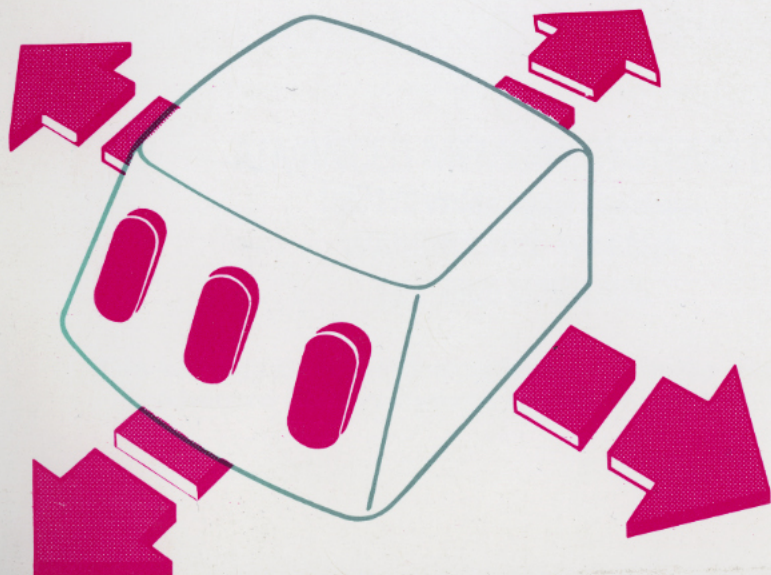


AMX PAGERMAKER



USERS GUIDE



AMX PAGERMAKER

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7-14 Greaves Place
Holywell Green
Halifax
HX4 9BU

Pictures for digitizing must be in one of the following formats:

10x8 inch monochrome print.
VHS video recording of subject.
VHS Microcassette video recording of subject.

(Video frames can be "grabbed"—therefore your favourite TV characters can be digitized).

For enquiries please ring either:

Halifax 73349
or Huddersfield 862017 (24 HR)

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Thank you for your co-operation in complying with the above request.

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HOW TO USE THIS MANUAL

AMX Pagemaker is extremely sophisticated, therefore in order to ensure proper understanding it is vital that you read through the manual from start to finish while actually sitting in front of the computer and using the system.

Never skip sections or pages-unless otherwise instructed-otherwise problems will occur. Different options are sometimes inter-related.

Designed, Conceived and early development done by Alex Blok. ROMs and all machine code routines written by Neil Lee.

ACKNOWLEDGEMENTS

Thanks to Jon Blok for checking the spelling. Thanks to Elizabeth Lee for her invaluable help in Editing this Manual. Thanks to Peter Downs and Keith Swift of 'Thought Processor' for supplying the excellent digitised pictures that have been used in the creation of the demo Pages within this manual and with promotional material associated with Pagemaker. Special thanks to Dominique Watson for canning the P's with his extraordinary artistic talent. We are very grateful to the Haynes Publishing Group for permission to reproduce text from one of their excellent Owners Workshop Manuals. Thanks to Dave and Peter of Elliot Software Ltd for the patterns. Thanks to all the printer distributors who helped with the control code info' and a big thanks to System for developing ADE, without which the Processor would have been virtually impossible to write. Thanks to all those at Newbury Computer Club who helped in pre-launch pest control. And finally, thanks to all friends and relatives who have had to put up with our constant midnight oil burning.

All diagrams and pictures in this manual were done using AMX PAGEMAKER.

CONTENTS	Page
1 INTRODUCTION	1
1.1 Items Supplied	1
1.2 Converting to 80 Track	1
1.2.1 Backing Up PageMaker Disks	2
1.3 Installation	2
1.4 Introduction	3
1.5 Pagemaker Compatibility	5
1.6 What You Need to Start?	7
1.7 Disk Space Table	7
2 GETTING STARTED	8
2.1 Cursor Control Options	8
3 THE SET UP MODULE	11
3.1 Screen Colours	12
3.2 Sound On/Off	12
3.3 Screen Position	12
3.4 Printer Select	13
3.5 Disk Initialiser	14
3.6 Mode Converter	15
3.7 Return to Main Menu	17
4 DEFINER MODULE	18
4.1 What Definer Icons Do	18
4.2 Starting with Definer	20
4.3 Editing Characters	21
4.4 Creating Font File	21
4.5 Creating Pattern File	22
4.6 Saving Fonts and Patterns	22
4.7 Loading Fonts and Patterns	22
5 PREVIEW MODULE	23
5.1 How to Use Previewer	24
5.2 Diagrammatical Explanation of Previewer	24
5.3 Re-selecting Drives	25
5.4 Returning to Setup Menu	25
5.5 Returning to main menu	25
5.6 Opus Challenger Users	25

6	PROCESSOR MODULE.....	26
6.1	Introduction to the Processor	26
6.2	What is a Page?	26
6.2.1	What about Initialisation.....	27
6.3	Communicating with the Processor.....	27
6.3.1	The Mode Select Icons	28
6.3.2	The Label/Message Window	28
6.3.4	Typing in Data	29
6.3.5	The Quick Click Window	29
6.3.6	Processor Mode Block Diagrams	30
6.4	Getting Started	30
6.5	Inch/Centimetre Scale	32
6.6	Filing.....	33
6.6.1	Page Filing	34
6.6.1.1	Saving a Page.....	34
6.6.1.2	Loading a Page.....	34
6.6.1.3	Duplicating a Page.....	35
6.6.1.4	Backing up a Page Disk.....	35
6.6.2	Screen Filing.....	36
6.6.2.1	Saving Screens	36
6.6.2.2	Loading Screens	37
6.6.2.3	Loading Screen Created Using Other Programs	37
6.6.3	Cutout Filing.....	39
6.7	Pasting	42
6.7.1	Copying.....	42
6.7.2	Stretching.....	44
6.7.3	Rotating	46
6.7.4	Flipping	47
6.7.5	Zooming.....	47
4.8	Text.....	49
6.8.1	Text Formatting	51
6.8.2	Character Sizing and Spacing	53
6.8.3	Text Filing.....	56
6.8.4	Producing Text Column.....	58
6.8.5	Using the Keyboard	60
6.8.6	Viewing the Typeface.....	62
6.9	Graphics	63
6.9.1	Shapes.....	64
6.9.2	Patterns	66
6.9.3	Painting	70
6.9.4	Spraying.....	71
6.9.5	Symbol Positioning	72

6.10	Windows.....	73
6.10.1	Using Graphics within Windows	73
6.10.2	Inverting the Window	74
6.10.3	Clearing the Window.....	74
6.10.4	Turning the Window off.....	74
6.10.5	Bordered Window	74
6.10.6	Using the Text Inside a Window.....	74
6.11	Printer Dumps	76
6.11.1	Printer Incompatibility	77
6.11.2	Printer Dump Major Options	78
6.11.3	Dump Size/Quality Options.....	80
6.12	Goodies.....	81
6.12.1	Programmable Gridlock	82
6.12.2	Sound ON/OFF	84
6.12.3	Interlace ON/OFF	84
6.12.4	* Command Entry.....	84
6.12.5	Return to Main Menu	85
6.12.6	Paste Shadow Option	86
6.12.7	Load 3D Zicon Files.....	86
6.12.8	Text Micro-Justification	87
7	APPENDIX 1.....	88
7.1	Disk Drive Problems.....	88
7.2	Mouse Problems	89
7.3	Printer Problems	89
7.4	Software Problems.....	90
8	APPENDIX 2.....	91
9	APPENDIX 3.....	93
9.1	Disc Space Table.....	93
9.2	Processor Screen Co-ordinates	93

1 INTRODUCTION

1.1 ITEMS SUPPLIED

The following items are included in the AMX Pagemaker package:

EPROM 1 (16K)

EPROM 2 (16K)

The AMX Pagemaker SYSTEM DISK

The AMX Pagemaker FONT DISK (with a demo Page and Cutout included)

An illustrated manual

BBC Micro + (Plus) owners may blow both Eproms into a single 32k EPROM if they wish.

PLEASE NOTE:

The Pagemaker ROMs cannot be used as a replacement for the AMX ROM or AMX SuperROM. They were written especially for Pagemaker Users are welcome to write (and publish) their own software based on the Pagemaker ROM * commands, but we will not be publishing details of these commands. The 'mainframe' type facilities such as 'copy', 'stretch', 'rotate', etc., are not accessible through * commands and will never be available so don't waste time experimenting with * this and * that!

It is far better to buy the AMX SuperROM if you wish to write your own software!

TECHNICAL NOTE:

The Pagemaker OS calls are made through OSWORD 54.

1.2 CONVERTING TO 80 TRACK

There is a special program supplied on the system disk which converts the software to work on 80 track drives.

To use this program do the following:

- (i) Remove the write protect tabs from the system disk
- (ii) Insert the disk
PLEASE NOTE: If you have a switchable drive and still want to convert the software to 80 track, then the drive must be switched to 80 track.
- (iii) Type

CHAIN "4080" < RETURN >

- (iv) Re-fit the write protect tab on the System Disk.

1.2.1 BACKING UP PAGEMAKER DISKS

It is possible to Backup both the font and System disk using the DFS *BACKUP command. BUT it must be noted that it will not be possible to use the Processor from your Backup System Disk.

This is to avoid software piracy. The Font disk will work fine.

DO NOT use the *COPY command as this will not copy the disks correctly.

If while using your original System Disk part of the disk becomes corrupted and you loose a file then use your BACKUP disk to run Pagemaker and then quickly insert your Original disk while the PROCESSOR screen is being drawn so you can use the Processor.

It must be understood that the Backup disks are only for use by the purchaser. of the Original AMX Pagemaker disks.

1.3 INSTALLATION

(a) SWITCH OFF YOUR MACHINE!

First of all remove the four screws that hold the case together.

(b) STANDARD 32K BBC MICRO Owners:

If you do not have a ROM board then you will have to fit the Pagemaker ROMs in the remaining two sockets under the keyboard. The later is removed by unscrewing the two retaining bolts-one at each end of the keyboard. The ROM sockets are visible at the lower RHS of the machine (looking from the front).

(c) Make sure the Notches on the ROMs point to the back of the machine!

If you DO have a ROM Board, the Pagemaker ROMs can be fitted in any of the spare sockets. They do not need to be next to each other. There is no special priority either.

We cannot guarantee that other ROMs will not interfere with Pagemaker. It may be found that certain ROMs, such as Disc Doctor will interfere if fitted in a higher priority than the Pagemaker ROMs. We have made extra special effort to make sure Pagemaker doesn't effect other ROMs.

Once the ROMs have been fitted, switch on your computer and type:

*HELP< RETURN >

The following will appear amongst the other copyright messages:

AMX Pagemaker X,Y
(C) Tecnation 1984,85

(The version number X,Y will vary.)

If this message does not appear, then SWITCH OFF YOUR MACHINE and check that the ROMs are inserted properly!

If ROM 2 is not fitted correctly, an error message will appear after the version number.

That concludes the installation details, now jump to section 1.4.

(d) **64k and 128k BBC MICRO PLUS owners:**

Having removed the lid, you will find the ROM sockets at the back of the circuit board on the left.

Please see your BBC+ manual if you are unsure. DON'T FIT THE ROMs IN THE SPEECH CHIP SOCKETS. THIS WILL BE FATAL TO BOTH MAN AND MACHINE!!! (We guarantee burnt fingers in attempting to remove frazzled Pagemaker ROMs.)

The Pagemaker ROMs can be fitted in any of the spare ROM sockets. Order and priority is not imported.

Please read part (c)-above- for the rest of the ROM fitting instructions.

1.4 INTRODUCTION

Pagemaker was designed to bring simple typesetting into the home, without the expensive costs of printing, machines, photocopiers, scissors and glue. It has been written using the very HIGH RESOLUTION graphics mode of the BBC micro (mode 0), so that you can pay much more attention to detail.

As well as allowing you to spray and paint, Pagemaker will allow you to type using a selection of fonts, which you can choose from at will, or you can even design your own! You can mix text and graphics freely. There are commands to cut and paste, rotate, flip, zoom and enlarge areas of the screen. You can even load in **DIGITIZED** pictures for incorporation in your work. There are text format options to allow simple wordprocessing, using characters of any size or shape. FULL control is given over the character spacing. Once you have created your work of art, it can be saved to disk or printed.

You can also work on a full A4 page. With the Inch/Centimetre scale around the screen everything will be printed the correct size. With all these facilities (and more) you can be well on your way to producing your own newspaper, technical report or comic. Clubs and groups can print their own posters.

... And what about that A-Level project?

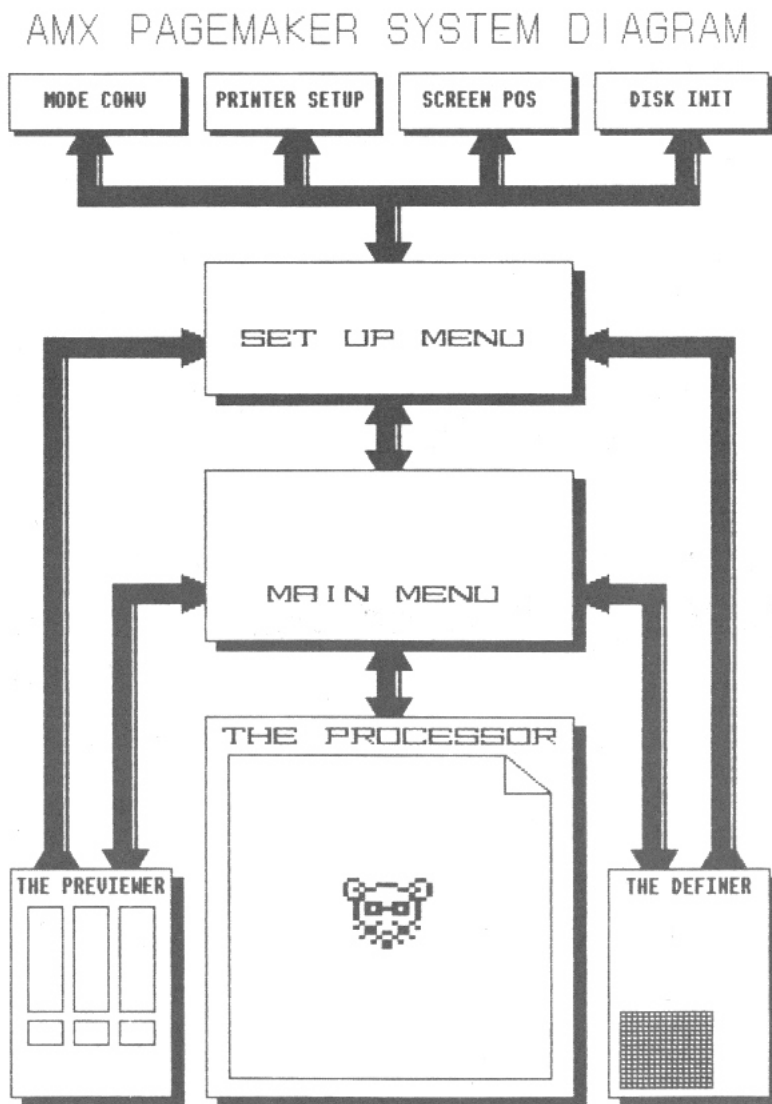


Figure 1 AMX Pagemaker System Diagram

PLEASE NOTE!

Pagemaker has been developed with a great deal of hard work. We want you, the user, to gain as much from it as possible. In order that those without much knowledge of computers should be able to benefit from the system, most operations are selected simply by pointing to ICONS or LABELS on the screen. Prompts which help explain Pagemaker's present function will appear at the appropriate time to guide you through an operation.

You will find a Jargon Box at the back of this manual to help explain some of the technical words used in the manual. For example, the word ICON (above) will be described.

There is also a Fault Finder at the back to help you out of those 'What have I done?!' situations.

Please read through these instructions before using Pagemaker to give yourself a good idea of how the system works and what it can do. Do not skip pages as this is a teaching manual which must be read from start to finish unless otherwise instructed in the text.

1.5 PAGEMAKER COMPATIBILITY

Pagemaker will not work with any 2ND PROCESSORS, these should be switched off before Page maker is used.

As regards SIDEWAYS ROMS, RAMS, non-standard DFS's or anything else that didn't come with your Beeb at purchase, we cannot guarantee that Pagemaker will work with these. The reason is that there is so much on the market that we cannot try it all and make the correct modifications. There is no harm in trying though.

We have tried and tested AMX Pagemaker with the following:

- BASIC 1 and BASIC 2
- OS 1.0 or greater
- Acorn DFS 0.9 and others
- Acorn DNFS 1.2
- Watford DDFS 1.53
- Solidisk DDFS 2.05
- Opus Challenger
- BBC Micro Plus 64K (Shadow mode OFF)
- BBC Micro Plus .128K (Shadow mode OFF)
- Acorn DDFS 2.20

All DDFS's must be in SINGLE DENSITY MODE.

Solidisk (or other) 32K (or more) sideways RAM-the ROMs can be downloaded into sideways RAM. Please refer to the manual supplied with your sideways RAM for instructions on how to download ROMs into RAM.

ROM CLASHES

Some ROMs WILL cause problems with Pagemaker. There is nothing we can do about that as there are so many, but you should disable or remove any suspicious ROMs BEFORE using Pagemaker.

ROM clash symptoms usually include corruption of the screen, random hang ups, some functions not working as they should etc. DON'T ring us if something doesn't work. Check for ROM clashes or use the Fault Finder at the back of this manual.

We have discovered (so far) that the following ROMs cause problems:

COMPUTER CONCEPTS-SPEECH ROM
COMPUTER CONCEPTS-DISC DOCTOR (Sometimes)
DEMON ZROMM
OAK UNIVERSAL-SPQR ROM

Pagemaker will not run if the AMX Rom is turned on. Please type:

*MOUSEOFF
and press < BREAK >

before using Pagemaker.

We have made a lot of effort to make sure the Pagemaker ROMs do not interfere with other ROMs. However, after using Pagemaker, always switch your machine OFF and ON before using any other software as we cannot guarantee that residual machine code that remains in RAM will not interfere with other software.

PLEASE NOTE:

If you have some hardware that is not listed above and Pagemaker works FULLY-i.e. EVERY SINGLE FEATURE!, please let us know so we can add that item to the list. Thank you.

1.6 WHAT YOU NEED TO START?

To gain maximum benefit from Pagemaker, you will need to be organised from the beginning.

Because of the special way in which Pagemaker Saves PAGES to disk, you must allocate disks especially for PAGES. Page disks will have to be specially INITIALISED before use, therefore you cannot mix PAGES and other files.

- Keep a disk for your own FONTS and PATTERNS. *
- Keep a disk for SCREENS. *
- Keep a disk for CUTOUTS. *
- Keep a disk for TEXT FILES. (Wordwise and View).*
- Keep a disk for PAGES.

Disks marked * can be formatted using a standard formatter.

Keep a special Pagemaker note pad handy. This will be invaluable when using the GRIDLOCK and TEXT options in the Processor Module as your favourite settings can be jotted down.

TECHNICAL USERS PLEASE NOTE:

There is no harm in mixing Cutout and Font files on the same disk as their directories are different, and will be discriminated from by Pagemaker. The others must not be mixed. We advise file separation in order that the user can remain organised.

The table below shows what you can get on each side of a disk.

1.7 DISK SPACE TABLE

The table below shows what you can get on each side of a disk:

DATA	40 track	80 track
Fonts & Patterns	21	31
Screens	4	9
Cutouts	Depends on size	Depends on size
Pages	2	4

PLEASE NOTE!

You must not attempt to save anything onto the two disks supplied-unless specifically instructed to do so in this manual.

NEVER SAVE ANYTHING BUT PAGES TO A PAGE DISK.

CONSERVATION NOTE:

Please make sure your work is correct the first time, do not print it out to see what it looks like. Use the Previewer, that is what it is for. Or use the small dump options.

2 GETTING STARTED

Insert the Pagemaker SYSTEM DISK into drive 0 and BOOT it, as follows:

Press < SHIFT >
Press < BREAK > (while still holding down SHIFT)
Release < BREAK>
Release < SHIFT >

Pagemaker will now automatically load and run.

You will be presented with the TITLE SCREEN. Joystick users, please press the 'FIRE' button to select joystick operation. None joystick users may press any key on the keyboard/mouse to continue.

The next title screen will appear. This contains the credits. This can also be aborted by pressing any key.

2.1 CURSOR CONTROL OPTIONS

Although Pagemaker is compatible with the AMX Mouse, it can be used with an Analogue Joystick-such as the BBC Joysticks or with the cursor keys.

KEYBOARD USERS

Use the cursor keys to move the cursor-pressing < SHIFT > will speed it up.

The mouse buttons are emulated using three function keys:

< f0 > . . . < EXECUTE >
< f1 > . . . < MOVE >
< f2 > . . . < CANCEL >

Any reference in the rest of the manual to 'Moving the Mouse' or 'Pressing a Mouse button' refers in your case to using the cursor keys or pressing a function key.

JOYSTICK USERS

The joystick option is selected from the TITLE SCREEN by pressing the 'FIRE' button on your joystick. A beep will confirm your action.

The joystick simulates the Mouse movement with the 'FIRE' button emulating the < EXECUTE > button.

Use < f1 > for < MOVE >
and < f2 > for < CANCEL >

Any reference in the rest of the manual to 'Moving the Mouse' or 'Pressing a Mouse button' refers in your case to moving the joystick or pressing a function key or the 'FIRE' button.

If you decide to change back to keyboard or mouse use you must Re-BOOT the System Disk. Keyboard and Mouse use are the default settings.

MOUSE USERS

Please note that the keyboard remains operational -even if you are using the mouse, i.e. you can use the cursor keys to move the cursor and use the function keys < f0 > to < f2 > to emulate the mouse buttons. Using the cursor keys may sometimes be useful for SPRAYING in a straight line in graphics mode, or for aligning the TEXT cursor.

Mouse button functions:

- < EXECUTE > is on the left
- < MOVE > is in the centre
- < CANCEL > is on the right

PLEASE NOTE

When you point to an ICON or LABEL, you must press < EXECUTE > on the mouse, < f0 > on the keyboard or 'FIRE' on the joystick to select that option.

We shall from now onwards refer to this action as 'Clicking', this is standard in mouse terminology.

The next screen is the Pagemaker MAIN MENU.

Pagemaker is made up of 4 main modules, each of which can be selected from the MAIN MENU. These are:

SET UP - This allows you to get things set up and ready.

DEFINE - This allows you to define your own characters and patterns in a 16 by 16 grid.

PREVIEW - Having created some pages, you can view them, three at a time to make it easy to choose which one you wish to edit or dump.

PROCESS - This is the Pagemaker itself! A high resolution graphics system with simple word processing features, the ability to type using a selection of fonts AND cut and paste as well.

All these will be explained in further detail.

You can return to the **MAIN MENU** from ANY module at any time simply by pointing to the Menu Icon or Label.

PLEASE NOTE

Throughout Pagemaker, whenever a "Continue ?", "Are you sure ?", "More ?", "Y/N ?" or other prompt comes up, you must answer by pressing < EXECUTE > for YES or < CANCEL > for NO - unless otherwise instructed.

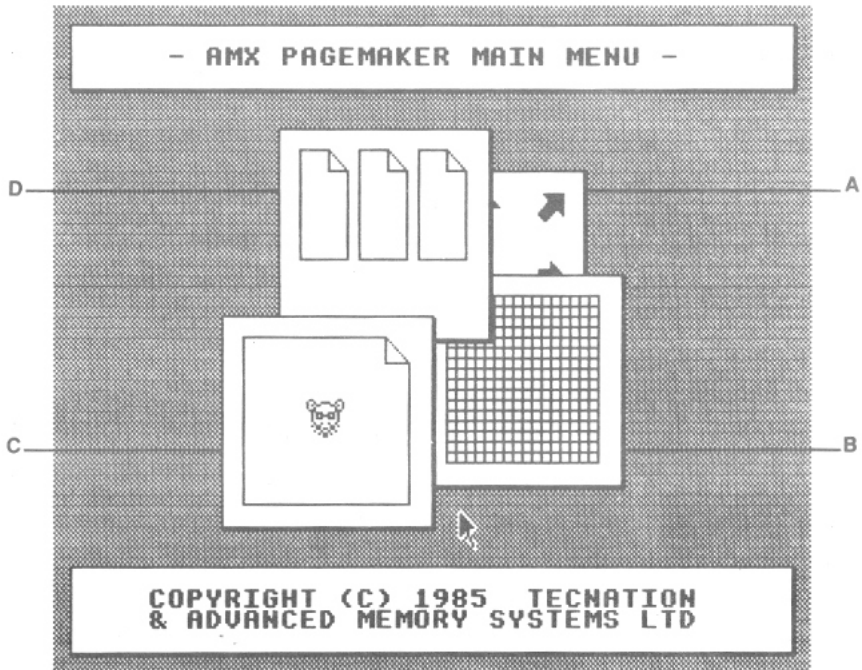


Figure 2 AMX Pagemaker main menu

A - 'SETUP' ICON
B - 'DEFINER' ICON

C - 'PROCESSOR' ICON
D - 'PREVIEW' ICON

The 4 modules are graphically represented here using giant icons. They are selected by CLICKING over the correct icon.

We shall deal with each module in the order that you would normally go about using Pagemaker after having just switched on.

The first option is SET UP.

3 THE 'SET UP' MODULE

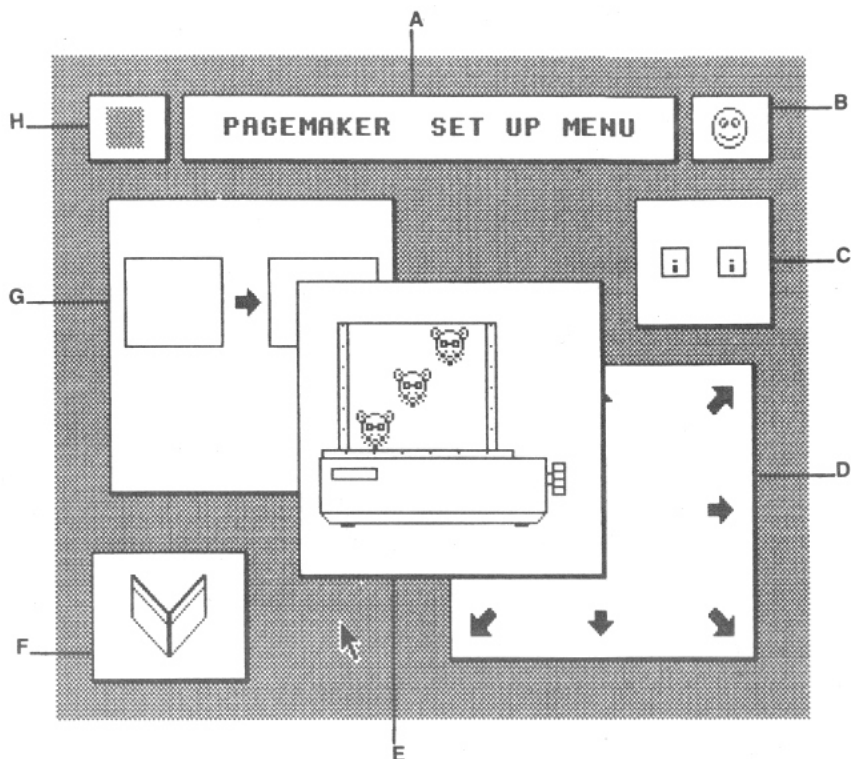


Figure 3 The SET UP MENU

A - FOREGROUND COLOUR
CHANGE ICON
B - SOUND ON/OFF ICON
C - DISK INITIALISER ICON
D - SCREEN POSITION ICON

E - PRINTER SETUP ICON
F - RETURN TO MAIN MENU ICON
G - MODE CONVERTOR ICON
H - BACKGROUND COLOUR
CHANGE ICON.

This module allows you to get things set up and ready before using some of Pagemaker's facilities. Please note that once you turn the computer off you will have to go through the SET UP process again. It is not essential to go through SET UP at all providing you have previously initialised your Page disks, and you have an Epson FX/RX compatible printer.

SET UP allows you to do the following:

- Adjust the screen colours to your taste.
- Turn the sound on and off.
- Position the screen to suit your TV/Monitor.
- Select the printer type you have.
- Initialise disks for saving PAGES on.
- Convert pictures from one graphics mode to another.
- Return to the, MAIN MENU.

We shall deal with each of these options in turn.

3.1 SCREEN COLOURS

For those who find black on white too ordinary, both the background and foreground colours of the screen can be changed to suit your taste. To change the background colour, click the top left icon, and to change the foreground colour, click the title icon. See Figure 3.

If you end up with both colours the same and cannot see a thing, then press. < CANCEL > to return to the default setting of black on white.

These colours will be retained throughout all Pagemaker modules. (They will be lost if the Main Menu is run from the Processor).

3.2 SOUND ON/OFF

Click the happy face icon and from then on there will be silence throughout all Pagemaker operations.

3.3 SCREEN POSITION

This option is for positioning the screen in case your TV or MONITOR does not display the computer picture in the centre. No further explanation of how to use this facility is needed, but if in the course of experimentation you cannot see the screen, then press < CANCEL > and the picture will return to its DEFAULT position. The position chosen will be retained throughout all Pagemaker modules. (The position will be lost if the Main Menu is run from the Processor).

No harm whatsoever can be done to your TV or MONITOR with this facility despite the visual effects produced.

3.4 PRINTER SELECT

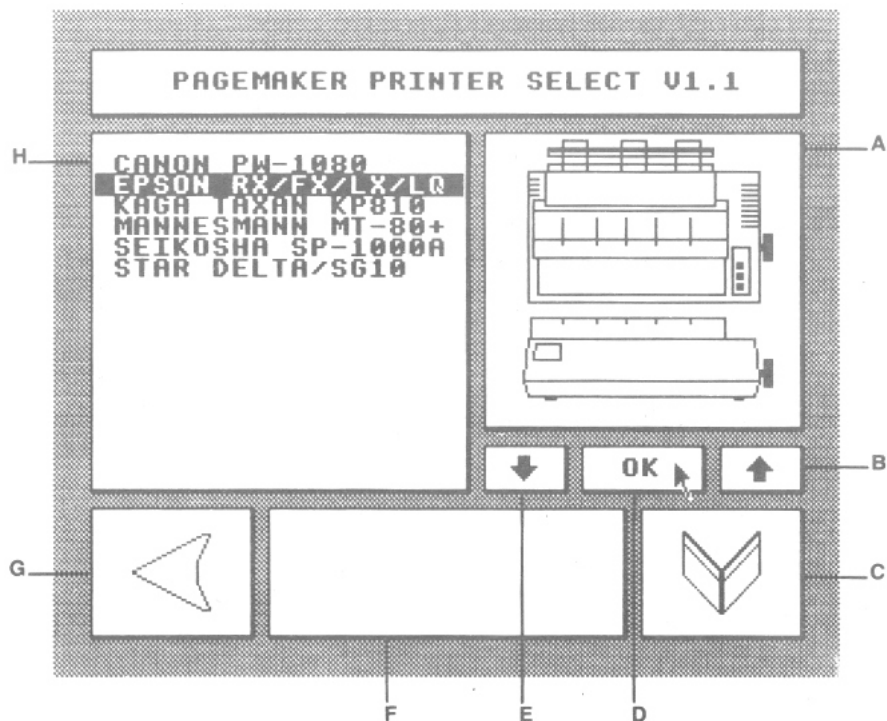


Figure 4 Printer Select

- A - PICTURE WINDOW
- B - SELECT UP ARROW
- C - RETURN TO MAIN MENU ICON
- D - PRINTER SELECT ICON
- E - SELECT DOWN ARROW
- F - MESSAGE WINDOW
- G - RETURN TO SETUP MENU ICON
- H - PRINTER SELECT LIST

This allows you to select the printer type that you will be using with Pagemaker. Simply click the up/down arrows to move the bar over the printer that you are using. If your printer is not listed then you must find out whether it is compatible with any of the printers that are listed. If so then select the printer that is compatible with yours. The printer must be compatible in graphics mode only. Text compatibility is not important. Click 'OK' and after the picture comes up, you can either return to the SET UP MENU or the MAIN MENU. The computer will remember the printer type you selected throughout all further operations with Pagemaker.

When first run, Pagemaker defaults to Epson FX/RX compatible dump mode. Therefore if you have one of these, then the printer select option can be ignored.

3.5 DISK INITIALISER

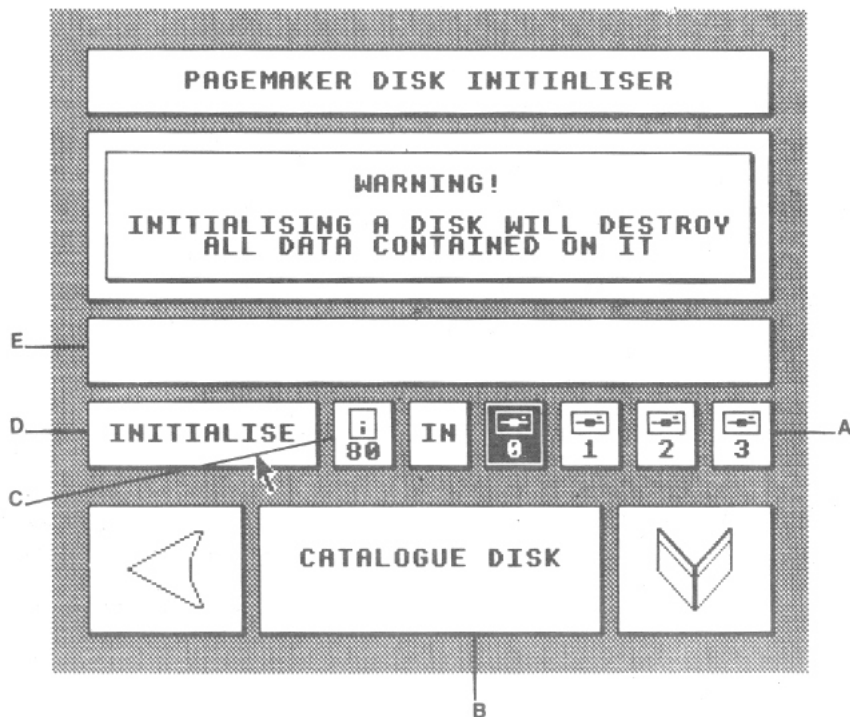


Figure 5 PAGE DISK INITIALISER SCREEN

A - DRIVE SELECT ICONS
B - CAT DISK ICON/WINDOW
C - TRACK SELECT ICON

D - INITIALISE ICON
E - MESSAGE WINDOW

Before using the Processor, your Page disks must be formatted in a special way. This routine does just that. We have called this 'Initialisation'. You may initialise both un-formatted and formatted disks. First of all, you should catalogue your disk to make sure that you are not about to destroy any programs. Then select the number of tracks on your disk by clicking the track select icon. Re-insert the System Disk and click the **INITIALISE** icon.

PLEASE NOTE:

Disks may be initialised whether formatted or not.

Follow the instructions given. If the disk you attempt to initialise contains any programs, then you will be given the option to abort.

Use the mouse buttons or the keyboard to answer prompts.

The initialisation process takes a long time, so be patient. Once finished, you will be prompted to re-insert the System Disk. The computer will then return to the Initialising Screen, from which you can initialise another disk, go back to the SET UP MENU or return to the MAIN MENU.

Your disk is now ready to be used with the Processor.

You can initialise both sides of the disk if you have Double Sided disks. We do not advise using both sides of a Single Sided disk, as the Processor accesses the Page disk a lot during operation and any damage that occurs while you are working on a Page will prove fatal and could cause a SYSTEM CRASH which will result in the loss of your Page.

The reason for this is that disk manufacturers do not check side 2 of single sided disks in their quality control, and therefore one should not rely on an unchecked disk for a file as large as a PAGE.

3.6 MODE CONVERTER

This option allows you to convert screens from all BBC Micro graphics modes (except mode 0) into either mode 0 or mode 1. The convert to mode 0 option is given so that you can use pictures from other programs (such as AMX Art) with Pagemaker. The convert to mode 1 option will convert pictures from other programs (such as AMX Art again) into a mode where they can be coloured using other graphics software such as 'Artsystematic'. This latter option is not relevant to Pagemaker, but has been provided for your convenience. Most colours are converted into GREY LEVELS when they are converted into modes with only 2 colours. Black and white stay as they are.

PLEASE NOTE

AMX Art pictures- are in mode 4. Using the "AMX Art" to mode "mode X" option will strip the border from the picture as well as converting it. If you do not wish to strip the border, then simply convert from mode 4.

To convert the picture is very simple.

First click the up/down arrows to move the bars over the correct mode. Before converting you may wish to find out on which disk the picture is that you want to convert. The right hand side Drive Select icons govern the drive that will be catalogued. Simply click the correct icon to select a drive.

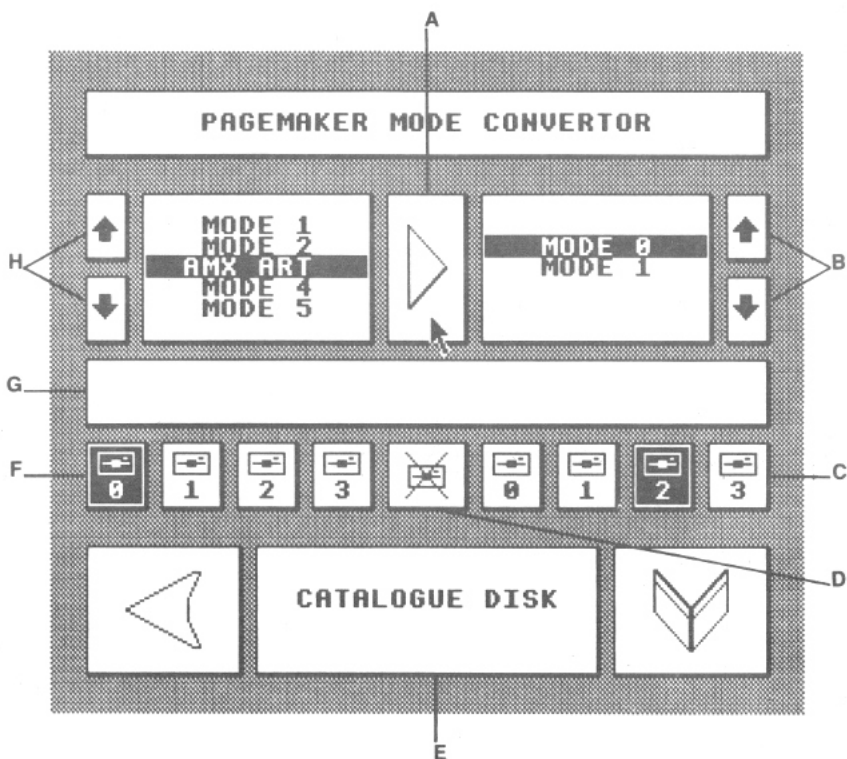


Figure 6 MODE CONVERTER

A - CONVERSION ICON
B - DESTINATION MODE SELECT
 ARROWS
C - DESTINATION/CAT DRIVE
 SELECT ICONS
D - DELETE FILE ICON

E - CAT DISK ICON/WINDOW
F - SOURCE DRIVE SELECT ICONS
G - MESSAGE WINDOW
H - SOURCE MODE SELECT
 ARROWS

To catalogue:

Click the catalogue window. Your chosen disk will then be catalogued.

Then select the drive that the original picture is on using the left hand side Drive Select icons.

Use the right hand side Drive Select icons to select the drive you want to save the converted picture onto.

You can delete files from a drive using the right hand side Drive Select icons and clicking the Delete File icon. Follow the instructions given on the screen.

To convert:

Click the large conversion arrow. Simply follow the instructions that are given. You will be guided through the conversion process. At the end your converted picture' will be displayed. Press any key to return to the mode convertor.

We would advise that you prefix your filenames with a number that gives an indication of the mode your picture is in. This may be useful in the future, i.e. 0SUNSET for a mode 0 picture.

Please note the following two points:

- i) Attempts to fool the computer into believing that it is converting one mode, when in fact it is converting another will give some strange results, but will do no harm.
- ii) It is not advisable to give both the original and the converted screens the same filename (if they are to be on the same side of a disk), because you will lose your original. Also remember that mode 4 and 5 screens use less memory than modes 0 and 1, so a "Disk Full" or "Can't Extend" error may occur if you attempt the above with mode 4 or 5 screens.

You may at any time (other than when actually converting) press < ESCAPE > to abort a function, for example; when entering a filename, etc. You can return to the SET UP or MAIN MENU at any time, by clicking the correct icon.

3.7 RETURN TO MAIN MENU

Make sure you have the SYSTEM DISK inserted in drive 0. Click the menu icon. From the MAIN MENU you can choose which out of the three remaining Modules you wish to use.

NOTE! At this point, if you wish you can jump to the section devoted to the Processor (Section 6), as reading about the Definer and Previewer is not essential for correct operation of the Processor.

4 'DEFINER' MODULE

To run the Definer click the Definer Icon from the MAIN MENU. Once it has run you will be asked to insert a font disk. You can either insert your own font disk, or the one supplied. With the Definer you can design up to 91 characters, symbols or patterns in each file. All prompts, warnings, instructions and error messages will appear in the Message Window or the Catalogue Window.

Before starting, here is a brief description of each of the Definer Icons and what they do.

4.1 WHAT DEFINER ICONS DO

The **SAVE FONT** Icon - After clicking this you must enter the filename of the font or pattern you are saving. We suggest you prefix the filename with a 'P' if it is a Pattern. (e.g. 'PCHESSE').

Everything shown on the display grid is saved. Even if you only define one character, the whole lot (including blank spaces) will be saved, i.e. all files are of the same length.

The **DELETE FILE** Icon - As above, enter the filename and the file will be deleted. Only fonts or patterns can be deleted.

The **CLEAR CHARACTER** Icon - Pointing to this Icon will clear the defining grid, and erase the corresponding character from the display grid.

The **LOAD FONT** Icon - Enter the filename and the corresponding font will be loaded.

The **FONTNAME** Label - Pointing to the word 'FONTNAME' will allow you to enter a short description of the font/pattern before you SAVE to disk. This facility is provided as the 7 character filename will probably be too short for a complete description. This will be saved to disk with the font/pattern and is displayed when the font is re-loaded.

The **DATE** Label - Same as above. You may enter the date in any form you wish. You may even enter a further description, for example.

It is not essential to enter either of the above details.

The **DRIVE SELECT** Icons - Click the drive you wish to use. The drive selected will be used for all functions, for example, deleting a file, saving, loading and cataloguing the disk. When returning to the SET UP or MAIN MENU, Drive O will automatically be selected.

The **CATALOGUE** Icon - Will catalogue the selected drive.

The **SET UP** Icon - This will return you to the SET UP menu. Any fonts you are editing at present will be lost, so remember to SAVE first! Insert the SYSTEM DISK and proceed.

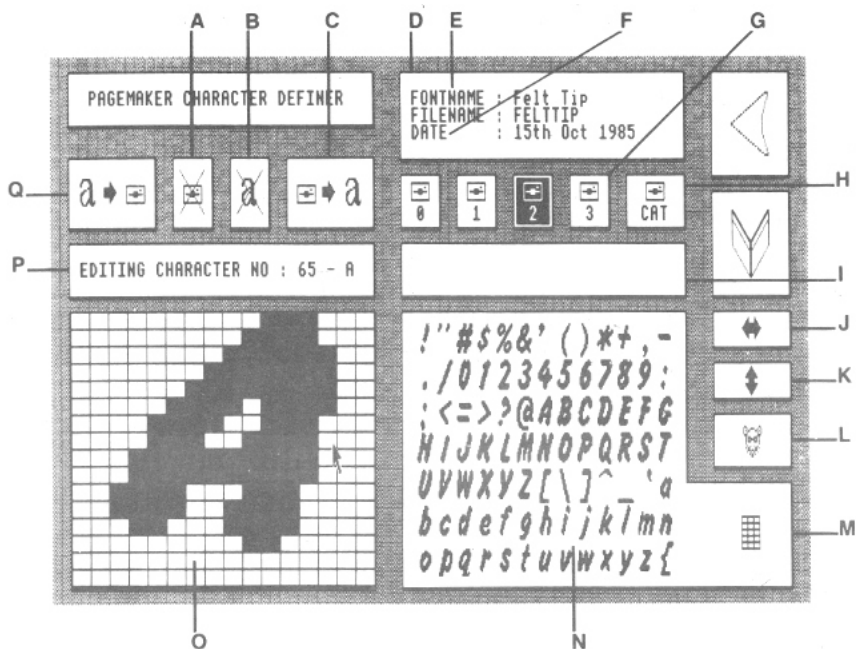


Figure 7 THE DEFINER

A - DELETE FILE ICON
B - CLEAR CHARACTER ICON
C - LOAD FONT ICON
D - CATALOGUE WINDOW
E - FONT NAME LABEL
F - DATE LABEL
G - DRIVE SELECT ICON
H - CATALOGUE ICON
I - MESSAGE WINDOW

J - FLIP LEFT TO RIGHT ICON
K - FLIP TOP TO BOTTOM ICON
L - WIPE WHOLE FONT ICON
M - DISPLAY AREA GRID ON/OFF ICON
N - FONT DISPLAY AREA
O - DEFINING GRID
P - CHARACTER INFO' WINDOW
Q - SAVE FONT ICON

The **MAIN MENU** Icon - As above, but you will be returned to the AMX PAGEMAKER MAIN MENU.

The **CHARACTER INFO' WINDOW** - Shown here is the ASCII code for the character you are editing and the actual character that you should be editing in that space on the Display Grid.

The **DEFINING GRID** - This area is where you edit or create a character. If you click the little squares and press < EXECUTE > the squares will TOGGLE on and off. If you hold down < EXECUTE > and move the mouse, you can rapidly fill or erase the squares.

The **DISPLAY AREA** - This is where a full font is shown. Before editing or creating a character (even if you have not loaded in a font), you must first point to and click a character or space in the grid. You will see the character change or appear as you edit or create. You can remove the boxes around the characters by clicking the Grid On/Off icon. Clicking again will re-draw the grid. This will help you in judging what the characters will look like on a Processor page.

The **CLEAR FONT** Icon -This wipes the Defining Grid clean and clears the Display Grid. This process will destroy your font-so save it first. It does not affect what you have on disk.

The **DISPLAY GRID ON/OFF** Icon - Pointing to this icon will toggle the grid on and off.

The **FLIP LEFT to RIGHT** Icon - Pointing to this icon will flip the character selected from left to right.

The **FLIP TOP to BOTTOM** Icon - This will flip the selected character from top to bottom, i.e. turn it upside down.

The above two options will be useful for creating electronic symbols etc., which need to be displayed in different orientations.

Please note: the Processor allows pixel accuracy positioning of individual characters.

4.2 STARTING WITH DEFINER

To get started load in a font from the font disk supplied.

After having inserted the font disk, select the drive that you have inserted the disk into, using the drive select icons. If you have inserted it in the same drive that the System Disk was in, leave the drive set to 0.

Point to the Load Font Icon.

Type

FELTTIP

and press

< RETURN >

on the keyboard.

The font will then load.

If you do not like this font, catalogue the disk with the Cat Disk Icon, and choose another. Only Font and Pattern filenames will be shown in the catalogue.

NOTE: using the Definer, you can design your own patterns on the 16 by 16 grid, for example,

- Electronic component symbols
- Logos
- Musical Symbols
- Wargame Pieces
- etc ...

Using the Processor you can also paint or spray using anything designed with the Definer. Therefore you could paint a shape with letter A's if you wish.

4.3 EDITING CHARACTERS

The whole ASCII character set is shown on the display grid. When using the Processor, if a font is loaded in and you decide to type using it, then as a key is pressed, the corresponding font character will be printed on the screen, i.e. each font character has an ASCII code. The layout of the characters on the display grid is essential for this facility, otherwise you will end up (for example) pressing the letter J' and getting a number 8!

Click the letter W (upper case) and you will see it appear in the defining grid. Also, above the grid to the right of 'EDITING CHARACTER NO:' you will see the ASCII CODE and then the character that you should be defining or editing in that position on the display grid. ASCII CODES are shown for your convenience.

To modify the letter W click the squares in the Defining Grid until you have modified the character to your taste. You will see the modification being echoed on the Display Grid. You can now pick up another character for editing by clicking over it.

4.4 CREATING FONT FILE

To create your own font, you may want to start from scratch.

To clear the previous font - click the Clear Font icon.

There is a special facility built in to help you with your own fonts. You may wish to model all your characters around a basic shape. First of all, design the basic shape in a spare (or low priority position), for example, the full stop position. We will assume you are starting with the W. Point to the W position, and then move the pointer over the shape you wish to model your characters on. Press < MOVE >, and it is copied into the W position. Repeat for the "B" and so on ... This will be useful for O's and Q's as they are the same shape and the Q can simply be a modified O. If you are doing it the easy way and modifying another font until it suits your taste then this will not be necessary.

4.5 CREATING PATTERN FILE

Creating a pattern is identical to creating a font character, except that it is not important which box you click on the Display Grid, as it is unlikely that you will be typing with patterns! It is possible to do so though, as the Processor does not mind what shape the character defined is. We advise that you define your patterns starting with the top left character position (ASCII code 33). This is because when selecting a spray or paint pattern using the Processor, the characters are displayed in ASCII code order. Therefore selection will be faster if you stick to this rule. As mentioned before, ANYTHING designed with the Definer can be used to Paint or Spray using the Processor.

We recommend that you prefix pattern files with a 'P' to help identify them when you catalogue the disk.

We have supplied, with thanks to Elliot Software Ltd, the same patterns as are used in AMX ART for you to use in the Processor. These are the only patterns supplied.

4.6 SAVING FONTS & PATTERNS

Before saving, you may like to give your font/pattern a description and record the date you designed it.

To do this:

- Click the labels and type in your information.
- Insert your font disk and select the correct drive.
- Point to the Save Font Icon.
- Enter the filename and press < RETURN >.

Any errors will be displayed in the Message Window.

4.7 LOADING FONTS & PATTERNS

- Insert a font disk and select the correct drive.
- Point to the Load Font icon, enter the filename and press < RETURN >

Again, any errors will be reported.

5 'PREVIEW' MODULE

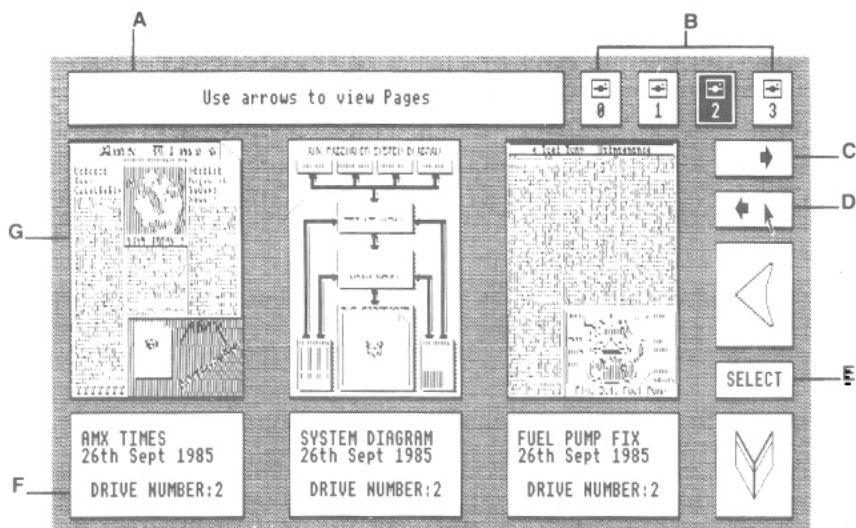


Figure 8 The PREVIEWER

A - MESSAGE WINDOW

B - DRIVE SELECT ICONS

C - PAGE ADVANCE ARROW

D - BACK A PAGE ARROW

E - RE-SELECT ICON

F - PAGE DATA WINDOWS

G - PAGE VIEWING WINDOWS

The Pagemaker Previewer is for use with Pages created on the Processor, so you must have created a Page or two before trying it out. There is a demonstration Page on the Font Disk. (The supplied font disk is a specially created one - it is not possible to mix Pages with other files using Pagemaker. The supplied disk was especially created to save having to supply a third disk!)

The Previewer allows you to browse through any Pages you have created.

The other use is to see what your Page looks like as a whole. Using the Processor only allows you to see approximately half a Page.

Applications for the Previewer can vary. One use will be if you are putting together a Newsletter or Manual. Having designed all your Pages, you can simply browse through the Pages thinking about how you will compose them.

5.1 HOW TO USE PREVIEWER

The Previewer is accessed from the MAIN MENU and once loaded will prompt you to insert your Page disks.

You then click the drive select Icons to indicate which drives you have Page disks in. You can obviously have a maximum of four drives selected at once. Upon selecting a drive, it will be accessed for a short time. This is nothing to worry about as the computer is simply detecting whether the drives are 40 or 80 track.

You can have a mixture of 40 and 80 track drives connected.

Having selected the drives, you then press < MOVE > on the mouse.

What the Previewer does is to then scan all selected drives displaying your Pages, 3 at a time, for you to view. Useful data is shown under the Pages. The Page name and Date (as given when using the Processor) are displayed, as well as the drive number.

PLEASE NOTE:

When viewing the supplied Page, a second Page will load in as well. All it will contain is garbage. This is nothing to worry about. You are actually viewing the rest of the contents of the font disk, i.e., the fonts and cutout all scrambled up. With a properly initialised Page disks this will not happen.

Pointing to the RIGHT Arrow will move the Pages along to the right one place - showing you the Page that is hidden to the left of the screen. Pointing to the LEFT Arrow will move the Pages along to the left one place - allowing you to go back and look at the pages you have already seen, showing you the Pages to the right. If you are viewing less than four Pages then the arrows will have no effect. Confused?

5.2 DIAGRAMMATICAL EXPLANATION OF PREVIEWER

Suppose that you have got the following set up:

Drive 0 - Four Pages

Drive 2 - Four Pages

After pressing < MOVE >, the first three pages from drive 0 will be displayed. Upon pressing the LEFT Arrow, the Pages will be moved to the left one place, and the fourth Page from drive 0 will be displayed. Again pressing the LEFT Arrow will show the first Page on drive 2. Eventually the 3 remaining pages on drive 2 will be displayed. (The drives are accessed in the order 0,1, 2, & 3).

You can imagine that all your Pages are stuck to along piece of card and that you are viewing them through 3 windows - using the arrows to push the card left and right. Try experimenting.

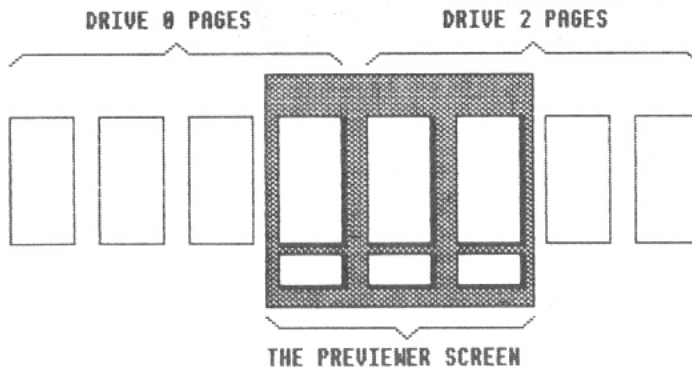


Figure 9 Previewer Diagrammatical Explanation

5.3 RE-SELECTING DRIVES

If you decide to change disks, or drives, then the selection process must be repeated. To do this click the SELECT icon. Upon doing this the Drive select icons will turn off and you will be prompted to re-select and press < MOVE >.

5.4 RETURNING TO SETUP MENU

At any time, you can click the SETUP icon. Make sure that the System Disk is inserted into drive 0.

5.5 RETURNING TO MAIN MENU

At any time, you can also click the MENU icon. Again the System Disk must be inserted in drive 0.

5.6 OPUS CHALLENGER USERS

Using the Challenger to Preview Pages is a dream.

*BACKUP the contents of your Page disk onto the RAM DISC having CONFIGured the RAMDISC as a drive between 0 and 3. Use the Previewer as normal.

6 'PROCESSOR MODULE'

6.1 INTRODUCTION TO THE PROCESSOR

The Processor is the main Pagemaker module.

It is a hybrid between a graphic design system and a simple word processor. The difference between this word processor and the norm is that you can type directly on the screen using a font of your choice in a variety of character sizes.

Alternatively, you can load in Wordwise and View files.

This really means that the .Processor is a form of typesetter without all the expensive equipment. Any differences in quality of output between the Processor and a 'real' typesetter are limitations of the BBC Micro and your printer. Where the Processor scores over most other "professional" typesetters is in the fact that what you see on the screen, is exactly what is dumped to your printer. Therefore all composition can be done and checked before any time or paper is wasted.

The facilities available within the Processor are available after some very hard work developing high speed ALGORITHMS which would normally only work at such speed on computers with much greater processing power.

Without the AMX Mouse and icons, it would have been impossible to write or use. Keyboard-only use would have made operation impossibly slow and difficult. Icons and Labels now allow the software designer/programmer to communicate their ideas and work with the user in a friendly manner despite the internal complexity of the software.

We hope that with the Processor you will be able to communicate YOUR ideas in a much more presentable form.

6.2 WHAT IS A PAGE?

No doubt you have been wondering what is so special about this word, which has cropped up all over the place. Well here is an explanation ...

Most normal graphics programs on the market simply allow you to work on the area of screen you see in front of you. This is OK for most work, but is a bit small for professional use. If you print it out, it only takes up about a half of an M size page.

In order to get around this problem, instead of using the computer's memory to store the screen, therefore limiting it to half A4 size, we have developed a way to use the disk as 'Real Time Memory' using our special RTDAR System (Real Time Disk Access RAM).

As a disk has a much greater capacity than the computer's memory, it is now possible to work on an area which is A4 in size when dumped to your printer.

Therefore a Page is the area of disk that you work on and does not represent just what you see on the screen at any one time, but the area you scroll up and down over. Each Page uses 37.5K of disk space.

6.2.1 WHAT ABOUT INITIALISATION

The initialisation process simply FORMATS the disk in such away as to allow the computer to treat the disk as RAM.

In order to work, the Processor needs an already initialised Disk before it will do ANYTHING at all. The Processor will not initialise disks so use the SETUP module for this purpose. If you paid attention earlier, you will already have your disks ready and labelled.

NEVER EVER SAVE ANYTHING OTHER THAN PAGES TO A PAGE DISK!

That concludes the explanation of Pages.

6.3 COMMUNICATING WITH THE PROCESSOR

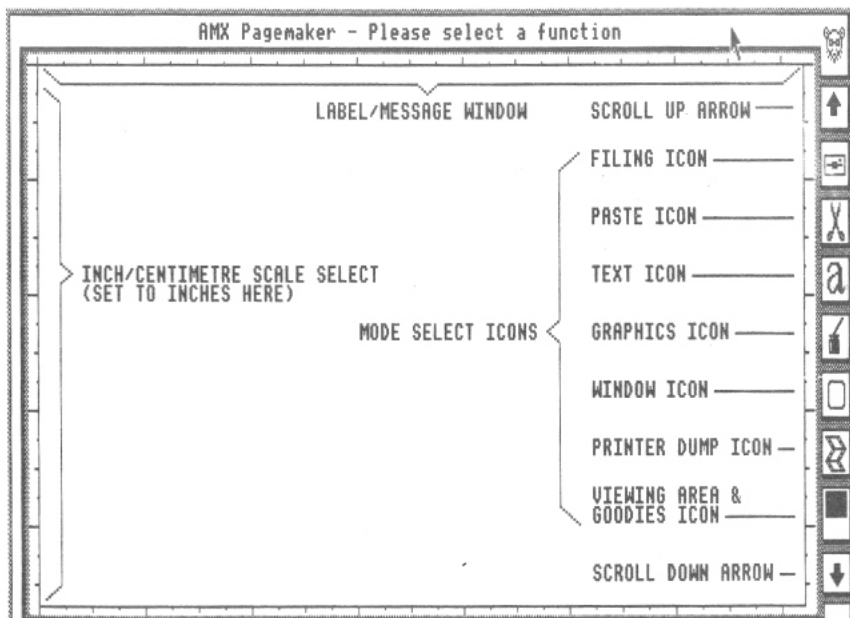


Figure 10 The Processor Screen

Here we shall have a look at the way information is displayed and entered when using the Processor.

6.3.1 THE MODE SELECT ICONS

These icons represent the major modes available from within the Processor.

FILING
PASTE
TEXT
GRAPHICS
WINDOWS
PRINTER
DUMPS
GOODIES

Clicking the wanted icon will highlight it and produce an appropriate menu in the Label/Message window.

6.3.2 THE LABEL/MESSAGE WINDOW

Labels

In order to make operation of the Processor as simple as possible, only information relevant to the currently selected Processor mode will appear at any one time. Therefore instead of pull down windows, we have laid the mode options out end to end. This makes selection much faster and reduces the chances of selecting the wrong option. A header on the left of the label window shows the currently selected option. When an option can either be OFF or ON, the relevant label will be highlighted when clicked. Clicking it again will remove the highlighting, and turn off the selected option.

Some options have their own sub-menus, for example, clicking the TEXT icon will present you with the TEXT menu. If you then click the SIZE label all the Text SIZE options will appear, and so on. If you press < CANCEL >, the previous menu will appear until eventually the AMX Pagemaker - Please select a function' message will appear. Once having got used to using < EXECUTE > and < CANCEL > together like this, you will find it quick to select options.

REMEMBER: if you ever get confused, just press the < CANCEL > button a few times.

Messages

Instructions will appear in the Label/Message Window whenever the need arises. These will help to explain what to do without constant reference to the manual.

ERRORS

When an error occurs, most commonly when using the filing system, the relevant error message will appear in the centre of the screen. You will be prompted to press < CANCEL >.

6.3.4 TYPING IN DATA

When you are prompted to enter data, for example filenames, dates, etc. a window will appear in the middle of the screen. What you type will appear there. You can press < ESCAPE > while typing in data if you change your mind or make a mistake.

6.3.5 THE QUICK CLICK WINDOW

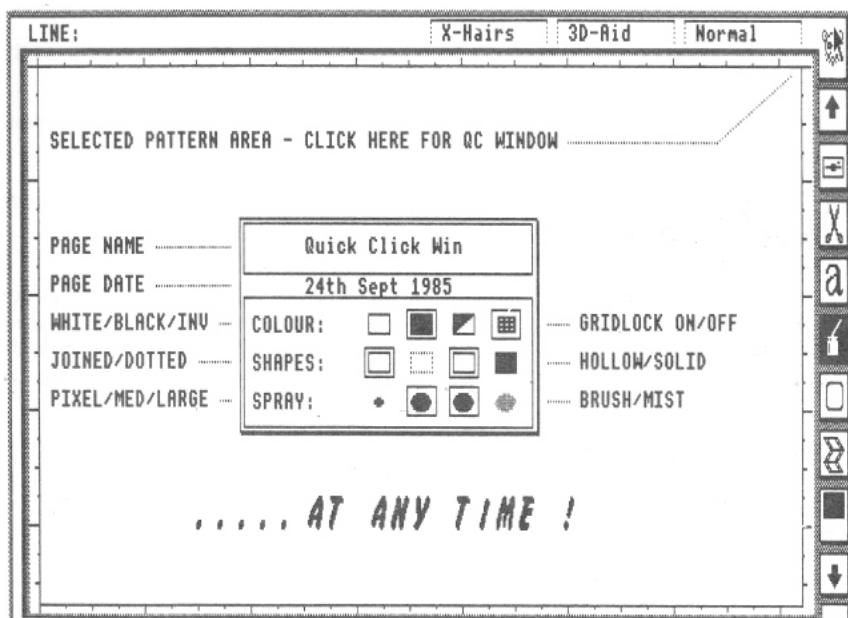


Figure 11 The QUICK CLICK WINDOW

In order to make operation as fast and convenient as possible we have included a way of changing some of the Processor options while actually using a facility.

If you look in the top right of the screen, you will see MAX the mouse. Clicking him will bring down the Quick Click window in the centre of the screen. You can do the following with the QC Window:-

- Change colours - (WHITE, BLACK, INVERSE)
- Select JOINED or DOTTED for shapes
- Select Spray Size - (PIXEL, MEDIUM, LARGE)
- Select PAINTBRUSH or MIST spray
- Turn the gridlock on and off

At the top of the QC Window is the Page name and Date of the Page presently being edited. Please note that the Gridlock can be programmed from the GOODIES icon.

The top right of the screen is also where the selected spraying/paint pattern is shown. MAX will disappear once a new pattern is selected. This does not affect selecting the QC Window.

The QC Window can not be used whenever a second window is already on the screen, e.g. while Zooming or Adjusting the character size.

Press < CANCEL > to remove the QC Window and continue with what you were doing.

6.3.6 PROCESSOR MODE BLOCK DIAGRAMS

At the beginning of each of the sections devoted to the individual Processor Modes, there is a block diagram showing all the facilities available within that mode. Each row on the block diagram represents the option labels that appear in the message/label window.

6.4 GETTING STARTED

Before we discuss all the major features of the Processor, you may wish to try something. Follow the instructions below for a quick tour of the Processor's more simple functions.

- a) Select the Processor from the Main Menu.
Once the Processor is up and running you will be prompted to Insert your Page disks.
- b) Insert your Page Disk(s), (Any Drive).
- c) Press any key.
- d) Select the correct drive by clicking the correct label.

A catalogue of the Pages on the selected drive will appear. Because these Pages have not been previously worked on they will be blank. Pressing < CANCEL > while the catalogue is on the screen will allow you to reselect a different drive.

- e) Pick a Page by clicking the title, let's start at the top!

The Page will be loaded in.

All you will see is a blank screen. Think of a blank Page as a blank piece of paper, awaiting your artistry! We are now going to change that.

- f) Click the GRAPHICS Icon.

PLEASE NOTE:

If at any time while selecting an option from the Label Window at the top of the screen you make a mistake, pressing < CANCEL > will take you back a step allowing you to re-select an option.

- g) Click the SPRAY label.

- h) Click the START label.

- i) Move the cursor around the screen while holding down < EXECUTE >. Do a few doodles.

Press < CANCEL > and then click the UP arrow to scroll the Page up. Holding < EXECUTE > will keep the Page scrolling until there is adequate space to continue your doodles. Keep on scrolling until the end of the Page is reached. This will be indicated by a 'Cannot scroll ... End of Page' message.

Notice the little box on the GOODIES Icon. It moves while you scroll indicating the area of the Page that you are viewing. Scroll up and down and watch it. You may find this very useful.

- j) Click the TEXT Icon

- k) Click the KEYBOARD label

Position the cursor at the top left of the canvas. Press < EXECUTE > and then start typing. The font you are now typing with is the default font. It is called STANDARD. Later on we will discuss how to load in other fonts and format your text.

After you have finished typing, press < ESCAPE >.

Having got used to the scrolling and the method of selecting options we will now describe each of the Processor's functions in more detail.

PLEASE NOTE:

It is important to remember that whenever you wish to scroll always have the correct Page disk inserted. Scrolling with the wrong disk will produce an error in the Label/Message window.

We will deal with the different modes and facilities in the order that they appear on the screen.

INCH/CENTIMETRE SCALE
FILING*
PASTE*
TEXT*
GRAPHICS*
WINDOWS*
PRINTER DUMPS*
GOODIES*

Modes marked * appear as Icons down the RHS of the screen.

6.5 INCH/CENTIMETRE SCALE



Figure 12 Change of address card done using SCALE

In order to help with printing out small areas of the screen, formatting text and with aligning the cross-hairs, a switchable Inch/Centimetre scale has been provided around the edge of the screen. The default scalers in Inches. Clicking the far left of the screen will toggle between the Inch and Centimetre scale. We cannot guarantee that the scale will be accurate with your type of printer. It is there as a guide. Only the LARGE printer dump options produce a scaled dump.

6.6 FILING

In order to allow you to fit more on a disk and to make composition easier there are two extra filing options as well as the option to Save or Load a Page. Both these options allow areas smaller than the Page to be Saved. These areas can be saved to conventionally formatted disks. We shall deal with these options after Page filing.

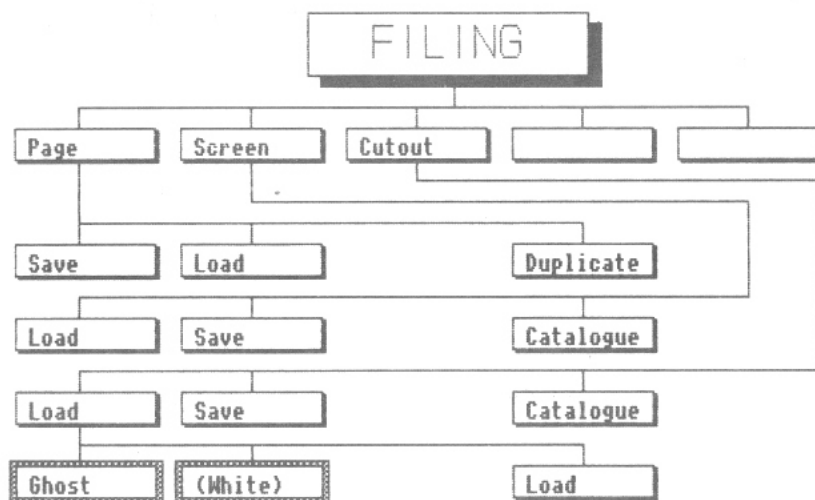


Figure 13 FILING MENU

6.6.1 PAGE FILING

6.6.1.1 Saving a Page

Click the FILING Icon.

Click the PAGE label.

Click the SAVE label.

Insert your Page disk and press < EXECUTE >. (Make sure it is the Page disk you are presently working on).

Enter a description for the Page.

Enter the Date.

Just press < RETURN > when asked to enter the Page description if you wish to retain the old Page name. This also applies to the date. No filename is required.

VERY IMPORTANT!

It is vital that you understand that once a Page is loaded, changing the Page name before Saving WILL NOT mean that the Page will be Saved in a- different place on the disk. Page duplication is described further on.

The Page will automatically scroll up and down as it is saved. You will then be prompted to select a function. You can of course Save the Page manually by scrolling up and down until all areas of the Page have been scrolled off the screen at some time. (Any part of the Page which has been scrolled off the screen will have been saved on to your Page disk).

6.6.1.2 Loading a Page

THERE IS NO WAY THAT THE PROCESSOR CAN BE USED WITHOUT YOU LOADING IN A PAGE FIRST.

N.B.: Remember that Loading over a Page already being edited will overwrite anything on the screen. The rest of the Page presently being edited will be OK as it is on disk. Therefore Save before Loading if you wish to keep what is on the screen.

Click the FILING Icon.

Click the PAGE label.

Click the LOAD label.

Press < EXECUTE > .

Insert your Page disk and press < EXECUTE >.

Click the correct drive label.

A catalogue of the Pages on that drive will appear. If you wish to catalogue another drive, press < CANCEL > and then you can reselect a different drive number.

To load in a Page,

Click the Page title that you wish to load. The Page will load in and you will be prompted to select a function.

If you attempt to catalogue a none Page disk, you will be able to re-select the correct drive.

6.6.1.3 Duplicating a Page

It is not possible to copy individual Pages from one disk to another, however we have included a facility that allows you to copy a Page into another Page on the same disk. This will be useful for either backing up Pages or for storing 'Dummy Pages' like blank letter heads or invoice forms which will be used a lot. This will save you from having to re-draw widely used Pages.

For example you may have 4 Pages on a disk called:

- 1 THE TIMES
- 2 TECHNICAL REPORT
- 3 DUMMY LETTER HEAD
- 4 BLANK PAGE

As you have labelled a blank Page on the disk, you can (for example) copy Page 3 into Page 4. Now whenever you wish to send a letter you simply copy the Dummy Page into the reserved Blank Page.

How to duplicate Pages:

- Click the FILING icon.
- Click the PAGE label.
- Click the DUPLICATE label.

A catalogue of the drive will appear.

Click the page name that you wish to copy into.

IT IS POSSIBLE TO COPY INTO ALREADY USED PAGES - SO BE CAREFUL OTHERWISE YOU WILL OVERWRITE VALUABLE WORK.

6.6.1.4 Backing up a Page Disk

Use the Backup command available from your DFS. Make sure the disk you are backing up onto has either been formatted or initialised. Do not attempt to Backup onto a disk which does not contain the same amount of tracks as the original, i.e. do not backup from an 80 to a 40 track disk.

OPUS CHALLENGER USERS

Using the Challenger RAMDISC to edit Pages has an incredible advantage over using a normal disk drive. The scrolling speed is incredibly fast!

There are two ways of using the Challenger:

- (1)
 - (a) CONFIG the RAMDISC as your Page disk. (Drives 0 to 3 only!)
 - (b) INITIALISE the RAMDISC using the Pagemaker Disk Initialiser. (c) Edit your Page as normal.
 - (d) When you have finished and saved your Page to RAM DISC, *BACKUP the RAMDISC onto a normal formatted or initialised disk for permanent storage.
- (2)
 - (a) *BACKUP your Page disk onto the RAMDISC.
 - (b) Edit your Page(s) as required.
 - (c) *BACKUP the RAM DISC back onto your normal Page disk.

PLEASE REFER TO THE OPUS CHALLENGER MANUAL FOR FULL UNDERSTANDING OF IT'S OPERATION.

6.6.2 SCREEN FILING

There will be occasions when you do not wish to Save or Load whole pages, therefore we have provided a facility that allows just the area of Page visible to be Saved. We shall refer to this area as the Screen. This uses up less memory than a Page, e.g. 20K bytes. You may also wish to Load in a screen created with another program for example AMX Art, Artsystematic, Beeb Art, etc. and use this within the Processor. Alternatively you may wish to use Pagemaker Screens in other programs. Screens are saved onto conventional disks - no special initialising is required.

NEVER SAVE A SCREEN ONTO A PAGE DISK!

6.6.2.1 Saving Screens

- Click the FILING Icon.
- Click the correct drive label.
- Click the SCREEN label.
- Click the SAVE label.

An option to invert the screen before saving will be given. If you are going to load the screen into another program, press < EXECUTE > and the screen will be inverted. If the screen will be loaded into the Processor at a later date, press < CANCEL >.

TECHNICAL NOTE:

The inversion option is given due to the effect the *DESK command has on the screen. It inverts the screen colours when called.

After the INVERT prompt, you must enter the Screen filename and press < RETURN >. The Screen will then be Saved.

6.6.2.2 Loading Screens

Click the FILING Icon.

Click the correct drive label.

Click the SCREEN label.

Click the LOAD label.

Enter the filename and press < RETURN >.

The loading process is quite slow because the border is being stripped at the same time. Hence the edges of pictures created within other programs will be missing.

6.6.2.3 Loading Screen Created Using Other Programs

You must know which graphics mode the Screens are in that you wish to load into the Processor.

Loading Mode 0 pictures.

The Processor runs in mode 0, therefore mode 0 Screens do not require conversion and can be loaded without modification.

Loading Screens that are not in mode 0.

There is no harm in loading screens that are in the wrong mode, but they will look awful! Please use the mode converter to convert your Screens to mode 0.

See Section 3.6.

Cataloging a Screen Disk

If you click the catalogue Label, ALL files on the selected disk will be shown (i.e. not just Pagemaker Screen files). This is so that screen files created using other software can be catalogued.

What about Digitized pictures?

You may have seen those T-shirts with their owners' faces on them. They are created by connecting a Closed Circuit Television or Video Camera to the computer via a special bit of electronic circuitry called a 'DIGITIZER'. The person/object being photographed is placed in front of the camera, and the picture appears on the Computer screen. It is then printed onto the T-shirt using a special process. The image will not be to the standard of a normal photograph but can be, with expensive equipment, nearly as good as a poor black and white TV picture. The quality of this image is governed by the resolution of the camera, digitizer and computer. The Pagemaker Processor was written in high resolution mode O to allow pretty good quality pictures to be displayed and 'Edited'. (Provided a good camera and digitizer are used).

To load in a Digitized picture, convert it into mode O (if required) and follow the normal procedure.

TECHNICAL NOTE:

A screen may be loaded into the Processor provided it is in the following form ...

A block of memory from START to FINISH.

Where START and FINISH must be not less than 3000 hex, and not more than 7FFF hex. For example, anything that is within the range 3000-7FFF may be loaded.

Do not attempt to load in Bitstik files, or any other type of DATA file.

Those who do not have Digitizers will be pleased to know that there is a Digitizing service available. See the beginning of this manual.

What good are digitized pictures?

The possibilities are endless. Apart from the obvious uses in newspaper/newsletter production, there are the less obvious uses.

So you are thinking of growing a beard.

With the Cut, Paste and Spraying facilities within the Processor you can find out how you will look before you grow it. Have yourself digitized. Load in the Screen. Spray on a beard. There, doesn't it look awful!

The non artistic of you may go one step further with the Cutout option.

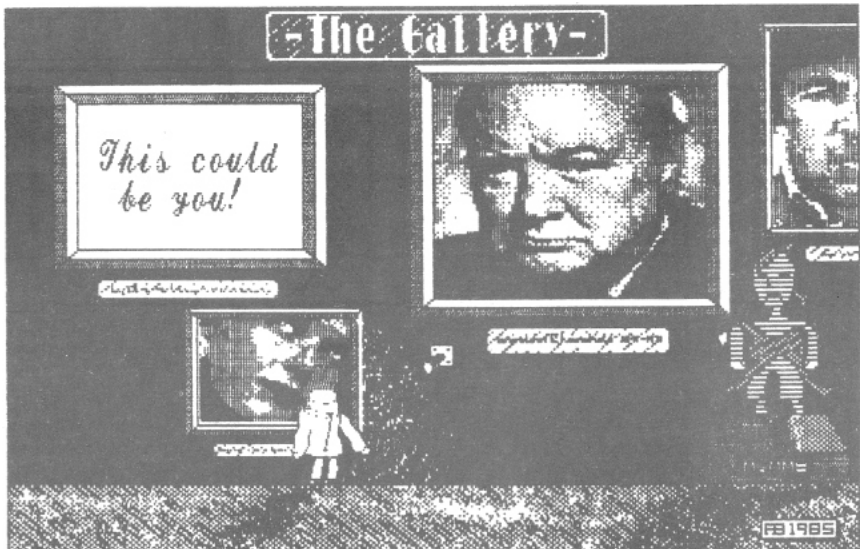


Figure 14 Need we say more?

6.6.3 CUTOUT FILING

Above we mentioned that you could spray on a beard. The Cutout option, allows you to do the following:

- Select an area of the screen using the Cross-hairs.
- Save it to disk.
- Re-load and display this area anywhere on the screen.
- Re-load and superimpose this area anywhere on the screen.

Therefore, in the above example, you could load in a picture of a man with a beard. Cut out his beard and Save it, and then re-Load and Paste the beard on top of your face using the superimposition option.

Saving Cutouts

- Click the FILING Icon.
- Click the CUTOUT label.
- Insert your Cutout disk and press < EXECUTE >.
- Click the correct drive label.
- Click the SAVE label.



Figure 15 Selecting Cutout Area with Cross-hairs

Use the Cross-hairs to select the area you wish to Save. Press < EXECUTE > to select one corner and press < MOVE > to select the other. (The corners may be selected in any order, i.e. bottom right then top left).

PLEASE NOTE:

You will notice that the X-axis movement of the Cross-hairs is limited to 8 pixel accuracy. This is for technical reasons. (Well known programmer's excuse). We don't think it will pose too much of a problem. You will just have to Save an area a little larger than what you wish to Save.

Enter the filename and press < RETURN >.

Your cutouts can be any size, but no larger than the canvas area of the screen.

Loading Cutouts

Click the FILING Icon.

Click the CUTOUT label.

Insert your Cutout disk and press < EXECUTE >.

Click the correct drive label.

Click the LOAD label.

Cutout Ghosting

You will then be given the option to turn on the superimposition routine. Selecting 'GHOST' means that when the cutout is Pasted that only the black areas will appear. On the other hand, selecting WHITE will only show up the white areas. (GHOST must still be selected if you select WHITE). So, what good is ghosting? There will not be a rectangular "shadow" around the cutout when it appears on the screen. Therefore your chin would not be erased when adding a beard. Try it using some of the doodles you did earlier. That will help explain the results that are obtained.

You don't have to use GHOSTing at all, just click "Load" if you wish.

After entering the filename a box will appear on the screen that is the size of the cutout you are about to Paste. Position the box and press < EXECUTE > to paste the cutout.

You may paste the cutout as many times as you wish. Press < CANCEL > to abort.

Cataloging a Cutout Disk

If you click the catalogue Label, only Cutout files on the selected disk will be shown, even if you have mixed Cutouts and other file types.

Some Ideas for Cutouts

- Creating newspaper Pages.
- Operating on yourself or a friend.
- Loading in an image or letterhead/disk label/cassette label/eprom label/car sticker/With Compliments slip/Business Card that you need to use repeatedly. Creating interesting effects. (Using GHOSTing).
- etc ...

We have supplied one or two cutouts on the font disk. You may like to load them in. Supplied cutouts will vary, hence we suggest you catalogue the font disk to find out the filenames.

Soon to be released is a disk containing many high quality cutouts for you to use in your work. They will include logo's, architects symbols and the like.

That concludes this section on the Processor Filing options.

6.7 PASTING

There are five major paste options, of which all should help you produce some very imaginative and professional work.

Have some artwork ready so that you have something to Paste with.

We advise that when trying out these facilities for the first time, that some of your less precious artwork is used. Some "slight" unintentional changes will occur to your work due to the (inevitable) teething problems that you will have while experimenting.

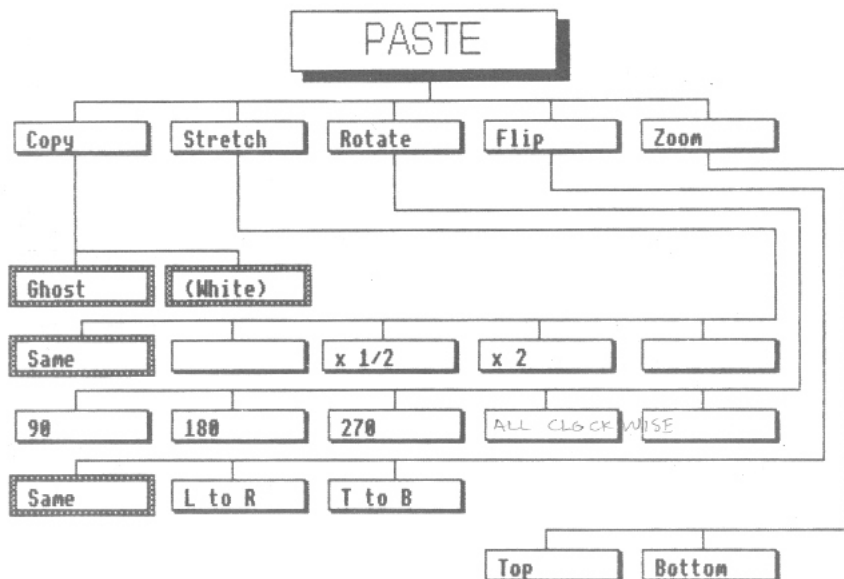


Figure 16 PASTE MENU

6.7.1 COPYING

The Copy option allows you to select a rectangular area of the screen and place it anywhere else on the screen. (This is the equivalent of cutting out part of a piece of paper).

- Click the PASTE icon.
- Click the COPY label.

As with Cutouts, you can use Ghosting to allow superimposition. We will ignore Ghosting for the moment.

Position the cross-hairs at one corner of the area to be copied and press < EXECUTE >.

Position the cross-hairs at the other corner and press < MOVE >.

We shall call the area you have selected the 'original' area.

A box the size of the original area will appear. We will call this box a 'hover box', as it can be moved around the screen and appears to hover.

Position the hover box to your taste.

Press < EXECUTE >, and the original area will be copied into the new area.

You can do this as many times as you wish.

Press < CANCEL > to abort.

If you copy into the original area you will of course over-write it and all future copies will be corrupted! If you want to get around this problem, use Cutouts as they can be placed on top of each other. This is because they are copied from a disk file and not an area of the screen.

Another use for copying is of course, to rubout areas of the screen. You can use COPY to define yourself an eraser which can then be moved around the screen pressing < EXECUTE > to rubout.

PLEASE NOTE:

We shall now refer to the process of positioning the hover box and pressing < EXECUTE > as 'PASTING'.

< CANCEL > can be pressed during Pasting.

COPY WITH GHOSTING

Click the GHOST label.

Copy an area of your artwork onto another part of your artwork.

You will notice that the new area does not have a white border around it! This is because only the black areas have been copied.

If you click the WHITE label, then only white areas will be copied. (The GHOST label must also be clicked). This will only be used with a black background.

See Figure 17 for an example of what can be done using Ghosting. The Space ships were all copied from one original. WHITE GHOSTING was used to position the ships in front of the planet, without the -area around the ship being erased.

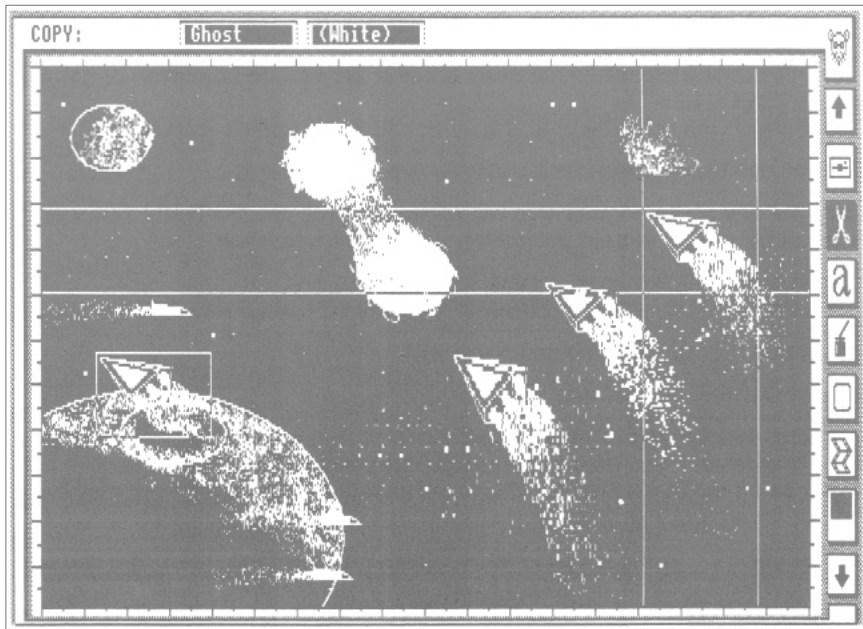


Figure 17 Ghosting in Action

Practice will help explain Ghosting if you are unsure of the technicalities. What if SHADOW is selected?

If the SHADOW option in GOODIES is selected, the word COPY will change to MOVE. Please see section 6.12.6 for a full description of the SHADOW option.

Remember SHADOW also effects ROTATE and FLIP.

REMEMBER!

Press < CANCEL > if you make a mistake, or are unsure of what you are doing.

6.7.2 STRETCHING

This option allows a rectangular area of the screen to be enlarged or shrunk.

Click the PASTE icon.

Click the STRETCH label.

Select the original area using < EXECUTE > and < MOVE > .

PLEASE NOTE:

It is only possible to Stretch right from the left edge and down from the top edge. Use COPY to re-position the original area if this poses a problem.

You must then select another point which is where the original area is to be stretched into.

Press < EXECUTE > and the new enlarged or reduced area will appear.

As you have noticed, your original area is not as it was. Fortunately we can get round this problem.

Press < CANCEL > and re-click the STRETCH label.

Click the SAME label.

Now re-select an original area using < EXECUTE > and < MOVE > .

Select a new area (not over the original area) using < EXECUTE > and < MOVE > . Make this area a strange size.

Your original area will be squashed and stretched into the new area. (As you can see, this allows you to stretch without affecting the original area).



Figure 18 Stretching a Cutout

INTERFERENCE PATTERNS

Sometimes, due to the asymmetrical resolution of the screen, some 'interference' patterns will appear while using the STRETCH option. These are normally only noticed with digitized or very carefully drawn pictures.

Hence the x½ scale and x2 scale options. If the x½ scale label is clicked before selecting the original area then the original area will be reduced to half size. If the x2 scale label is clicked then the original area will be enlarged by a factor of 2. The original area will be overwritten in both circumstances. SAME has no effect.

PLEASE NOTE:

From now onwards, we shall refer to selecting a rectangular area of the screen as 'PULLING'.

For example the instruction:-

Select the original area using < EXECUTE > and < MOVE >

will now be written as:-

PULL the original area.

(The < EXECUTE > and < MOVE > keys are used to avoid pressing the same key twice by mistake).

When pulling a box, you can press < CANCEL > at any time to abort.

6.7.3 ROTATING

This option works a little like COPY, but the new area is rotated through an angle of your choice. Ghosting is not available.

Click the PASTE icon.

Click the ROTATE label.

Click the angle of your choice.

Pull the original area.

The hover box will appear rotated through the selected angle.

Position the hover box and Paste it.

As with Copy, you may Paste as many times as you wish, but do not overwrite the original area - unless you want to!

INTERFERENCE PATTERNS

As with Stretching, strange results will be obtained if a detailed area is rotated through 90 degrees.

If the original area is symmetrical then this will not occur. For example, an area obtained by using the supplied AMX Art patterns, which are all symmetrical, will not suffer from interference patterns. Pictures loaded from AMX Art will not be affected either, as mode 4 pictures are of symmetrical resolution.

We advise that you experiment to get the hang of the results obtained.

Rotating large text is great fun, and very useful.

6.7.4 FLIPPING

Flipping allows an area of the screen to be either switched from left to right or turned upside-down.

- Click the PASTE icon.

- Click the FLIP label.

- Click either L to A for Left to Right or T to B for Top to Bottom.

- Pull the original area.

It will instantly FLIP.

- Click the SAME label and you will then be able to Paste the area to be flipped. Once Pasted, it will Flip on its own. Try it!

6.7.5 ZOOMING

This final PASTE option is the equivalent of looking through a microscope at the screen and being able to actually turn on and off the tiny dots that make up the image.

In fact all that you are doing is being given access to the individual PIXELS that make up the computer display. They are so small at this resolution that having to plot each one using the SPRAY option would be a pain in the retina.

- Click the PASTE icon.

- Click the ZOOM label.

- Click either the TOP or BOTTOM label depending on where you wish the ZOOM Window to appear.

In the very centre of the screen there will be a small box shaped cursor.

Move this around while pressing < MOVE > .

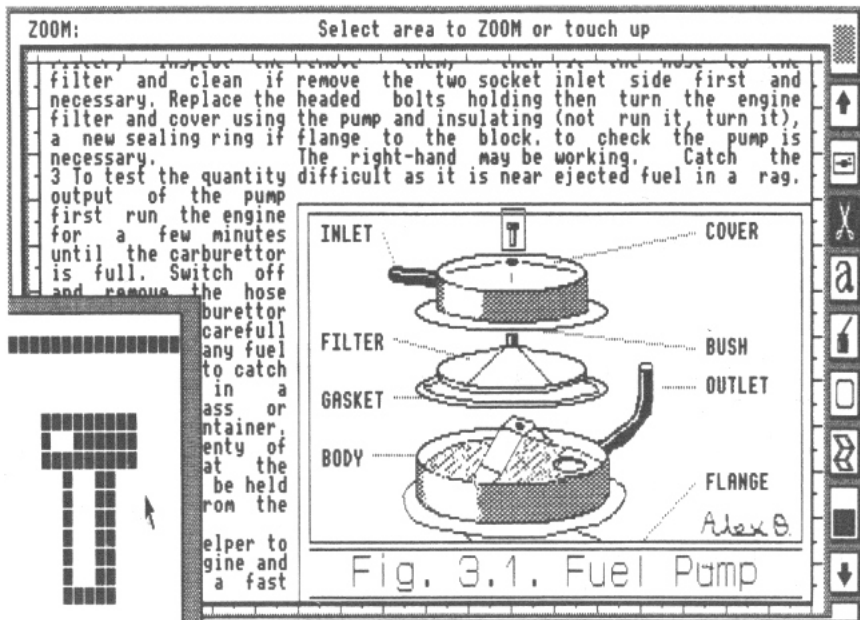


Figure 19 ZOOMING to add detail

You will notice that the area inside the Zoom Window will show an enlarged view of the area inside the small cursor.

Release < MOVE > and move the pointer over the Zoom Window. Press < EXECUTE > and the Pixels will change state,

i.e. if they were black they will go white and vice-versa.

Look inside the small cursor and you will see the tiny pixels changing state.

It is possible to 'drag' the zoom cursor around the screen by pressing < MOVE > while the pointer is INSIDE the Zoom Window at the same time as moving the mouse.

Zoom Blind Spot

There is an area in the centre left of the screen which cannot be accessed using the ZOOM. This problem can be solved by scrolling the Page and therefore moving the area to be worked on out of the blind spot.

The area magnified is 16 by 16 pixels. Therefore you can zoom on characters or patterns to see how they are defined.

Other uses include touching up fine artwork, repairing 'holes', modifying text characters, checking gap sizes, removing those unwanted spots from your digitized picture etc ...

PLEASE NOTE:

Holding down < EXECUTE > in the Zoom Window will allow quick 'inversion' of the pixels. This will make altering the large areas much quicker. Slowly move the pointer across the Zoom Window while holding down < EXECUTE > to get the hang of this. If the first pixel inverted was changed from white to black, then all further pixels will be changed from white to black, until < EXECUTE > is released. On the other hand, if the first pixel inverted was changed from black to white, then all further pixels will change from black to white. Try it!

That concludes the section on Pasting.

4.8 TEXT



Figure 20 TEXT MENU

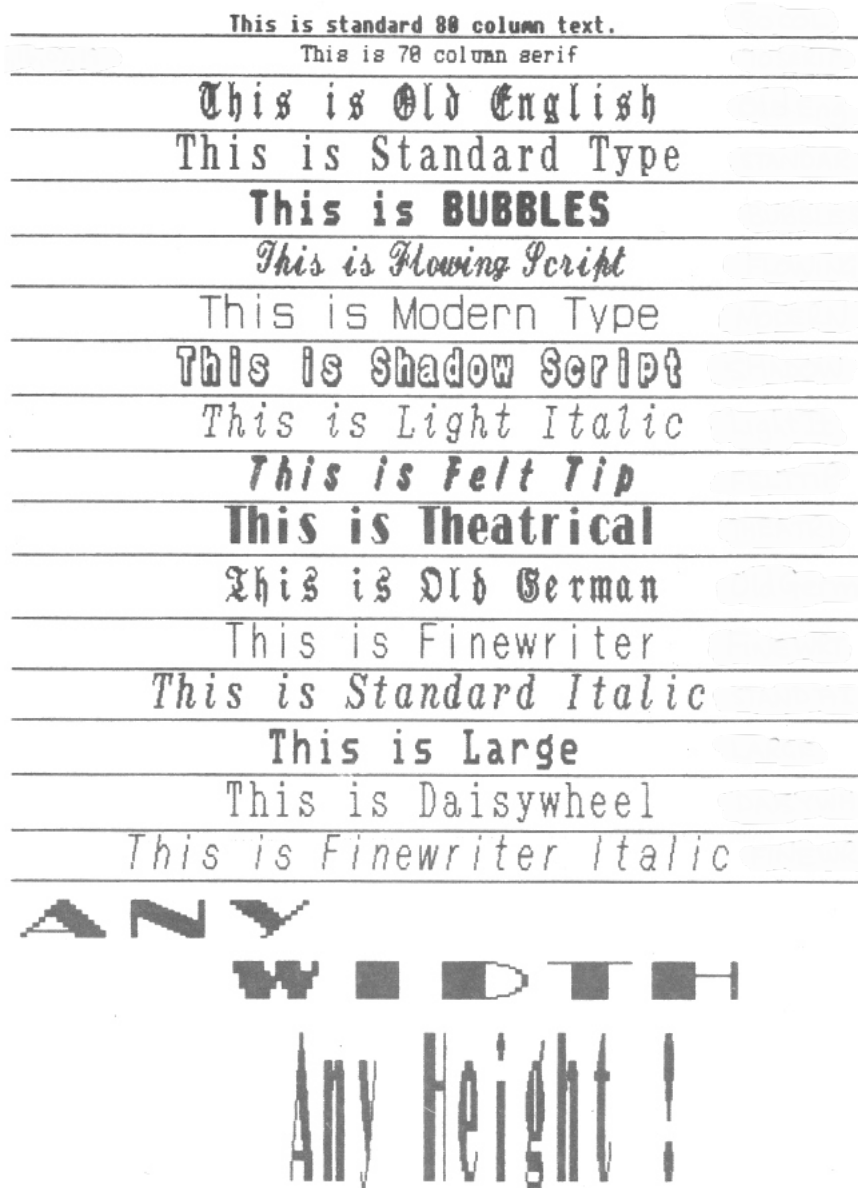


Figure 21 The Supplied Fonts

The Text options are the most complex of AMX Pagemakers' facilities, and as far as we know, they are world firsts. We suggest that you follow the worked examples CAREFULLY so that you become familiar with the idiosyncrasies of the Processor typesetting system. Provided the examples are followed, no problems should occur and anyone should be able to typeset.

With all the options, you can either use standard 80 column (mode 0) characters, or a font of your choice. The default setting is font. The Standard font is loaded in to the Font Store automatically when the Processor runs, but you may load in another font at any time.

THE FONT STORE WILL BE ERASED WHEN A PRINTER DUMP IS DONE AND SO YOU WILL HAVE TO RE-LOAD THE FONT YOU WERE USING AFTER HAVING DONE A DUMP.

Click the TEXT icon.
The text options will appear.
Click the FORMAT label.

6.8.1 TEXT FORMATTING

This allows you to control how the text is output to the screen. If a Window is defined, then the text will be formatted inside the Window, with the right hand side of the Window acting as the right hand margin. The formatting options affect ALL text options.

PLEASE NOTE:

The computer assumes that the LEFT HAND MARGIN is wherever you first positioned the cursor, NOT the left of the screen or Window!

Centre

This will be used for headings etc.

Click the TEXT icon.
Click the FORMAT label.
Click the CENTRE label. Press < CANCEL >.
Click the KEYBOARD label.
Position the cursor at the far left of the screen - on the canvas!
Press < EXECUTE >.
Type 'The Heading' and press < RETURN >.

The heading will be centred between the left and right margin fully automatically. When typing large quantities of text, or loading in text files, each line will be centred. Very useful for Posters, Wedding Invitations, Change of Address cards, etc.

Justify

This is the default setting, and will be the one you use the most. When typing or loading text, it will automatically be padded so that the right hand margin is not ragged. This is done by inserting padding spaces between the words to space them out.

Justification also prevents words from 'splitting' at the RHS margin. If a word is longer than the line, it will obviously split despite the format setting.

If the 'u-Justify' label is selected from the GOODIES menu (Section 6.12), then individual words will be 'stretched' to fit in the required space without leaving unpleasant gaps between words.

Users may be interested to know that 'real' newspapers are typeset using this facility, look carefully at the words on a line. Notice how they have been stretched very slightly to fit within the column width.

This facility may not appeal to everyone, hence it has been implemented as an option. Its default setting is OFF. When Micro-Justification is used with very narrow columns some words will be stretched too far. Therefore we do not advise using this option unless your columns are of reasonable width. Experiment, no harm can be done!

R. Right (Ragged Right)

This setting will not justify text when it reaches the RHS margin, but will still prevent words from splitting.

Literal

This means what it says, whatever you type will NOT be formatted in any way, but appear exactly how you type it.

i.e. No justification.
No centring.
Words WILL split at the RHS margin.

Font

With this label highlighted, all text output will be with the font which is in the font store. If the label is de-selected, then all text output will be standard 80 column. The default setting is FONT selected.

TECHNICAL NOTE:

The 80 column mode uses standard Mode O characters, but only 70 columns are available with Pagemaker, (unless you compress the text by adjusting the spacing).

BUT, we have also supplied the standard mode O character set as a font file. It is called '80 COL' You can load this into the DEFINER where each character can be reduced/enlarged in size or modified to produce your own miniature typeface. It is possible to reduce each character by one pixel in width and adjust the spacing so that you can get OVER 80 LEGIBLE characters on a line!

That completes the section on Text Formatting.

6.8.2 CHARACTER SIZING AND SPACING

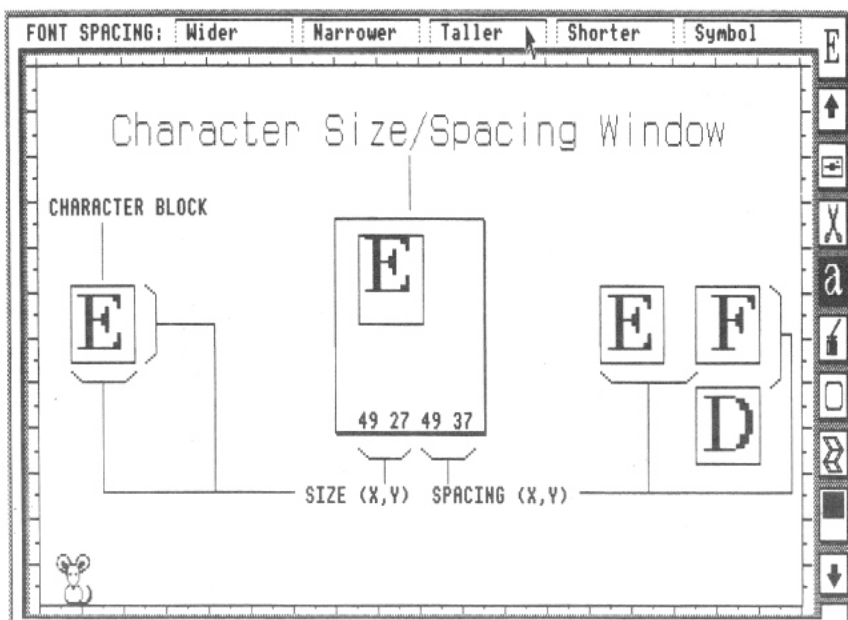


Figure 22 Character Size and Spacing Adjustment

High Quality Miniature Typeface

On the font disk is a special font for producing professional looking 70 column text. It is based on the original BBC Micro mode O character set, but was modified using the Definer to include 'serifs' which make the characters far more attractive. This font is called '70SERIF'. When loaded, remember to adjust the spacing for 8,8. See Section 6.8.2.

It is not advisable to adjust the spacing of '70SERIF' to less than 8,8 otherwise the characters will be far too close together which is not very attractive or professional looking.

Full control over individual character size and spacing is given to allow text composition in your own special style.

Font Character Size Control

Click the TEXT icon.
Click the FORMAT icon.
Check that the FONT label is highlighted.
Press < CANCEL >.
Click the SIZE label.

The size values (X,Y) of the character block are given in pixels in the bottom left of the window. The Spacing values are also given, in the bottom right of the window.

The default values for Size are..... 16,16
Minimum size..... 16,16
Maximum size..... 64,64

The default values for Spacing are. 16,16
Minimum Spacing..... 1,1
Maximum Spacing 88,70

PLEASE NOTE:

It is important to remember that the size refers to the imaginary Block that the character sits on, and NOT the actual dimensions of the character itself. This also applies to the Spacing. The Spacing value refers to the block size plus an offset to the right and below. This offset can be negative, allowing characters to overlap.

This system can be compared to the POINT system used on professional typesetters. Certain Size values will correspond to the POINT system (when printed out), so you may like to make a note of these sizes by measuring the characters after they have been printed using the A4 (LARGE) dump option.

To adjust the Size,

Click the appropriate adjustment labels.

The selected pattern is used as an indication of size (this is shown in the top right of the screen). This is so that if you load in a font/pattern file containing symbols, you can adjust their size and have an idea of what they will look like enlarged for use with the Symbol Positioning facility mentioned later on. It is best to use a capital N when adjusting Size and Spacing as the angled cross-bar on the N helps give an idea as to which Size value looks correct. Also, the N is a 'Full Size' character (unlike say, an l), and this will be useful for adjusting spacing.

To adjust the Spacing,

- Click the SPACING label.
- Click the appropriate adjustment labels,
- Press < CANCEL > to return to Size adjustment.

SYMBOL POSITIONING

The SYMBOL option allows whichever character/pattern that is shown in the Selected Pattern window to be positioned on the screen to pixel accuracy. It is unlikely that you will use this facility with the normal font characters, but it will be invaluable for circuit layouts, designing, flow charts, etc ...

The symbol will be displayed in the size it appears in the Size Adjustment Window. Spacing values have no effect.

- Click the GRAPHICS icon.
- Click the PATTERNS label.
- Click the SELECT label.
- Select a pattern or font store character - this will be used as our 'symbol'.
- Press < CANCEL > a few times.
- Click the TEXT icon
- Click the SIZE label.
- Adjust the size to your taste.
- Click the SPACING label.
- Click the SYMBOL label.

The symbol will appear in the centre of the screen, It can be moved around using the mouse.

- Press < EXECUTE > to 'fix it' onto the screen.

The symbol will appear in the colour selected using the QC Window.

GRIDLOCK WITH SYMBOLS

The Gridlock will be invaluable when doing diagrams as you will be able to line up the symbols.

Pressing < CANCEL > will abort the symbol positioning option.

80 Column Character Size Control.

This is done in the same way as for Font characters, but the parameters are different.

The default values for Size are 16,16
Minimum size 16,16
Maximum size 64,64

The default values for Spacing are 8,8

No matter what size a character, the text formatting options will all work as normal.

6.8.3 TEXT FILING

Click the TEXT icon.
Click the FILING label.

You will be prompted to select a drive and then the filing options will appear. There are no Save text options with the Processor.

Loading a font or pattern file

This allows you to load in a font/pattern file from the supplied font disk. Alternatively, you can load in a file that you designed using the Definer module.

PLEASE NOTE:

The Standard font is loaded in when the Processor is first run, but will be overwritten when a new font/pattern file is loaded in. Only one file can be stored at once. The Standard font is on the System Disk, so you will not have to insert the font disk if you wish to re-load it in.

You can catalogue a font disk using the catalogue label. Only font files will be shown, so if you have mixed fonts with other files, there will be no confusion over which is which.

OK, let's load a font:

Insert font disk.
Click the TEXT icon.
Click the FILE label.
Click the correct drive label.
Click the FONT label.
Type 'FELTTIP' and press < RETURN >.

Once loaded, you will be shown half of the typeface in the centre of the screen. Press < MOVE> to see the other half.

'FELTTIP' will remain in the font store until you load another font or do a printer dump - which erases the font. ('FELTTIP' was chosen as an example). Loading patterns is identical to loading fonts.

What about patterns?

As mentioned earlier, whatever is designed with the Definer, can be loaded into the Processor and can be used for typing, painting, spraying or symbol positioning. If you load in a pattern file and start typing, the patterns will appear where characters would normally! We have supplied just one pattern file.

It is called 'Patterns' and is on the Font disk.

The patterns are the same as the patterns supplied with AMX Art. They are always available for Spraying and Painting (they are in one of the ROMs), but must be loaded off the font disk in the unlikely event that you wish to type using them! The reason we have supplied the patterns on disk, is that they can be loaded into the Definer for modification. We have added an extra pattern on the disk file. It is a grey effect pattern which takes advantage of the high resolution available with the Page maker.

Loading WORDWISE & VIEW files

This option is revolutionary in itself. With AMX Pagemaker you can load in WORDWISE & VIEW files using all the text formatting options in either a font of your choice, or standard 80 column characters.

It is better to edit large quantities of text using Wordwise or View, rather than using the Processor as they have far more powerful editing facilities. Check your text BEFORE loading it into the Processor as correcting mistakes is difficult afterwards.

ALL control codes are stripped from text files. Only CARRIAGE RETURN codes are accepted.

We cannot guarantee that certain control codes will be stripped. If they are missed, a character sized 'splodge' will probably appear. This is nothing to worry about and can be removed after the text has loaded.

The text catalogue will show ALL files on the disk. There is no discrimination. We do not advise attempting to load anything other than text files. There is no harm in attempting to load files from other wordprocessors, but make sure your Page is saved in case something goes wrong!

PLEASE NOTE:

It is very important to use the GRIDLOCK whenever using text options. Therefore the gridlock is turned on automatically when the TEXT icon is clicked. The value depends on what you set using GOODIES. The gridlock can be turned off if you wish, but we do not advise this as cursor re-positioning will be difficult.

Try this:-

- Insert the font disk.
- Click the TEXT icon.
- Click the FORMAT label and check Justification is on.
- Press < CANCEL > .
- Click the FILING icon.
- Select a drive.
- Click the FONT label.
- Type 'Flowing' and press < RETURN >.
- Press < CANCEL >.
- Click the SIZE label.
- Check for 16,16.
- Click the SPACING label.
- Adjust the Spacing for 12,16.
- Press < CANCEL > twice.
- Click the FILE label.
- Insert your Text disk.
- Click the correct drive label.
- Click the relevant Wordprocessor label.
- Enter the filename of one of your wordprocessor files and press < RETURN >.
- Position the cursor at the top left of the screen and press < EXECUTE >.

6.8.4 PRODUCING TEXT COLUMN

Whenever the bottom of a Window or Screen is reached, you will be prompted to press < EXECUTE > or < CANCEL > .

If < EXECUTE > is pressed the text will continue loading after the Page has scrolled. If a window was defined, it will be removed, but the text will still be formatted inside an 'invisible' window.

If < CANCEL > is pressed or the bottom of a Page has been reached, then a menu of options will appear in the label/message window. These are the only options available while loading text. IT IS NOT POSSIBLE TO USE ANY OF THE ICONS DOWN THE RHS OF THE SCREEN.

4 Fuel Pump - Maintenance

1 Refer to Fig 3.1.

Although it rarely goes wrong the fuel pump can be the unsuspected reason for poor starting and irregular running. If the filter is choked, the diaphragm damaged or the valves leaking, the pump may deliver enough petrol to keep the engine running, but not enough for a cold start or running under a heavy load. It is easy to test the pump and to clean or replace the filter, but beyond that no repair may be done as the unit is sealed on manufacture and must be renewed if faulty.

2 Undo the small screw on the top cover and lift off the cover and filter, inspect the filter and clean if necessary. Replace the filter and cover using a new sealing ring if necessary.

3 To test the quantity output of the pump first run the engine for a few minutes until the carburettor is full. Switch off and remove the hose from the carburettor intake. Be careful not to spill any fuel and arrange to catch the fuel in a measuring glass or similar container. There is plenty of hose so that the container may be held well away from the engine. Now get a helper to start the engine and run it at a fast

tick-over for 30 seconds. There will be enough petrol in the carburettor bowl for this. Stop the engine and measure the amount of petrol in the container. There should be at least 200 ccs. There is not much point in pressure testing the pump for it cannot be repaired, but if it wished to confirm the quantity test it is possible to fit a tee-piece in the supply hose to the carburettor and fit a pressure gauge. The pressure at 3,500 rpm should be between 2.5 and 3.5 lbs per sq. in. (0.2 to 0.25 kg/s. cm). Outside these limits the pump should be renewed.

4 To remove the pump, clip the hoses and remove them, then remove the two socket headed bolts holding the pump and insulating flange to the block. The right-hand may be difficult as it is near

to the oil filter and the filter may have to be removed to get at it if you do not have a suitable key.

5 Replacement pumps may be a new pattern with a heat insulating flange of different thickness from the old pump. The new type pump measures 1.8 inches (47 mm) from the tip of the operating lever to the body flange, the old one is 5mm (0.2 in.) shorter. The insulating flange is thicker for the new pump and longer screws, 8mm x 30 instead of 8 mm x 22, are required. The new pump is said to give better hot starting.

6 When replacing the pump always secure the hoses to the pump with clips. It is best to fit the hose to the inlet side first and then turn the engine (not run it, turn it), to check the pump is working. Catch the ejected fuel in a rag.

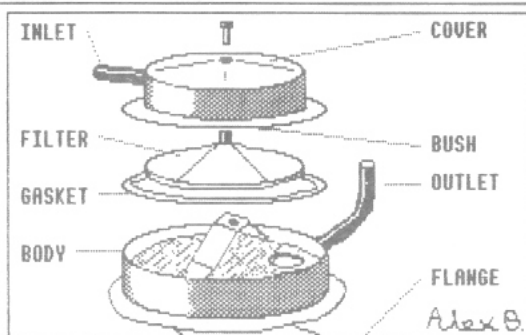


Fig. 3.1. Fuel Pump

Figure 23 Text Formatted Around an Illustration

The Column Options

The first 2 options allow you to scroll the Page UP or DOWN. The Page can be scrolled to expose the area of the Page where you want the text to continue loading.

The next option, WINDOW allows you to pull a window where you can CONTINUE loading the text. If no Window is pulled, then the text will be justified up to the RHS of the screen. The window will be invaluable for formatting text around an illustration or photograph.

The CONTINUE option will prompt you to re-position the cursor, from which, the text will continue loading.

The ABORT option will abort the TEXT loading process. You can then re-position the text cursor and type manually if you wish. Press < CANCEL > to abort altogether.

TECHNICAL NOTE:

As the COLUMN options will only appear BEFORE the file has been fully loaded and closed the ABORT label must be clicked to close the text file.

Aborting while loading text

If < CANCEL > is pressed while the text is actually being loaded onto the screen the file will be closed and you will be prompted to position the cursor from which you can then continue typing using the keyboard.

REMEMBER, USE THE GRIDLOCK ALL THE TIME.

6.8.5 USING THE KEYBOARD

As well as being able to load in text files, you can type directly on the screen. The text is formatted depending on the FORMAT settings. You can type using either standard 80 column characters or fonts. If you have loaded a pattern file into the font store, then patterns will appear on the screen when you type!

- Click the GOODIES icon.
- Click the GRIDLOCK label.
- Set the GRIDLOCK to 8.8.
- Click the TEXT icon.
- Click the KEYBOARD label.
- Position the cursor to your choice and press < EXECUTE >.
- Start typing.

Notice that the text is formatted fully automatically. When the bottom of a Window, Screen or Page is reached, the same options will be available as when loading in text files. See section 6.8.4.

You can only delete the characters on the last line you typed. Alternatively, you may press <ESCAPE> and re-position the cursor. Pressing <CANCEL > while typing will delete the last line typed.

Depending on the font used, some of the characters will not appear, or will not correspond to what is on the key when pressed. The following can explain this;

The typeface is incomplete.

You have defined your characters in the wrong position.

You have loaded in a pattern file.

You have done a printer dump.

Pixel resolution typesetting

To position characters to pixel resolution turn the Gridlock off and proceed as normal. Alternatively use the SYMBOL option.

Deleting Text

You will have noticed that when you type or load in text files, that the text is not formatted until you either press <RETURN > or the RHS margin is reached. It is while the text is in this 'un-formatted' state that it can be deleted using the <DELETE> key. Once type is SET, it CANNOT be deleted using the <DELETE> key.

These are the occasions when the type will be set, please remember them.

TYPE IS SET WHEN:-

- i) The RHS margin is reached.
- ii) The <RETURN > key is pressed.

Deleting the SET TYPE.

If you didn't use the Gridlock, then this first method will be near impossible!

Set the Gridlock to 4,4 or 8,8.

(Depending on the size of the characters you are deleting).

Click the very top right of the screen.

(The Quick Click window will appear.)

Set the colour to the background colour.

Click the TEXT icon.

Click the FORMAT label.

Set the format to that you used when typing the text you wish to delete.

Set the character size to that of the text you wish to delete.

Select KEYBOARD.

Position the cursor and press <EXECUTE >.

Type over the text and it will be deleted.

This method will not work if either Centring or Micro-Justification were used to SET the type.

You can press <ESCAPE> or < CANCEL > when doing this after having overwritten the last character on the line without pressing < RETURN >. This method eliminates the need to change the colour of the text.

There are many other ways of deleting set text, for example:-

Spraying, Zooming, Copying, Painting ... Use your imagination!

Changing fonts etc.

Provided the Gridlock is used, you can change any of the Processor's options and then continue typing. Therefore, you could change fonts to produce a Poster or Newspaper page.

Painting characters.

Provided they are large enough, it is possible to use the GRAPHICS mode PAINT option to shade individual characters. This looks very nice. The other more effective option that allows very small characters to be shaded is to use SPRAY with GHOSTING, see Section 6.9.4

TECHNICAL NOTE:

Text is EOR'd onto the screen. Only when a CARRIAGE RETURN or LINEFEED are done is the text then EOR'd OFF the screen and then SET using the selected colour and FORMAT option. Hence, if <ESCAPE> is pressed before a CR or LF is done, the text is left in its EOR'd and un-formatted state.

GOT THAT?

6.8.6 VIEWING THE TYPEFACE

Click the TEXT icon.

Clicking the SHOWFONT label will allow you to see the whole Typeface. It is shown in two parts.

Press < MOVE > to see the second half. That concludes the section on TEXT.

If you have found this section hard to grasp, please experiment - no harm can be done!

6.9 GRAPHICS

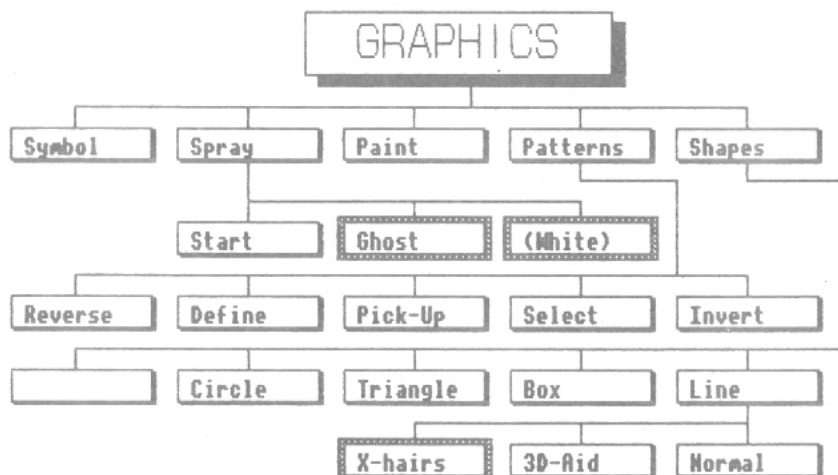


Figure 24 GARCHICS MENU

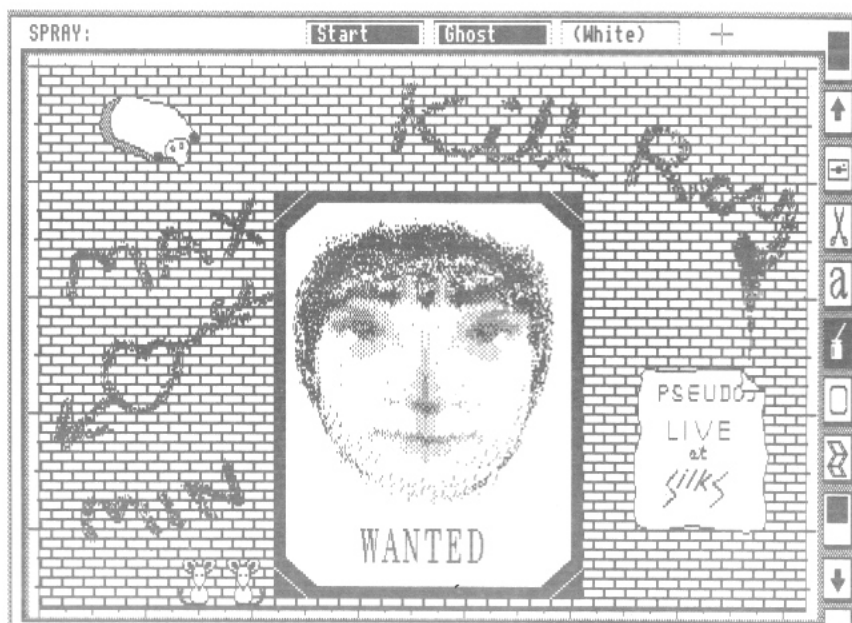


Figure 25 Think of the Possibilities

As well as some very powerful typesetting facilities, we have incorporated imaginative graphics facilities to help you illustrate your text.

On the other hand artists may like to use Pagemaker for artwork on its own. The high resolution available in Mode O means that you can produce very detailed artwork, sometimes appearing as if it was created using a conventional drawing pencil or charcoal stick.

Digitized pictures can be 'doctored' to produce some fascinating results.

The man's face was created from a girl's face using .the Paste and Spray options.

6.9.1 SHAPES

Click the GRAPHICS icon.
Click the SHAPES label.

Drawing shapes is very simple. They all use the < EXECUTE > and < MOVE > buttons to prevent any problems with pressing the same button twice.

Use the Quick Click Window to alter how shapes are drawn, e.g. Solid, Dotted, Inverted, etc.

See section 6.3.5 for a description of what the QC Window allows you to do.

Line Drawing

Click the LINE label.
Click the NORMAL label.

Use < MOVE > to set the point the line is to be drawn from. Press < EXECUTE > to draw the line.

Pressing < MOVE > allows a new point to be set.

THE 3D-AID

Despite its extreme simplicity, this option allows you to do complex 3D perspective drawings with full hidden line removal. It was well received in the press when invented a few years ago and should help with isometric drawings as well as logo's that involve 3D text.

As a worked example we will assume you wish to draw a cube with all its corners disappearing to the vanishing point.

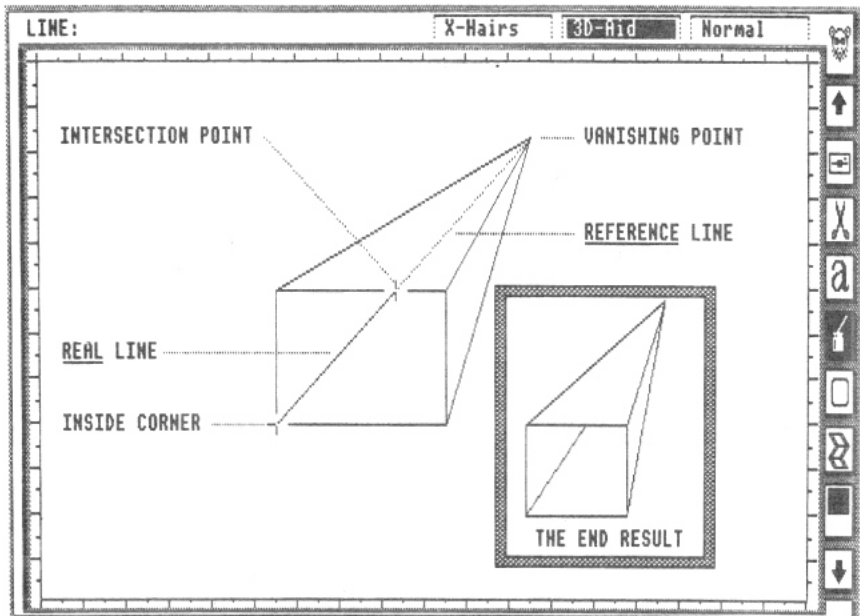


Figure 26 3D-AID Diagrammatical Explanation

Turn the GRIDLOCK on.
 Draw a box.
 Click the LINE label.
 Draw the 3 outer lines to a vanishing point of your choice.
 Press < CANCEL >.
 Click the 3D-AID Label

Draw a line from the inner corner to the vanishing point. This we shall call the 'reference line'.

Now, draw another line between the corner and the point where the previous line intersects the edge of the box. This is the 'Real' Line. (It may be necessary to turn off the Gridlock when positioning the 'Real' line).

The reference line will disappear leaving the Real line. Press < CANCEL > to abort the line drawing.

If you wish, the Cross-hairs can be used by clicking the X-HAIR label. This will help you line up points but they do tend to 'get in the way' as you will see.

Box Drawing

Use < EXECUTE > to set one corner.

Use < MOVE > to draw the box.

You can then re-draw the box as many times as you wish.

Press < CANCEL > once to re-pull a box, or twice to abort box drawing altogether.

Triangle Drawing

This is the same as line drawing, except that there is a third point which is set by pressing < EXECUTE >. It is possible to draw as many triangles the same size as you wish.

Circle/Ellipse Drawing

Circles and Ellipses are drawn inside boxes to make life easy.

Pull a box and a circle or ellipse will appear depending on the ratios of the sides of the box. If you wish to undraw the circle/ellipse, press < CANCEL >.

Press < EXECUTE > to fix the circle/ellipse.

Once a circle/ellipse is fixed, it cannot be undrawn. As with box drawing you can draw as many circles/ellipses the same size as you wish.

Press < CANCEL > to abort.

When a printer dump is done, the on screen image is compressed slightly. Therefore when drawing CIRCLES, make them slightly higher than wide.

To accurately do this use the scale around the edge of the screen. For example, if your circle is 2 inches by 2 inches on the screen, despite looking elliptical, it will be a circle when dumped. Remember, it will be smaller if you use the SMALL dump option, but the ratio will still be correct.!

6.9.2 PATTERNS

The pattern facilities are very powerful. They use newly developed algorithms which allow an area or shape to be painted in ANY pattern that will fit into a 16 by 16 pixel area. Thus you can paint or spray using Font characters!

NOTE TO AMX ART USERS:

There are 32 patterns built into the Processor. They are the same as those available with AMX Art. Therefore if an AMX Art picture is loaded into the Processor, it can be modified using the Spray and Paint options available from within the Processor. These patterns are always available, but are also on the font disk so they can be loaded into the Definer Module for modification, then loaded in as a font.

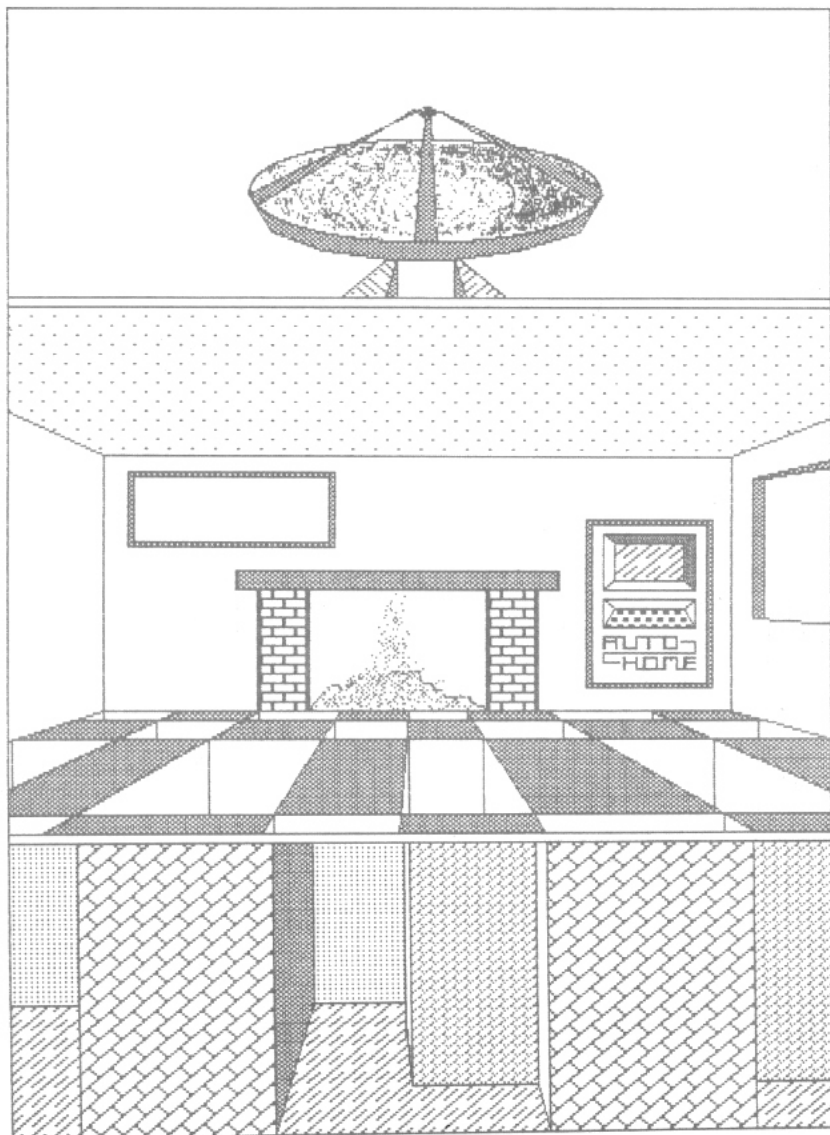


Figure 27 Future Traps

Selecting a pattern from the font store

As well as the standard AMX Art patterns, there is the font file which can as mentioned earlier, consist of patterns or electronic symbols as well as a typeface. Remember, ANYTHING that is defined using the Definer Module can be loaded into the font store within the Processor.

- Click the GRAPHICS icon.
- Click the PATTERNS label.
- Click the SELECT label.

The AMX Art patterns will appear. You can select a pattern by clicking over the required pattern with the < EXECUTE > key.

Alternatively, press < MOVE > and half of the contents of the font store will appear. Press < MOVE > again to view the other half.

As above, you can select one of these by clicking over the required pattern/character with the < EXECUTE > key.

The pattern/character selected will appear at the top right of the screen in the 'Pattern Window', i.e. the default selected pattern is the AMX Pagemaker 'MAX Mouse' logo. The mouse will be lost once another pattern is selected.

The pattern selected can now be used for spraying or painting.

Defining a pattern from within the Processor

- Click the GRAPHICS icon.
- Click the PATTERN label.
- Click the DEFINE label.

A window similar to the one used when Zooming will appear. The last selected pattern will appear enlarged. You can modify the pattern using the < EXECUTE > key, in the same way as you would with the Zoom facility. You will see it change in the Pattern Window. If you want to start with a blank pattern, then select either black or white from the AMX Art pattern store.

There is no way of storing the pattern you have just defined. This facility is only there in case you have a flash of inspiration. Under normal circumstances you will load in your own pattern file. There is room for 91 patterns in EACH file so we don't think you will need worry about this! See Section 4 for instructions on how to define a character set or pattern file.

Picking up a pattern

So, you've loaded in a picture from someone else's portfolio and they have used a pattern you just can not resist ...

Click the GRAPHICS icon.

Click the PATTERNS label.

Click the PICK-UP label.

Position the small box cursor over the area you wish to use as a pattern.

Press < EXECUTE >.

The selected area will appear in the pattern window.

PLEASE NOTE:

You will sometimes notice that what appears in the Pattern Window does not correspond to what you 'picked up'. This is because of a special Pattern Alignment System that we have developed so that when you spray or paint, the pattern selected will merge with the copied pattern on the screen. Use will help explain this.

You can of course, pick-up part of a digitized picture, some incredible effects can be produced using spray and paint.

If you want to see what the pattern looks like enlarged, use the DEFINE PATTERN option.

As with the define pattern option, it is not possible to save your pattern, BUT you can use the CUTOUT option and Save a section of the pattern. When you wish to use it, re-load it and then use the PATTERN PICK-UP. This will work as we have taken the time to develop a special routine that automatically aligns patterns so that they will always merge when used on different pictures - even scrolling has no effect on the alignment.

Reversing the pattern

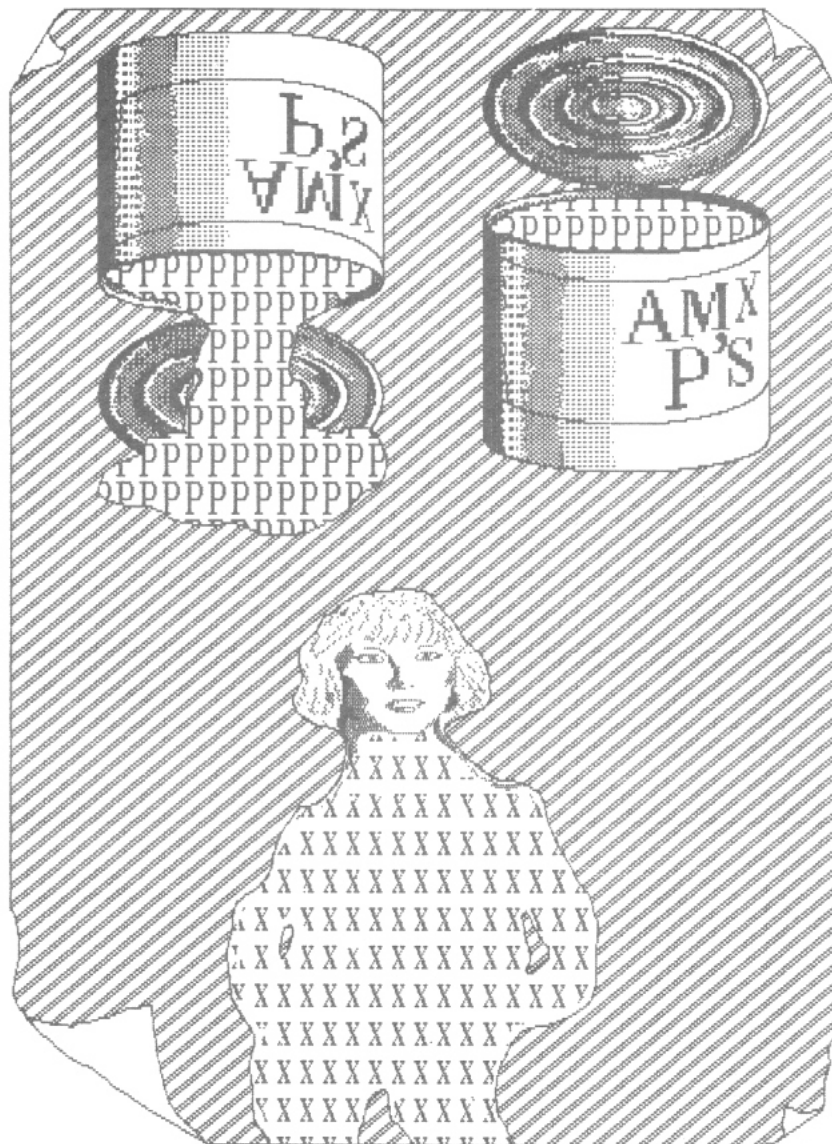
Click the REVERSE label and the selected pattern will be flipped from LEFT to RIGHT.

Ideal for that occasion when the pattern is the wrong way round.

Inverting the pattern

Click the INVERT label and the selected pattern will be inverted, i.e. black to white and vice versa.

Ideal for spraying over a black background.



Now you have grasped all the options available with pattern creation, you can now actually use them.

Draw a few shapes, or load in a Screen or Page with a picture on it.

- Click the GRAPHICS icon.

- Click the PAINT label.

- Position the cross-hairs over the area you wish to Paint and press < EXECUTE >.

The shape will be painted in the inverse of the background colour and then the pattern will appear over the top. This is done for technical reasons.

After a few seconds, an 'Is this OK?' prompt will appear. If you press < CANCEL > the area will 'drain' of paint. The prompt is there in case of a leak.

If you press < EXECUTE >, the painting will continue. There will be no more chances to drain the paint. But you can press < CANCEL > at any time to abort the painting. Experiment to get the hang of it.

When painting very complex shapes the painting will stop. If this occurs simply re-position the cross-hairs and continue by pressing < EXECUTE >.

Painting over other patterns can create new patterns, there are millions of combinations.

Figure 28 shows what can be done by painting using font characters. The Page was done by using LINE, CIRCLE, SPRAY, PAINT and SYMBOL options.

6.9.4 SPRAYING

All of the options available with spraying are selected using the Quick Click Window.

Normal Spraying

- Click the GRAPHICS icon.

- Click the SPRAY label.

- Click the START label.

Move the cursor around the screen.

The default spray setting is Large Paint brush spray.

If you have just started using the Processor, then you will be able to spray using the mouse logo that appears in the pattern window. Try it!

At any time you can click the QC Window Jo change the spray type.

There are three spray sizes and the ability to select Mist or Brush spray. Mist is a random spray that simulates the results obtained with a spray can. Brush is a 'solid' spray.

See section 6.3.5 for a description of the QC Window where control over the above facilities is explained.

Ghost Spraying

If when doctoring digitized pictures you use the spray, you will notice that the spray pattern will obliterate the area underneath, ruining the effect. For example, if you are spraying a beard, the chin will disappear because the white area of the spray 'erases' the area behind it. If GHOSTING is selected, only the black areas of the spray pattern will appear, therefore not obliterating what is underneath. WHITE GHOSTING is for use on white pictures with a black background.

The ghost options must be selected before clicking the START label.

Spraying (without GHOSTING!) can be used to erase mistakes.

Below is a worked example to show how easy it is to paint using a font character. This is an example only, of course you can use a font or pattern file of your choice.

- Load in a picture or draw some shapes.
- Click the TEXT icon.
- Click the FILE label
- Click the FONT label.
- Type 'Flowing', press < RETURN >.
- Click the GRAPHICS icon.
- Click the PATTERNS label.
- Click the SELECT label.
- Press < MOVE >.
- Click the required character. Click the PAINT label.
- Position the cross-hairs and press < EXECUTE >.

The shape will be painted in the font character.

6.9.5 SYMBOL POSITIONING

This is identical to the feature described in Section 6.8.2. It has been included under the GRAPHICS menu to speed things up if you are constantly selecting new patterns/symbols from the font store. This will be invaluable when doing circuit layouts, musical notation etc. If you are using the Electrical Symbols supplied within the AMX Art pattern file to design your own circuits, use the gridlock set to 8,8 as the components have all been designed so that all connections can be made using the LINE drawing option with the gridlock set to this value.

Where a connection is difficult to make, for example with transistors, use the ZOOM to make the connection.

Use the Pattern REVERSE option to flip the symbols left to right. This option saves having to define each symbol in a different orientation, therefore saving space in the font file.

That concludes the section on GRAPHICS.

6.10 WINDOWS



Figure 29 Future Traps

The WINDOW mode will be invaluable for both typesetting, and drawing pictures.

A WINDOW is a rectangular area of the screen where all your work will appear. The area outside the WINDOW will not be affected.

- Click the WINDOW icon.
- Click the DEFINE label.
- Pull a WINDOW.

The DEFINE label will light up and the windowed area will remain surrounded by fixed Cross-hairs.

6.10.1 USING GRAPHICS WITHIN WINDOWS

Click the GRAPHICS icon and do some spraying outside the window.

Nothing happens! Move the cursor towards the window while still holding down < EXECUTE >. As the cursor passes over the window the spray will appear.

As you can see, the spray is only visible inside the window. (Think of the WINDOW as a hole in a piece of card - like a stencil. You are spraying over the stencil).

ALL other GRAPHICS options are affected by the window. For example, when drawing a CIRCLE, you can position the cross-hairs outside the WINDOW, select a point, then position the cross-hairs inside the window, select the other point, and then only parts of the circle that are plotted inside the window will appear. Try it!

The cross-hairs around the window will remain on the screen forever, or until you turn the window off.

6.10.2 INVERTING THE WINDOW

Clicking the INVERT label will turn all white areas (inside the window) black and vice-versa. If a WINDOW is not defined then the whole screen will invert.

6.10.3 CLEARING THE WINDOW

Clicking the CLEAR label will clear the window, as above if a window is not defined, then the whole screen will be cleared. To avoid accidents, the area you decide to clear will be inverted first - to show you in case of an error, and then you will be given the option to change your mind.

Press < CANCEL > to abort or < EXECUTE > to clear.

6.10.4 TURNING THE WINDOW OFF

This is done by clicking the WINDOW label again. The cross-hairs will be removed from around the window area.

6.10.5 BORDERED WINDOW

If the BORDER label is clicked, then whenever a WINDOW is turned OFF, a border will be left around the edge of where the window was. This facility is provided for aesthetic reasons.

6.10.6 USING THE TEXT INSIDE A WINDOW

This is one of the most useful features of the Pagemaker system. It will prove very useful when laying out text, whether for newspapers, or technical reports. We will assume you have read the section on TEXT, but full instructions on what to do are given here, so you shouldn't get too confused.

With the fantastic AMX Mouse from Advanced Graphics, Incorporated. Memory System Ltd., communications with the computer is made much easier. Hence, at last a low cost type set for the writer. Icons and Labels. It is possible to load in Wordwise and View files which will be formatted as they appear on the screen, whether they are appearing as 80 column characters or a typeface of your choice! Very versatile Spraying, Painting and standard Shape drawing facilities are also supplied. Cut and Paste facilities allow professional composition of your work. You can Cut and Save any area of the screen, no matter what size. The cutout can then be re-loaded and super-imposed on top of what is already on the screen. Versatile Printer Dumps are supplied to allow you to produce a full A4 page, or AMV part of a Page. Join the publishing revolution! Yes folks, two lovely digitised females will make their first appearance at the show today in glorious 2 Dimensional form. Thanks to Peter Downs who supplied them, Peter (and his colleague Keith Swift) can digitise pictures (including your family snaps) using a digitizer connected to the BBC Micro. These pictures can then be loaded into the AMX Pagemaker Processor where all sorts of effects and alterations can be made. Just imagine the possibilities! 1. Refer to Fig 3.1. Although it rarely goes wrong the fuel pump can be the unsuspected reason for poor starting and irregular running. If the filter is choked, the diaphragm damaged or the valves leaking, the pump may deliver enough petrol to keep the engine running, but not enough for a cold start or running under a heavy load. It is easy to test the pump and to clean or replace the filter, but beyond that no repair may be done as the unit is sealed on manufacture and must be renewed if faulty. 2. Undo the small screw on the top cover and lift off the cover and filter, inspect the filter and clean if necessary. Replace the filter and cover using a new sealing ring if necessary. 3. To test the quantity output of the pump first run the engine for a few minutes until the carburettor is full. Switch off and remove the hose from the carburettor intake. Be careful not to spill any fuel and arrange to catch the fuel in a measuring glass or similar container. There is plenty of hose so that the container may be held well away from the engine. Now get a helper to start the engine and run it at a fast tick-over for 30 seconds. There will be enough petrol in the carburettor bowl for this. Stop the engine and measure the amount of petrol in the container. There should be at least 200 ccs. There is not much point in pressure testing the pump for it cannot be repaired, but if it
--

Figure 30 Using Text Inside a Window

Define a window approx 3 inches wide by 3 inches down. (Use the scale!!!) The size is not important, but the above size will be convenient as a demonstration of how TEXT is formatted inside a window.

- Click the TEXT icon.
- Click the FORMAT label.
- Click the JUSTIFY label (if not' already selected).
- Press < CANCEL >.
- Click the KEYBOARD label.
- Position the cursor at the top left of the window.
- Press < EXECUTE >.
- Start typing.

As you will notice, the text will be justified inside the window.

See Section 6.8.4 for details on what to do when the bottom of a Window is reached.

Experiment with different character sizes and spacings. We advise that standard 80 column characters are used in windows, as the large gaps left with the large FONT characters are not very attractive.

Wordwise and View files can be loaded inside a WINDOW. This is very useful and great fun to watch. If the bottom of a Window, Screen or Page is reached while loading a file, you will be able to continue. Watch for prompts at the top of the screen. Please refer to Section 6.8.4.

That concludes the section devoted to Windows.

6.11 PRINTER DUMPS

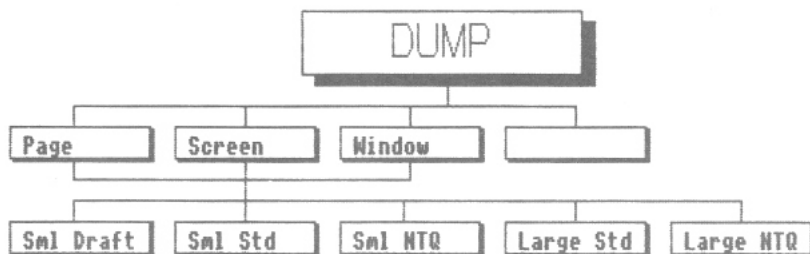


Figure 31 DUMP MENU

This is what Pagemaker is all about. If you don't have a printer, then don't worry, give your disks to a friend who does and get him to do your dumps or keep all your Page disks for the time when you do have a printer. It is well worth the wait.

Due to the difficulty we have of obtaining printers to write dumps, you may have discovered that none of the printers mentioned in the PRINTER SET UP menu are compatible with yours.

If your printer IS compatible then jump to Section 6.11.2.

6.11.1 PRINTER INCOMPATIBILITY

Don't worry. We are constantly writing dumps as new printers come on to the Market, if we can get hold of them! When the dumps become available, we will mention this in our adverts or elsewhere in the press and on Prestel, etc. Keep an eye open.

A disk with a selection of printer dumps for more printers will be available soon. It will cost very little and include some cutouts for you to Paste up and use in your own work.

The other option is to use the *COMMAND option in the GOODIES mode.

See Section 6.12.

This will allow you to call your own printer dump. Unfortunately an area no larger than a screen can be dumped, but you can of course keep scrolling the Page until you have dumped the whole Page. (This will take 2 and a bit screen dumps.) This is messy and will require the use of a pair of scissors and some tape to cut and stick the dumps together and make a Page. (Both the above items are available from your local antique dealer). The screen co-ordinates of a processor screen are:-

Bottom Left 48,32
Top Right 1198,924

IMPORTANT!

Whenever calling a printer dump from the GOODIES *COMMAND option, put a HASH (#) before whatever you type otherwise the *COMMAND window will remain in the centre of the screen and will come out on your dump!

i.e. #GDUMP 1 2 3 1

The hash tells the Processor to remove the *COMMAND window after you press < RETURN >.

It also produces a window to mask out the icons around the edge of the screen. You may try all the different supplied printer dumps to see if any of them give satisfactory results with your printer. No harm can be done to your printer.

Amx Times

WEDNESDAY JANUARY 1st 1986

Unleash Your Creativity

With the fantastic AMX Mouse from Advanced Memory Systems Ltd, communicating with the computer is made much easier. Hence, at last a low cost typesetter is now available that allows you to create complex A4 pages combining Text AND Graphics. Over 14 different typefaces will be supplied with the system to allow you to compose your own Newspaper or Poster. All by following simple commands on the screen and pointing to Icons and Labels. It is possible to load in Wordwise and View files which will be formatted as they appear on the screen, whether they are appearing as 80 column characters or a typeface of your choice! Very versatile Spraying, Painting and standard Shape drawing facilities are also supplied. Cut, Paste and Zoom facilities allow professional composition of your work.



LIVE TODAY !

You can Cut and Save any area of the screen, no matter how large or small. The cutout can then be re-loaded or super-imposed on top of what is already on the screen. Versatile Printer Dumps are supplied to allow you to produce a full A4 page, or ANY part of a Page.

Digital Magic at Today's Show!

As you can see on the left, digitized pictures can be loaded into AMX Pagenaker where they can be composed to give some very professional results. The graphics options can be used to doctor pictures. Just imagine the possibilities! Pictures from all BBC Micro graphics modes can be converted for use with AMX Pagenaker using a special conversion program supplied with the package. Therefore AMX Art pictures can be loaded and changed.

Join the publishing revolution!

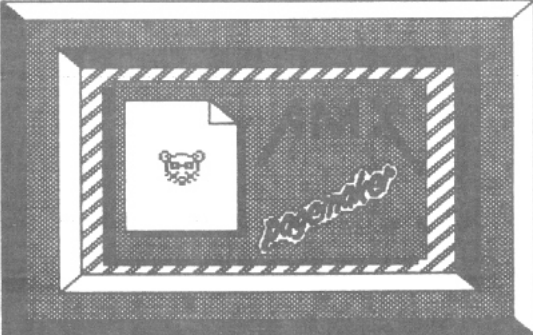




Figure 32 Small Standard Page Dump

It is important to remember that the font store is erased when doing a printer dump. Therefore re-load your font after dumping if you need to.

There are three major options.

PAGE, SCREEN and WINDOW dump.

First of all, have you have selected your printer from the Pagemaker Printer Set Up module? If not then the default EPSON RX/FX/LX compatible dump will be loaded.

The Page Dump

The PAGE dump will dump a complete Page.

The Screen Dump

The SCREEN dump will only dump the area of the Page that is visible.



Figure 33 Small Standard Page Dump

The Window Dump

The WINDOW dump will dump the area inside a Window pulled using the WINDOW mode. If no Window is defined, then the whole screen will be dumped. Uses of the WINDOW dump are unlimited:-

Badges, Cassette inlays, disk labels, business cards, etc.

There are options that allow you to tailor the size and quality of the different dumps.



Figure 34 Small Standard Window Dump

6.11.3 DUMP SIZE/QUALITY OPTIONS

Small Draft

This will dump the selected area (i.e. Page, Screen or Window at approx A5 scale in a poor quality but very fast fashion). Therefore a Page dump will appear A5 size and Screen will appear as part of an A5 Page dump.

A Window dump will be in the position that it would have appeared (across the paper) if it was dumped as part of a page.

Small Standard

This is the same as Small Draft, but is of higher quality. It is the dump we recommend for most purposes.

Small NTQ

This is the same as the last two options, but of very high quality.

Large (A4) Standard

This will dump the area selected to A4 scale in Standard Quality fashion.

Large (A4) NTQ

This is again an A4 scale dump, but of very high quality. It is very slow and should only be used for that special occasion.

ABORTING DUMPS

While a dump is under way you can press < CANCEL > to abort.

Hold down the key until the 'AMX Pagemaker - Please select a function' message appears in the label/message window.

WARNING!

Never press <ESCAPE> while doing a dump as this can cause a hang up.

We would suggest that at the start you create a very professional looking Page that includes both text and graphics. Dump this Page (and parts of it) using ALL the options available. This will save time and paper wasting experiments in the future. You can instantly refer to these test dumps for a reminder of the kind of output obtained. Try photocopying the dumps as well to test duplication quality. Make a note of which option was used to produce each dump.

That concludes the section on Printer Dumps.

6.12 GOODIES

The GOODIES mode allows you to 'tailor' the Processor to meet your needs. The GOODIES mode will be added to as time goes on so your version of Pagemaker may include extra options, but all the following are included as standard.

- A PROGRAMMABLE GRIDLOCK
- SOUND ON/OFF
- INTERLACE ON/OFF
- *COMMAND ENTRY
- RETURN TO PAGEMAKER MAIN MENU
- PASTE SHADOW
- LOAD IN 3D ZICON FILES
- MICRO JUSTIFICATION

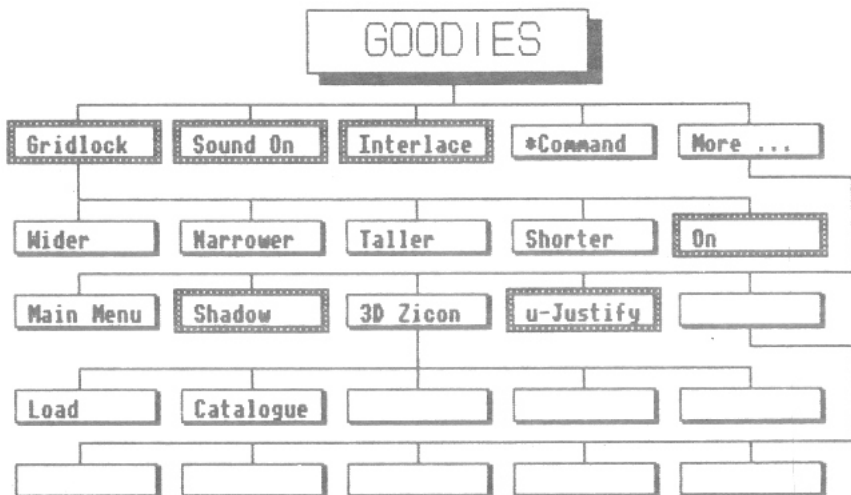


Figure 35 GOODIES MENU

6.12.1 PROGRAMMABLE GRIDLOCK

First of all we will describe what a GRIDLOCK is. Imagine that the screen has an invisible grid drawn on it. When you move the cursor or cross-hairs around the screen, they jump in increments governed by the pitch of the grid. For example, if the vertical lines on the grid are X pixels apart, then the cursor will jump X pixels in the horizontal direction.

If the horizontal lines are Y pixels apart, then the cursor will jump Y pixels in the vertical direction. Hence you can not access the individual pixels when the GRIDLOCK is on, only the pixels that occur every X across and every Y down will be accessible.

BUT WHAT USE IS A GRIDLOCK?

If you draw a cube (for example) and want to give it a 3D look, the GRIDLOCK will help with positioning the cursor accurately at the corners of the box. If you do it by eye (without the GRIDLOCK), then you are bound to make an error due to a shaky hand or jumpy mouse.

We have given you the option to vary the X and Y jumps of the GRIDLOCK.

Let's try it.

Click the GOODIES icon.

Click the GRIDLOCK label.

Click the adjustment labels until the GRIDLOCK is set to 16 by 16.

Turn the GRIDLOCK on by clicking the ON label.

As you can see, we have displayed the gridlock graphically to help.

- Click the GRAPHICS icon.
- Click the SHAPES label.
- Click the BOX label
- Pull a box.

Notice how the cursor jumps? Your box is being drawn on the invisible grid.

Press < CANCEL >.

Click the LINE label.

Draw lines from the two top corners of the box to a point of your choice. Easy?

The cursor just fell into position at the corners. Experiment with different GRIDLOCK values and GRAPHICS options.

REMEMBER:

It is no good doing a drawing or some typing without GRIDLOCK, and then attempting to line up the cursor at a later date with GRIDLOCK selected. The chances of all the corners being on the grid are very remote!

On the other hand, if you draw something with a large GRIDLOCK value, and then try to access the corners with a smaller value you will be able to - even at a later date. This is because ALL the GRIDLOCK values are powers of 2.

Turning the Gridlock ON and OFF

The GRIDLOCK has a memory. To turn it off there is no need to set it to zero, just click the ON label. The label will light up when the GRIDLOCK is on.

Alternatively, use the Quick Click Window and click the Gridlock Icon. A little box around the icon indicates that the gridlock is ON.

The default value of the GRIDLOCK is 8 by 8.

Using the Gridlock with text

This is where the GRIDLOCK really comes in useful.

Suppose you wish to do some typesetting, but don't have the complete story yet. If you type something on the screen and then attempt at a later date to finish the story, you will find it a matter of trial and error to re-position the cursor where you left off if the GRIDLOCK is turned off.

The Gridlock will be turned on automatically when the text mode is selected. Jot down which GRIDLOCK values you used for when you continue at a later date. You will then be able to re-position the cursor with ease. Problem solved.

6.12.2 SOUND ON/OFF

We have tried to reduce the noise level of Pagemaker as we realise that many are driven insane by the constant BEEPS produced by some software.

As a result we have developed a 'click' that sounds whenever a button on the mouse is pressed.

If this is still too much, then;

Click the GOODIES icon.

Click the SOUND ON label.

There ...

6.12.3 INTERLACE ON/OFF

Click the GOODIES icon.

Click the INTERLACE icon.

Notice any change?

If not, you have a very good VDU. Interlacing is normally turned on when you switch your BBC Micro on, but we have turned it off to produce a much more stable display. Some of you may wish to turn it on. Therefore, the option has been included.

WHAT HAPPENS WHEN INTERLACING IS ON?

When interlacing is ON, the electron beam that makes up the VDU picture scans twice to make up each picture. The second scan is between the lines produced by the first. This helps make the picture look more solid. On poor VDUs the picture sometimes appears unstable when interlacing is on.

WHAT HAPPENS WHEN INTERLACING IS OFF?

When interlacing is OFF, the electron beam only scans once. Hence, if you look closely at your VDU, you will see gaps between the lines that make up the WHOLE areas of the picture.

6.12.4 *COMMAND ENTRY

There is no doubt that as technology advances, more hardware and software will become available for the BBC Micro. Most of this will be controlled through the use of * COMMANDS - hence we have included the option to do this from within the Processor.

A *COMMAND (pronounced 'Star Command') must always have an Asterisk(*) before it, and allows direct communication with the computer's 'Operating System'. (The thing that controls and directs everything the computer does.)

Uses include, turning printers on and off, enabling ROMs, cataloguing disks, deleting files, etc.

Therefore, if someone develops a printer dump that you prefer to ours, you can take advantage of it. FOR EXAMPLE, Computer Concepts do a ROM called 'Printmaster' that is activated by typing *GDUMP. If you decide to use this ROM because you don't like our dump, or you want to take advantage of the facilities offered by Printmaster, then use the *COMMAND option. Here's how:

Click the GOODIES icon.
Click the *COMMAND label.
Type #GDUMP 1 2 3 1
Press < RETURN >.

There is no need to type '*' as it is already there. The hash (#) tells the Processor to remove the window in the middle of the screen after you press < RETURN >. It wouldn't look good on a printout. A window of co-ordinates 48,32,1198,924 is automatically defined when the # is placed before a *COMMAND. This will ensure that any external printer dumps do not dump the whole screen, e.g. Icons, Labels and all. Our in-built dump automatically does this.

TECHNICAL NOTE:

The catalogue routines built into the Processor do not show the complete directory, for example, the BOOT option is not shown. Use the *COMMAND option to get around this problem. (*CAT)

6.12.5 RETURN TO MAIN MENU

This allows you to jump straight to the Main Menu.

Remember, any work you have done will be lost. Therefore Save your Page before proceeding.

Click the GOODIES icon.
Click the MORE ... label.
Click the MAIN MENU label.

That concludes the section on the GOODIES options.

That also concludes the part of the manual devoted to the Pagemaker Processor.

Over the next few pages, there is a Fault Finder, a Jargon Box to help explain technical words, an AMX Pagemaker Technical Spec Table and finally, the Main Pagemaker Index. GETSET, TYPESET.

6.12.6 PASTE SHADOW OPTION

SHADOW effects the following PASTE options:

COPY ROTATE

and FLIP (with SAME selected)

The default setting is OFF. But when switched on if any of the above Paste options are used the original area will be erased as the new area is pasted.

The original area will be erased in the opposite to the currently selected colour. For example, if you have black selected from the QC Window, the original area will be erased in white.

If invert is selected, then the original area will be erased in black. When SHADOW is selected the word COPY (on the PASTE menu) is replaced with MOVE. This will help indicate the SHADOW status when you are about to use a PASTE option without having to go through GOODIES just to find out.

6.12.7 LOAD 3D ZICON FILES

This option allows you to load 3D images created with AMX 3D ZICON. This package is available separately and allows complex 3D objects to be constructed and rotated on screen.

Loading these into Pagemaker will allow you to Paint and add detail to the objects giving them a more solid look. (If you have a Window defined, then the image will only be visible inside the window.)

The files must be Spooled using the 3D Zicon SPOOL option before they can be loaded into Pagemaker. Please see the 3D Zicon manual for spooling details.

- Click the GOODIES icon.
- Click the MORE GOODIES label.
- Click the 3D ZICON label.
- Insert your 3D ZICON file disk.
- Click the correct DRIVE number.
- Click the CATALOGUE label (if you wish)
- Click the LOAD label.
- Enter the filename of the ZICON file.

It will be loaded on top of whatever was on the screen beforehand.

There is a demonstration 3D icon file on the Font Disk. It can be loaded straight into the Processor. Try it!

6.12.8 TEXT MICRO-JUSTIFICATION

This option effects all text output when the JUSTIFY option is selected from the TEXT FORMAT menu.

Because some people don't like Micro-Justification the default setting for this option is OFF. Once turned on U-JUSTIFY will make sure that no unpleasant gaps appear between words on a line.

It is best to experiment with Micro-Justification to help explain the end result. Try different column widths by using the WINDOW option. The small text on the 'AMX Times' in section 6.11.2 was formatted from a 'Wordwise' file using Micro-justification. The supplied '70SERIF' typeface was used.

7 APPENDIX 1

There is no doubt that you will have the occasional problem with AMX Pagemaker. Don't send it back in a huff, check you have not made a silly mistake.

7.1 DISK DRIVE PROBLEMS

The following problems may occur with your disk drive.

7.1.1 The disk drive light stays on and/or the motor makes a noise - but nothing happens.

- a) Is the door shut?
- b) Is the disk inserted correctly?
- c) Is the disk damaged in any way?
- d) Is the disk write-protected?
- e) Are the disk drive cables connected properly?
- f) Is the disk formatted/initialised?

If you are unsure about (c), verify the disk. Use the verify command in your DFS manual. Try other disks as well just to make sure that your drive isn't faulty.

The drive may need alignment. If so then take it to your local dealer who should be able to have it aligned.

If the disk IS damaged then return it to where it was purchased for a replacement. If we/your dealer find true signs of misuse, do not expect a replacement without a charge.

7.1.2 The disk drive clatters and then comes up with a 'disk fault' error.

- a) 40/80 track switch not set to the right position.
- b) Disk not converted to 80 track.
- c) Is the correct disk inserted?

7.1.3 The Page refuses to scroll.

- a) See section 7.1.1(a-f)
- b) Is the correct disk inserted?
- c) Is the disk write-protected?

7.1.1 (d) The Page does scroll, but the screen is corrupted.

- a) Our 'incorrect/corrupt Page disk' checking procedure has failed and you have just ruined a none Page disk by saving part of a Page onto it. The corruption on the screen is data from your disk. All we can say is it should never happen. If it does - sorry, but you must be more careful which disks you insert. Label them all!

7.2 MOUSE PROBLEMS

7.2.1 The pointer behaves erratically. For example,

only moves vertically.
only moves horizontally.
jumps.
doesn't move.

- a) Is the mouse plugged in the right way around?
- b) Is the mouse plugged in at all?
- c) Has its ball dropped out?
- d) Are the pins on the BBC Micro User-Port damaged?
- e) Is the surface you are moving the mouse on slippery?

If e) then here is an idea that has cured our jumping pointer problem. Use a flat rubber mat as a surface for moving the mouse on.

7.2.2 The buttons don't work.

- a) See some of Section 7.2.1 possibilities.
- b) Sometimes a button will 'bounce'. This causes the computer to think you have pressed a button twice or more. This can be caused by dirty contacts or a fault in the mouse or computer. Hence in the software we have made sure that TWO different buttons must be pressed in turn, to prevent problems if your mouse buttons do 'bounce'.

7.3 PRINTER PROBLEMS

7.3.1 Nothing happens when you start a dump.

- a) Is the printer turned on?
- b) Is the printer connected correctly?
- c) Is the printer compatible?
- d) Is the printer ON-LINE?

7.3.2 Dump is corrupted.

- a) Is the printer compatible?
- b) Is the printer connected properly?
- c) Is the printer head damaged?

If NO to the above, then try turning the printer off and on.

7.3.3 Dump is faint.

- a) Is the ribbon old or dry?
- b) Is there a ribbon at all?

Solutions to a),

Buy a new ribbon.

Use some form of RECOMMENDED ribbon 'life extension' fluid.

Use the high quality dump option.

7.3.4 Linefeed Problems

If a) there is no linefeed at all, then use the * COMMAND option in GOODIES and type:-

*FX6,1

If b) there is a gap between each line, then repeat the above but type:

*FX6,10

7.4 SOFTWARE PROBLEMS

7.4.1 You know your system is in working order and yet Pagemaker hangs up here and there or acts strangely.

- a) Is there a ROM interfering?
- b) Is something plugged into the Tube port?
- c) Do you have BBC Micro with anything less than OS 1.0?
- d) Does your machine have some strange hardware add-on that could be interfering?

If you don't know the answer to c), then please switch OFF and back ON.

Type *FX0 < RETURN >.

The OS version number will appear. Anything less than 1.0 is forbidden!

All is not lost, your local Acorn dealer will be able to get you a new Operating System ROM. Ask for the latest version. (Show him this page).

IF AFTER HAVING CHECKED ALL THE ABOVE, YOU STILL HAVE PROBLEMS, ALL WE CAN SUGGEST IS THAT YOU TRY PAGEMAKER ON A FRIEND'S MACHINE, AND TRY HIS COPY ON YOURS. YOU WILL THEN BE ABLE TO DRAW YOUR OWN CONCLUSIONS FROM THIS.

That concludes the section on Fault Finding.

8 APPENDIX 2

Here we will try and explain those frightening technical words.

ASCII - Acronym for 'American Standard Code for Information Interchange'. Each character in the English Alphabet and most computer 'control codes' are represented by a number. These numbers are the same on ALL computers using the ASCII system. The ASCII code is used so that information can be exchanged between different computers. If every computer had a different code they wouldn't understand each other. Just like people speaking in different languages - to each other!

CLICKING - this is the name mouse users give to the process of pointing to an Icon or Label and pressing a button on the mouse. This button is in our case the < EXECUTE > button.

FONT - The name given to a complete set of characters. A font can vary from just upper case characters to both upper and lower case, numbers and punctuation.

HOVER BOX - A Pagemaker term used to describe the box that is used when Pasting an area of the screen, or a cutout. The Hover Box will be the same area as the original area.

ICON - This is an old word. It used to (and still does!) refer to the small figure heads and carvings on an old building, etc. It now of course also refers to a small 'symbol' that represents a function of the software. An Icon can be thought of as the graphical representation of a written word or function. Icons are used to make software very user friendly and give the user some idea of what the software does without having to understand complex menus or manuals.

INTERFERENCE PATTERNS - A term that we have given to the strange (and annoying) effects sometimes produced when pasting detailed pictures with the Processor. They are caused by 'the asymmetrical screen RESOLUTION.

GREY LEVELS - If a colour picture has to be converted into black and white form, it is no good making all coloured areas black, and keeping all white areas white. All you would see would be a mass of black with the white areas only giving a clue as to what the image was supposed to be. (The effect is the same that you get when turning the 'contrast' control down on your TV set.)

Therefore, each colour is assigned a 'shade of grey' - by mixing black and white in different quantities to produce different shades. This now means that the image is as clear in black and white form as it was in colour. When you convert a colour (i.e. mode 2) picture (using the Pagemaker mode convertor) into mode 0, our clever software assigns each colour to a Grey Level so that the picture can be used with the Processor.

PASTE - The term used to represent the action of positioning a previously selected (Cut) area of the screen onto a new area. ,

PIXEL - The name given to the tiny dots that make up the computer display. (These must not be confused with the dots that make up a TV picture.) Pixels are produced by circuitry in the computer. Powerful computers, like the BBC Micro allow full control over each pixel. This means that more attention can be made to detail. The Pagemaker Processor ZOOM option allows you access to the individual pixels.

PULL - A term generated especially for the Processor. We have used it to represent the action of selecting a rectangular area of the screen using the mouse and its buttons.

RESOLUTION - A general term that in computerspeak refers to the amount of PIXELS that make up the computer display. The more pixels the higher the resolution. The higher the resolution - the better the image quality.

If there are more pixels across the screen than there are down, then the display has a 'High Horizontal Resolution'. On the other hand, if there are more pixels down the screen than there are across, then the display has a 'High Vertical Resolution'. If they are equal, then the display has a 'Symmetrical Resolution'.

The Pagemaker Processor uses a High Horizontal Resolution display mode. (Mode 0). Unfortunately, the mode 0 resolution is asymmetrical which is why those interference patterns occur when using some Paste options. On the other hand, mode 4 is of symmetrical resolution, hence when an AMX Art picture is pasted, interference patterns do not occur.

That concludes the section on Technical Jargon.

9 APPENDIX 3

9.1 DISC SPACE TABLE

PAGE.....	37.5K Bytes
SCREENS.....	20K
CUTOUT.....	Variable
FONT.....	3K Bytes

9.2 PROCESSOR SCREEN CO-ORDINATES

Bottom left	48,32
Top right	1198,924

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