all left-hand margins to be in line, set this margin the same as **left margin**.

▽ ▽ ▽ ▽ **Tabs**. You can have up to 32 tabs on a ruler. These operate as tabs do on a typewriter – press the *Tab* key and the cursor moves to the next tab position. There are four types of tab: *left*, *centre*, *right*, and *decimal*. The use of the various types of tab is described in *Using Impression*.

If the **left margin** or **1st line margin** are not defined, the left-hand edge of the frame is used as the margin.

If the **right margin** is not defined, text ends at the right-hand edge of the frame.

If the ruler has no **tabs** defined, then using the *Tab* key moves the cursor to the right margin position or the edge of the frame.

Placing, moving and removing the symbols on the ruler is described in *Using Impression*.

Applying rulers

To display a list of the available rulers click **Menu** on the **Ruler** box.

Over a selected region of text

If a ruler's name is ticked on the menu, it is used in the selected region. A tick just shows that the ruler is used **somewhere** in the selected region; it does not necessarily mean that the ruler is applied over the entire region. For the same reason, you could have two or more rulers ticked – this shows that they are used in different parts of the region.

If the ruler name is ticked, clicking on it removes the ruler from the selected region of text. The tick against the name is then removed.

If the ruler name is not ticked, clicking on it applies the ruler over the entire selected region. This over-rides any other rulers applied to the same text.

If a ruler is applied over part of the region and you want to apply it to the entire region,

- click once on the name to remove it from the region, then
- click again to apply it to the entire region.

At the cursor

If the ruler's name is ticked, it is applied at the cursor and any new typing will have the ruler applied.

If the ruler's name is not ticked it is not applied.

If you click on a ruler's name to tick it, any other rulers already applied at the cursor are cancelled.

Edit ruler

Keyboard short-cut: *Ctrl-Shift-E*

See **New ruler**.

The style list

The last part of the menu is a list of styles available in the current document. This list consists of one or two parts separated by dotted lines.

The first entries in the list (with ticks or dashes beside the names) indicate the style or styles that are currently in use.

If there is no selected region, some styles may be ticked to indicate those styles that are present at the cursor position.

If there is a selected region, then some styles may have a dash beside them indicating that these styles occur somewhere within the selected region.

If there are no ticked or dashed style names, then no styles (other than the BaseStyle) are applied either within the selected region or at the cursor.

Choosing one of the ticked or dashed styles will turn that style off.

Using **Adjust** on these menu options will make the alteration and keep the menu present on screen (as with most RISC OS menus).

Below these ticked or dashed styles is a list of the available styles. Choosing one from the list will either apply this style over the selected region, or turn this style on at the cursor position so that any subsequent text entered at this point will be displayed in this style.

Whenever there is a selected region and a new style is chosen from this lower part of the style list, then it will always apply this style over the selected region, covering any styles already existing in the region.

There are ten styles rules listed in *Using Impression* which give a more precise definition of the various ways of applying and removing styles.

Frame

Frame	
Insert frame	^I ↵
Alter frame...	^F10
Alter graphic...^F11	
√ Snap to guides	
Borders setup...	

Group frames	
Ungroup frames	
Force to next	^G
Put to back	⇧^B
Bring to front	
Embed frame	⇧^F

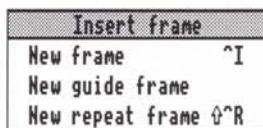
The **Frame** menu contains options concerned with Impression frames. It allows you to:

- create new frames.
- alter existing frames,
- alter the appearance of graphics in frames,
- change the stacking order of frames.

Insert frame

Click on this option to directly choose **New frame**.

Slide over the arrow to the right of the name to display a submenu:



These types of frame are described in *Using Impression*.

All three frame types are created in the same way:

1. Choose the appropriate option. The mouse pointer tracks a pair of cross-hairs. Position these where you want the top left-hand corner of the new frame to be.
2. Press and hold down the **Select** mouse button.
3. Keep the **Select** button pressed and drag the cross-hairs to where you want the bottom right-hand corner of the new frame to be.
4. When correctly placed release **Select**.

The new frame is now created.

The new frame becomes the selected frame, indicated by the eight *grab handles* around its edge.

New frame

Keyboard short-cut: *Ctrl-I*

A new frame is initially a *null frame* (empty frame). It becomes a *text frame* if you type into it or you drop in a text story. It becomes a *graphic frame* if you drop in a draw or sprite file.

New guide frame

This option does not have a keyboard short-cut.

Use this option to create a new guide frame. Remember that guide frames cannot hold text or graphics but are used to help you align text and graphics frames.

Frames will only snap to guide frames if the **Snap to guides** option is selected. You can set **Snap to guides** either in this menu or in the **Preferences** dialogue box. (Setting the option in the **Preferences** dialogue box and then clicking on **Save** ensures that *Impression* always starts up with this option selected.)

New repeat frame

Keyboard short-cut: *Ctrl-Shift-R*

Use this option to create a new repeating frame. Create the frame on the first page where it is required; copies of it then appear on all subsequent pages of the chapter.

Alter frame

Keyboard short-cut: *Ctrl-F10*

The Alter frame dialogue lets you alter the size and position of the selected frame which can be of any type (*text, graphic or null*). It also lets you change the frame borders and the colour (if any) of the frame background. These two groups of functions are controlled by two separate pages of the dialogue box. The radio buttons near the bottom of the box marked **Info** and **View** are used to flip between the pages.

If the **Alter graphics** dialogue is on screen, it will be automatically closed if this option is chosen from the menu. The keyboard short-cut cannot be used if the **Alter graphics** dialogue is on screen.



The Alter frame dialogue showing the Info page

The **OK** and **Cancel** buttons work in the usual way. Pressing them with **Select** causes the dialogue box to leave the screen and **Adjust** leaves it on screen. The **OK** button changes the frame to its new, edited state. The **Cancel** button restores the frame to its old state before it was edited.

While the **Alter frame** dialogue is on screen, documents can be

edited normally. If the selected frame changes during editing (you might click in another frame or move the cursor into a new frame), the **Alter frame** dialogue will be updated to show the newly selected frame.

Changes are incorporated in the document only when you click on the **OK** button. If you make changes and then move on to another frame without clicking on **OK**, those changes are not incorporated into the document and are lost.

The top line of the dialogue describes the frame (for example, *Local frame: graphic*).

The final item in the frame description only applies to text frames and it tells you whether the text story overflows from this frame. Text can overflow from a frame if there is more text than will fit in the frame and there is no other frame for the text to flow into. This is a very important warning because it means that some of the text is not shown in the document!

Info page

Position

This option is greyed if the frame is a master frame and the cursor is not in the master page window.

The **Position** group describes the position and size of the frame on the page. **X** and **Y** give the distance of the top left-hand corner of the frame from the top left hand corner of the page. **Width** and **Height** give the width and height of the frame. The **X**, **Y**, **Width** and **Height** values are shown in millimetres by default, but they can be entered in any of the standard units. See the chapter entitled *Using dialogue boxes* for a full list of units recognised by Impression.

The **Lock in place** switch allows the frame to be locked onto the page so that it cannot be accidentally dragged by the mouse.

Repel

This option is greyed if the frame is a guide frame.

The **repel** group describes how text is repelled around the outside of the frame. The frame will only repel text in frames underneath it if the **Repel** switch is turned **on**; when turned **off**, text in lower frames will flow underneath the frame. When the **Repel** switch is on, the four editable fields describing the repelling distance for each of the four edges are enabled. The

values in these fields describe how far away the text will be pushed from that edge of the frame. The **repel** distance is in addition to the width of any frame border that might be drawn along that edge.

Inset

The **Vertical** and **Horizontal** settings allow you to **repel** text or a graphic inside a frame away from the edges of the frame. If a frame has a border, usually you want text to start about 3 mm away from the edge of the frame. You would therefore set both values to 3mm.

Make local

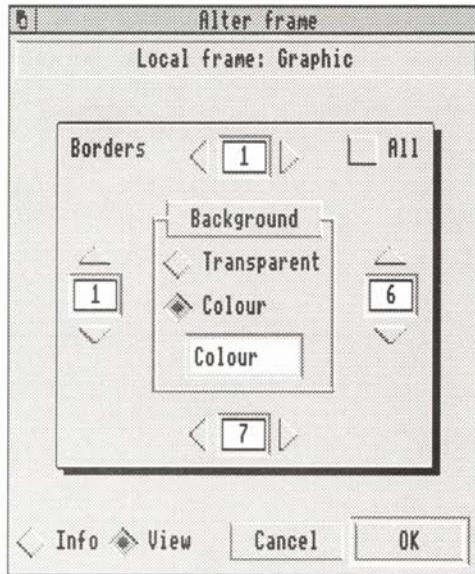
This is used to make a master frame become local to the page on which it exists. The button is disabled if the frame is not a master page frame. Pressing this button means that the frame will no longer be altered automatically when the parent frame is altered on the master page. A warning box will appear to remind you of this before the frame is made local. The change is only made when you click on the **OK** button so you still have the option of clicking on **Cancel** to keep the frame as a master frame.

If this frame contains part of a flowing text story, making the frame local has no affect on this. The story continues to flow through this frame as before.

Remember that local frames can be resized and can be dragged around the page.

View

You cannot access this dialogue box if the frame is a guide frame.



The Alter frame dialogue showing the View page

The **View** display (visible when the **View** button is pressed) describes how the frame is drawn. The thin white rectangle represents the frame and the editable fields against each of the edges hold the border number for each edge. A half-size version of the border is drawn in the dialogue box to show you the effect. The border numbers can be changed by;

- Clicking on the arrow icons around them. Arrows pointing down or left decrease the value; arrows pointing up or right increase them.
- Clicking on them and typing. Any changes are only implemented when the cursor is moved out of the editable field with the cursor keys or *Return*.
- Moving the mouse pointer over where the half-size border is displayed. The mouse pointer changes to a page shape when in the correct place. Clicking on the **Menu** mouse button displays the border list. Click on the required border in the list to select it.

The standard borders are:

- 1 1/4 pt black line
- 2 1 pt black line
- 3 4 pt black line
- 4 1/4 inch Dark grey mitred slab
- 5 1/4 inch Light grey mitred slab
- 6 1/8 inch Black drop shadow left
- 7 1/8 inch Black drop shadow right
- 8 1/4 pt black line and 1/8inch offset 2pt black line
- 9 1/8 inch offset, centre and corners only, 4pt black line
- 10 1/4 inch offset 4pt black line with curved corners

Additional borders can be created as *!Draw* files and loaded in; refer to *Borders* in *Using Impression* for more details.

Notice that the illustration of the dialogue box shows how to use the drop shadow borders 6 and 7.

The small **All** switch in the top right of the **View** page allows all of the borders to be altered at once. While this switch is on, changing any one of the four border numbers changes the other three to the same value.

The **Transparent** and **Colour** radio switches in the centre of the **View** page determine whether the frame has a filled background or not.

If the **Transparent** switch is set, then the frame has a transparent background. Anything underneath the frame will show through wherever text or graphics don't fill the frame.

If the **Colour** switch is set, then the frame background is set by the **Colour** field and anything underneath the frame is hidden. Click in the colour field to display the colour editor; this is described in *Using Impression*.

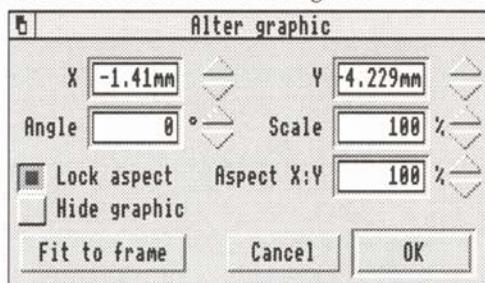
Alter graphics

Keyboard short-cut: *Ctrl-F11*

You can also call up this dialogue box by double-clicking inside a graphics frame.

To use this dialogue, the selected frame must contain a graphic. If the selected frame is not a graphics frame, the menu option is greyed.

If the **Alter frame** dialogue is on screen, it is automatically closed if this option is chosen from the menu. The keyboard short-cut cannot be used if the **Alter frame** dialogue is on screen.



The Alter graphics dialogue box

The **Alter graphics** dialogue is similar to the **Alter frame** dialogue. The **OK** and **Cancel** buttons work in the same way, and, once again, the document can be edited while the **Alter graphics** dialogue is on screen. If a non-graphic frame is selected, the **Alter graphics** box is automatically closed.

The dialogue box is small so it obscures as little as possible of the graphic frame.

The **X** and **Y** editable fields show the distance of the bottom-left corner of the graphic from the bottom-left corner of the frame. These can show negative values when you are showing only a part of the graphic.

Clicking on the bump icons moves the graphic in steps of 1/8th of an inch (approximately 3mm). When the icons are clicked, an internal **OK** operation is performed so the new position is immediately incorporated into the document.

The **Angle** field allows you to rotate the graphic by any angle between 0° and 360°. Any applied rotation is cancelled if you

click on the **Scale to fit** button. (Remember, you can also rotate the graphic using the **Alter** mouse button.)

The **Scale** field shows how the graphic has been scaled relative to the original size. 200% means the graphic is twice its original size.

The **Aspect X:Y** editable field shows the 'fatness' or 'thinness' of the graphic. It measures how much more the graphic is scaled in the horizontal direction than it is in the vertical direction (as set by the **Scale** field). When **Aspect X:Y** is set to 100% the graphic is equally scaled in both directions. That is, a square in the original graphic remains as a square in the scaled graphic. Numbers smaller than 100 in the **Aspect X:Y** field make the graphic thinner than the original, larger numbers make it fatter.

The appearance of the graphic on the screen may be distorted by the aspect ratio of the pixels displayed by the monitor.

If you scale the graphic up by a large number it could become bigger than the frame and only part of the graphic will be seen in the document. This is called 'cropping' the graphic and is a useful way of hiding unwanted parts of a picture without altering the original graphic.

If you alter either the scale or the aspect ratio of a graphic, it is rescaled around the centre of the frame.

To show a graphic at its original shape and size, set both the **Scale** and **Aspect X:Y** fields to 100%. Note that Acorn sprites do not store any information about the original size of the bitmap and so Impression treats sprites as always being stored at screen resolution no matter where they originally came from.

The **Hide** switch controls whether or not the graphic is shown in the document. Some line art pictures take a long time to re-draw, which can slow down the response time of the program, so it is useful to be able to hide the picture once you have made sure that it looks right. There is also an option in **Misc** to hide all graphics.

The **Lock aspect** switch controls the aspect ratio of the picture when the size of the frame is being altered. When it is on, the graphic keeps the aspect ratio set in the **Aspect X:Y** field no matter what the shape of the frame. This is a useful protection against accidental resizing of the graphics when changing the size of the frame. (If you accidentally used **Adjust** to resize the

frame, you would resize the graphic as well unless this switch is set.)

Fit to frame is a quick way to resize the graphic to fill the frame. Also, if the graphic has been rotated, it is returned to its original position. If the **Lock aspect** switch is **off**, the graphic is rescaled both horizontally and vertically to fill the frame. If the switch is **on**, the graphic is resized to fit the frame without changing the x-y scaling.

Snap to guides

A tick against the name shows when this option is **on**. Click on the name to alternate between **on** and **off**.

When this option is **on** any frame edge dragged close to the corresponding edge of a guide frame snaps to the guide frame edge. Only corresponding edges snap – that is, a left-hand frame edge snaps only to a left-hand guide frame edge.

You can set the default state to be either **on** or **off** by using the Preferences menu – see *Customising Impression* for details.

There are more details about guide frames in *Using Impression*.

Borders setup

You can have up to 40 different borders available in a document. This scrollable display (the *borders list*) shows you what each of the current borders looks like. Borders 1 to 10 are provided as standard in all Impression documents. Borders 11 to 40 can be individually loaded.

For more information, see *Borders* in *Using Impression*.

Borders

Load a new border by dropping a *!Draw* file icon from a directory window onto this load target. In-memory transfers directly from *!Draw* are also supported. The newly loaded border takes the next free border number.

Complicated borders can be quite big and need a lot of storage space in a document. If you load several complicated borders, even simple documents can need a lot of disc space.

Delete

You cannot delete borders 1 to 10.

To delete any of the other borders

1. Click on the required border. Its background colour changes from grey to white.
2. Click on **Delete**. The border is deleted even if it is used somewhere in the document.

If you delete a border that is used, that border number is remembered by the frame. If the number is reused by loading another border, the new border is automatically applied to any frames using that border number.

OK

This closes the Borders setup window.

Group frames

When you multiply select frames they are temporarily grouped as one object. If you click on another frame that is not part of the group, the multiple selection is cancelled.

Use the **Group** option to make the grouping permanent. First, select all the frames you want in the group. Then click on this menu option. Now, you can click on other frames and the frames will remain as a group. The grouping is remembered by Impression when the document is saved to disc.

When frames are grouped, a bounding box is displayed around all the frames in the group (similar to the bounding box displayed in *!Draw*). When selected, the eight grab handles are shown on this bounding box rather than any of the individual frames. If you resize the bounding box, the individual frames in the group are resized by the same amount. This is particularly useful when the group is a set of column frames and the width of the columns and the spaces between them require adjustment.

To cancel the grouping use the **Ungroup** option.

As a reminder – to select multiple frames you:

1. click **Select** as normal in one of the frames
2. hold down *Shift* and then click **Select** in the other frames.

The outlines of grouped frames are shown as solid lines. They behave as one large frame and you can drag, cut, copy, paste, etc. as though they were one frame.

Ungroup frames

The **Group** option is used to permanently group frames that have been multiply selected. Use **Ungroup** to cancel that grouping and return the group to being separate, unrelated frames.

Force to next

Keyboard short-cut: *Ctrl-G*

The cursor must be located in the text before this option can be used.

Selecting **Force to next** causes the text after the cursor to move to the start of the next frame. This is like a word processor's 'force to next page' command and is used in similar circumstances.

Position the cursor immediately before the character that is to start the new frame. Choose **force to next** and subsequent text will move to the next frame. If you have only one text frame on a page (as this manual does), then the text moves to the top of a new page. We use it in this manual to force each menu option description to start on a new page.

Where you have multiple frames on a page and you want text to start on a new page, you may have to use this option several times to advance the cursor to the start of a new page.

A 'next frame' character is inserted in the text (although it is not shown on screen). Thus, if you add or delete code before it, the 'next frame' character always ensures that the required text starts at the top of a frame. Because it is a separate character, you can delete it using any delete key if it is no longer required.

The use of this **force to next** option is encouraged in long documents since it speeds up many formatting operations and improves the overall responsiveness.

Put to back

Keyboard short-cut: *Ctrl-Shift-B*

This and the **bring to front** option control the 'stacking order' of overlapping frames on the page.

You sometimes want to ensure that a certain frame overlays another frame. This is particularly important when some frames are opaque and obscure parts of frames underneath.

These two options work on the selected frame. If necessary, click on the required frame to select it before using either of these options.

Put to back puts the selected frame behind all other overlapping frames. Use this option with care as you may lose the frame behind a larger frame.

Bring to front makes the selected frame the front frame. It is then on top of all other frames.

Bring to front

See **Put to back** description on previous page.

Embed frame

Keyboard short-cut: *Ctrl-Shift-F*

This option is available if there is a frame on the clipboard and the cursor is within some text.

When **Embed frame** is chosen, the frame on the clipboard is copied into the text, including any story associated with it. The frame will flow with the text as it is reformatted or as more text is typed.

Embedded frames are an ideal way to include illustrations in long documents, when they have to stay in the correct place in relation to the text. Normal local frames are attached to the page, so any text associated with them can easily move away as the document is edited. Embedded frames will remain at the same position in the text, even if the text moves across pages.

Embedded frames can be selected and re-sized like normal frames although, if the frame becomes too large for the page, it will be clipped. The **Alter frame** and **Alter graphics** dialogue boxes work, although you cannot change the frame's position. A selected embedded frame can be deleted using the **Delete frame** menu option.

Embedded frames obey all formatting commands so that, for example, if the text style *Centre* is applied to a line which only contains an embedded frame, that frame will be centered.

Text stories in embedded frames cannot flow into other frames, or from other frames. They are always single-frame stories.

This example of embedded frames is from this manual. Both frames are embedded and borders have been added to show the size of the frames. A special ruler is applied to move the graphic to the left of the text.



All Impression documents may be easily identified by the 'big I' file icon.

Misc

Misc	
Find...	^F4 ⇨
Spelling	^F8 ⇨
Abbreviation	⇨
Kern...	
Insert	⇨
Hide graphics	

Compile index...	
Compile contents...	

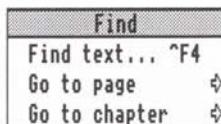
The Misc menu contains miscellaneous items, including

- search and replace,
- spell-checking,
- kerning,
- inserting page numbers,
- hide all graphics.

Find

Click on the option name to directly choose **Find text**.

Slide over the arrow to the right of the name to display a submenu:



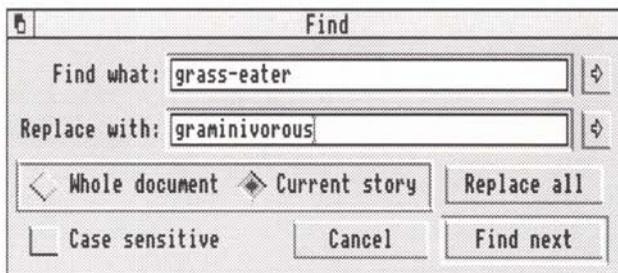
Find text

Keyboard short-cut: *Ctrl-F4*

This option allows you to find:

- a specified word or phrase,
- selected occurrences of a word or phrase and to substitute a different word or phrase, or
- all occurrences and to substitute a different word or phrase.

You can search either within the confines of the current story or through the entire document.



The Find and Replace dialog box

Find what:

When you select **Find text**, this field contains the cursor. Anything you type appears here. Type in the word or phrase you want to search for.

Replace with:

Type the replacement word or phrase in this field.

If you want only to find and not to replace, you can leave this field blank.

You can move to this field from **Find what** by either clicking in it, using the cursor up/down keys, or the *Tab* key.

Wildcards

You may not want just to find an exact match. Suppose you want to find *fill*, *full* and *filter*. In this case, you use **wildcards** in the search string. These are special characters which match against a number of characters in the text. There are three wildcard characters:

- # matches with any single character
- * matches with any group of characters in a word
- @ matches with any group of characters

If you actually want to search for one of these characters, refer to the *Advanced features* chapter.

Whole document

Current story

These switches allow you to choose whether the next operation will take place only in the current story, or in all stories in the document.

If you choose **Whole document**, the search starts at the beginning of the document and runs through each story until the end of the document.

If you choose **Current story**, the search starts at the cursor position and finishes at the end of the story

Case sensitive

This switch determines whether searching takes account of the *case* of the words. To show its use, suppose we want to replace *the* with *oUr*.

If unselected, then the search will match on *the*, *The* and *thE*. When the substitutions are made, capital letters are retained so you would get *our*, *Our* and *ouR*. The capital *U* in the substitution word has no effect.

If **case sensitive** is selected, then the search will only match *the* and not *The* or *thE*. *oUr* would be substituted for *the*.

Replace all

Once you have decided

- what text to search for
- whether to be case sensitive or not

- whether you want to replace it
- whether you want to deal with the whole document, or just the current story

you can click on either **Find next** or **Replace all**. Pressing *Return* is the same as clicking on **Find next**.

If you have changed your mind and decided not to search for any text, click on the **cancel** box.

If you've selected **Find next**, then Impression will search for text matching that in **Find what:**. If a match is found, the **Text found** dialogue box is displayed (see below).

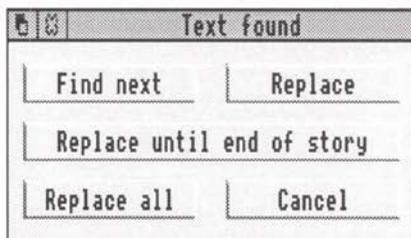
If you've selected **Replace all**, Impression will search the text looking for a match with **Find what:**. If a match is found, then it is automatically replaced by the **Replace with:** text.

With either selection, how far Impression searches depends on whether you've selected **Current story** or **Whole document**.

If a match cannot be found, a warning box is displayed saying *Couldn't find search string in text*.

The Text found dialogue box

If some text is found which matches the contents of the **Find what:** field, then a smaller dialogue box will be displayed. This box allows more of the document to be seen than if the main Find and replace box were still on screen.



The Text found dialogue box

This contains five buttons that allow you to:

- find the next occurrence of the **Find what:** string,
- replace the search string and find the next occurrence,
- replace all the occurrences of the search string in this story,
- replace all occurrences of the search string in the document,
- cancel the box.

Find next

Clicking the **Find next** button allows you to find the next occurrence of the **Find what:** string in the text. If no match is found in this story, and the **Whole document** button was selected in the **Find and replace** dialogue box, then Impression will move to the next story (if there is one) and try to find the string. This process continues until Impression finds either a match or the end of the text. If the end of the text is found, an Alert box, which contains the message *Couldn't find search string in text*, is displayed.

Replace

Clicking the **Replace** button replaces the highlighted occurrence of the **Find what:** string with the **Replace with:** string. Impression then performs a **Find next** to find the next occurrence of the search string. If the **Replace with:** field in the **Find and replace** dialogue box is empty, then clicking **Replace** deletes the found text.

Replace until end of story

Clicking the **Replace until end of story** button causes Impression to replace all occurrences of the **Find what:** string, from the current highlighted occurrence to the end of the story, with the **Replace with:** string.

Replace all

Clicking the **Replace all** button will cause Impression to replace all occurrences of the **Find what:** string with the **Replace with:** string.

This button duplicates the **Replace all** button in the **Find and replace** dialogue box. Its advantage is that text replacement can start part-way through a document.

Truncated text

If truncated text is encountered while searching (i.e. text has flowed out of one frame, and has no other frame to flow into), the search does *not* end. This can be confusing because Impression tells you that it has found some text but you cannot see it on the screen.

Go to page

Keyboard short-cut: *Ctrl-Shift-G*

Moving the pointer to the right of this option displays a small editable box. Type in the required page number and then either

press *Return* or click the **Select** mouse button to scroll the window to that page.

Careful: this only scrolls the window to the required position; the cursor remains on the original page.

If you want to return to the cursor position, then pressing one of the cursor left or right arrow keys will re-display the window around the cursor. In fact this point holds generally; if ever you have scrolled the window to another position in the document, moving the cursor by using the arrow keys re-positions your view back to the cursor position.

The page number used is the 'physical' page number, as displayed in the **Info** box, rather than the page number that may be shown on the page.

Go to Chapter

This option is similar to **Go to page** just described. Chapters are numbered in sequence with the first chapter as 1, the second as 2 and so on. Chapter numbers are also shown in the **Alter chapter** dialogue box.

Spelling

Slide over the arrow to the right of the name to display a submenu of four items:

- Check as you type
- Check from cursor
- Check entire text
- Dictionary.

Check as you type

Clicking on this option turns **on** the 'check as you type' feature (or **off** if the option is already ticked). If the spelling checker has not been loaded, a warning box will appear allowing you either to load it, or to cancel the operation.

When this option is selected, if you type a word which the spelling checker does not recognise, it will bleep. This acts as an audible warning that you may have made a mistake. Note that Impression only checks the word when you type a space, full stop, *Tab* or *Return* after the word: it will not check the word if you move off it using the mouse or the cursor keys.

Check From Cursor

Keyboard short-cut: *Ctrl-F*

This menu option is greyed if there is no cursor present in the text, so it may be necessary to click in the text at the required position before using this menu option.

When you choose this option, any selected region of text is deselected.

Text that overflows a frame, and therefore cannot be displayed, is not checked.

This checks the words in the current story from the cursor position onwards. The hourglass is displayed while the spelling checker is searching for possible errors.

Once a possible error is found, the word in the text is highlighted and the document window scrolled, if necessary, to bring the word into view.

The spelling checker dialogue box appears on screen with the word in question in the editable field and the guess option

invoked. This dialogue box is described in the *Using Impression* chapter.

Clicking on the **Cancel** button terminates the spell checking and removes the dialogue box from the screen.

Clicking on the **Replace** button or pressing *Return* simply takes the word from the editable field or a highlighted word in the list and replaces the highlighted word in the text.

After replacing the word, checking continues from that point with the dialogue box remaining on screen. The pointer changes into the hourglass until the next word is found. Once checking has been completed the dialogue box is removed and the cursor remains at the end of the text story.

The spell checker ignores any two letter words because initials, abbreviations, postcodes, etc. often have two-letter combinations.

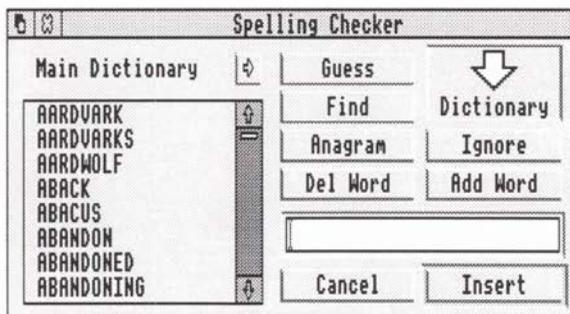
Words with an apostrophe at the end (Chris') or apostrophe-s (Fred's) are checked as Chris or Fred. Any other words with apostrophes are checked directly e.g. didn't, I'll.

Check entire text

This option will check the spelling of all text in a document. Its operation is similar to **Check from cursor**. It will ask if the spelling checker is to be loaded if it is not already present.

Dictionary

Keyboard short-cut: *Ctrl-F8*



The **Spelling checker** dialogue allows you to perform dictionary operations such as creating user dictionaries, adding words to or deleting words from the user dictionaries or finding a word from the dictionary and placing it in the text.

The Spelling Checker Dialogue Box is described in detail in the *Using Impression* chapter.

Abbreviations

An abbreviations dictionary can be automatically loaded when Impression starts up. See *Customising Impression* for details.

Expand as you type

Choosing this option will turn on the abbreviation expansion facility. Every time a word is typed that is recognised as an abbreviation by Impression it will be expanded. The expansion only takes place if a space, full stop, *Tab* or *Return* is typed to terminate the word. If the option is ticked, choosing it will turn expansion off.

Dictionary

Choosing this option will bring up the standard spelling checker dialogue, displaying the abbreviations dictionary in the **Abbreviations** window to the left. If there is no abbreviations dictionary loaded, an empty one will be created, and the **Abbreviations** window will be blank.

Adding entries to the dictionary

Entries can be added to the abbreviations dictionary by typing them into the editable field. The abbreviation should be typed first - it should be a single word - then a space, then the expansion. The expansion can contain any character, including spaces. For example, typing:

imp Impression

will put the abbreviation *imp* in the dictionary, which will expand to *Impression* when typed. Once you have typed in the entry, click on the **Add word** button to add it to the dictionary. Clicking **OK** or **Cancel** will remove the dialogue box.

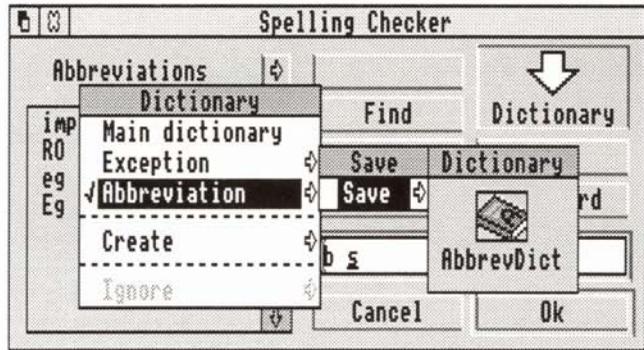
NB: The abbreviations are *case sensitive*: In the above example, the word *imp* would be expanded but *Imp* would not.

Removing entries from the dictionary

To remove an abbreviation from the dictionary, click on the abbreviation to be deleted - this will put it into the editable field - then press the **Del word** button and the entry will be removed.

Saving the abbreviations dictionary

Click the Menu button over the **Abbreviations** window, and the **Dictionary** menu will appear. Go down the **Abbreviation** submenu and down the **Save** submenu and a saver box will appear. Drag the icon from the box into a filer window to save the dictionary. The filename of the dictionary cannot be altered.



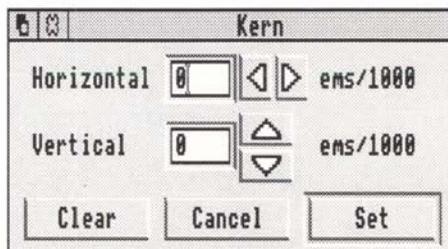
The Abbreviations dialogue, showing the Save abbreviations window

If the dictionary is in Impression's *Auto* directory, it is automatically loaded when Impression starts-up. Also, if you make any changes to the dictionary, the changed dictionary is saved to disc when you quit Impression. Details of how to copy files into the *Auto* directory can be found in *Customising Impression*.

Kern

This menu option can only be selected when the cursor is positioned in the text. It will be greyed therefore when there is a selected region. Choosing this option will produce the **Kern** dialogue box.

The book '*DTP at a glance ...*' (supplied with Impression) explains why kerning is useful.



The **Kern** option allows very precise control of the positioning of individual characters on the line. Not only does it allow the horizontal space between two characters to be altered, but also the vertical offset from one character to the next.

The degree to which any two characters are brought closer together or moved further apart is measured in *ems*. One *em* is equivalent to the size of a capital M in the current font, so the amount of movement determined by kerning is always proportional to size of the text. The dialogue box expects values to be entered in 1000ths of an em, so entering a value of 1000 in the horizontal field will move the two characters apart by one em. A negative value is required if the characters are to be moved closer together so, for example, a value of -100 will move the two characters closer together by one tenth of an em.

The vertical movements are controlled in a similar manner. However, since only one 'move up' occurs at the cursor position, unless you want the rest of the characters on the line to be moved up by the same amount, it will usually be necessary to place an equivalent 'move down' at a later position on the line.

After entering the required horizontal or vertical move values, pressing the **Set** button will put this move value at the cursor position. The **Cancel** button simply cancels this operation and removes the dialogue box. The **Clear** button will set both the vertical and horizontal values to zero.

If the **Kern** dialogue is displayed while the cursor is between two characters that had previously been kerned, it will show the previously entered kern values. It is therefore an easy matter to alter or remove (with the **Clear** button) any existing kern movements.

There are key short-cuts for kerning that do not require the dialogue to be displayed. *Ctrl-E* and *Ctrl-R* will extend or reduce the gap between two characters while *Ctrl-U* and *Ctrl-J* will move the next character either up or down. In all cases one press of the key will alter the kern value by 50 (0.05 em). Using 10 point text this represents a movement of half a point in the given direction.

Insert

The **Insert** submenu allows the current page number, current chapter number, date and time to be inserted at the cursor position.

Current page number

Moving over the arrow on this option will display a submenu listing three different page number types -

- Upper-case Roman,
- Lower-case Roman, or
- Numeric.

Selecting one of these will place the current page number, in the appropriate format, into the text at the current cursor position. This page number will be automatically updated as the text moves around, always showing the correct page number.

This option would usually only be used on master pages in a header or footer frame. The actual master page itself does not have a page number associated with it so it will simply show `<pn>` where the page number would normally be seen. However, on the actual pages based on this master page, this `<pn>` will be replaced by the real number.

Unless instructed otherwise, the displayed page number will match exactly the physical page number. However, it is possible to re-start the page numbering at each chapter start: see the *Alter chapter* and *New chapter* menu options for details of how to control the page numbering for each chapter.

A typical manual, as an example, may have the first few introductory pages with Roman page numbers (i, ii, iii etc), followed by the remainder of the manual numbered conventionally, but re-starting from number 1. It is not uncommon to find the index section of a book numbered in Roman numerals.

The actual displayed page number is treated much like any single character within Impression. Therefore, positioning the cursor after it and pressing *delete* will remove the page number. This also means that the page number can be tabbed, centered or displayed in any style just like normal text.

Current chapter number

This option is similar to **Current page number** in that the chapter number shown is always the current chapter. The displayed chapter number is updated if the host chapter number changes because of adding or deleting chapters before it. You can display the chapter number in:

- Upper-case Roman
- Lower-case Roman, or
- Numeric.

If you use this option to put the current chapter number on a master page, it is displayed on the master page as `<cn>`.

Current date Current time

These two menu options will insert the current date or time into the text at the cursor position. These options will be greyed if there is no cursor placed in the text.

These options read the time and date from the clock in the Archimedes so you should ensure that this is set up correctly.

Note that the time and date inserted by these options will not automatically update as the time and date changes. Once inserted at the cursor position, the time and date behave just like any normal text and may be edited in the normal way.

Hide all graphics

Use this option to save the graphics to disc and then remove them from memory. All graphic frames are displayed on screen in outline with a diagonal cross through them. When the document is printed (unless it is printed in draft mode), all graphics are printed.

There is a similar option in the **Alter graphic** dialogue box to hide an individual graphic. The **Hide all graphics** option hides all graphics in the document.

Complicated graphics can occupy a lot of memory and hiding graphics increases the space available for text. Also, large line drawings can take time to redraw on screen and so slow down screen updating. If you have several graphics on one page, this option allows you to hide all of them in one operation.

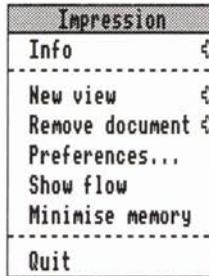
Compile index

For details of using this option refer to *Compile index & Contents* in *Using Impression*.

Compile contents

For details of using this option refer to *Compile index & Contents* in *Using Impression*.

Program menu



If the **Menu** mouse button is clicked over the Impression icon on the icon bar, a small menu appears. This is the *program menu*. It controls aspects of the entire program rather than individual documents.

Info

About this program	
Name:	Impression N°000001
Purpose:	Document processor
Author:	© Computer Concepts Ltd 1989
Version:	1.52 (24-Aug-1990)

Moving over the arrow displays a small dialogue box which gives some brief information about Impression.

The most significant item is **Version**. If, for any reason, you contact Computer Concepts concerning Impression, we may ask you for the exact version number and date of the copy that you're using.

New View

Impression can hold up to 15 documents in memory at any one time. When a window is closed using the Close icon, it is simply removed from the screen; the document is not deleted from memory.

If another window onto a document is required, this menu option would be used. It allows up to four windows, or views, to be opened onto any document currently stored in Impression.

Moving over the arrow will display a list of the currently stored documents. If a window is already open on any document then its name will be ticked. Selecting any name from the list will display a window onto that document.

Each window or view is totally independent of the others. Each window may view any part of the document and be scrolled freely. Each window may be scaled individually by selecting the **Scale view** menu option from the **Document** main menu while the pointer is over the required window.

Alterations to the document in one window will show in any other windows on the same document.

The cursor is displayed in one window only, this window being indicated with a light yellow *title bar*, as is the convention with all RISC OS applications.

Use **New view** to display a list of the documents currently stored in Impression.

Remove document

As previously described, clicking on a document window's Close icon doesn't remove the document from memory. You have to specifically remove it. You can remove an individual document by using the **Remove document** option in Main Menu. However, to use the Main Menu option, the document has first to be displayed on screen.

Moving over the arrow displays a list of the currently stored documents. If a document has been changed and the changes have not been saved to disc, its name is followed by an asterisk (*). (In the same way, an asterisk is shown on that document's title bar.)

To delete a document from memory click on its name. If there are changes that have not been saved to disc, you are asked to confirm that you want to discard those changes.

Note that this option only removes the document from memory. It does not alter or remove the version of the document stored on disc.

Preferences

This dialogue box controls the preferences while Impression is running, allowing you to change the defaults after Impression has started, but it also allows you to save the preferences in the Impression application so that these become the defaults.

Click the **OK** button to use, but not save, the new preferences.

Click the **Cancel** button to ignore any changes made to the preferences.

Click the **Save** button to use the new preferences and also save them within Impression, so they will also take effect each time Impression is loaded.

There are five areas controlled by the **Preferences** dialogue box.

Auto load

The spelling checker, automatic hyphenation, and enhanced graphics within Impression are controlled by separate programs, which are stored within the Impression application directory. Normally, they are not automatically loaded, since they take up valuable memory - the spelling checker takes up over 100K - but if they are always required, the switches marked **Spell check**, **Hyphenation**, and **Enhanced graphics** can be switched on. Then, if the preferences are saved, the next time Impression is loaded it will automatically load in the 'on' modules. **Spell check** has two associated buttons, **ROM** and **Disc**, indicating to Impression whether it should load in the supplied disc version of the spelling checker or a ROM version called Spell-Master (available separately). The ROM version takes up considerably less memory than the disc version.

You only need to load the enhanced graphics module (which is about 20Kb long) if you want grey-scale dithering and rotated sprites. Grey-scale dithering improves the appearance of scanned images that include half-tones (varying shades of grey); monochrome images (where everything is either black or white with intermediate grey shades) do not benefit. Even with this switch off, you can still rotate Draw files; it is only sprites that are affected.

Units

Several of the dialogue boxes in Impression display measurements. Use this area to change the display default units. Any

page measurements, such as frame sizes or page sizes, use the **Page** unit. This is *millimetres* by default. Style or typeface measurements, such as font size or line spacing, use the **Style** unit. This is *points* by default. (One point is approximately 1/72 inch.) Rulers use the **Rulers** unit which is *centimetres* by default.

To change one of the default units, either;

- click on the arrow to the right of the box, or
- click **Menu** on the box itself.

This displays a menu of available units. The currently selected entry is ticked. Click on the required name to change the default units.

When using Impression, you can type in new values using any of the units that Impression recognises and Impression will do any required conversion. For example, if the page unit is *inches*, you can type in a value as **3cm**. Impression then automatically converts that values from centimetres to inches. All values would be displayed in inches.

Default window scale

Whenever a new window is created onto a document, it has a default scale, normally 100%. It may be useful to change this, as the best scaling depends on the screen mode. As an example, 100% in mode 12 means that Impression is unable to display the whole of the default frame - a scale of 90% would be more useful. To change the scaling of the document view, edit the number in the **Document** box.

The **Master page** box performs the same task for the master page window.

Display

This box controls certain aspects of the way documents are displayed in Impression.

Show frame outlines turns frame outlines on or off, except for the selected frame which always has an outline. This option has a keyboard short-cut of *Ctrl-O*. Turning the frame outlines off gives a better impression of how the page will look when printed.

Show print borders shows the limit of the current printer driver's printable area in grey. This limit only applies when printing single pages at 100%. If there is no printer driver installed, a default border is displayed.

Show page rulers turns the rulers along the top and left-hand edges of the window on or off. Because the ruler has to be redrawn when the document moves in the window, showing the page rulers can slow down screen updating. This has a Keyboard short-cut of *Ctrl-Shift-P*.

Flashing cursor – it is often easier to see the cursor if it is flashing. This is especially so on monochrome monitors.

Misc

Check as you type. This checks the spelling of words as you type them. You also need to set the **Spell check** switch on in **Auto load** and include any user dictionaries in the *Auto* directory. (See *Associated files* in the *Customising Impression* chapter.)

Expand abbreviations. If you have created a hyphenation directory, setting this option on will automatically expand abbreviations as you type them. You also need to include the abbreviations dictionary, *AbbrevDict*, in the *Auto* directory.

Snap to guides. This facility is described in the *Misc* section of *Main Menu*.

Smart quotes. This option affects the interpretation of ‘sexless’ quotes in text files read into Impression. (Sexless quotes are the ‘ and ’ characters on the keyboard, next to the *Return* key.) Impression can convert these into proper open and close quotes (‘ ’ and “ ”). The smart part is that Impression decides when it should use open quotes and when close quotes, according to the rules of English punctuation. It occasionally confuses an apostrophe for a close quote but usually gets it right. Smart quotes can greatly improve the appearance of a document especially when printed at high resolution.

You would turn this option off to import program listings as usually these require the sexless quotes to remain unchanged.

(The reason why all the quotes in this manual appear as ‘ is that the typeface is *Pembroke Medium* which does not have true open and close quotes.)

Show flow

Use this option when you have flowing text stories to show the linking order of frames. Arrows are drawn between frames from the bottom-right of one frame to the top-left of the next frame in the chain.

This option is particularly useful if you have some frames which, although linked, are empty and also when some linked frames are overlaid by other frames.

Minimise Memory

Impression can handle documents larger than the available memory by saving non-current parts of the document to disc. Usually this is only done automatically when memory is getting short. However this option will force Impression to save all non-current parts of the document away to disc, thereby reducing the memory requirements of Impression as much as possible.

This menu option can only take effect if the document has been loaded from disc, or has been saved to disc, since otherwise it does not know where to store the parts of the document. Make sure the document has been saved at least once before attempting to use this option.

Impression will always keep the entire text of the current chapter in memory. If a graphic is selected then this will also be kept in memory. Therefore this menu option will only have an effect if a document consists of more than one chapter or contains any graphics. It will always save any non-current documents to disc (as long as they have a 'home' on disc. i.e they have been loaded from file, or have been saved to file at least once.) In order to reduce Impression's memory requirements to the minimum possible, place the cursor in the smallest chapter in the document.

Because of this *virtual document* feature, Impression always treats the document on disc exactly as if it were part of the document in memory. This has several serious consequences. For example, it is not possible to rename a file on disc while it is in Impression since this is rather like removing part of the document. Impression cannot stop you using the filer **Rename** and **Delete** options and so we can only warn you: **Never rename or delete a document file from the disc while it is currently being held as an Impression document.**

All sections of the document that have been 'put away' to disc will show their frames as crosses. Clicking in any crossed frame will restore the section to memory again (possibly saving some other part of the document to disc in the process if there is not enough memory to fit it all in). Therefore it is possible to scroll around *all* pages in a document, irrespective of its length. Those sections resident in memory will show normally; those sections that have been saved to disc will show as crossed frames.

This menu option is most useful when trying to release memory for another application or when changing to another screen mode that requires more memory than is currently free.

Quit

This deletes all documents from memory, and also removes the Impression program. Any documents not written to disc are lost. Therefore make sure you have saved any documents to disc before using this option.

However, if you do have any unsaved documents, a warning box appears with the message '*Documents not saved. Do you really wish to quit?*'.

Click **Quit** or press Return to quit Impression.

Click **Cancel** or press *Esc* to return to Impression.

If you have made changes to any dictionaries in Impression's *Auto* directory, then the changed dictionaries are saved to disc when you quit. (Details of copying dictionaries into *Auto* can be found in *Customising Impression*.)

7. Tutorial

Introduction

The best way to learn how to use a product is to start using it. This chapter describes the creation of three different documents of increasing complexity. Each document illustrates the use of various facilities of Impression. If you are unsure about how to perform some of the operations, refer to the chapter *Using Impression*.

Document 1 is a simple letter. It shows you these facilities:

- entering text from the keyboard,
- incorporating text from a disc file,
- selecting areas of text,
- cutting and pasting text,
- using the spelling checker,
- saving a document,
- changing the scale of your view on the document.

Document 2 is a brief notice. It shows you these facilities:

- editing an existing document,
- using and changing the effects.

Document 3 is a quite complicated page with a picture and captions. It shows you these facilities:

- creating and manipulating frames,
- graphics handling,
- using styles,
- printing.

To save unnecessary typing, much of the text used in these documents has already been prepared for you. The text is in a series of files on Impression disc 2 in a directory called *Tutorial*. You will also need disc 3 for the picture used in document 3.

Finally, you will need a formatted disc to save the completed documents to. As suggested in the chapter *Installation*, this disc should also contain *!Fonts* and can be used as your first work disc.

Document 1— A letter to Aunt

You have to write to your aunt and thank her for your Christmas present. This is a simple document and is all in plain text. The complete letter is shown on the next page.

Gaddesden Place
Hemel Hempstead
Herts
17th July 1990

Dear Aunty,

Thank you for your delightful Christmas present. Bright-pink socks are just what I require. They are lovely. They would make a good match with last Christmas's lime-green socks except the dog chewed those and then buried them. As you know, he gets very agitated if anyone exhumes anything he's buried and so I thought it better to leave them undisturbed.

Also, thank you for the book 'Pillow lace through the ages'. I must admit to knowing nothing about this subject and I am sure that many a dull winter's evening will be spent on expanding my knowledge.

Hope that you received the box of chocolates. I remember you saying how much you look forward to receiving a box each Christmas and birthday.

Yours as ever,

Opening the document

Install Impression onto the icon bar. Click once on the icon to open a new document. The document window fills only part of the screen and is too small for our purposes. Click on the Toggle-size icon (in the top right-hand corner of the window) so that the window fills the whole screen.

Entering text

Click inside the frame to select it. The title bar changes to yellow to show this is the current window. The frame outline, which was shown dotted, changes to solid; this shows that it is the selected frame.

Start the letter off with your address and the date. Use *Tab* to position the text cursor to the required place and type in. If you make a mistake, use the delete keys to remove the error and then retype. At the end of each line press *Return* to step to the next line.

Change the scaling of the window

Now you have some text on the page you may want to increase (zoom in) or decrease (zoom out) the scaling of the window. Use the menu option **Document** then **Scale view**. (To display the main

menu, position the mouse pointer over Impression's window and click on the **Menu** (centre) mouse button.)

Even if you are happy with the present scaling, try changing it to see the effect.

Entering more text

Type in the line

Dear Aunty.

Type in the last paragraph, which starts

Hope you have received...

Type it as one continuous line; do not type *Return* at the end of the first line. For now, make this the first paragraph; we will move it later to show how you use cut and paste.

Importing text

To save you typing in the rest of the letter, the remaining text is available in a disc file. We will use it to show how to import text.

Position the cursor at the end of the text (after the word 'birthday').

Open the directory *Tutorial* on disc 2. In that directory is a file called *Aunty*. Move the mouse pointer over the file's icon. Press and hold down the **Select** (left-hand) mouse button and drag the mouse pointer back over the Impression document. Release **Select** and the file's contents are included into your letter.

You may notice some incorrectly spelt words in the text you have just included. These are intentional and are used later to show how the spelling checker works.

Moving text

Select text

Now you have all the text in place we can move the first paragraph to its proper place.

First the paragraph must be selected. There are several ways of doing this (see next paragraph) and we suggest you try each in turn to see which you prefer. When a block is selected it is highlighted. To deselect a block, either type *Ctrl-Z* or click once on the **Select** (left-hand) mouse button.

There are four ways to select a paragraph:

- Type *Ctrl-@*.
- Rapidly click four times on the **Select** mouse button.
- Position the mouse pointer at the start of the paragraph (the words 'Hope that..'). Press and hold down **Select** and drag the mouse pointer to immediately before the start of the second paragraph (the words 'Also thank..'). Release **Select**.
- Position the mouse pointer to the start of the paragraph. Click once on **Select**. Move the mouse pointer to immediately before the start of the second paragraph and click on **Adjust**. If the end position is incorrect, reposition the mouse pointer and click again on **Adjust**.

Cut to clipboard

First select the paragraph as just described. Then, cut the paragraph out of the letter by:

- using the menu option **Edit** then **Cut text**, or
- typing *Ctrl-X*, or
- using any of the delete keys – *Delete*, *Copy*, or *Backspace*.

This removes the text from the document and places it on the clipboard. (The clipboard is an invisible storage area.)

Paste it back

Position the cursor immediately before the words 'Yours as ever'. Paste the text from the clipboard into the document by:

- using the menu options **Edit** then **Paste text**, or
- typing *Ctrl-V*, or
- pressing *Insert*.

Checking the spelling

Now that the letter is complete you can check the spelling.

On the menu choose **Misc** then **Spelling**. Click on the option **Check entire text**.

Some of the words in your address may not be in the dictionary and will be reported as misspellings. If this happens, click on the **Ignore** button on the dialogue box. This puts the word into the temporary dictionary and the spelling checker can continue. Many road names are ordinary English words and most city

names are already in the dictionary. So if you live in
Back of Bridge Street, Bristol, Avon, England
the spelling checker already knows all these words.

The first deliberate misspelling is **Chritsmas** for **Christmas**. The spelling checker can easily detect two letters are transposed and gives you the correct word. To replace the word, either press the **Replace** button on the dialogue box or press *Return*.

The second misspelling is **agited** for **agitated**. This time the spelling checker cannot find a matching word and reports *No words found*. Click on **Guess again** to perform a second search using a different algorithm. This time you are presented with several choices. To select the required word, you can either:

- click once on **agitated** and then click on **Replace** (or press *Return*), or
- double-click on **agitated**.

The first option copies the word into the editable box and then overwrites the misspelt word.

The second option directly replaces the word and is normally the easier to use.

Saving the letter

Insert your work disc and click on the floppy disc icon. If you have followed our suggestion, the disc will only contain *!Fonts*.

From the menu, choose **Document** then **Save document**. In the editable box will be the default filename *Document*. Change this to a name of your choice, for example *MyDoc*. The name can be up to nine characters long.



Position the mouse pointer over the big-I icon. Press and hold down the **Select** (left-hand) mouse button. Drag the icon over the directory display for your disc and release **Select**. The document will now be copied to your floppy disc.

Document 2 – Voles

With this exercise, you are going to open an existing document and then apply a number of effects to it.

Opening the document

On disc 2 in the directory *Tutorial* is the file *!Voles*. Double-click on its icon to load it. If *Impression* is not already in memory, it is

Notice

Recently many of you have been bringing your pet voles with you. Whilst we all appreciate the entertainment value of having these rather pleasant little furry creatures around and fully appreciate that they get distressed if left for long periods without human company, you must be made fully and comprehensively and unequivocally aware and advised and informed and notified that such practices are not fully conducive to the smooth running of this establishment and are incompatible with our attempts to present a modernistic image to the outside corporate world.

Besides which, they keep eating my chocolate biscuits.

This practice must cease immediately. Anyone found in possession of a vole will be severely told off.

For the purposes of this notice, *voles* also means *foals*, *moles* and *trolls*.

You have been warned!

loaded automatically. (On floppy disc systems you may be prompted to swop discs.)

!Voles contains most of the text for the notice. Everything is in plain text and looks uninteresting. As we want it to be read, we need to liven it up by applying suitable effects.

Heading

First, let's make the heading more prominent. The effects we want to apply are:

font:	Homerton Bold
font size:	24pt
justification:	centre .

Before you can apply an effect to existing text, you must first select it. To select a word (in case **Notice**) you can either

- double-click on it, or
- position the cursor in the word and type *Ctrl-Q*.

Display the **Effects** menu. If you choose items from the menu using the **Select** (left-hand) mouse button, the menu disappears from the screen. If you use the **Adjust** (right-hand) mouse button, the menu stays on the screen – very useful if you are choosing several items.

On the **Text font** submenu choose **Homerton Bold** using the **Adjust** mouse button. The highlighted text changes to the new

typeface. The menu remains on the screen. Notice that the name **Homerton Bold** is now ticked to show that it is selected.

On the **Text size** submenu choose **24pt**. Again use **Adjust**. The highlighted text increases in size.

On the main **Effects** menu choose **Centre** using the **Select** mouse button. The text is then centered on the line and the menu disappears from the screen.

First paragraph

The first paragraph would look more imposing if it was fully justified instead of its current left-justified. Select the entire paragraph (this was described for the first document). From the **Effects** menu choose **Fully justify**. The text automatically reformats to have both left and right margins aligned.

You may find it instructive to also try the other forms of justification so that you can see how the document looks.

The other changes are similarly made. Text in **bold** is in *Trinity Bold*. Text in *italics* is in *Trinity Medium Italic*. Also, try using the other typefaces so that you know how they look on the page.

Typing in new text

To complete the document you need to type in the command at the bottom. This shows you how to apply effects at the cursor for when you are typing in new text.

Position the cursor at the end of the text; pressing *Ctrl-down arrow* is a quick way to do this.

From the **Effects** menu choose a suitable text size and text font – the example uses 18pt Homerton Medium – and centre justification. Type in

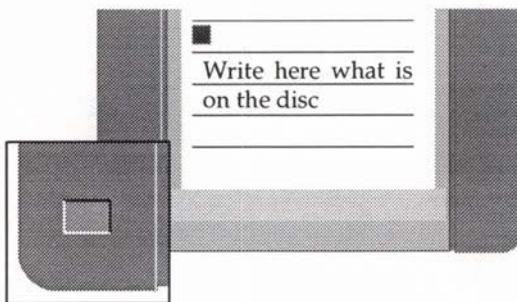
You have been warned!

and, as you type, the text appears in the selected effects.

The notice is now complete.

Document 3 – Discs

This document is a sample page from a book and describes floppy discs. It has a couple of pictures and some text. Again we have prepared the text for you and it is in a disc file called *Floppies*. Part of the completed page is shown on the next page.



The 3¼ inch floppy disc is the main archival medium on the Archimedes. This size of disc is the latest in a line of

Remember that all magnetic media can be corrupted if exposed to other magnetic fields. These fields could be

Load an appropriate printer driver as you will print out the completed document.

Click on the Impression icon to open a new document. Click inside the document's window to select it.

Creating a frame

You now need to create a frame on the blank page to hold the main picture. There are two ways to create a new frame; either:

- from the menu choose **Frame** then **New frame**, or
- type *Ctrl-I*.

The mouse pointer changes to a pair of cross-wires. At this stage do not press any of the mouse buttons. Move these to where you want the top left-hand corner of the frame. For this example, the position should be roughly 50mm from the left-hand edge of the page and 25mm from the top. The exact position isn't critical as you can adjust the frame's position later.

Press and hold down the **Select** mouse button. Move the cross-wires down the page and to the right. As they move, you will see the outline of the frame appear. You will also see the dimensions of the frame. When the frame is approximately 80mm square, release **Select**. The first frame is created and, being new, it is the selected frame. If you made a mistake and the frame is not the required size, you can correct it by dragging the appropriate frame handle.

As it is a new frame it is a **null frame**; that is, it is empty. We are now going to put a graphic in it and it will then become a **graphic frame**.

Insert Impression disc 3 and click on its icon. It has two directories – *Draw* and *Sprites*. Double-click on *Draw*. This has four further directories – *Art*, *Items*, *Signs*, and *Symbols*. Double-click on *Items*.

One of the files on this disc is *MiniDisc2*. In document 1 you dropped a text file into an Impression document. In the same way drop *MiniDisc2* into the frame you've just created. A picture of a floppy disc appears.

Adding a second frame

Now you need a second frame. Create it the wrong size and in the wrong place and then resize it and move it.

Create a frame roughly 100mm square positioned below the existing frame.

First to resize it. Try resizing it using all the frame handles to see the effect. As when you were creating the frame, you see the frame's dimensions whilst you are resizing it. The final size should be approximately 30mm square.

Now to move it. There are four ways to move a frame:

- Position the mouse pointer inside the frame. Click and hold down **Select**; this selects the frame if it is not already the selected frame. After a second the mouse pointer changes to a hand and the frame dimensions are shown; the edges of the frame are continued as dotted lines. You can now slide the frame around on the page. When it is correctly positioned release **Select**.
- The second method is similar. Position the mouse pointer inside the frame. The frame must be the selected frame so, if necessary, click inside it to select. Press and hold down **Ctrl** and then press and hold down **Select**. You can now move the frame around the page as described for the first option, but without having to wait for the second.
- Move the mouse pointer over any edge of the frame avoiding the frame handles. When in the correct place, the mouse pointer changes shape to an eight-pointed 'snowflake'. You can now move the frame around the page as described for the first option. It requires fine control to always pick up the edge of the frame. Vertical edges present particular problems so don't worry if this method doesn't always work.
- You can use the menus. This is described later.

With the first three options you are sliding an outline of the frame around on the page and you can see when it is in the required position. They are the easiest to use. How accurately you can position the frame depends on the scaling factor for the window. If you want to exactly align two frames, the menus option is preferable.

Personal preference usually decides which of the two sliding methods you use. The second (*Ctrl-Select*) is easier for moving graphic frames for a reason that will be explained later.

You can only use these methods to move a frame around on a page. To move frames between pages, you have to use cut and paste.

You can now move the frame to its required place, which is overlapping the bottom-left corner of the picture of the floppy disc. When in position it hides part of the floppy disc picture. Try moving the frame a short distance using both the sliding methods before finally positioning it. The frame needs a border to complete it but that is described later.

In this second frame we want an enlargement of part of the floppy disc picture. You could again drop in the draw file from disc but the document would then contain two copies of the same graphic and this wastes memory. (A complicated sprite file can be over 100Kb long – the old saying “A picture is worth a thousand words” is rather inaccurate; it can often be worth 10 or 20 thousand words.)

Instead, we are going to open a second view on the same graphic. Click **Select** on the graphic of the floppy disc, then click **Adjust** on the empty frame. A second, reduced image of the floppy disc then appears in the smaller frame.

We want to enlarge this second image. On the menu choose **Frame** then **Alter graphics**. Change the **Scaling** box to 400% and click on **OK**. The image in the frame is enlarged and you see only a part of it.

You want to see a different part of the image – the bottom left corner – so you need to slide the image along in the frame. There are three ways to do this:

- Press and hold down **Select** and slide the image around inside the frame. This is useful for moving the image over short distances. Do not use **Adjust**; that rotates the image.

- Use the **Alter graphics** dialogue box. Click on the four direction arrows; this moves the image in steps of 0.125" If you keep the mouse button depressed over any of the arrows, you get continuous movement. For moving the enlargement of the floppy disc, this is probably the easiest method.
- The third method also uses the **Alter graphics** dialogue box. Enter new values into the X and Y editable boxes. This method allows the image to be precisely positioned but it is sometimes complicated to calculate the exact X-Y position.

Experience shows that for large movements of a graphic it is easier to use a combination of methods. Use the editable boxes to make large changes in position; then click on the arrows to get the approximate position; and then either slide the graphic or again use the editable boxes to finally position the graphic.

This is why we advised using *Ctrl-Select* to move graphic frames rather than just *Select*; if you move the mouse pointer before it changes to a hand, you slide the graphic rather than move the frame.

Adding the third frame

We want to overlay a caption on the label of the floppy disc.

Again create a frame that is too big and in the wrong place; make it about 100mm square and below the two existing frames.

This time, use the menus to position the frame. On the menu choose **Frame** then **Alter frame**.

The dialogue box has four editable boxes for X and Y (the horizontal and vertical distance from the top-left corner of the page) and **width** and **height** (the width and height of the frame). For initial values set

X = 90mm Y = 70mm width = 39mm height = 15mm.

and click on **OK**. You may need to slightly adjust the X and Y values later. The new frame should overlay the label area of the floppy disc graphic. If it doesn't, move the frame until it does.

The new frame masks the underlying floppy disc graphic; we want to see the label underneath. Again, from the menu choose **Frame** then **Alter frame**. Click on the button **View** and another dialogue box appears. Click on the button **Transparent** and then **OK**. The new frame becomes transparent and you can see the underlying graphic.

Into the new frame type the caption

Write here what is on the disc

This should appear as two lines with a break between the words 'is on'. If not, adjust the width of the frame until it does.

By making small adjustments of the frame's position you should be able to position the caption between the lines on the floppy disc's label.

Adding a border to frame 2

Click on frame 2 to select it. (Frame 2 holds the close-up of one corner of the disc.)

From the menu choose **Frame** then **Alter frame**. The **View** dialogue box should appear as this was the last selected. If the **Info** box appears, click on the **View** button.

In the dialogue box are four editable boxes with *Off* in them. These, and the adjacent two arrow boxes, are used to set the frame borders. You can also set all four borders simultaneously if you select the **All** button.

Try selecting different borders on all four sides and on individual sides to see their appearance. In the illustration, we have used border 2; remember, pages in this manual are reduced for printing and so the border appears thinner.

Remember to click on **OK** to implement your choice of frame borders.

Creating frames 4 & 5

In a normal document you would create two separate frames. For this tutorial we want to show how cut and paste works for frames. So we will create one frame and then copy it.

Create a frame below the existing frames. It should be 80mm wide and 134 mm high. Align its left margin with the left margin of the page.

Now copy it to the clipboard. From the menu choose **Edit** then **Copy frame**. The original frame does not change.

To paste the duplicate frame you could use **Edit** then **Paste frame**. Instead, use the keyboard short-cut by pressing the *Insert* key. The mouse pointer changes to a pair of cross-wires. Move them so that they align with the top edge of the existing empty frame and about 5mm away from the right-hand edge. Click **Select** to

paste the duplicate frame. The dimensions of the duplicate frame are identical to the existing frame.

Before we import the text, we want to create and then apply a style. Then, as the text is read in from disc, it will have that style applied.

We want to create a new style so type *Ctrl-F5* to display the style editor. The style name is *Untitled*. If you scroll through the style editor, you will see that all of the attributes are greyed but values are shown in the editable boxes. These are the current values in *BaseStyle* and show you what the result would be of applying this style on top of *BaseStyle*.

Before you can enter a value for an attribute, you have first to select it. We want to specify **Font name**, so click on the switch to the left of the name. The text in the box to the right of the name changes from grey to black.

Click on the arrow icon to the right of the name. This displays a menu of the available font families. Slide the mouse pointer over the name *Homerton*. This displays a second menu which shows the variants of the Homerton family of fonts. Click on *Medium* to select Homerton Medium font.

Next click on the **Font size** switch. This also selects **Line spacing** as normally you want to specify both a font size and a line spacing. Use the *Delete* key to remove the current contents of the editable box and type in **12**. There is no need to specify any units as we want the default units, which are *points (pt)*. Notice that the line spacing automatically changes to 14.4pt (120% of 12pt). If you wanted a larger or smaller line spacing, you would click on the **120%** switch to deselect it and then type a new value into the **Line spacing** box.

These are the only changes we want to make; the remaining attributes will be defined by *BaseStyle*.

Now check that the cursor is in the right-hand frame. (If necessary, click **Select** in the frame.)

In the style editor, click on **Apply** (use the **Select** mouse button). This copies the style into the style list and also applies it at the cursor. Now when you import the text, it will have this style applied to it.

Importing text from disc has already been described for document 1. Click on the left-hand frame to select it. Drop in the text

file *Floppies*. The contents of *Floppies* are too large for the frame and not all the text is displayed.

If the left-hand frame is not already the selected frame, click **Select** in it. Click **Adjust** in the right-hand frame. The remaining text now appears in the right-hand frame. You have created a *flowing text story* between the two frames.

If you move the cursor in the text, it moves between the frames as though they were a single frame. Similarly, if you add text to the left-hand frame, displaced text flows into the right-hand frame.

The document would look better if both columns of text were the same length. Move the bottom edge of the left-hand frame upwards. Each time you release the mouse button the text reformats to fit the space available.

When the two columns align, you have completed this document. Now to print it.

To display the Print dialogue box either:

- press the *Print key*, or
- choose **Document** on the Main Menu and then choose **Print**.

If the dialogue box is set up as you require, click on **Print**. A box appears telling you the printer is being prepared and then printing starts. With certain types of printer up to a minute may elapse before printing starts.

Document 4 - Hints & tips (!Hints)

This document is in the root directory of disc 2. You don't have to change this document. This is our sneaky way of reminding you to read *!Hints* for the latest information about Impression.

8. **Advanced Features**

Described in this section are:

- customising Impression,
- draft printing
- file format conversions
- document description format
- advanced searching.

Customising Impression

Introduction

Every owner of Impression will have a different use for it. One user might want it mostly for letters, another might use it to produce newsletters, and another might use it for writing books. No matter what your requirement for Impression, you will almost certainly find that one aspect or another is not exactly as you would like it.

For this reason, many features of Impression are changeable. These features broadly fall into three different categories:

Program preferences, such as the type of units used for displaying measurements, or whether the spelling checker is loaded automatically;

Document defaults, such as the default style list and default master page;

Associated files, such as modules to convert from other word processor formats to Impression format.

Program preferences are altered using the **Preferences** dialogue box. This is described in the *Program Menu* chapter.

Document defaults

When you click on the Impression icon, the document that appears on the screen is the **default document**. If it does not meet your exact requirements, you can edit the default document exactly like any other Impression document. This allows you to exercise complete control over all aspects of the default document.

Editing the default document

The default document is in the Impression application directory. Find the *!Impress* icon on your Impression disc, then hold down *Shift* and double-click on the icon. This brings up a window which contains the files used by Impression. **Never alter any of these files.** If you do, Impression will stop working.

Double-click on the *Auto* icon. Another window appears which contains several other files. One of these files is the Impression document called *!Default*. To edit the document, double-click on it in the normal way and Impression will load it in.

Make any changes you require and save the document retaining the same file name. When you next call up the default document, it will include these changes.

The *Hints and Tips* chapter gives a specific example of how to stop Impression putting a one-line gap between paragraphs. The same method can be used to change the default text font from Trinity.Medium 14pt (you might prefer a smaller font size or a different main font).

Associated files

There are many different files supplied with Impression, for example, *loader modules* which convert different file formats to Impression format, *printer modules* which convert the opposite way, spelling checker user dictionaries, hyphenation exception dictionaries, abbreviation expansion dictionaries etc.

Not all of these modules will be useful to every user, but there will certainly be some which are used most of the time, so Impression can automatically load these files when it starts up.

The loader modules can be found on Impression disc 1 in a directory called *Extensions*. Double-click on this directory to open it, and a window will appear showing the loaders. To load any one of them, double-click on it.



An Impression loader or printer module has this icon

To load a loader automatically on start-up, copy it from the *Extensions* directory into the Impression application directory itself. Find the *!Impress* icon on your Impression disc, then hold down *Shift* and double-click on the icon. This brings up a window which contains the files used by Impression. **Never alter any of these files.** If you do, Impression will stop working.

Double-click on the *Auto* icon. Another window appears which contains several other files. Copy the required loader or printer modules into *Auto*.

All files in the *Auto* directory are loaded at start-up if they are:

- Impression loader and printer modules,
- spelling checker user dictionaries,

- spelling checker ignore dictionaries, or
- RISC OS relocatable modules.

If any of the files in the *Auto* directory cannot be loaded, no warning is given.

Draft Printing

Important: check any addenda supplied with Impression for possible changes to the Draft Printing function.

When a document has been prepared using Impression, the ultimate aim is to obtain a printout. On some printers, notably non-Postscript or non-direct-drive lasers, getting a printout of a document containing only text can be a slow process. A typical 24 pin dot matrix printer may take more than 4 or 5 minutes to print a page. This is because the RISC OS printer drivers used by Impression use the graphics mode of the printer to print the whole page. This is generally acceptable when a complicated page has been prepared which mixes graphics with different font styles and sizes but may not be desirable if only a quick letter is required.

One method for obtaining a quick draft print-out of all the text in a document is to use the **Save Text** menu option, with the **With styles** option off, and drop the icon directly onto the printer driver icon on the icon bar. This will use the fast character printing capability of most printers to print out the text. This is the mode generally used by most conventional word processors such as Inter-Word or Wordwise Plus. The disadvantages are that the text will be in a single style, usually the default mono-spaced 'pica' font on the printer and that you do not have full control over the formatting of the text.

There is a better way to produce textual printouts: Impression includes the ability to use *printer modules* which save text in different formats. Three of these modules are specifically designed to convert text within Impression into a format which uses the text printing facilities on a text-based printer.

The modules that are included are for:

- Epson LX compatible dot matrix printers (9 pin) - includes RX, MX, FX compatibles
- Kaga Taxan KP810 and Canon PW1080A
- Epson LQ compatible dot matrix printers (24 pin)
- Deskjet - includes LaserJet compatibles

These suffice for the majority of printers, although further drivers may be developed in the future.

Printer modules

The purpose of these modules is to try and emulate an ordinary word processor, such that the character mode of the printer is used. This means that graphics frames will be ignored when printing, and there are a limited number of combinations of effects that correspond to the styles available on the printer. Unfortunately these are necessary limitations when using printers in text mode.

Page size

The default page size is standard A4 (210 × 297 mm). This is suitable for Deskjet equivalent printers.

For the Epson LX and LQ printers and equivalents you should use either A4 or US Letter (8.5 × 11 inch) sized pages, dependent on the paper size used in your printer. To change the page size use the menu option **Alter page size** in the **Document** part of Main Menu.

Effects

When the printer module is used for printing, it translates the effects applied to an area of text into the nearest equivalent on the printer. Obviously some effects and combinations of effects have nearer equivalents than others. For example, most printers can implement the *underline* effect. The printer module knows that it must send an 'underline on' code before sending the word and an 'underline off' code after sending the word. These codes will be specific to the type of printer being used, hence the different saver modules. If, however, you use the 24pt effect, the printer will not have equivalent size characters available and so the nearest alternative size characters will be used. Tab settings on the rulers are likely to be correctly interpreted.

Unfortunately, this means that the 'What You See Is What You Get' nature of Impression is lost.

Generally you should use the Impression monospaced fonts, since these correspond to the characters available on the printer. Some more modern printers allow proportional or microspaced fonts. For these use the Impression fonts (other than the monospaced fonts), but these are very unlikely to completely match similar fonts on the printer, so ruler settings may not be correctly printed. These fonts have been tested in some of the drivers (DeskJet, for example) to implement a proportional style, and there does appear to be a fairly good correspondence (but it is still not perfect). However, using the font is easier to look at on

screen and on the printout. Some types of printer require font cartridges to print proportional text. For example a DeskJet printer requires a Times-Roman cartridge to use Trinity font.

Using the printer modules

On the **Print** dialogue box in the **document** section of Main Menu there is a section called **Draft**. If the switch to the left of the name is **off**, click on it to set it **on**. Click on the arrow on the right to display the available printer modules. The top option (**NLQ**) is ticked when the **near-letter-quality** option is **on**. If your printer does not have NLQ, ensure this option is **off**. (If the name is ticked, click on it to clear the tick and switch NLQ off.)

Click on the name of the module you require and its name appears in the **Draft** box. Set up any other parameters needed (like the number of copies). If you now click the **Print** button on the dialogue box, the document is converted into a form suitable for the selected printer type.

Note that these printer modules are different to the standard RISC OS printer drivers.

To load these printer modules you can either double-click on their icon in a directory window. Remember to do this before displaying the Print dialogue box. Alternatively, you can copy the module suitable for your printer into the *Auto* directory. This is described in *Customising Impression*.

You may have to load the standard RISC OS printer driver for your printer to set up parameters such as serial or parallel connection, baud rate and so on. Once these parameters have been set, you can remove the printer driver from the icon bar.

Some of the specific printer drivers are detailed below:-

Epson LX80 Dot Matrix

Printer module: *PrintLX*
 Default paper size: US letter (8.5" by 11") or A4.
 For Epson RX, FX, LX and compatible 9 pin dot matrix printers.

The following effects and combinations of effects are suitable:-

Style	Effect or combination of effects
<i>Plain text</i>	use 16pt Impression Monospaced font with a line spacing of 19.2pt (120%). This gives 80 characters per full printing width line, with single line spacing.
<i>Double line spacing</i>	use a line spacing of 32pt.

Bold use Impression Monospaced Bold font.
Italic use Impression Monospaced Italic font.

The effects *underline, centre, left, right, superscript, and subscript* can be used.

NLQ does not work and should not be used on printers such as the RX, MX and FX range, which do not support this facility.

Kaga Taxan KP810 & Canon PW1080A

Printer module: *PrintKAGA*

This module is identical to *PrintLX* except that it sends different codes to the printer to control NLQ.

Epson LQ800 Dot Matrix

Printer module: *PrintLQ*

Default paper size: US letter (8.5" by 11") or A4.

For Epson LQ and compatible 24 pin dot matrix printers.

For the range of effects available, see the Epson LX80 description.

Hewlett Packard Deskjet

Printer module: *PrintDJ*

Default paper size: A4.

For Deskjet or LaserJet compatibles.

The following effects and combinations of effects are suitable:-

Style

Plain text

Effect or combination of effects

use 16pt Impression monospaced font with a line spacing of 19.2pt (120%). This gives 80 characters per full printing width line, with single line spacing.

Double

use a line spacing of 24pt.

Bold

use Impression Monospaced Bold font.

Italic

use Impression Monospaced Italic font.

Proportional

for details of compatible font types please contact the Technical Department at Computer Concepts.

The effects *underline, centre, left, right, superscript, and subscript* can be used.

Loading alien file formats

One of the perennial problems in computing is compatibility. There are any number of software products on the market but the chances of one product understanding files created by another are slim.

Impression overcomes this problem by using *loader modules* - small programs loaded into Impression which convert from 'alien' formats into a format that Impression can understand.

Loading Loader Modules

A *Loader module* is loaded into Impression simply by double-clicking on its icon in a filer window. You cannot load the same module more than once.

Converting a file

Once a module has been loaded, any files of the type recognised by the loader can be dropped onto blank Impression frames, and the contents of the file will be converted into Impression format.

Automatically loading modules

Loader modules can be automatically loaded by Impression when it starts up. This is useful if you frequently want to load files from another source. See *Customising Impression* for more details.

Text files

A text loader is permanently built-in to Impression which can read pure text files, and also files saved in Impression's own format.

FirstWord Plus text files

Use **loader-file** *LoadFWP*

The loader can only handle text from FirstWord Plus and not graphics.

You may have problems because very early versions of FirstWord Plus on the Archimedes did not set the file types, although current versions do. If you have to set the file type use the *SETTYPE command. After pressing F12 you can enter the command

```
*settype :0.fred AF8
assuming your file is called fred and it is on drive 0.
```

Once the file type has been set in this way, and the appropriate loader installed into Impression, then the files can be dropped onto an Impression text frame in the normal manner.

If this is not done, the text will display some strange effects such as words joined together.

InterWord files

Use loader-file *LoadIWord*

You may have problems with files from the BBC versions of InterWord because these do not set the file types. If you have to set the file type use the *SETTYPE command. After pressing F12 you can enter the command

```
*settype :0.fred D80
```

assuming your file is called `fred` and it is on drive 0.

If this is not done, the text will include many incorrect characters.

Acorn DTP files

Use loader-file *LoadDTP*

This loader can only handle text from Acorn DTP files and not graphics. There are no known problems with these files.

Basic files

Use loader-file *LoadBasic*

There are no known problems with these files.

Wordwise Plus files

To use Wordwise plus files in Impression you must first remove any embedded commands and change the character denoting *Tab*.

If no Impression Wordwise Plus loader is available, then:

1. Load the file into Wordwise Plus.
2. If any tabs are used then do a search and replace specifying `IT` for the search string and `II` for the replace string. The `I` symbol is the broken vertical bar found on the `\` key in the top right of the main keyboard.
3. Press `Escape` to go into the editor. Find and delete all embedded commands.
4. Save out the file under a new file name.
5. Load this file into Impression as plain text.

Transferring files from a BBC to Impression

This can be performed using one of two methods:-

1. Link the two computers by a serial link. Use special communications software on both computers so that they can talk to one another.
2. Add a 5.25" disc interface to the Archimedes and connect a disc drive directly to the Archimedes. The only extra that may be required is a program which allows the Archimedes to read DFS format discs since these cannot be read by ADFS (the filing system in the Archimedes).

Document Description Format

Impression supports the loading and saving of multi-font text in a simple ASCII format, called 'DDF' or 'Document Description File' format. The changes in font, colour, underline, etc are stored as command strings in the ASCII file and this means that the tagged files can be edited or even originated in simple text editors. Furthermore the ASCII character set used in DDF files is the seven bit character set (no ASCII codes greater than 127 are used) so that it is easy to export tagged files to other systems via modems. The "Save text with styles" menu option saves files in DDF format.

A DDF interpreter is permanently resident in Impression. This interpreter is used whenever text needs to be converted into Impression's own format. The search-and-replace and abbreviation dialogues use DDF to specify special codes in a document. When a text file icon is dropped onto a frame the DDF interpreter is used to give that text tabs, styles, page numbers, etc. So, any text file will be interpreted by Impression as a DDF file. Most normal text files will pass through the DDF interpreter unharmed but occasionally a file may unintentionally contain a DDF embedded command which will alter the format of the loaded text. This is *very* unlikely because if the syntax of the command is not *exactly* correct, Impression will treat the embedded command as part of the text.

The DDF interpreter is also used by the loader modules. They do not convert files directly into the internal Impression format but translate it first into DDF in memory. The DDF interpreter then converts from DDF into the internal form.

All characters in the ASCII range 32-126 are recognised, except for the opening curly bracket, which marks the start of a special command. These commands are used to store style changes, characters from 0-31 and 128-255 and other things. ASCII code 9 is recognised as a tab and codes 10 and 13 are both recognised as a return (end of paragraph) character.

DDF commands

Style changes

A style change is stored in the form:

```
{"Style name" on}some text{"Style name" off}
```

A style on code must be followed by a style off code, otherwise the style will be on for the duration of the document. Impression will put in style off codes for any unmatched style on codes.

New to this version of the DDF interpreter is an optional third parameter for advanced users which describes the level at which the style application should take place. The integer parameter gives the level from the top of the style list at which to insert the new style code, 0 applying the style change at the top where it would be applied normally.

Effects

An effect change is stored in a similar way to the style change except that turning on a new effect will cancel any previous effect which sets the same attribute. To turn an effect on the effect command takes a parameter and to turn it off the command is given with no parameter. For example:

```
{fontsize 20pt}This is 20pt {fontsize 10pt}This is 10pt{fontsize}This is back to default.
```

Tabs

A tab is stored in the form: `{tab}`

ASCII character 9 is also recognised as a tab.

Returns

A return is stored as character 13. `{cr}` is also recognised as return. Linefeeds (character 10) are converted to returns.

Top bit set characters

Characters in the range 128-255 are stored as: `{\ n}` where `n` is the character code.

Star, Hash and At

When DDF is used in the search dialogue the star (*), hash (#) and at (@) characters represent wildcards and so the DDF commands `{star}`, `{hash}` and `{at}` are supplied to make it easier to search for these characters.

Force to next frame

A force to next frame is stored as: `{nextframe}`

Including curly brackets

If your document needs to include the open curly brackets symbol, the command `{\123}` should be used.

Kern commands

Kern commands specify both the x and y movements to be applied to the following text. The values given are measured in 1000ths of an em as in the kern dialogue box.

Example: `{kern 120 -50}`

Page and chapter numbers

Page number and chapter number commands both have optional parameters describing the way in which the page number is shown. If the parameter is not present then the number will be displayed in numeric form. The possible parameters are `decimal`, `romanlower` and `romanupper` for numeric, lower-case roman numerals and upper-case roman numerals respectively.

Examples: `{pagenumber romanlower}`
`{chapternumber decimal}`
`{pagenumber}`

Soft hyphens

Soft, or discretionary, hyphens are stored as: `{softhyphen}`

Style definitions

Styles can be defined from within DDF using the `{define style ...}` command. This command is slightly different from the other commands in that it doesn't insert anything into the text. The style definition can describe every attribute of a style from its name right down to whether it will appear on the style menu or not. The attributes are identified by DDF keywords which are usually followed by parameters and are separated by semicolons (see the Syntax description below for complete details). Style definition commands can occur anywhere in the text - the only restriction being that a style must be defined before it is applied by a style change command.

Some of the style attributes need further explanation:

Measure A measurement of some size which can be specified in points, picas, inches, centimetres, etc. exactly as they would be entered into dialogue boxes.

ColourSpec Most of the UnsignedReal values in colour spec items range in value from 0 to 1, apart from the first component of HSV colours which ranges from 0 to 360 and all three components of RGB24 which range from 0-255.

Style definitions are only recognised in loaded text - neither the search-and-replace nor the abbreviations dialogue will let you define styles.

Example:

```
{define style Aardvark; font "Dingbats"; fontsize 2.5in;
backcolour hsv=(40,0.5,1.0)}
```

DDF Control

It is possible to disable most of the DDF processing by using the new command {off}. All text following this command will be placed directly in the document including any DDF commands apart from one - {on}. When the {on} command is met, normal DDF processing will be turned on again.

Smart quotes

When text is loaded into Impression, it often contains quotation marks. These are normally 'sexless' quotes, being neither opening nor closing marks. However, in most fonts there are different symbols for opening and closing quotes, so when loading in an ASCII file, Impression will attempt to convert normal quotes into the correct type, according to the rules of English. The difference smart quotes make, especially when printed at a high resolution, is often surprising. There may be some extremely rare occasions when the code will mistake an apostrophe for a closing quote, but on the whole, it will convert correctly.

Some examples

The DDF format to make the words 'Some examples' appear in the 'sub-heading' style would be:

```
{Style sub-heading On}Some examples{Style sub-heading Off}
```

The next example includes a tab between the words 'The' and 'quick'. The words 'quick brown fox' are in style 'Main Heading' and the words 'fox jumps' are in style 'Italic'. So,

The **quick brown** *fox jumps* over the lazy dog.
could be translated to DDF as:

The `{tab}{“Main Heading” on}`quick brown `{“Italic” on}fox{“Main Heading” off}` jumps`{“Italic” off}` over the lazy dog.

Notice that the alternative form of turning styles on and off is used where the style keyword is omitted. Also, the style names are supplied as quoted strings because the style name ‘Main Heading’ includes a space which would otherwise be taken as a delimiter.

Finally, here is the previous DDF example as it would be saved from Impression. The line uses only one style, called ‘Bold’, around the keywords and curly brackets and remember that the curly brackets themselves have to be specially encoded...

```
The {"Bold" on}{\ 123}tab{\ 123}{"Bold" off}"Main Heading"
{"Bold" on}on{"Bold" off}quick brown {"Bold" on}{\ 123}{"Bold"
off}"Italic" {"Bold" on}on{"Bold" off}fox{"Bold" on}{\
123}{"Bold" off}"Main Heading" {"Bold" on}off) {"Bold"
off}jumps{"Bold" on}{\ 123}{"Bold" off}"Italic" {"Bold"
on}off){"Bold" off} over the lazy dog.
```

Information for advanced users

Syntax description

The syntax of DDF is defined below in pseudo Backus-Naur form (BNF). Future versions of DDF may contain extensions to the syntax but they will always be compatible with this syntax. The following symbols are not part of the Document Description Format but belong to BNF.

`::=` ‘is composed of’

| ‘or’

[] denotes repetition of the enclosed symbol zero or more times.

< .. > denotes selection of one symbol from the specified range.

Keywords and special characters are shown in bold, for example,

Style.

DDF ::=	ElementList
ElementList ::=	[Element]
Element ::=	Character | ControlElement
Character ::=	ASCII 0 .. ASCII 127

ControlElement ::=	{ Command }
Command ::=	StyleCommand | FrameThrowCommand | CodeCommand | CharacterCommand | KernCommand | NumberCommand | DefineCommand | EffectCommand | ControlCommand
StyleCommand ::=	Style StyleName Switch StyleLevel | StyleName Switch StyleLevel | StyleName
StyleLevel ::=	UnsignedInt | Empty
StyleName ::=	Identifier | String
Switch ::=	On | Off
Identifier ::=	Letter [Letter | Digit]
Letter ::=	⟨ASCII "A" .. ASCII "Z"⟩ | ⟨ASCII "a" .. ASCII "z"⟩
Digit ::=	⟨ASCII "0" .. ASCII "9"⟩
String ::=	" [⟨ASCII 32 .. ASCII 126⟩] "
FrameThrowCommand ::=	Framethrow | Nextframe
CodeCommand ::=	Code UnsignedInt | UnsignedInt
UnsignedInt ::=	Digit [Digit]
CharacterCommand ::=	Tab | CR | Star | Hash | At | SoftHyphen
KernCommand ::=	Kern SignedInt SignedInt
SignedInt ::=	[ + | - ] UnsignedInt

DefineCommand ::=	Define Style StyleName BaseOption ; AttributeList
BaseOption ::=	BasedOn StyleName | Empty
AttributeList ::=	Attribute [; Attribute ] | Empty
Attribute ::=	FontAttribute | MeasureAttribute | ColourAttribute | PercentAttribute | JustifyAttribute | TabsAttribute | StrikeoutAttribute | ScriptAttribute | UnderlineAttribute | HyphenateAttribute | LeaderAttribute | TracerAttribute | MenuAttribute | FlagAttribute | ShortcutAttribute
FontAttribute ::=	Font String
MeasureAttribute ::=	FontSize Measure | LineSpace Measure | SpaceAbove Measure | SpaceBelow Measure | CondFrameThrow Measure | LeftMargin Measure | RightMargin Measure | ReturnMargin Measure | RuleWidth Measure | RuleOffset Measure |
ColourAttribute ::=	FontColour ColourSpec | BackColour ColourSpec | LineColour ColourSpec | RuleColour ColourSpec
PercentAttribute ::=	FontAspect UnsignedInt %
JustifyAttribute ::=	Justify Left | Justify Centre | Justify Right | Justify Full
TabsAttribute ::=	Tabs TabList
TabList ::=	TabSpec [, TabSpec]
TabSpec ::=	TabType Measure
TabType ::=	Left | Centre | Right | Decimal | Empty
StrikeoutAttribute ::=	Strikeout Switch
ScriptAttribute ::=	Script Off | Script Sub | Script Super
UnderlineAttribute ::=	Underline Off | Underline UnsignedInt
HyphenateAttribute ::=	Hyphenate Switch
LeaderAttribute ::=	Leader String

TracerAttribute ::=	Index | Contents UnsignedInt
MenuAttribute ::=	MenuItem Switch
FlagAttribute ::=	AutoLineSpace
ShortcutAttribute ::=	Shortcut UnsignedInt
Measure ::=	Measurement [Measurement]
Measurement ::=	UnsignedReal UnitSpec | - UnsignedReal UnitSpec
UnitSpec ::=	M | CM | MM | YD | FT | IN | PI | PT | " | ' | Empty
ColourSpec ::=	RGB = (UnsignedReal , UnsignedReal , UnsignedReal ) | CMYK = (UnsignedReal , UnsignedReal , UnsignedReal , UnsignedReal ) | HSV = (UnsignedReal , UnsignedReal , UnsignedReal ) | RGB24 = (UnsignedReal , UnsignedReal , UnsignedReal)
UnsignedReal ::=	UnsignedInt | UnsignedInt . Digit [Digit]
NumberCommand ::=	PageNumber NumberSpec | ChapterNumber NumberSpec
NumberSpec ::=	Roman | UpperRoman | Decimal | UnsignedInt | Empty
EffectCommand ::=	FontEffect | MeasureEffect | PercentEffect | JustifyEffect | StrikeoutEffect | ScriptEffect | UnderlineEffect | ColourEffect
FontEffect ::=	FontAttribute | Font
MeasureEffect ::=	MeasureAttribute | FontSize | LineSpace | SpaceAbove | SpaceBelow | CondFrameThrow | LeftMargin | RightMargin | ReturnMargin | RuleWidth | RuleOffset
PercentEffect ::=	PercentAttribute | FontAspect

JustifyEffect ::=	JustifyAttribute | Justify
StrikeoutEffect ::=	StrikeoutAttribute | StrikeOut
ScriptEffect ::=	ScriptAttribute | Script
UnderlineEffect ::=	UnderlineAttribute | Underline
ColourEffect ::=	FontColour | BackColour | LineColour | RuleColour | ColourAttribute
ControlCommand ::=	On | Off
Empty ::=	

The Character elements make up the textual part of the file which holds information for the reader. The ControlElements contain information for the formatter about how to display the textual part.

All of the Character elements with printable ASCII codes except the opening curly bracket are recognised as part of the text. This means that ASCII codes 32 to 122 and 124 to 126 will be displayed in the formatted output. The only non-printing ASCII codes which have any meaning are:

ASCII 9	Tab
ASCII 10	End of paragraph
ASCII 13	End of paragraph

Character elements with any other ASCII code are ignored.

To display an opening curly bracket in the text, one of the code commands must be used to insert the ASCII code, ie

{Code 123}

or

{\ 123}

Inside the ControlElements the closing curly bracket, semi-colon, comma and any ASCII code less than 33 are treated as delimiters separating keywords and parameters. Spaces are treated as white space.

The style change commands assume that the named styles already exist or have been created by the **{ define style ..}**

command and that the interpreter reading the file can format the text accordingly.

Hint:

The ability to define styles in DDF is very powerful. If you prefer to define styles textually rather than use the style editor you can do so with a text editor. First, type in the DDF command to build the style or styles that you want in the text editor. Then put the caret in the Impression document that you want the style to be defined in. Select the save option from the text editor, drag the text file over the Impression document where the caret is and drop it there. The new style will be created in that document (assuming that there weren't any syntax errors in the style definition).

Advanced searching

This section describes how to perform search and replace operations involving

- styles
- control characters such as carriage-return
- characters not on the keyboard (such as ©).

Where these characters appear in your search or replace strings you use the format

 curly bracket – style information or character – curly bracket

Examples are:

(CR) carriage-return (end of paragraph character)

{Tab} tab character

For © (character 169) you can use either

{Code 169} or

{\169}

Appendix 5 lists the character set and their corresponding numbers.

Remember that * # and @ are wildcards and cannot be used directly in search strings. If you want to search for these characters, use their numbers

* 42 – enter as {code 42} or {\42}

45

@ 64

The case of characters within commands is not important. These commands are a subset of the DDF document description format which is described in more technical detail in the Appendices.

The **Find what:** and **Replace with:** fields can contain any of these commands and ordinary characters in any combination. You could for example, search for the phrase 'spinning card' and replace it with the word 'thaumatrope' in italics like this:

Find what:

spinning card

Replace with:

{"Italic"}thaumatrope{"Italic"}

The ability to find and replace special codes in text makes the chore of labelling words for index generation a lot easier. You can search for the words you want to appear in the index, replacing them with the same word but with the index labelling

style applied around it. The word will then be picked up by the index compiler and included in the index chapter.

The find and replace dialogue can also be used to help reformat documents which have been imported from text editors such as Twin or !Edit. These editors place return characters at the end of every line instead of the ends of paragraphs only. First you must find the true paragraph ends by searching for two returns in succession and replace them with a string which does not appear anywhere else in the document:

Find what:
{CR}{CR}
Replace with:
\$para\$

Secondly replace all the remaining carriage returns by spaces to join up the lines of paragraphs:

Find what:
{CR}
Replace with:
{Code 32}

You can type a space into the replace field - we used code 32 in that example so that you could see it! Finally the paragraph ends can be replaced with carriage returns:

Find what:
\$para\$
Replace with:
{CR}

Style list

To make it easier to get the style commands into the **Find what:** and **Replace with:** fields the style names can be picked from a style list menu. Clicking the menu button on either field or clicking on the menu arrows beside the fields will bring this menu up. When a style name has been selected it is inserted into the field at the caret position or at the end if the caret wasn't in the field

9. Disc 2 utilities

These programs are on Impression disc 2 in the directory *Utils*.

Four programs are provided:

- *!Chars* - display the available characters in a selected font.
- *!FontDraw* - produce a draw file from a string.
- *!NewModes* - extra screen modes better suited to Impression.
- *!SuperMono* - provides enhanced grey-scales on monochrome monitors.

!Chars

Many characters available in the outline fonts are not directly accessible from the keyboard, except by using the Alt key and typing the number of the required character on the numeric keypad. The *!Chars* program displays all the available characters in a window. It is then possible to select the required character by simply clicking on it.

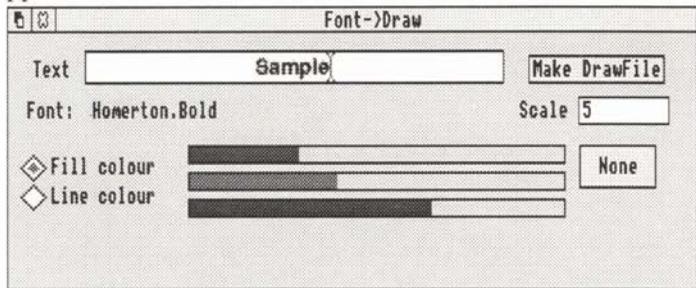
To run the program double-click on the program icon *!Chars*. This will open a window on screen which shows the entire system font. To change to one of the RISC OS outline fonts, press the **Menu** mouse button. A menu is displayed which lists all the fonts currently available. If a font name is selected, then that font is displayed in the *!Chars* window.

!FontDraw

!FontDraw converts a character or a line of text into a graphics file. This file is in ArcDraw format, so it can be edited like any other draw format file, and is suitable for inclusion in an Impression frame, where it can be re-sized to suit the document. Illustrations of the use of *FontDraw* can be found at the end of this description.

Operation

Double-click on the *!FontDraw* icon and the *FontDraw* window appears.



If you click in the field labelled **Text** you can type in the desired string. Clicking on the window with the **Menu** mouse button will bring up a menu of all the fonts in the machine. Choosing a font will select the font used to produce the final image.

The **Scale** field defines the size of the characters when the file is transferred into *!Draw*. This is set by default to 5, which will produce very large characters. Use 5 when transferring the file to Impression. Use 2 when transferring the file into *!Draw*. Increasing the scale will increase the smoothness of the curves that make up the characters. Zero or negative values might have unpredictable effects.

Once the string has been entered and the font chosen, click on the **Make Drawfile** button and *!FontDraw* will create a draw file using the outlines of the given font. An error will be produced if the selected font has no outline definition.

When the drawfile has been created, a save box appears, and the icon can be dragged from the window into a filer window, or onto another program's window. For example, you can drop it on a new Impression frame.

This program is particularly useful for creating 'drop caps' or large initial characters. This paragraph has an example of a drop cap. Using *!FontDraw* is often easier than scaling the first character using the normal font scaling mechanism since:

- (a) the character is now simply a graphic. It can be scaled in the frame very easily without involving the font cache (stretching the frame with the **Adjust** button).
- (b) the character can be scaled accurately since it exactly fills the frame. Normally scaled characters insist on having a certain space below them and so cannot be scaled exactly to fit a frame.

It is often useful to scale the current window to 200% or 300% to position the drop cap precisely.

If you want to place text at an angle, such as a headline, then the file icon can be dropped into *!Draw* where the characters can be selected and rotated (by dragging the top right corner). They can then be saved again for later use in an Impression frame.

Some examples produced using *!FontDraw*

'Outline' and 'Tired' are in Homerton Medium Font; the others in Trinity Medium. The basic text was created by *!FontDraw* and then manipulated by *!Draw*.



!NewModes

These modes give bigger screens for ordinary and multi-sync monitors. They provide a variety of different physical and logical resolutions in 2, 4, 8 and 256 colours.

To use, double-click on the *!NewModes* icon. The screen mode can then be changed using the **Mode** menu option of the **Palette** icon. (If in doubt about using **Palette** refer to the Archimedes User Guide.)

Mode	Text Resolution	Pixel Resolution	OS Resolution	Colours	Bits per pix	Memory	Freq
The first two modes can be displayed on both ordinary and multisync monitors. They are designed to give ordinary monitors larger physical desktops.							
66	104x36	832x288	1664x1152	16	4	120K	50Hz
67	..	..	..	256	8	240K	
The following modes can only be displayed on multisync monitors.							
72	132x52	1056x416	2112x1664	2	1	54K	44Hz
73	..	..	..	4	2	108K	
74	..	..	..	16	4	215K	
75	..	..	..	256	8	429K	
76	120x48	960x384	1920x1534	2	1	45K	51Hz
77	..	..	..	4	2	90K	
78	..	..	..	16	4	180K	
79	..	..	..	256	8	360K	
80	112x44	896x352	1792x1498	2	1	40K	57Hz
81	..	..	..	4	2	80K	
82	..	..	..	16	4	160K	
83	..	..	..	256	8	320K	
84	104x42	832x336	1664x1344	2	1	35K	63Hz
85	..	..	..	4	2	70K	
86	..	..	..	16	4	140K	
87	..	..	..	256	8	280K	
Modes 88 to 91 can be used with both ordinary and multisync monitors. They give a larger logical desktop without taking up extra screen memory.							
88	160x64	640x256	2480x2080	2	1	20K	50Hz?
89	..	..	..	4	2	40K	
90	..	..	..	16	4	80K	
91	..	..	..	256	8	160K	
The following modes can only be used with multisync monitors.							
92	160x64	640x512	2480x2080	2	1	40K	50Hz?
93	..	..	..	4	2	80K	
94	..	..	..	16	4	160K	
95	..	..	..	256	8	320K	

Modes 88 to 95 have the same pixel resolutions as existing RISC OS screen modes but they have different logical resolutions, which make them look bigger. Modes 66 to 87 offer various compromises between screen resolution, memory, processor speed and refresh rate. Mode 95 has the greatest resolution but uses the most memory and slows the processor down the most. Mode 84 uses the least memory, is flicker-free and gives you the most processor speed but it is not very big.

!SuperMono

SuperMono gives a better grey-scale representation of the screen in monochrome modes.

To start *SuperMono*, double-click on its icon in a filer window. An icon appears on the right-hand side of the icon bar.

Click the **Menu** button on the icon to display a menu with these options:

Info

Moving the mouse over the arrow to the right of this option will pop up an information box giving the name, purpose, version number and date of the program.

Halftoning

This option allows you to turn the halftoning **on** and **off**. It is greyed except when in a monochrome screen mode. A tick to the left of this option indicates that halftoning is currently **on**.

Quit

Quit removes the icon from the icon bar which releases 16Kb of memory. The current setting of halftoning (**on** or **off**) is preserved when you quit.

Appendix 1: Glossary of terms

Ascii	Stands for the American Standard Code for Information Interchange. Usually refers to the range of alpha-numeric characters which make up plain text files.
Adjust	The right hand mouse button.
Anti-aliasing	A graphical technique which uses shades of grey to 'smudge' the edges of images on screen, used to improve the readability of text.
Baseline	The invisible line upon which the bases of most characters rest. Character descenders usually drop below the baseline.
BaseStyle	The default text style in Impression. This is normally 14 point Trinity.Medium. See 'Style'.
Bit-image	A graphic image described in terms of the individual <i>pixels</i> which make it up, in the same way as a television picture or a newspaper photograph is made up of individual dots.
Bold text	Text shown in a heavy, thick, form.
Bullet	A bold dot (•), often used to mark or highlight words and phrases in some text.
Caret	A vertical cursor shaped like a capital 'I'. Impression uses two carets, which we refer to as the text cursor and the mouse pointer. See <i>Cursor</i> .
Case	The form of letters, be they upper case (capitals) or lower case (small letters).
Centered text	Lines of text arranged on a text frame so that the beginning and end of each line are equidistant from the their respective margins.
Chapter	A self-contained section of a document. All pages in a chapter are based on the same master page, but different chapters can be based on different master pages. Also, page numbering can either be continuous (following from the last page in the previous chapter) or start from a defined page number. Chapters other than the one currently being edited may be saved out to disc if Impression runs low on memory.
Character	Any printable number, letter, or symbol.
Clipboard	A temporary store for sections of text or graphics frames which may have been deleted or cut. An item stored on the clipboard can be 'pasted' back to a selected area of a document.
Close box	One of the small icons in the title bar of certain windows. Clicking in it will close the window.

Context sensitive	Something is said to be <i>context sensitive</i> if it changes depending on the context of its use. Many context sensitive menu options change their wording depending on, for example, the currently selected item.
Copy	Part of the cut/copy/paste facility. Copies a selected region of text, or a frame, to the clipboard, but unlike cut it does not delete the original. Items copied to the clipboard can be recalled later by using the paste facility.
Cursor	An indication of the current position in the text. It appears as a vertical bar. Any characters that are typed will appear at the cursor position.
Cut	Part of the cut/copy/paste facility. Copies a selected region of text, or a frame, to the clipboard, but unlike copy, it deletes the original. Items cut to the clipboard can be recalled later by using the paste facility.
Decimal tab	A tab stop which determines the position of a decimal point in a piece of text. This is useful for aligning columns of figures.
Default	The condition of a feature as set by the computer or Impression at the beginning of a new session.
Dialogue box	A window containing various buttons, switches and editable fields which allows the user to control various facets of a program.
Dot matrix printer	A printer that forms its image on paper by striking an inked ribbon with several tiny needles, forming dots. These are inexpensive but often noisy, and slow compared to more expensive laser printers.
Double-click	The action of clicking the mouse button twice in succession over a particular icon or part of a window. Double-clicks are often used to initiate some kind of action, such as starting an application. Double-clicking in Impression text will highlight the word at the pointer.
DPI	Stands for Dots Per Inch. Usually used to describe the <i>resolution</i> of a particular display device, such as a printer.
Drag	The process of moving icons, windows, or the text cursor when selecting text. Whilst dragging, a mouse button is held down as the mouse is moved.
Draw files	Line art objects compatible with the display mechanism of Acorn Draw. See 'Line art'. Please note that neither Acorn Draw, nor Impression, is compatible with line art files produced by the draw facility within Acorn Desktop Publisher as this uses a different file format.

Effect	See <i>Style effect</i> .
Em	A measure of width, equivalent to the point size of an M character in the font currently in use.
Extension loader module	See <i>Loader module</i> .
Extension saver module	See <i>Saver module</i> .
Facing pages	When the pages on the current master page are arranged in pairs, allowing a different layout on left and right hand pages.
Family	A family of fonts all having similar characteristics to one another. For example, Homerton.Medium, Homerton.Bold, Homerton.Medium.Italic and Homerton.Bold.Italic all belong to the Homerton font family.
Filer	The program that controls the filing systems on RISC OS, notably the windows displaying disc files.
1st line margin	The margin which determines the horizontal position of the first line in a paragraph. This can be changed to produce a <i>hanging indent</i> for example.
Font	The term used for a particular design of character set. For example, Trinity.Medium and Trinity.Bold are two different fonts, although they belong to the same family. On the Archimedes, Homerton, Trinity and Corpus are actually slight variations of the classic fonts Helvetica, Times-Roman, and Courier respectively.
Font cache	An area of memory used to store the screen representations of fonts at different sizes. The size of the font cache can be adjusted using the RISC OS <i>Task manager</i> . Using a small font cache may well cause Impression to run slowly since it will continually have to look at the disc when displaying text, rather than having the characters stored in the cache.
Footer	A line at the bottom of each page which usually contains chapter references or page numbers.
Format	The arrangement of a page according to its set parameters. These parameters could include margins, justification, dimensions, etc.
Frame	A rectangle in which text can be entered, or graphics can be displayed.
Frame handles	See <i>Handles</i> .
Full box	A small icon to the right of the title bar of some windows. Clicking the full box will force the window to become as large as possible, up to the size of the screen. If it is already full, clicking the full box will return the window to the position it occupied before the full box was last clicked.

Graphic	A picture.
Graphic frame	A frame containing a graphic. Graphic frames can be re-sized by dragging their <i>frame handles</i> , which will either leave the graphic image alone (if the handles are dragged using the Select button) or re-size the graphic along with the frame (if they are dragged with the Adjust button).
Guide frame	A type of frame which aids the positioning of normal frames. When the Snap to guides option is selected, the edges of new frames will be 'attracted' to the edges of any guide frames. Guide frames are often useful when creating a magazine-type layout.
Guttering	The space added to the right margin on a left-hand page, and the left margin on a right hand page to allow for binding with <i>facing pages</i> .
Handles	Small squares found on the corners and sides of a selected frame. The handles are used for adjusting the size of that frame.
Hanging indent	Where the first line of a paragraph has a different left margin from the rest of the paragraph, and so 'hangs' outside the paragraph.
Hard disc	A sealed unit containing a rigid disc spinning very fast, which can store a large amount of information, and retrieve it at very high speeds.
Hard space	A space in a line of text which is not affected by formatting or justification. The code for a hard space is code 160.
Header	A line of text at the top of each page - similar to a footer.
Highlight	Selected text, displayed by inverting its displayed colour. Normally this is white text on a black background. Impression will also invert highlighted coloured text.
Hyphenation	The process of splitting words with hyphens. Impression will hyphenate words which cannot fit into the space provided on a line. Impression uses a sophisticated algorithm to determine exactly where a word should be hyphenated, if necessary.
Hyphenation exception	The hyphenation method used in Impression is accurate for more than 90% of words; however, some commonly used words are hyphenated unusually. These words and the correct hyphenation points can be included in the exception dictionary for future reference by the hyphenation mechanism.
Icon	A small, usually rectangular, image which is representative of an object or function - a file icon for example. The icon can usually be manipulated by the mouse pointer.
Import	The process of introducing previously saved text or graphics to a document.

Indent	Either the gap between the beginning of a line and the left margin or the gap between the end of a line and the right margin.
Ink Jet printer	A printer that produces its image by firing tiny jets of ink onto the paper. Slightly faster than dot-matrix printers, and usually almost silent, they can produce results that are almost as good as those of a laser printer, but are much slower.
Input focus	When a window or a dialogue box has <i>input focus</i> , all keypresses will be passed to that window. The window with input focus will normally have a light yellow title bar.
Italic text	Slanted text. By convention this is usually slanted to the right.
Justified text	A body of text which is lined flush with either the left, right, or both margins. In Impression, text can also be justified about the centre of a page.
Kerning	The process of altering the gap between certain pairs of characters to improve their appearance. This is generally only useful at larger text sizes - at smaller sizes the effect is negligible.
Key short-cuts	Some functions within Impression are selectable without having to resort to the mouse. For example, CTRL-B selects BaseStyle text. See the appendix on key short-cuts.
Laser printer	A printer that produces an image by scanning with a laser beam, then printing the image in a similar way to a photocopier. Able to produce high-quality text and images very quickly, but they are presently rather expensive.
Leader	A row of characters, usually dots or dashes, filling the space between two words separated by tabs. Useful for contents pages.
Leading	This is the distance between the base of one line and the next. This can be measured in points, or conventional imperial or metric scales, amongst others.
Left justified text	Where the left hand edge of a given body of text lines up flush with the left hand margin.
Left margin	The margin which controls the horizontal position of the left hand edge of text (with the exception of the first line, which is controlled by the <i>1st line margin</i>).
Line art	A graphic object produced by or compatible with Acorn Draw. Line art is made up of many drawing constructs like lines and curves, rather than pixels as in a sprite image file. Line art benefits from the expanded resolution of certain screen modes or printing devices such as laser printers.

Loader module	A program which can be loaded into Impression and which allows files from other programs to automatically be translated into Impression format and loaded in a frame.
Local frame	A frame which does not appear on the master page, only on the conventional page. Local frames can be re-sized and moved around on the page at will.
Marked block	A selected region of text. A marked block of text will be highlighted.
Master page	A page layout which is used as the basis for all subsequent pages up to the next chapter.
Master page frame	A frame on a master page which appears on all pages based on that master page. Master page frames can contain text, enabling them to be used for headers and footers, or they can be left blank, in which case they become <i>Master text frames</i> . New pages are automatically created as text flows out of a master text frame, removing the need for the manual creation of pages.
Menu	The centre mouse button. This usually summons a central options menu.
Mono-spacing	Where characters are spaced evenly regardless of their actual size. The opposite of proportional spacing. Each line of mono-spaced text will have the same number of character spaces, so characters fall into defined columns. An example of a mono-spaced font is Corpus, a version of the Courier typeface commonly used in typewriters.
Mouse pointer	The small icon that moves when the mouse is moved. It often changes its shape depending on what is below it on screen. For example, when it is over some Impression text, it changes to a vertical cursor, but when over an area of the page without frames, it changes to a 'hand', indicating that the page can be dragged.
Multi-scan monitor	A monitor that can change its scan rate in order to display much higher resolution images than is possible with ordinary monitors.
Null frame	An empty frame. A null frame can become either a text frame, by typing into it or dropping a text file onto it, or a graphics frame, by dropping a graphics file onto it.
Outline font	A font that is designed as a series of lines and curves, as opposed to a bitmap font which is designed as a series of pixels. Outline fonts can be scaled to any size, and still retain smooth edges, while bitmap fonts will look jagged.
Page layout	The chosen arrangement of text and graphics on a given page.

- Paste** The re-introduction of text from the clipboard to a new place in a document. Text on the clipboard will have been cut or copied from another part of the document.
- Pathname** The name of a file including all the directories it is under from the root, or \$ directory. For example:
`adfs::HardDisc4.$sprites.MyPic`
- Pending style change** A style change applied at the cursor position. It will not take effect until something is typed.
- Pica** A unit of measurement used for typesetting. One pica is one-sixth of an inch.
- Pixel** A pixel, or picture element, is an individual point in a picture. Everything displayed on the computer screen can be described as a collection of pixels of differing colours, in the same way as a television picture is made up of individual coloured dots. A picture file that describes the picture in terms of pixels is known as a 'Sprite' file (see 'Sprite').
- Point** A unit of measurement used in typesetting. A point is equivalent to 1/72 of an inch.
- Point size** The height of a given font measured in points.
- PostScript** PostScript is a *page description language*, often used in laser printers to reduce the amount of information a program needs to send to print a page. On most printers, in order to print a complex page containing text in different fonts and sizes, and graphic images, a program would need to describe the page in terms of individual *pixels*, which could mean describing the position of over a million tiny dots. With PostScript, however, the program need only send commands to tell the printer to, for example, display a line of text at a certain position in a certain font and size, or draw a line from one point to another. The PostScript program in the printer will create an image from the commands it is given, then print the page. Using a PostScript printer is generally the fastest way to produce printed results.
- Preferences** Those aspects of Impression which can be permanently changed to suit your personal taste. These include the default window scale, whether frame outlines are shown, what units measurements are displayed in and whether the spelling checker is automatically loaded. The chapter *Customising Impression* gives full details of this feature.
- Proportional spacing** Where the individual characters in a line only take up the amount of space they need. An 'i' will only take up the fraction of the horizontal space required by an 'm', for example. It is usually easy to tell if text is proportionately spaced since, unlike

	mono-spaced text, characters do not form regular columns down the page.
Ragged text	Where one side of a region of text is not flush with a given margin. The opposite of justified text.
Repel text	An option which forces text to flow around a frame rather than over or under it. The distance between the frame boundary and the start of bordering text is variable.
Return margin	See <i>1st line margin</i> .
Resolution	A measure of how accurately a device can display an image. Resolution is often measured in Dots Per Inch (DPI).
Right justified text	Where the right hand edge of a given body of text lines up flush with the right hand margin.
Right margin	The margin which controls the horizontal position of the right-hand edge of the text. If the right margin falls beyond the right-hand edge of the frame, the frame edge is used as the right margin.
Ruler	An accurate horizontal scale measurable in centimetres and inches. Marks tab stops and margins. Each style definition can have a unique ruler. Accessible via the Edit style function.
Rule off	A horizontal line drawn beneath a line or paragraph. A rule-off is one of the effects that can be set in the <i>style editor</i> .
Sans serif	A font which does not feature serifs.
Saver module	An additional program which can be loaded into Impression and which allows text in Impression to be saved in varying formats. This is primarily used to enable text to be printed out using the printer's character mode, which allows faster printing of text compared to the usual graphics mode.
Select	The left hand mouse button.
Serif	The embellishment of character designs made up of a small projection finishing off the stroke of a displayed or printed letter. Compare the capital 'T' of Trinity font with the Homerton 'T'. The serifs at the ends of the horizontal T-bar, as well as the base of its trunk, can be clearly seen in the Trinity version. The Homerton T is finished without such embellishment and is referred to as sans serif.
Snap	A term used to describe the effect of <i>guide frames</i> . When placing or changing frames on a page containing guide frames, the edges of the frame will <i>snap</i> to the edges of the guide frame, as if they were magnetically attracted to them. This makes the accurate placing of frames much easier if you are creating a magazine-type layout, for example.

Sprite	<p>A picture described in terms of individual pixels - an icon for example. Large bit-images, such as scanned images or pictures created using art programs, are also saved as sprites. Sprites can be re-sized, though they have a maximum displayable resolution. Since sprites are made up of pixels, the larger you display the sprite, the chunkier it looks.</p> <p>Sprites should not be confused with line art images or draw files. The latter are not defined as pixels, they are a collection of geometric constructs which are re-drawn every time they are re-displayed.</p>
Story	<p>A specific part of an overall document. A story is a piece of text. A text story will fill one or more frames in a document, flowing from one frame to the next. A sequence of frames for a given story can be built.</p>
String	<p>Any given series of characters, spaces included, of any length.</p>
Style	<p>A named collection of text effects. There are default and user defined styles in Impression. Styles can affect one or many aspects of the way in which a given section of text is displayed. Among the effects in a style are font, font size, line spacing, colours, justification, margin settings and underlining. All text in an Impression document is governed by at least one style - BaseStyle.</p>
Style effect	<p>An individual feature of a style, which can be set in the style editor. For example, font height, font colour or justification.</p>
Subscript	<p>A miniature version of the displayed font which appears under the baseline of the full-sized text.</p>
Superscript	<p>As for subscript, except displayed along the top of the line of full-sized text.</p>
Tab stop	<p>Defines the starting position of the text on any line if the tab key is pressed. Tab stops are defined on the ruler as part of the style editor.</p>
Task manager	<p>A feature of RISC OS which allows you to adjust the amount of memory taken up by various functions, such as the fonts or the relocatable modules. See your RISC OS user guide for more details.</p>
Text frame	<p>A frame containing text. A text frame may contain text which has flowed from another frame, and in turn it may flow text into another frame. Frames connected in this way are said to contain the same <i>text story</i>.</p>
Text story	<p>A self-contained piece of text that is displayed in one or more <i>text frames</i>.</p>

Title bar	The area at the top of a window which contains the window title. The title bar of an Impression document window gives the document name and the scale factor of the window. Holding down the mouse button on the title bar allows the window to be dragged around the screen, and even off screen.
Toggle	Like an on-off switch - press the key once and the function is on, then press it again and it is off.
Truncated frame	A frame which contains more text than it can display, but which cannot flow the text into another frame.
Typo matching	A feature of the spelling checker. If a typing mistake is made, and the document is spell-checked, the spelling checker will attempt to guess what the word should be, according to some simple rules.
Window	<p>A rectangular area of the screen which displays all or part of a larger area. A window can be seen as a 'hole' in the screen through which you can view a portion of a larger area. The area underneath can be moved around (scrolled) using scroll bars at the edges of the window, allowing different parts to be seen. Windows can be moved around the screen by dragging their <i>title bars</i>, and they can overlap one another.</p> <p>All documents in Impression are viewed in windows.</p>

Appendix 2: Key Short-cuts

Ctrl-A	Delete character after cursor
Ctrl-B	Clear all styles, (back to Basestyle)
Ctrl-C	Copy selected item to clipboard
Ctrl-D	Delete word at cursor
Ctrl-E	Extend space between characters (kern)
Ctrl-F	Check spelling of this story from cursor
Ctrl-G	Force to next frame
Ctrl-H	Delete back (same as back-arrow)
Ctrl-I	Insert frame
Ctrl-J	Move baseline down (vertical kern)
Ctrl-K	Delete item without putting on clipboard
Ctrl-L	Cut line
Ctrl-N	Next page
Ctrl-O	Turn frame outlines on/off
Ctrl-P	Previous page
Ctrl-Q	Select word at cursor
Ctrl-R	Reduce space between characters (kern)
Ctrl-S	Swap case of character after cursor
Ctrl-T	Select total story
Ctrl-U	Move baseline up (vertical kern)
Ctrl-V	Paste clipboard contents
Ctrl-W	Check spelling of word at cursor
Ctrl-Y	— not used —
Ctrl-X	Cut selected item to clipboard
Ctrl-Z	Clear selected region
Ctrl-@	Select entire paragraph
Ctrl-Shift-A	Alter chapter dialogue box
Ctrl-Shift-B	Put to back
Ctrl-Shift-C	Close window
Ctrl-Shift-E	Edit ruler
Ctrl-Shift-F	Embed frame
Ctrl-Shift-G	Go to page
Ctrl-Shift-H	Insert bullet point (•) at cursor
Ctrl-Shift-J	Superscript effect
Ctrl-Shift-K	Subscript effect
Ctrl-Shift-L	Line spacing editable box
Ctrl-Shift-N	New ruler
Ctrl-Shift-P	Turn page rulers on/off
Ctrl-Shift-R	Insert new repeating frame
Ctrl-Shift-S	Text size menu
Ctrl-Shift-T	Save text story
Ctrl-Shift-U	Underline effect
Ctrl-Shift-Z	Remove document

Insert	Paste clipboard contents
Back-arrow	Delete previous character or cut selected region
Delete	- ditto -
Copy	Delete next character or cut selected region
Page Down	Scroll screen down by one page
Page Up	Scroll window up by one page
Home	Move cursor to top of story
Print	Display print dialogue
Ctrl-Print	Display print dialogue resetting values to defaults
Up/Down arrow	Move cursor up or down one line
Left/Right arrow	Move cursor left or right one character
Shift - up/down	Move cursor up or down one frame
Shift - left/right	Move cursor left or right one word
Ctrl - up/down	Move cursor to start or end of current story
Ctrl - left/right	Move cursor to start or end of current line
Ctrl-F1	Info dialogue
Ctrl-F2	Open master page window
Ctrl-F3	Save document
Ctrl-F4	Find and replace dialogue
Ctrl-F5	New style
Ctrl-F6	Edit style
Ctrl-F7	New chapter or master page
Ctrl-F8	Dictionary dialogue
Ctrl-F9	Scale view dialogue
Ctrl-F10	Alter frame dialogue
Ctrl-F11	Alter graphics dialogue
Ctrl-F12	— not used —
Shift F1-F10	Scale current window 10% to 100% of actual size
Shift-F11	Scale current window to half current size
Shift-F12	Scale current window to double current size

Mouse operations

Operation	In text frame	In null frame	In graphic frame
Single left click	Select frame & position cursor	Select frame	Select frame
Single right click	Adjust selected region	Story assignment	Use copy of graphic
Double left click	Select word at cursor		Call up Alter graphics box
Triple left click	Select line at cursor		
Quad left click	Select paragraph at cursor		
Left button drag	Select a region of text		Move graphic
Right button drag	Adjust the selected region		Rotate graphic
Ctrl-drag	Drag frame	Drag frame	Drag frame
Left click and hold	Re-position frame	Re-position frame	Re-position frame
Shift left click	Add to selection	Add to selection	Add to selection
Alt left click	Select frame below	Select frame below	Select frame below

Appendix 3: Recommended equipment

Your choice of equipment and its specification will necessarily be limited by your budget. It is possible to run Impression on a basic Archimedes, though your machine must have at least 1Mb of memory fitted.

The question of what to get in order to enhance your system is never an easy one to answer. However, here we offer a few pointers.

More memory means more speed and convenience

Impression is perfectly capable of operating in a 1Mb Archimedes, leaving plenty of room for substantial documents.

The *task manager* may have to be used to re-arrange the memory in your machine. Impression's requirements may differ from other applications; for example, since it uses the font manager it requires some font cache memory. See your RISC OS User Guide for information on the task manager.

The recommended font cache for Impression is around 128K, but if you use several different fonts all at once, the font cache will inevitably undergo many updates, slowing progress down on screen. If you are dealing with simple text documents, especially ones that have only one text style, a much smaller cache is required - perhaps only 32K.

If your Archimedes has a high resolution monitor capable of using memory-hungry screen modes, or if you have a hard disc or extra expansion cards fitted, then more memory could be used up by the system.

It is also worth remembering that simply cataloguing a directory of files sporting lots of different file icons could increase the allocation of memory to the *Relocatable Module Area* (RMA) and this is usually not recoverable without resetting your machine. It is best to avoid keeping RISC OS applications in the top level of your disc, since these all take up a little space as soon as they are 'seen' by the filer.

Disc drives

Once again, it is possible to run Impression on a basic Archimedes which has just the one disc drive. However, some disc swapping will be encountered with this configuration.

The outline font definition file, *!Fonts*, is almost 500K long, leaving just a little over 300K for Impression documents and various other files on a single disc.

A twin drive machine is an obvious improvement, but a hard disc is undoubtedly the most useful option. Fonts load in little more than a blinking of an eye, as do documents, and there is no tedious disc swapping. Indeed, it is our opinion that a hard disc is a significantly more useful addition to a machine than a memory expansion.

Monitors

A standard resolution mono or colour monitor display will not do justice to the display abilities of your Archimedes or Impression. Anti-aliased fonts can look uncomfortably blurred on standard resolution displays, and the scope to scale the display down whilst retaining readability is very much less than that provided by a good high resolution multi-scan monitor.

Colour or mono?

High resolution colour monitors are very attractive, but their attractiveness is easily matched by their high price. The fact that good quality monochrome high resolution multi-scan monitors can be obtained for as little as a third of the price of a comparable colour monitor is often overlooked.

In fact there is much to be said in favour of mono monitors with Impression. Although Impression supports colour, many users will only be producing black and white documents. Mono multi-scan monitors produce much sharper displays than their colour counterparts and there is a school of thought which says that a mono display is less stressful to look at over long periods.

The mono monitors referred to so far are the type which are able to display multi-colour screen modes in shades of grey. Very large (typically 20" or larger) monochrome monitors are also available, which are capable of displaying the highest resolution monochrome displays available to users of Archimedes 400 series machines (1152x896 pixel mode 23 for example).

These monitors are ideal for displaying monochrome line art or computer aided design (CAD) drawings. However, in monochrome screen modes like mode 23, text cannot be anti-aliased since there are no intermediate grey levels available, and some fonts can look surprisingly poor even at very high pixel resolutions.

Laser printers

The LaserDirect printer from Computer Concepts is specially designed for use with the Archimedes. It has a print speed of 6 pages a minute at a print quality identical to more-expensive laser printers. This is probably the fastest printer available for the Archimedes as it uses special software to maximise Archimedes-to-printer transfer rates. It is also considerably cheaper than either PostScript or LaserJet printers.

A PostScript laser printer driver (!PrinterPS) is supplied with Impression, and this type of printer produces excellent printed copy. This type of printer can usually process pages much faster than cheaper laser printers because of the PostScript language. This is a page description language and, if your document is converted to PostScript, it can be many times shorter than an equivalent bit-image file (which is required by cheaper laser printers). The advantage of PostScript is reduced by its inefficiency in dealing with complex graphic images, such as sprites, which can slow printing down considerably.

If you cannot stretch to a LaserDirect or PostScript compatible, the next choice would be a Hewlett-Packard Laserjet compatible, to complement the !PrinterLJ printer driver supplied. This is slower than a PostScript printer since it has to deal with an entire page as a bit-image. These long bit images are actually compressed somewhat, but generally PostScript printers are much faster, especially if a lot of text is involved.

With all these types of laser printer, repeat prints of the same page will appear much more quickly than the original.

Ink jet printers

The next step down is a Hewlett Packard Deskjet (or DeskJet Plus). This is a high quality ink-jet printer and will operate under a modified LJ printer driver. (See the *RISC OS Hints and Tips* chapter for information on how to modify the laserjet driver for the deskjet.) Print quality is very close to a laser printer, but for a fraction of the cost. Its main disadvantages are that it is much slower than a laser printer, and fine detail can be lost due to the ink 'running' on paper fibres.

Dot matrix printers

A wide selection of dot matrix impact printers is supported by the !PrinterDM printer driver, including Epson and NEC 24-pin models. These give a theoretical 360 dots per inch (DPI) print

resolution, better than the 300 DPI usually available from laser printers.

However, in practice, even 24-pin dot matrix printers have print head registration problems which limit the quality of their print. Other problems include paper warping after repeated print passes, and noise. But above all, impact printers are very slow.

Colour printers

Impression supports colour, and an Integrex colour printer driver is supplied. The PostScript driver can also drive a Colour PostScript device.

Scanners

If you wish to include illustrations and photographs in your documents, an image scanner could be the answer. These are available with resolving capabilities of up to 400 DPI, and whilst that is not quite up to photographic reproduction quality, very convincing pictures can be captured and imported to Impression documents via scanners.

Scanners are fast becoming popular accessories and Computer Concepts currently has two models available; a hand held 400 DPI unit and a high quality 200 DPI full A4 width unit with optional paper feeder.

ARM3

On A300 and A400 machines it is possible to obtain replacement processors. These give a dramatic increase in the speed of all Archimedes operations. They are particularly suited to serious publishing work since font scaling and print operations are considerably speeded-up. (The hour-glass when scaling fonts almost becomes a thing of the past.) Most operations are 3 to 5 times faster.

Appendix 4: Hints and Tips

This chapter contains general hints concerning many aspects of Impression. It is provided because although most things are quite possible in Impression, it is not always obvious how they might be done. You should also refer to the document called *Hints and Tips* on disc 2 which contains the latest information.

A menu option is greyed

This usually happens when a menu option is not appropriate to the current situation. For example, if the currently selected frame is not a graphic frame, then menu options relating to graphics will be greyed.

If the document beneath the menu does not have the currently selected frame in it (shown by a light coloured title bar), then most of the options will be greyed. Simply clicking in the document should then ungrey the menu options.

Printers

Some users have become confused about the page size when printing. The page size in Impression is set quite independently of the paper size used in the printer. The printer driver should be set up to have the correct size of paper to match the paper which is being used in the printer. Usually this is the same as the page size defined in Impression but in some cases they may be different. The best example of this is an A5 document in Impression and printing this out on A4 paper as two A5 sheets side by side.

By default Impression starts with an A4 page. For laser printers and inkjets this is the most commonly used paper size, so there is no problem. Fanfold A4 paper suitable for dot-matrix printers is available and becoming increasingly common. However the traditional dot-matrix fanfold paper is generally shorter than A4, being only 11 inches deep.

If you want to print correctly on 11 inch paper, check the following points:

1. The dip-switches in the printer are set for 11 inch paper, with no perforation skip.
2. The printer driver (PrinterDM) has the correct page size set. This can either be set with the 'Page Setup' menu option of the printer driver and then saved using the 'Save Options', or by editing the PrData text file that is held within the printer driver directory.

3. Impression is set to use 11 inch paper. The *Alter Chapter* dialogue box can be used to change the page to be based on master page number 1, which is A4 in size.

Few printers can print right up to the paper edge, and so it is sometimes useful to see the extent of the available print area. One option in the *Preferences* dialogue (selected from the Impression icon) allows the print borders to be shown. Once selected, Impression draws a light grey border around the edge of the page on screen to indicate the print margins. If any objects on the page extend into this grey area they are unlikely to be printed.

Note the print borders can only be shown if the printer driver has been loaded. The print borders are shown on screen for pages printed upright at 100%. Therefore they do not indicate anything useful if printing sideways or at a different scale.

Print Borders

The print borders shown as grey areas on the Impression page will not correspond to the actual borders set up in the printer driver on the page size dialogue box. This is because Impression outputs its page centered between the margins and hence the margins shown are the average size i.e. the top one shown is the size of the average of the top and bottom margins.

Extra fonts on PostScript printers

To use the Greek font on PostScript printers, insert the following line at the end of the 'PSProlog' file:-

```
/Greek /Symbol /Symbol findfont /Encoding get FF
```

The file can be found by holding down *Shift* and double-clicking on the *!PrinterPS* printer driver icon. The file can be edited by using a text editor such as *!Edit*.

Any other additional fonts are usually added to the end of this file with a line similar to:

```
/Pembroke.Medium /Palatino-Roman Latin1Enc FF
```

In this case *Pembroke.Medium* is the RISC OS font name and *Palatino-Roman* is the name of the Postscript equivalent.

File operations

Impression uses the RISC OS conventions for most filing operations. To anyone using this system for the first time it can

be mildly frustrating, but once mastered it is fast and simple and allows all the conventional filing operations. The following text describes how to:

- Save a new document to the required disc directory.
- A quick way to re-save the current document.
- Save a document to a different directory.
- Save the document with a different name.

Because of the way Impression handles large documents (its so-called virtual operation), it is worth emphasising that documents should not be seen as being *loaded*, then edited and *saved*, but rather as being *opened*, then edited and *closed*. For this reason, whenever a document is being edited in Impression, you must not alter the document file on the disc in any way. Do not delete the file, rename it, copy it, or move it while Impression has it stored in memory.

How to save a document to the required directory

The first thing to remember is to display a window on the correct disc directory *before* attempting to save the document. (See the RISC OS user guide for details of file windows etc). Once you have a window open on the correct directory, then move over the arrow of the **Save document** menu option. This will display a small window with the distinctive 'I' icon in its centre.

Before saving the document it will be necessary to give it a name other than the default name 'Document'. This can be done by first deleting the current name with the delete key, then re-typing the new name (not more than 9 characters). Take care not to accidentally move the pointer back over earlier levels of the menu since this will make the window go away - meaning you will have to re-enter the name again. (This is an unfortunate RISC OS feature.)

Once the new name has been entered, drag the 'I' icon from the centre of this window over the disc directory window and drop it. The document will now be saved with this name and a file icon should appear in the window when the operation is complete.

A quick way to re-save a document

Use *Ctrl-F3*. This is described further in **Save document** in the **Main Menu** description.

How to save a document to a different directory

Refer to **Save document** in the **Main Menu** description.

How to save a document with a different name

Refer to **Save document** in the **Main Menu** description.

This is the recommended way to save a back-up of a document you are working on. If at any stage you want to keep a copy of the document *in its current state*, then do it as described above, rather than copying or renaming the document file in the file directory windows.

Impression does not allow documents to be moved from one place to another *while* editing. If you want to move a document from one place to another or re-name it then this must be done using the conventional RISC OS facilities (ie drag the document icon from one place to another) but make sure you do not have the document loaded into Impression when doing this.

Overwrite mode

Refer to **Replacing text** in the chapter *Using Impression*.

Our experience shows us that this system coupled with the mouse pointer and a clearly defined selected region mechanism is a great time saver.

Moving a frame

To change the frame's position on the page, refer to **Moving frames** in the chapter *Using Impression*.

If you need to move a frame from one page to another, you must use the cut and paste facilities. This is described in the chapter *Using Impression*.

Font cache

There is insufficient room here to detail all the possible controls provided over the font cache, or to explain the full implications of these controls. The basic settings for the font cache are described in the *Installation* chapter.

Slow screen update

This problem is invariably due to the font cache not being configured correctly. Refer to the *Installation* section for the suggested font cache sizes.

Note: the new font manager must be installed before setting the font cache. The easiest way to do this is to double-click on the *!Fonts* directory.

Memory problems

Some people have reported problems fitting even small documents on a 1MByte machine. Impression is specifically designed to allow quite large documents on such machines. Therefore, if you get 'out of memory' or 'heap full' errors, then it is likely that memory is not ideally configured. It should be possible to have over 300K of free memory for document use with Impression installed. This will be reduced if the Module area or System Sprite area is allocated unnecessarily large amounts of memory.

The higher the screen resolution, the more memory is required. Therefore, a simple way to recover more memory is to switch to a lower resolution screen mode. Mode 12 requires 80Kb whilst mode 11 requires half that. Mode 0 is not really suitable for editing text in Impression but can be used and requires only 24Kb. (Mode 0 can be useful when maximising memory for printing.)

Acorn recommend that no memory is allocated to the System Sprite area and the minimum possible to the Module area (RMA). Refer to the *Installation* chapter for details of how to change the settings. Remember to reset the Archimedes after making any changes.

Many applications (such as *!Draw* and *!Paint*) load parts of their programs into the module area. When these programs are removed from memory, a residual area is still occupied in the module area. This reduces the space available to Impression.

You cannot recover these residual areas except by pressing *Reset*. To give Impression the maximum possible memory, press *Reset* before starting Impression. This removes any unnecessary programs from the module area.

Lines going outside the frame

In order to enable text to go right up to the right edge of a frame, the last space (or two) that occurs on a line of text can be positioned outside the frame. Since spaces don't show when printing, this has no effect on the printed result. However to show that the spaces are there (like all characters they must be editable) it is possible to position the cursor just outside the frame. This is a deliberate design feature and so you should not

be concerned when the cursor moves outside the frame in this manner.

My screen isn't wide enough!

When using a conventional monitor in, for example, mode 12, a typical A4 Impression document is slightly wider than the maximum width of a window. This means that it is not possible to see a complete, full width, line of text within a window without scrolling it. There are several solutions to this.

- Scale the view size down to 80% or 90%. This can be done very easily with the key short cut *Shift-F8* or *Shift-F9* but has the disadvantage that the text gets smaller and so less easy to read.
- Use a multi-sync monitor. This is the best solution since it can dramatically improve the appearance of the outline text while at the same time allowing very much larger amounts of the document to be seen on screen. It also has the benefit that higher refresh rate screen modes (less flicker and less eye-strain) can be used. Unfortunately this is a rather expensive solution.
- Use the new screen mode 66 as provided by the *!NewModes* program on disc 2. This mode should work with conventional monitors and extends the screen resolution from its normal 640 by 256 to 832 by 288. This is enough to allow the text to be scaled to 110% and still get the full A4 width within a window.

16 Grey Palette

Within the Impression application directory there is a 16 grey level palette. If this is loaded (by double-clicking on it), it changes the 16 colour modes to show 16 shades of grey. This gives scanned images and grey half-tone artwork a more realistic appearance.

Sprite files

A known problem with RISC OS is that it cannot display sprites created in a new screen mode unless the screen extension module has already been loaded. Since it is normally unlikely that sprites will be created in one of Impression's new screen modes, this is unlikely to be a great problem.

The one exception is using *!Paint* to 'grab' a part of the screen area. If this is done while in any new mode, then the sprite is created with the screen mode number in it. If this sprite is

subsequently put into an Impression document and then that document is used on a machine that does not have *!NewModes* loaded, the sprite is not correctly displayed.

The same display problem exists in the *!Paint* and *!Draw* programs, neither of which can display such sprites correctly.

How do I spell check the word at the cursor ?

Simply hold down the key marked *Ctrl* and at the same time press the *W* key. If the word is not in the dictionary then the normal error sound is made, the word being checked is highlighted and a dialogue box appears. An automatic guess is performed on the word and guesses shown in the list on the left hand side of the dialogue box. If the word is incorrect but cannot be spell checked, e.g. the word 100, then just the error beep will sound. If the word is correct then a high beep will sound and no action taken.

How do I alter my start page ?

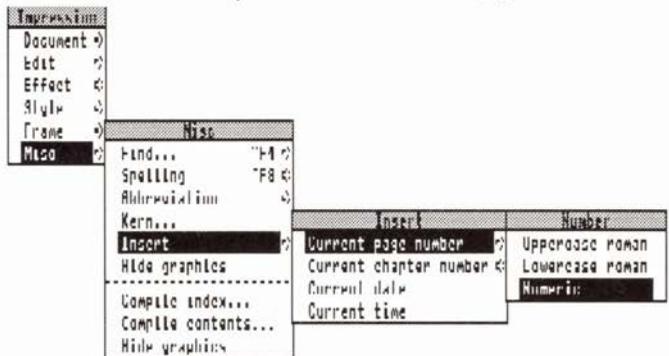
Suppose, for example, that you want Impression to always start up with a standard A4 page, but with a footer line that shows the page number at the bottom of each page.

This can be done with the auto-loading feature of Impression as described in *Customising Impression*. However the actions needed to achieve the required result are as follows:

1. Find the Impression program on the disc that you normally use to start. While holding down a shift key, double-click on the icon to cause a new window to open showing the contents of the Impression application directory.
2. Double-click on the Auto directory within this window to open another window. An Impression document called *!default* will be at the top of this window. This is the one used every time Impression starts up. Double-click on this document to start Impression and load the document. It should open the standard window showing a blank page.
3. Select the **View master pages** menu option to open the view onto the master page. Use the scroll bar to find the second page of the collection. Click in the centre of this page to select the frame. You will probably want to scale the view to 100% by pressing *Shift-F10*.
4. Move the bottom edge of the selected frame up a bit to make room for the footer line - probably no more than 1/4 inch. The next requirement is to create a new frame along the bottom of the page. Use the *New frame* option to do this,

making it deep enough to contain one line of text - no more than 1/2 inch.

5. Now enter the text to be used for the footer in this newly created frame. For example, if it is to be centered in italic the sequence would be something like:
 - a) Click in the footer frame to select it.
 - b) Press *F3* followed by *F6* and the word 'Page' with a following space.
 - c) Select the menu option **Insert - Current page number**



After having done this, the footing line should appear in italics, centered with the <pn> symbol at the end. This <pn> indicates where the page number will go.

6. Close the master page window by clicking on its close box in the top left corner of the window. Now click in the original document window - the frames should re-arrange themselves so that the page number 1 appears at the bottom of the page.
7. Save this document back as the new default document - the easiest way is to press *Ctrl-F3*.

That's it. In future whenever you start Impress it will now use this document as its starting point. Of course you can use this technique to customise any aspect of the start-up document. For example, some people prefer not to have any extra space put between paragraphs. If the base style is edited so that it has no below paragraph space, prior to step 7, then this will achieve the desired result. See the chapter *Customising Impress* for further details.

Loading text files

If a text file is dropped over the selected frame with the cursor in it, the text will be loaded and inserted into the document at the cursor position. The loaded text therefore takes on the styles that are on at the cursor. This can be a very useful feature since it allows text to be imported into a pre-set style. For example, if the text is required in italics then simply selecting an italic style (press *F3*) then dropping the text file over the frame will load this text in italics.

If a text file is loaded that has a *Return* on the end of every line (such as 'Readme' files produced in *!Edit*) then the text appears as double-spaced when loaded into Impression. This is simply because Impression defaults to a large space below every paragraph and if each line ends in a *Return* then each line is taken to be a paragraph. Since there is a style called *No Paragraph Space* which has the key short-cut of *F11*, simply pressing *F11* prior to loading any text file will prevent this extra space between lines.

How do I delete a blank page

The **Delete page** menu option will delete the page that has the selected frame on it. Since a completely blank page has no frame to select, this menu option cannot be used. In order to delete the blank page, therefore, it will be necessary to deliberately place a new blank frame on the page. Once this is done the **Delete page** menu option can be used.

Hard space character

Telephone numbers are usually written as two parts – 0442 63933 – and you want them to appear on the same line. To prevent them splitting (as the example has), separate them with a **hard space** (*Alt-Space*) instead of a normal space. Impression never splits at a hard space and treats it as a fixed width character. This is useful when text is fully-justified as normal spaces stretch to spread out words. For example, a hard space separates the number 0442 63933 in this extraordinarily contrived piece of fully-justified text. (We cheated to exaggerate the effect.)

Hard space is character number 160.

RISC OS Hints and Tips

Select/Adjust clicking

Clicking the right (**Adjust**) mouse button generally has a different action to clicking the left (**Select**) mouse button. This gives rise to the following effects:

Windows

A **Select** drag on a title bar moves the window as well as moving it to the top of the stacking order of windows while an **Adjust** drag moves the window but keeps its position in the stacking order.

Similarly an **Adjust** drag on the resize icon on a window retains the order of the window in the stacking arrangement.

Scroll bar

A **Select** click on a scroll bar arrow scrolls in the direction of the arrow while an **Adjust** click scrolls in the opposite direction. This allows scrolling in both directions from one end of the scroll bar.

A **Select** click in the blank area of the scroll bar causes a 'Page down' operation while an **Adjust** click causes the opposite 'Page up'.

Menu options

A **Select** click on menu options chooses that menu option and removes the menu while **Adjust** will keep the menu up if it is appropriate. Useful when applying effects.

Impression

A **Select** click on Action buttons in Impression causes the action to be carried out and the dialogue to be removed from screen while an **Adjust** click causes the dialogue to remain up. The best example of this is the Style editor. This means that changes can be made and seen on screen whilst still keeping the editor up to make any new adjustments.

A **Select** drag on frame handles performs a clipping operation while an **Adjust** drag performs a resize operation.

Filer

A **Select** click on the Close icon of a filer window closes the window while an **Adjust** click also opens the parent directory if one is present.

A **Select** click on a directory in a filer window opens the new directory viewer while an **Adjust** click also closes the parent window. This is useful in trying to avoid a Desktop cluttered with many directory viewers.

Double-clicking on an application in a filer window with the **Select** button runs the application while use of the **Adjust** button also removes the filer window from the screen.

Looking inside an application directory

Pressing the shift key whilst double-clicking on a RISC OS application, such as the Impression *!Impress* icon, opens a directory viewer of what is in the application.

Clearing an editable field

Pressing *Ctrl-U* when in an editable field wipes the entire field. This is useful when entering a new filename or document name to be saved out.

RISC OS applications

Any applications which are seen by RISC OS for the first time have their *!Boot* file run. Normally this sets up variables associated with the application such as file types and run actions for when the application's files are clicked on but also it loads any associated icons. In the worst case, if all RISC OS applications are situated in one directory, then on first viewing of this, there is a long pause whilst this setting up takes place but a large amount of memory can be taken up for the sprite definitions. The worst possible case is a hard disc with all of the applications in the root directory. This means that memory is permanently lost instead of only being lost when the directory is viewed. The suggested approach is to split any applications logically into a number of sub-directories or over a number of discs on a floppy disc machine.

Printing

Most RISC OS printer drivers make use of the system sprite space for a work area. When printing is initiated, the driver grabs as much free memory as it needs, usually all on a 1MByte machine, and allocates it to the **system sprite** area. It uses this area

to build up the image to be printed in strips. Once printing is complete it then releases this memory back to the free area. This does have the side effect of setting the **system sprite** area to zero size. This may only affect programs which have been converted from the Arthur operating system and still make use of this area. True RISC OS programs should not make use of this.

One effect of this grabbing of free memory does mean that even if the **fontmax** configuration has been set correctly, then on machines which do not have enough memory for a full image as well as some extra, no memory is available to increase this cache. As printing uses the fonts at the resolution of the printer, which is normally much greater than screen resolution, a larger **font cache** is needed. Therefore, it is suggested that once the printer driver has been loaded and before printing, the memory is optimised by:

- When using the normal printing mode, as opposed to the character printing mode, the printer driver icon on the icon bar is no longer needed and thus can be removed by choosing the **Quit** option when the **Menu** button is pressed on the icon. This leaves the printer driver module in memory which is all that is needed.
- Changing to a lower resolution screen mode, e.g the four or even two colour modes. The mode which gives most memory is mode 0. If mode 82 is being used then switch down to mode 81 or 80. For mode 20 use mode 19 or 18, whereas for mode 12 use mode 11. As the screen resolution plays no part in printing this means that more memory can be allocated to such items as the font cache or strip size (via the free memory).
- Once optimised, use the task manager to drag the **font cache** to a more reasonable size for printing. A rule of thumb might be to use double the allocation that you normally use for normal screen resolution cacheing. Allow a reasonable amount of memory free for the strip size but the font cache is more important. Another rule of thumb might be to allocate the memory on a two thirds to the font cache, one third to the strip size basis. An example of a suggested allocation might be:-

With 200k of memory available to divide between the font cache/strip size then it is suggested that about 150k is used for a font cache and the remainder left for the strip size.

Note that if you are using Computer Concepts' LaserDirect printer, you do not need to alter the font cache size. The printer's software automatically makes any required adjustments.

Printer margins

If the margins for the particular printer in use are not set up correctly then clipping of the printed page can occur. The way to graphically see this for portrait A4 pages is to use the preferences menu option on the Impression icon to show **print borders**. This shows in grey the page margins as defined by the printer driver, if it is loaded. Any frames which overlap with the grey areas will be clipped or not printed. Impression centres the print out between these margins. The **page size** option available on the menu associated with the printer driver icon on the icon bar allows you to set this up and save this information out for the printer in use. Your printer manual should give you some idea about the printable area on the printer. Otherwise try setting the margins to zero and obtain a print out at a scaling factor of 120% with **fit lots on page** button off. Then measure where the printing actually starts on the top of the paper and on the left and where it is should be clipped on the right and on the bottom. This should then explicitly give you the margins for your printer.

Font readability

Scaling an Impression window generally means a trade off between readability of fonts on screen and the amount that can be seen on screen. A 90% or 95% view on a normal monitor using mode 12 lets you see the one default frame and misses out the dead area or margins of the page. This does reduce legibility of the fonts over a 100% view. A 125% scaling using mode 66 on normal monitors or a 130% scaling on mode 82 on multisync monitors increases the legibility but still allows that full frame to be displayed.

The default Trinity font is a light font and therefore switching to a darker font such as Homerton or even to Trinity bold when editing may increase readability. To switch the fonts, all that is required is to go in and use the style editor to edit the basestyle and any other styles which are used on a paragraph basis. As more RISC OS outline fonts are released then more choice over the fonts will be available. This may mean that a darker serif font will be more useful as the default.

The System folder

The only module Impression needs from the *!System* folder is the colour translation module *Colours*.

In-memory transfer is achieved via a file, *Scrapfile*, which normally resides in the *!System* directory. A system variable, *Wimp\$Scrap*, controls where this file resides. Users of single floppy machines may find it useful to either have the *!System* on their work disc or to set up the system variable to point to their work disc to try and cut down on disc swapping.

Altering the LaserJet driver for use by the DeskJet

The **LaserJet** driver can be set up to print on **DeskJet** or **DeskJet Plus** printers by changing the printable margins on the printer driver's **page size** option to:-

Top	2.0mm
Bottom	10mm
Left	3.0mm
Right	4.2mm

Please note that on the DeskJet the landscape printing option for text printing cannot be used as no character mode landscape fonts are available. These are available on the DeskJet Plus and most LaserJet compatibles. This landscape option only applies if text files are dropped onto the printer driver.

Appendix 5: The Character Set

All of the characters displayed here are accessible from the Archimedes keyboard. Those with codes greater than 127 can be typed by holding down the left hand Alt key and typing the character code.

Codes 127-142 are undefined in RISC OS. Code 160 is a non-breakable space which is useful when you have two words which you want to keep together. Impression will not split at a non-breakable space.

32	60 <	88 X	116 t	144 ´	172 ¬	200 È	228 ä
33 !	61 =	89 Y	117 u	145 ’	173 -	201 É	229 å
34 "	62 >	90 Z	118 v	146 <	174 ®	202 Ê	230 æ
35 #	63 ?	91 [	119 w	147 >	175 ~	203 Ë	231 ç
36 \$	64 @	92 \	120 x	148 “	176 °	204 Ì	232 è
37 %	65 A	93]	121 y	149 ”	177 ±	205 Í	233 é
38 &	66 B	94 ^	122 z	150 „	178 ²	206 Î	234 ê
39 ’	67 C	95 _	123 {	151 –	179 ³	207 Ï	235 ë
40 (	68 D	96 `	124 |	152 —	180 ´	208 Ð	236 ì
41)	69 E	97 a	125 }	153 –	181 µ	209 Ñ	237 í
42 *	70 F	98 b	126 ~	154 Œ	182 ¶	210 Ò	238 î
43 +	71 G	99 c	127	155 œ	183 ·	211 Ó	239 ï
44 ,	72 H	100 d	128	156 †	184 „	212 Ô	240 ð
45 -	73 I	101 e	129	157 ‡	185 ì	213 Õ	241 ñ
46 .	74 J	102 f	130	158 fi	186 °	214 Ö	242 ò
47 /	75 K	103 g	131	159 fl	187 »	215 ×	243 ó
48 0	76 L	104 h	132	160	188 ¼	216 Ø	244 ô
49 1	77 M	105 i	133	161 ÿ	189 ½	217 Ù	245 õ
50 2	78 N	106 j	134	162 ¢	190 ¾	218 Ú	246 ö
51 3	79 O	107 k	135	163 £	191 ¤	219 Û	247 ÷
52 4	80 P	108 l	136	164 □	192 Å	220 Ü	248 ø
53 5	81 Q	109 m	137	165 ¥	193 Á	221 Ý	249 ù
54 6	82 R	110 n	138	166 †	194 Â	222 Þ	250 ú
55 7	83 S	111 o	139	167 §	195 Ã	223 ß	251 û
56 8	84 T	112 p	140	168 ¨	196 Ä	224 à	252 ü
57 9	85 U	113 q	141	169 ©	197 Å	225 á	253 ý
58 :	86 V	114 r	142	170ª	198 Æ	226 â	254 þ
59 ;	87 W	115 s	143 •	171 «	199 Ç	227 ã	255 ÿ

Appendix 6: The Greek Character Set

Supplied with Impression is a specially designed Greek character set containing the whole Greek alphabet.

64 ≅	72 H	80 Π	88 Ξ	96	104 η	112 π	120 ξ
65 A	73 I	81 Θ	89 Ψ	97 α	105 ι	113 θ	121 ψ
66 B	74 ∅	82 P	90 Z	98 β	106 φ	114 ρ	122 ζ
67 X	75 K	83 Σ	91 [	99 χ	107 κ	115 σ	123 {
68 Δ	76 Λ	84 T	92 ∴	100 δ	108 λ	116 τ	124 |
69 E	77 M	85 Y	93]	101 ε	109 μ	117 υ	125 }
70 Φ	78 N	86 ς	94 ⊥	102 φ	110 ν	118 Ϙ	126
71 Γ	79 O	87 Ω	95 _	103 γ	111 ο	119 ω	127

Appendix 7: The Dingbats font

This font is displayed in three columns:

1. the decimal equivalent of the character
2. the equivalent ordinary character on the keyboard, and
3. the character in the dingbats font.

To select one of the characters from the dingbats font, you can either

- (1) use `!Chars`, or
- (2) select the dingbats font and type the corresponding ordinary character on the keyboard, or
- (3) select the dingbats font, press down `Alt` and type its decimal number on the keypad.

32	60 <	88 X	116 t	144 >	172 ①	200 ⑨	228 ➤
33 !	61 =	89 Y	117 u	145 >	173 ②	201 ⑩	229 ➤
34 "	62 >	90 Z	118 v	146 }	174 ③	202 ①	230 ➤
35 #	63 ?	91 [	119 w	147)	175 ④	203 ②	231 ➤
36 \$	64 @	92 \	120 x	148)	176 ⑤	204 ③	232 ➤
37 %	65 A	93]	121 y	149)	177 ⑥	205 ④	233 ➤
38 &	66 B	94 ^	122 z	150 ①	178 ⑦	206 ⑤	234 ➤
39 '	67 C	95 _	123 {	151 ②	179 ⑧	207 ⑥	235 ➤
40 (	68 D	96 `	124 |	152 ③	180 ⑨	208 ⑦	236 ➤
41)	69 E	97 a	125 }	153 ④	181 ⑩	209 ⑧	237 ➤
42 *	70 F	98 b	126 ~	154 ⑤	182 ①	210 ⑨	238 ➤
43 +	71 G	99 c	127	155 ⑥	183 ②	211 ⑩	239 ➤
44 ,	72 H	100 d	128 <	156 ⑦	184 ③	212 ➔	240 —
45 -	73 I	101 e	129 <	157 ⑧	185 ④	213 ➔	241 ➤
46 .	74 J	102 f	130 {	158 ⑨	186 ⑤	214 ↕	242 ↻
47 /	75 K	103 g	131 (	159 ⑩	187 ⑥	215 ↕	243 ↕
48 0	76 L	104 h	132 (	160	188 ⑦	216 ↕	244 ↕
49 1	77 M	105 i	133 (	161	189 ⑧	217 ➔	245 ↕
50 2	78 N	106 j	134 ①	162	190 ⑨	218 ↕	246 ↕
51 3	79 O	107 k	135 ②	163	191 ⑩	219 ➔	247 ↕
52 4	80 P	108 l	136 ③	164	192 ①	220 ➔	248 ↕
53 5	81 Q	109 m	137 ④	165	193 ②	221 ➔	249 ↕
54 6	82 R	110 n	138 ⑤	166	194 ③	222 ➔	250 ↕
55 7	83 S	111 o	139 ⑥	167	195 ④	223 ➔	251 ↕
56 8	84 T	112 p	140 ⑦	168	196 ⑤	224 ➔	252 ↕
57 9	85 U	113 q	141 ⑧	169	197 ⑥	225 ➔	253 ↕
58 :	86 V	114 r	142 ⑨	170	198 ⑦	226 ➔	254 ➤
59 ;	87 W	115 s	143 ⑩	171	199 ⑧	227 ➔	255 —

Appendix 8: Qume CrystalPrint Printer

This PostScript compatible printer is one of the cheapest and fastest on the market. However, we have found certain problems when trying to use it with the Archimedes.

Parallel printer port

It is apparently impossible to print on the Qume via the parallel printer port. We understand that Qume are aware of a problem in this area, and may well remedy it in the future. For now, however, we would recommend using the serial port when printing on the Qume.

Connecting the serial port

The following connections are necessary when connecting the Qume to the Archimedes via the serial port:

<i>Archimedes</i>	<i>Qume</i>
Pin 2	Pin 2
Pin 3	Pin 3
Pin 5	Pin 7
Pin 8	Pin 20

Also, on the Archimedes socket, pins 1, 4 and 6 should be connected together, as should 7 and 8. These connections also work with the Apple LaserWriter II.

Make sure you use the XON/XOFF software protocols on the Qume, NOT hardware handshaking.

Problems with !PrinterPS

There appears to be a bug, either with the Qume or with the Acorn Postscript printer driver, which can prevent you from printing. Fortunately, it is possible, with a small change to one of the printer driver files, to fix the problem. The offending file in the !PrinterPS application is *psprolog2*. Load that file into an editor (such as !Edit) and locate the offending line, which reads:

```
def /Copies [#copies/#copies 3 -1 roll def showpage /#copies exch def]bind
```

This line should appear about ten lines down. Change it to:

```
def /Copies [/#copies exch def showpage]bind
```

If this line is substituted for the existing line, the PostScript printer driver should operate correctly with the Qume.

Appendix 9: Clip Art samples

These are supplied on disc 3 in two directories, *Sprites* and *Draw*. The draw files can be enlarged without losing quality.

The file *GradTint1* is particularly useful for creating graduated tints. On screen it appears obviously banded but when printed should give a smooth graduation from black to white. Use the scale and crop facilities in *Impression* if you do not want the full range from black to white.

RootDraw contains the following:

Art sub-directory

CAMcord3
Cover2
Face
GIRLcar6
GradTint1
Logo3
lotus
PLANE

Items sub-directory

Cassette
Compass2
FloppyDic
KeyBoard2
MiniDisc2
Monitor1

Signs sub-directory

Corosive
Fragile
HighVolts
KeepDry1
KeepDry2
NoMagnets
NoSmoking
Phone
Poison
Radiation

Symbols sub-directory

3d-Ding
Approx
ArrowBL
ArrowBR
ArrowDown
ArrowLeft
ArrowRight
ArrowTL
ArrowTR
ArrowUp
BracketL
BracketL2
BracketR
BracketR2
Dingbat
Flash
Integral
Phone
Square

Sprites contains the following:

DRAWING
house2
LYNstand2

HEALEY
JIM
Snow

Disc 3

This disc contains a collection of Sprite and Draw files. The following diagrams show the files and the file name with each graphic.

The files are split into two directories, Sprites and Draw. The Draw pictures can be enlarged to any degree without loss of quality, and can be loaded into !Draw for further examination or editing. One file, GradTint1, is particularly useful for creating graduated tints. On screen this may appear obviously banded but when printed it should always give a smooth graduation from black to white. The !ImpDemo example document uses this effect in several places. Using !Draw it is possible to rotate the tint to any angle, and using the Impression scale and crop facilities it is possible to only draw a portion of the tint, so it does not always have to go from black to white.

All the sprites have been produced with the Scan-Light A4 image scanner from either photographs or pencil drawings.



Face



CAMcord3

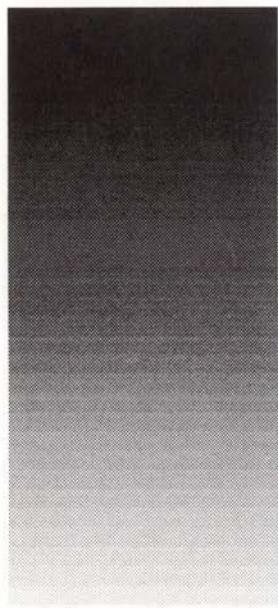
Logo3



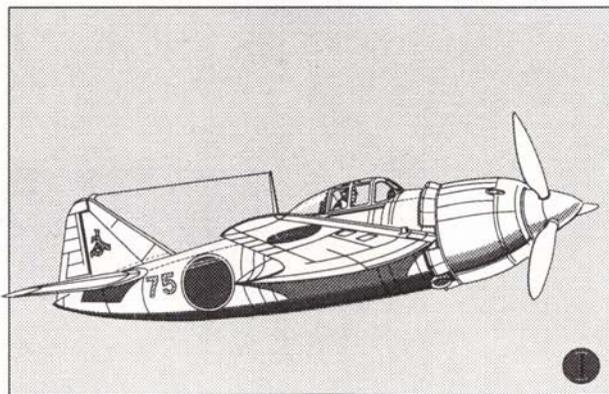


Cover2

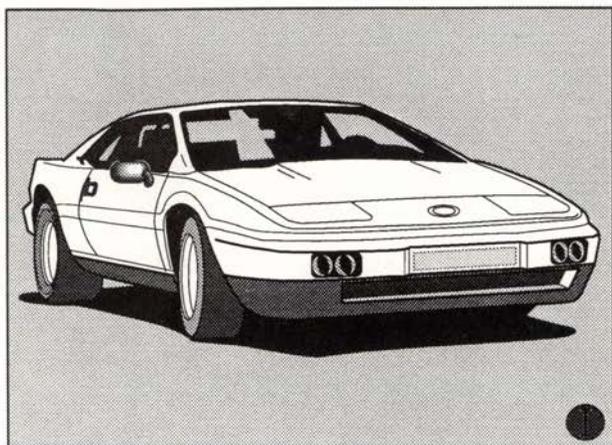
GirlCar6



GradTint1



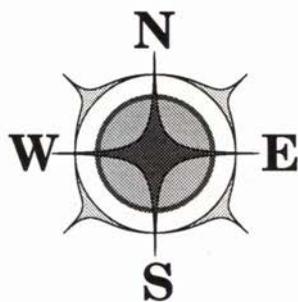
Plane



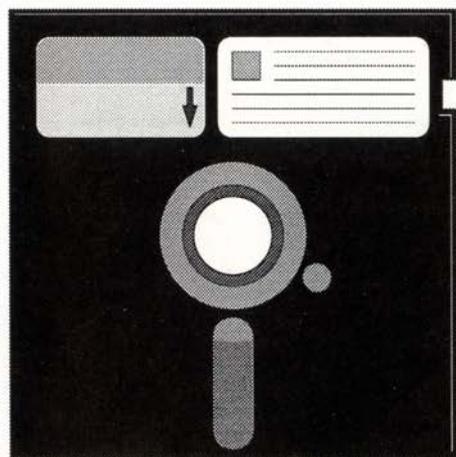
Lotus



Cassette

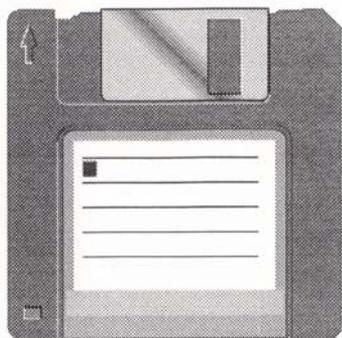


Compass2



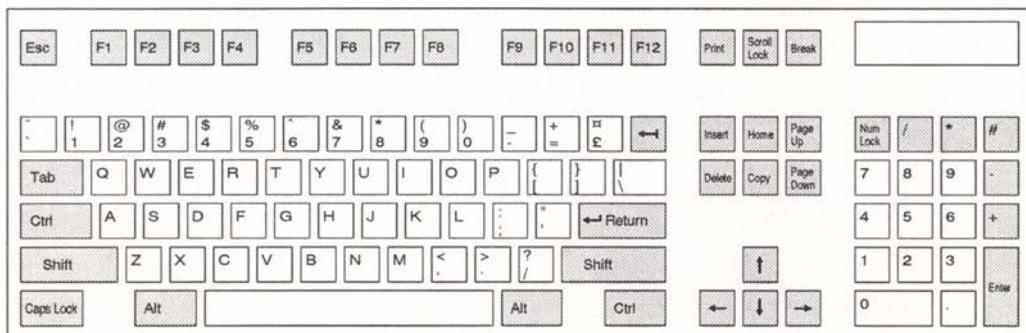
FloppyDisc





MiniDisc2

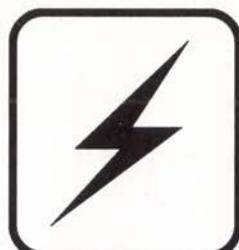
Keyboard2



Corrosive



Fragile



HighVolts



KeepDry1



KeepDry2



NoMagnets



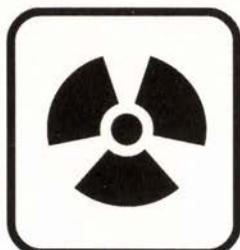
NoSmoking



Phone



Poison



Radiation



Dingbat



3D-Ding



Integral



Phone



Approx



ArrowBL



ArrowBR



ArrowDown



ArrowLeft



ArrowRight



ArrowTL



ArrowTR



ArrowUp



Flash



SquareRoot



BracketL



BracketR



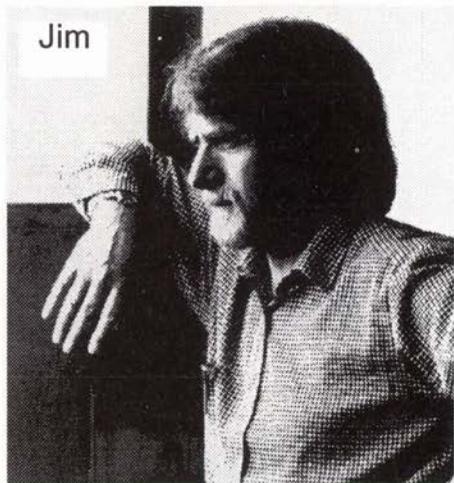
BracketL2



BracketR2



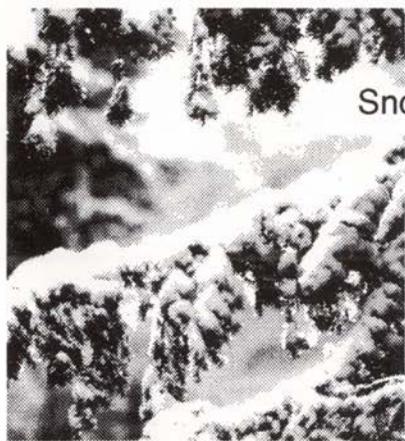
Drawing



Jim



House2



Snow



LynStand2



Healey

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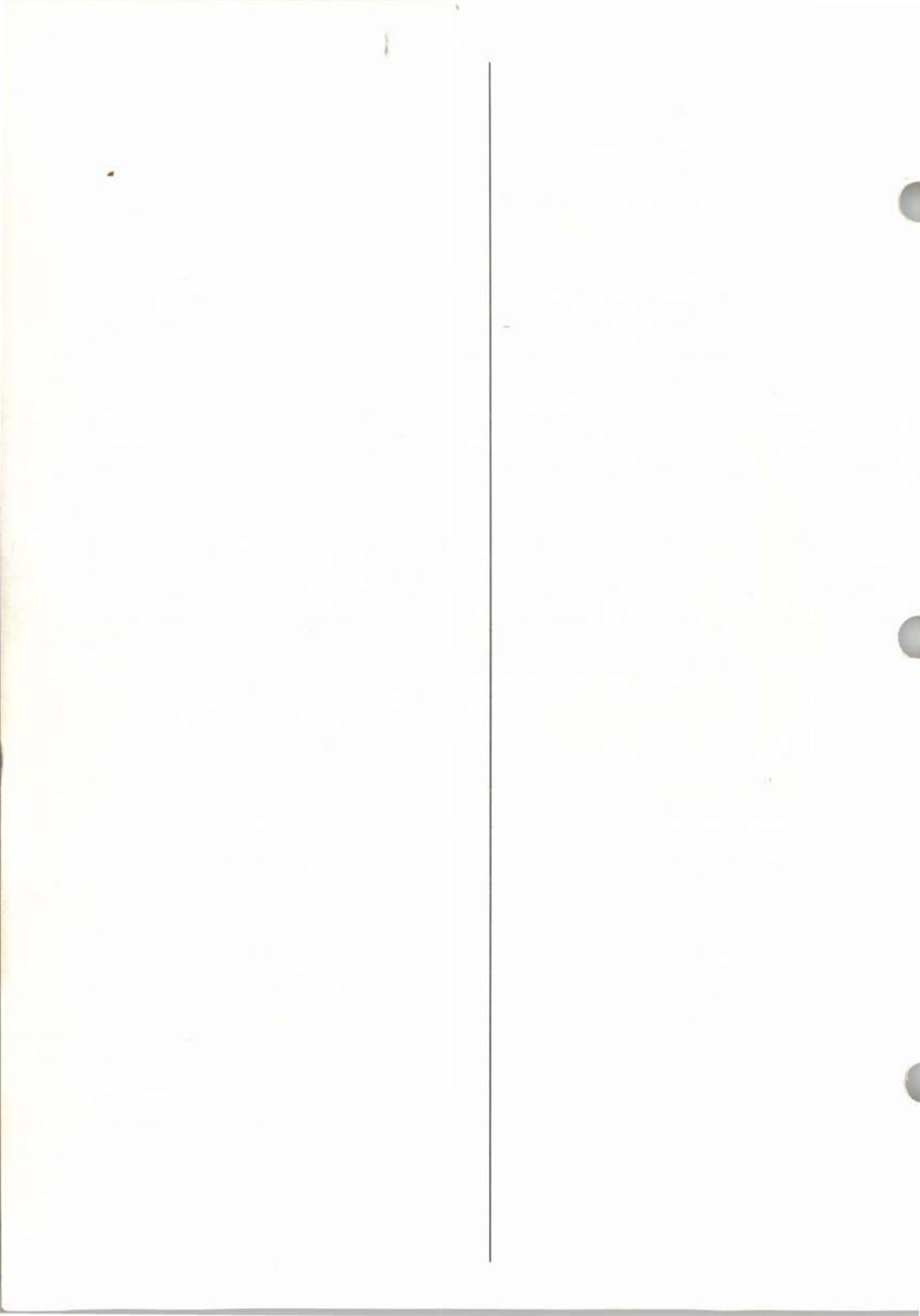
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The first part of the paper is devoted to a general discussion of the problem. It is shown that the problem is of great importance in the theory of the differential equations of the second order.

The second part of the paper is devoted to the study of the properties of the solutions of the differential equations of the second order. It is shown that the solutions of these equations are of great importance in the theory of the differential equations of the second order.

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