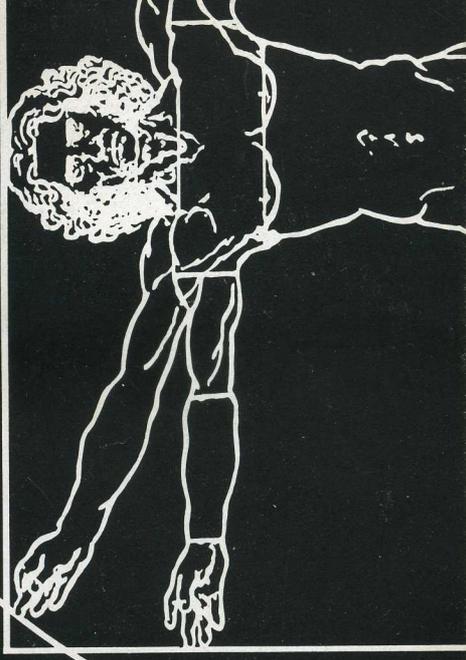


DATABASE SOFTWARE

Master PAINT

User Guide

Amstrad
PCW
8256/8512



All about MasterPaint

MasterPaint is a computer art package which allows you to easily create artistic effects on your computer's screen and save them to disc as picture files.

The program is fully compatible with Database Software's Desktop Publisher and MasterScan digitiser packages in the sense that any picture files created within MasterPaint can be loaded into and edited by these two programs, and vice versa.

You can also import picture files into MasterPaint from the following products via the MasterScan software on side B of your disc: Mirrorsoft's Fleet Street Editor Plus and Electric Studio's Newsdesk International and Art packages.

MasterPaint, like The Desktop Publisher, is characterised by a WIMP environment (Windows, Icons, Menus and Pointers). As a result of this it is both very powerful and extremely easy to use.

The Wimp Environment

Of mice and menus

The philosophy of the Wimp environment is that instead of having to learn and remember various command sequences to get a program to perform a specific task, you select the type of action you require by literally 'pointing' at it with the small

arrow (pointer) which is always on the screen and can be moved around freely, using either the keyboard or more conveniently a mouse.

The following mice are compatible with MasterPaint:

- AMX
- Electric Studio
- Kempston

When an AMX or Electric Studio mouse is connected cursor movement can still be achieved using the keyboard.

The program detects the rodent's presence automatically so there is no specific installation procedure to go through.

Clicking

MasterPaint's Wimp system represents possible types of action on the screen in two ways – as options in lists (menus) or self-explanatory little diagrams called icons. This means that rather than having to learn and remember various command sequences to get the program to perform a specific task, you select the option you require using a pointer.

To do this in a drop-down menu you simply move the pointer to the desired item which will then be shown in inverse colour. You then press the left-hand mouse button or the Alt key to confirm selection. From now on we will refer to this action as 'clicking', which is standard terminology.

Menus

The drop-down menus allow you to access a large range of functions. These are grouped together under menu headings such as Disc, Edit, and the like. To open a drop-down menu just click on one of the group headings on the main menu bar. At this point you may select one of the options by moving the bar cursor over it, and the corresponding action will be carried out when you stop clicking.

Icons

An icon is a picture symbol you can move around the screen using the directional cursor keys or mouse. Each icon has a tool of some kind associated with it: The pencil for drawing, the eraser for rubbing out, and so on. The icon corresponding to the type of action you want to carry out can be chosen by moving to the icon block on the left of the screen. Just place the pointer over the icon of your choice, click, and that tool comes into force under the control of the mouse or arrow keys.

Windows

MasterPaint makes extensive use of windows of various sizes. A window is a box on the screen representing a work area within which a particular action or set of actions can be carried out. A menu is therefore a type of window.

All the windows (except the menus and the zoom window) can be moved, by simply clicking inside them and pulling the dotted-line box – which repre-

sents the window's new intended position – to the screen area of your choice.

To close a window just click in the little box at its top left. When a window is open, it is only possible to carry out actions appropriate to that window. For example, you would not be able to use the paint brush while working in the zoom window.

Getting started

Your MasterPaint disc is protected against copying, so you won't be able to make a working duplicate with the Diskit program as is the usual practice. It is not write-protected however, so it is possible for you to make it into a self-starting working disc, which will run the program whenever you insert it in the drive and turn on. You would be advised to do this for your own ease

MasterPaint carries out all its disc operations through the CP/M operating system. In order for the program to run automatically when you boot up, CP/M must be on the MasterPaint disc together with a utility called SUBMIT.COM.

To copy these files across for your own use, from side 2 of the system discs you received with your computer, proceed as follows:

Turn off your computer and turn it back on again. When the screen has lit up insert side 2 of your system discs (marked CP/M Plus) in drive A, and press the spacebar. CP/M will load and when

you see the **A>** prompt type:

PIP M:= A:J14CPM3.EMS

and press Return. When the prompt appears again type:

PIP M:= A:SUBMIT.COM

and wait for the prompt again. The necessary files will now be in the M drive. Now type:

PIP

and when the asterisk appears remove the system disc from drive A and replace it with your MasterPaint disc, making sure its write-protect holes are closed and side A of the disc is facing to the left. Now type:

A:= M:*

The two files will be copied across to your MasterPaint disc. When the asterisk appears again on its own the process is finished and you should hit the Stop key to return to CP/M. Your MasterPaint disc is now ready to go and you can set the program running automatically by rebooting the system (press Shift+Extra+Exit).

If at any time you are returned to the **A>** prompt you can run MasterPaint from there by typing:

PAINT

The MasterPaint screen

The MasterPaint working screen is divided into several zones, each with its own utility. This screen is illustrated in Figure 1 opposite. At the top is a menu bar from which you can pick various drop-down function menus.

On the left you will find a block of icons representing various tools such as a pencil, eraser or paint brush. Choosing any of these puts that particular tool into use under the control of the pointer.

The box at the bottom allows you to opt for a particular pattern to be used by the paint brush, the line options, and so on.

The large window in the middle of the screen represents the workspace in which all your actions will take place and where you can compose your artwork.

The icon block

When you start composing a picture you will almost certainly want to achieve a wide range of different effects and drawing styles. You may wish to draw freehand, and at other times require standard geometrical shapes. You may perhaps want to shade areas in with patterns, add text to a drawing in a variety of sizes and styles, or rub parts of it out.

An artist has a whole range of manual tools with which to create these effects on paper or canvas, and MasterPaint provides you with the very same range of tools to work on your screen. They are shown as a block of icons down the left-hand side of the screen, and choosing a particular tool is simply a matter of clicking the appropriate icon. To use the

chosen item on the drawing screen you must click continuously. The tool icons will now be explained in the top-to-bottom order in which they appear.

Allows you to draw fine lines, with the facility to invert the line colour. If you click while holding the pencil still, the point will be inverted. If you then move, all the points passed through will take on this inverted colouring. In other words, if you start on a white spot the line will be black, and vice-versa.

Sprays on to your picture the pattern currently in use. As with a real spray can, you can vary the intensity of whatever you draw. To achieve a light pattern use a couple of strokes and darken it to your taste by going over areas repeatedly.

Rubs out parts of a drawing. Any area of the drawing screen the eraser passes over will be made blank if you are pressing the mouse button.

While you are clicking, this paints in the current pattern using one of the brush styles available in the drop-down Special menu.

The size of the picture you compose need not be limited to the dimensions of the drawing screen you can see. Using the hand icon, you can push the picture in any direction to see the rest of it, rather as you would push a rollerboard up and down.

To scroll just click continuously using the hand icon and literally 'push' in the direction you wish the picture to move.

Pencil



Paint spray



Eraser



Paint brush



Hand



Rubber-band box



Enables you to outline a specific area of the screen in order to carry out a particular action such as editing or moving. Just click at the right spot and stretch the rubber-band box until it surrounds your chosen area or object. When you stop clicking the box will be fixed.

Clicking outside the box will erase it and you can start again. On the other hand, by clicking inside the box you can pull its contents to another part of the window and release it there when you stop clicking.

Text



Puts you into text mode and brings up a special cursor where the pointer would normally be. This is positioned where you click on the drawing screen, and at that point it is possible to add text to your picture using the keyboard, provided a font has been loaded. It is possible to delete characters in the usual way using the Del key.

The type of font used and the size and style of the characters printed can be specified using the dropdown Font, Size and Style menus explained later.

Line



Allows you to draw a line between two points in the pattern and line thickness of your choice. The drawn line is elastic, which means that before making it permanent on the screen, you can stretch and move it.

The point at which you first click will be the fixed point, and you can then move the other end around by continuous clicking. Once the line is as you want it just stop clicking to make it permanent. To change the initial fixed point press the right-hand mouse button or Can key and start again.

Outlined box



Draws a hollow box in the line thickness and pattern currently in use. The top left-hand corner is fixed at the point where you first click, and the box is elastic while you are still clicking.

Up and down movement will stretch and compress the box vertically while sideways movement will stretch or compress it horizontally. The box becomes permanent when you stop clicking.

Solid box



Works just like the outlined box but the shape will be filled with the current pattern.

Outlined ellipse



Draws a hollow ellipse in the line thickness and pattern currently in use. Its centre is determined by where you make the first click, then by moving the pointer around, still clicking, you can stretch and squeeze it to the desired shape. An up and down movement will extend or compress vertically and sideways movement will do the same horizontally. The shape becomes permanent when you stop clicking.

Solid ellipse



Works just like the outlined ellipse, but the shape is filled with the current pattern.

Outlined circle



Draws a hollow circle in the line thickness and pattern currently in use. Its centre is determined by where you make the first click, and while you continue to click, the circle can be expanded. The radius is stretched or compressed by vertical movement and becomes permanent when you stop clicking.

Solid circle



Outlined polygon



Solid polygon



Tap



Copy fill



Patterns palette

Works just like the outlined circle but the shape is filled with the current pattern.

Draws a hollow polygon in the line thickness and pattern currently in use. The outline is built up quickly by means of a succession of elastic lines drawn end to end. Each time you click you fix a corner from which you can pull another elastic line. To close the polygon, just click a second time on the last corner and it will be connected to the first.

Works just like the outlined polygon except that the shape will be filled with the current pattern.

Here the pointer becomes a cross, and by placing it inside any enclosed area and clicking, you can flood-fill that area with the current pattern. If the starting point is white all the adjacent white points are filled with the pattern, and if black all the adjacent black points.

Extends the simple fill. When you first click, a small hover box appears: Whatever is in this box when you stop clicking is taken as the basic motif for the fill instead of the current pattern. In this way, it's possible to replace one pattern with another inside a closed area. You can interrupt the fill at any point by pressing the Can key.

This is the block along the bottom of the screen and consists of 32 different stipple and tessellation patterns. To select a pattern simply move the pointer

Line thickness

to the box containing the one you want and click. All line drawing, painting, spraying and filling is done in the pattern currently in use, which is displayed at all times in the small window to the left of the palette.

The window at the bottom left of the screen displays five line thicknesses for use with any tool which draws lines except the pencil, whether they are simple lines or part of the geometrical shapes available.

To choose a particular thickness, just move the pointer into this window and click on the one you want. The little tick will confirm your choice to indicate the thickness currently in use. Thicknesses are available of one, two, four, and six pixels.

The dotted line represents a line thickness equivalent to zero, and is used, for instance, to draw a solid circle without an outlined circumference.

Main menu bar

The main menu bar across the top of the screen has seven sub-menus: Paint pot, Disc, Edit, Special, Font, Size and Style. These cover MasterPaint's interaction with CP/M, its disc handling operations and all the program's powerful text and editing facilities.

This is really MasterPaint's box of odds and ends. It contains those options which would not easily fit into any of the other six group headings:



Paint pot

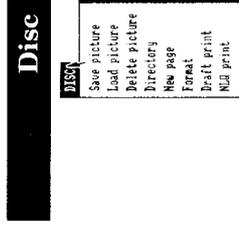
Information

Return to CP/M

Brings up a small window containing brief details of the software, its authors, and copyright.

Takes you out of MasterPaint and back to CP/M. It also allows you to run another CP/M program, that is one with the filename extension .COM.

NOTE: The current picture will be lost if you have not previously saved it.



Save picture

Contains all the functions relating to the disc drive and printer. To pull down a menu, just move the pointer over the appropriate heading and click. A menu will only remain displayed while you are clicking, so to choose an option move the bar cursor down the menu to the option of your choice then stop clicking.

The following options are available from the Disc menu:

Opens a window within which you can save your picture. You can save it either automatically under its existing name – untitled if a new file – or one of your own choice. Under CP/M pictures created in MasterPaint can be recognised by the fact that their filenames have the extension .PCP, so the program automatically saves files with this suffix.

While a picture is being saved, certain error messages may appear: Disc write protected! for instance. If this happens just click to regain control.

Load picture

Imports a picture file from disc. A window pops up in which you should enter the name of the file you wish to load. Note that while loading is taking place

the picture currently on the screen will disappear.

MasterPaint can load and work on pictures created with Database Software's Desktop Publisher, Mirrorsoft's Fleet Street Editor Plus and Electric Studio's Newsdesk International and Art packages, but these must first be converted to the correct format and resaved using the MasterScan program on side B of your MasterPaint disc.

Delete picture

Erases a picture file from disc without altering the picture currently on the screen. A window will appear for you to type in the name of the file you wish to delete. The option is particularly useful for making room for new files on a disc which is nearly full.

Directory

Lists inside a pop-up window, the names of all the picture files on the disc. It will only list files with the MasterPaint file extension .PCP, which greatly cuts down time scanning through your discs.

Here's a little tip: When looking for a particular file, it is often necessary to directory list several discs. Rather than opening and closing the directory window for each one, keep it open and simply click inside after each disc change.

New page

Fills the working page (even the parts out of view) with the pattern currently in use, and the picture previously on the screen is lost. It is useful both to clear the screen or to create patterned backdrops to your artwork.

Format

Formats the disc currently in the drive to standard PCW8256 format. As a safety measure in case you choose this option accidentally you will be asked for confirmation before any formatting takes place.

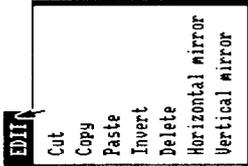
Draft print

Prints out the picture on the screen in draft quality. The whole picture area is printed not just that part visible on the MasterPaint screen.

NLQ Print

Prints out the picture on the screen in high (near letter) quality. The whole picture area is printed not just that part visible on the MasterPaint screen. Compared with draft printing, the crispness of a picture on paper is greatly improved, but the printing time is tripled. This should therefore only be used to produce final copies of your work.

Edit



Contains the functions for manipulating screen zones. A zone must have been previously defined using the rubber-band box before any of these functions can operate on it.

This is done by selecting the rubber-band box from the icon block, clicking in the working window where the top left-hand corner of the boxed area is to be and stretching the box around it. When you stop clicking the screen zone is defined and you can choose a function from the edit menu to operate upon it.

Several functions can be called in turn to work on the same area, enabling you to carry out quite sophisticated editing with minimum effort. Within the menu you will find the following facilities:

Cut

Lifts out the contents of the zone, removing it from display on the screen, and saves it to a reserved block in memory for immediate or later manipulation.

Copy

Duplicates the contents of the zone and saves it to a reserved block in memory for immediate or later manipulation. The copied area remains displayed on the screen.

Paste

Restores an area of the screen which has been saved to memory using the Cut or Copy facilities. When you choose Paste the pointer is replaced by a cross, representing the top left-hand corner of the box you used to save the screen area concerned. Clicking at this point will paste the saved zone on to the working window wherever the cross is situated.

It is possible to paste the same area several times without returning to the menu. To leave Paste mode, just click outside the working window.

Invert

Reverses the colour of every pixel in a zone.

Delete

Erases the whole contents of a zone.

Horizontal mirror

Reflects the contents of a zone along its own central horizontal axis.

Vertical mirror

Reflects the contents of a zone along its own central vertical axis.



Contains a range of special features to help you put the finishing touches to your work and avoid or rectify time-consuming mistakes.

Previews the final appearance of your picture at any point by displaying the whole of it in a window reduced by a ratio of 4:1. This enables you to see how the overall layout of a piece of work is developing as you go along.

Everybody makes mistakes at some time, and this useful function is your safety net for those occasions when you do. At any moment you can cancel the effects of your last instruction and return the drawing to the state it was in before you slipped up.

Clicking will cause a small hover box (the 'magnifying glass') to appear and a window displaying the screen area under the 'glass' magnified by a factor of 64. The hover box can be moved around by clicking inside it and pulling with the pointer, allowing you to pan across the screen.

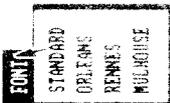
At any point you can click inside the magnified window to modify that picture area in very fine detail. The blown up area is composed of small blocks, each of which represents one pixel on the full-size working area.

Clicking on any of these blocks will toggle its respective pixel on or off, and the effects of this are immediately visible to scale under the hover box so you can see the results of your editing as you go along. Whole clusters of pixels can be switched on and off quickly by clicking continuously and sweeping over them with the pointer.

Brushes

Opens a window in which the full range of eight brush styles is displayed. When the window first opens one of them is shown inverted – this is the one currently in use. Clicking on any other will invert it and on closing the window that becomes the current style. Only one brush style can be in use at any one time.

Font



Lets you choose a character set from those available on disc. The four possibilities are Standard, Orleans, Rennes and Mulhouse. Make sure you have the master disc in the drive or you will get an error message. Once the font has loaded, you can go straight on to use it, by clicking the T icon to move into text mode.

Note though that text mode will only work if you have already loaded a font. You can change the size and style of the characters using the Size and Style menus explained below.

Size

Allows you to choose the size of the letters in a character set loaded via the Font menu. You can opt for normal, double, triple or quadruple size, and the one you pick will be marked with a tick.

Style

Provides type styles for whichever font is currently in operation. The styles available are bold, italic, outlined and underlined, and these can be combined to produce the effect best suited to your needs. The styles currently in use will be marked with a tick.

Quick reference section

This section is intended for reference only, and has been designed to make it easy for you to quickly find and use any of MasterPaint's facilities.

The table consists of an alphabetical list of every function, which menu or screen area it's accessed from, and the page number in the manual where fuller details are given.

Function	Menu/Area	Page No.
Brush	Icon block	7
Brush style	Special	17
Copy	Edit	15
Copy fill	Icon block	10
Cut	Edit	15
CP/M	Paint pot	12
Delete	Edit	15
Delete file	Disc	13
Directory	Disc	13
Disc menu	Main bar	12
Edit menu	Main bar	14
Eraser	Icon block	7
Fill	Icon block	10
Fonts	Font	17
Font menu	Main bar	17
Format	Disc	14

Function	Menu/Area	Page No.
Invert	Edit	15
Line	Icon block	8
Load picture	Disc	12
Mirror	Edit	15
New page	Disc	13
Print style	Disc	14
Paste	Edit	15
Pencil	Icon block	7
Rubber-band box	Icon block	8
Save picture	Disc	12
Scroll	Icon block	7
Show page	Special	16
Shape style	Icon block	9, 10
Size menu	Main bar	17
Spray	Icon block	7
Style menu	Main bar	17
Text	Icon block	8
Text size	Size	17
Text style	Style	17
Undo	Special	16
Zoom	Special	16

