Studio24

Mike Williams assesses Pineapple Software s entry in the image processing stakes.

Pineapple Software s Studio24 is another in the recent spate of 24-bit art and image processing packages inspired by Acorn s design of the Risc PC. The July issue of RISC User (7:8) reviewed Clares ProArtisan24 and Spacetech s Photodesk. Then there is Oregan s PhotoTouch, and Digital Arts Picture, also reviewed in this issue. With all such substantial packages it is not only the range and type of function which is important, but the ease and facility with which these features can be used in real work. That of course can only be fully assessed over a period of time, so I shall be concentrating here on Studio24 s main characteristics, but I will comment as appropriate on the feel of the package and its ease of use. The copy of Studio24 and manual provided for review was pre-release, so you may find some differences compared with the released version.

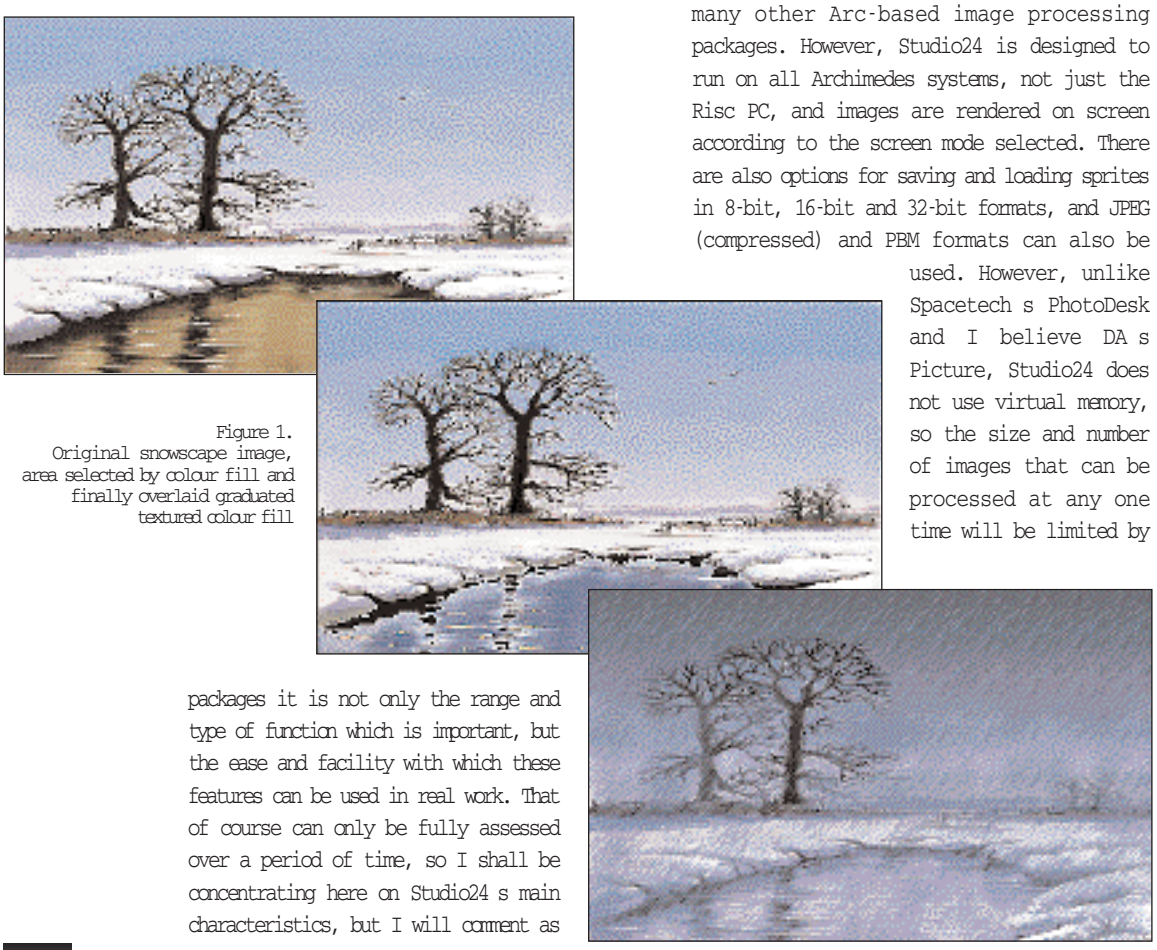

Figure 1.
Original snowscape image, area selected by colour fill and finally overlaid graduated textured colour fill

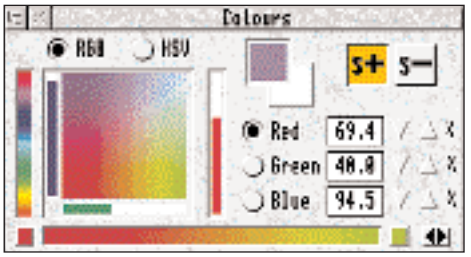

Figure 2.
Studio24's colour picker

To start with let s get some facts straight about Studio24. All images are manipulated in 24-bit colour, and normally stored as Clear files, a standard uncompressed format recognised by many other Arc-based image processing packages. However, Studio24 is designed to run on all Archimedes systems, not just the Risc PC, and images are rendered on screen according to the screen mode selected. There are also options for saving and loading sprites in 8-bit, 16-bit and 32-bit formats, and JPEG (compressed) and PBM formats can also be used. However, unlike Spacetech s PhotoDesk and I believe DA s Picture, Studio24 does not use virtual memory, so the size and number of images that can be processed at any one time will be limited by

Figure 3.
Using Studio24 to process a photographic image (inset) using cut and paste and the Smudge brush

your computer s memory. While Studio24 needs just 460K when first loaded, an image 600x400 pixels, for example, will imme-diately add over 700K to that. Thus 2Mb of memory should be considered a minimum, and I would suggest 4Mb is highly desirable.

MODES, MENUS AND TOOLBARS

In Studio24 terms, an image area is referred to as a canvas, and all the features of Studio24 are then controlled via a mode panel (at the left), with the currently selected mode related to a corresponding toolbar at the foot of the canvas, plus a standard menu system. The

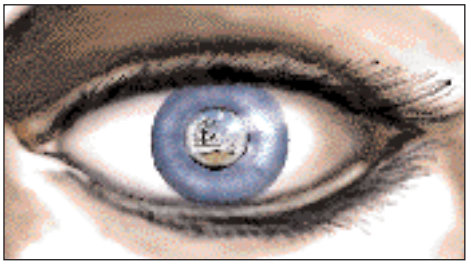

Figure 4.

main modes provided by Studio24 cover selection and use of main screen and stencil screen, the obligatory brush and pencil modes, magnification, cut & paste, text input, special effects, fills and undo (the left pointing arrow). The mode panel also shows the currently selected opacity and choice of texture.

The mode panel is not as clear as I would wish, particularly with regard to the four small buttons at its head, and having attributes of a toolbar function partly controlled by a menu system is, I feel, potentially confusing. However, it does also lead to considerable flexibility in what can be done. I would also have preferred to control colour selection from the mode panel, as in other packages like ProArt24, whereas Studio24 uses the menu alone. In what follows, I shall not bother to described all the features of Studio24, but highlight those that

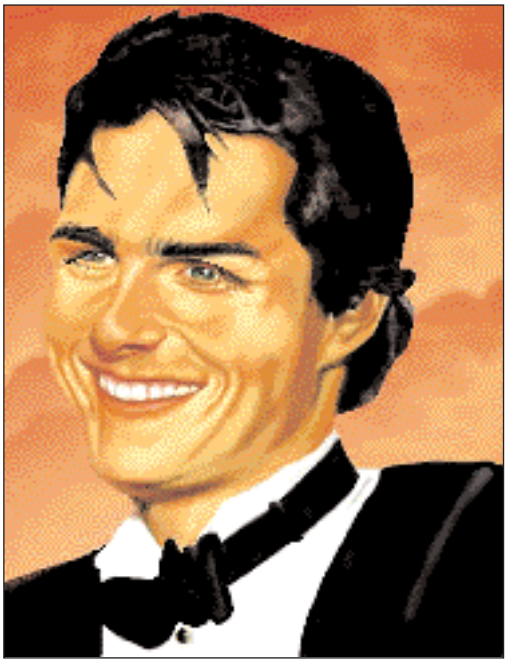

Figure 5.

Figure 6.

stand out as being unusual or worthy of comment in some way.

COLOUR SELECTION AND GRADUATED FILLS

Since we have referred to colour selection let s take a quick look at the colour picker used by Studio24 (figure 2). This is similar to the standard Acorn colour picker, without the CMYK approach to colour selection, but including the facility to create graduated colour fills. This provides a linear graduation only (compared with Photodesk s mathematically controlled one), and provides a graduated scale between just two selected colours, compared with the multiple colour graduations which can be created with ProArt24. But this is where Studio24 s flexibility comes to the fore. The main menu has a so-called Fill tolerance setting; at 0% the slightest change of colour provides a boundary to the fill process (as normal), while a setting of 100% provides no barrier at all. A setting of, say, 50% allows one graduated fill to overlay another of a relatively similar range of hues, and if the opacity setting is kept fairly low (about 15%), then some very subtle effects can result.

The Fill tolerance can also be useful in other ways. Special effects, processes and filters, are applied to a selected area of the canvas. The Fill tolerance can be used to select an area by filling much more accurately and realistically than could probably be achieved by the freehand drawing of an irregular outline (see figure 1). This also shows how a texture can be combined with a low opacity setting and a graduated fill to achieve yet further effects.

BRUSHES

Different brush shapes can be loaded onto the brush toolbar. A selection of these is provided in the form of sprites, and the manual describes how Studio24 can be used to create further brush shapes as required. Brushes can also be selected in one of eight sizes. The main menu also provides a very useful Smoothing level which can be used to give much smoother results when working freehand. There are two brush types of particular note. The first of these is the Smudge brush, and very effective I found this to be. It reproduces very realistically the effect of rubbing your finger over colour (in the form of chalk, crayon or pastel) applied to a sheet of material. And as with most functions, the opacity setting also affects this operation. Smudging can be used in many creative designs, but it can also be used in appropriate circumstances to blend an image cut from one source and pasted into another, so that the join between the two images is well nigh invisible (see figure 3).

The other brush is that for special effects. Processes, but not filters, can be selected via the menu system, and the process applied to the selected area of the canvas as already explained. However, by selecting the Effects brush, a process can also be applied to the canvas in brush format, which means that you can also control the shape, size and opacity of the brush used. The processes available are Invert, Lightness, Contrast, Saturation, RGB balance, Grey noise, RGB noise and Adjust levels. In most cases selection involves a slider bar to set the scale of the process, and some processes allow both positive and negative values to both increase and decrease the effect (e.g. the Lightness process can be used to both lighten and darken parts of the canvas). The duration for which the mouse button is depressed also controls the intensity of the resulting image. This highlights one problem with Studio24 when running on a Risc PC: some operations are just too fast to be controlled with sufficient precision. This includes some painting effects, and parameter settings for slider bars etc - an irritating blemish, but one which Pineapple says is being addressed.

CUT AND PASTE

Cut & paste operations are much as one would expect, but again the paste operation is also affected by the opacity setting. There is no built-in clipboard as such, but all that is needed is to cut round an image (or part thereof) and transfer to another canvas, process as required, and then cut & paste to wherever it is required (the inset in figure 3 was treated in this way, cutting out part of the original image, rescaling and adding a border before pasting onto the

main picture). The main menu provides selection of a Paste mode, which determines how the image is pasted onto the canvas (Blend, Add, Subtract, Difference, Multiply, Lighten/Darken).

TEXT INPUT

Text mode makes full use of any outline fonts available, and text can also be rotated by a specified angle, but not rotated in situ. The text, a single line, is entered first, and then appears attached to the pointer as this is moved over the canvas. Once again, this is also affected by the choice of texture and opacity, and the Select button controls the intensity of the image.

FILTERS GALORE

The last feature which deserves some mention is the choice of filter provided. There are fourteen options available via the menu system, and all of these can be further customised and saved with a new name by the user. Features included cover blurring, sharpening, embossing and others. The menu provides five further non-customisable filters, and there is the option for the effect of any filter to wrap around from edge to edge. All filters are subject to some degree of additional control, either in terms of the strength of the effect expressed as a percentage, or as a radius defining the extent of the area to be affected (in pixels). Only experience over a period of time and in a variety of circumstances will show the full extent of what can be achieved with filters in any image processing package, and Studio24 is no exception in this respect.

CONCLUSIONS

As always it is very difficult to sum up one s views on such a major application as Studio24, as it is the combination of effects and features which determines what you can do, and there are a myriad of permutations. However, I hope the illustrations give you some idea of its capabilities.

First let me get some little niggles off my chest. The combination of mode panel, tools and menu options has a slightly confused and cluttered feel to it - the design behind this, i.e. how a user controls and accesses a particular feature, needs a little more thought in my view. That an image can only be created by specifying pixel sizes (not page sizes as in PhotoDesk) is a possible minor limitation. I also found the Undo/Redo feature a little difficult to get used to. Undo does not undo in steps, but back to the last save or change of mode/tool, and at a single stroke. Thus if you select the Smudge brush, and make a number of smudges, Undo removes all of these, not just the last one - I would prefer a more graduated Undo option.

On the positive side, Studio24 is extremely flexible in the way in which attributes can be combined, both in a single operation (choice of brush size, style, texture, opacity, smoothing, colour etc.), and in a sequence of steps (e.g. multiple overlaid graduated colour fills using the Fill tolerance facility). Compared with some image processing packages, Studio24 achieves extremely smooth gradations of colour, whatever means is used to create them. For example, some airbrush tools can result in obvious patterns of colour when a smooth graduation is needed. Studio24 also has some outstanding features, its Smudge brush being one, and the use of smoothing and fill tolerance levels another. It has most of the drawing and painting tools which one might expect, though not all, plus fills, text, stencils, cut & paste, and a goodly range of effects and filters.

How does it compare with other similar software? Should you view Studio24 as an art package with image processing capabilities, or as an image

PRODUCT INFO

Product	Studio24
Supplier	Pineapple Software 39 Brownlea Gardens, Seven Kings, Ilford, Essex IG3 9NL. Tel. 081 599 1476 Fax 081 598 2343
Price	£125 ex. VAT