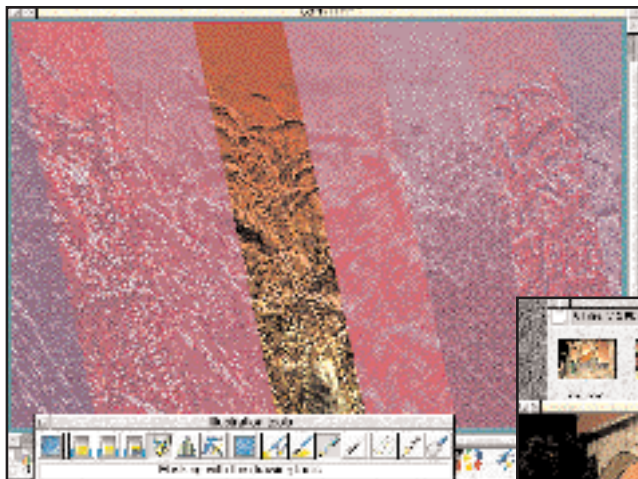


INTRODUCTION

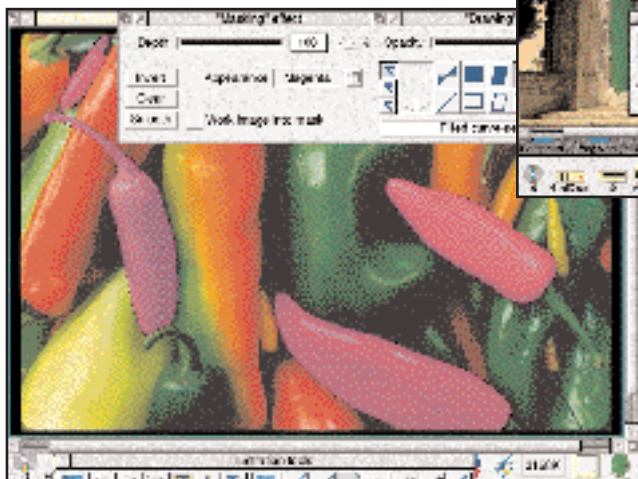
After I was asked to write this review I spent quite a long time - too long for the editor's liking - using and experimenting with Photodesk's multitude of functions before putting pen anywhere near paper. I had a good reason however, and I hope that when you turn to the example page you will understand it. Whereas in a review of a sound editor it is impossible to let the reader hear what the program can do, the same is not true for a graphics package. I wanted to let Photodesk speak for itself. See for

Photodesk

Alan Bonsor puts paint brush to canvas as he tries out Photodesk - Spacetechn's new image processing and photo-



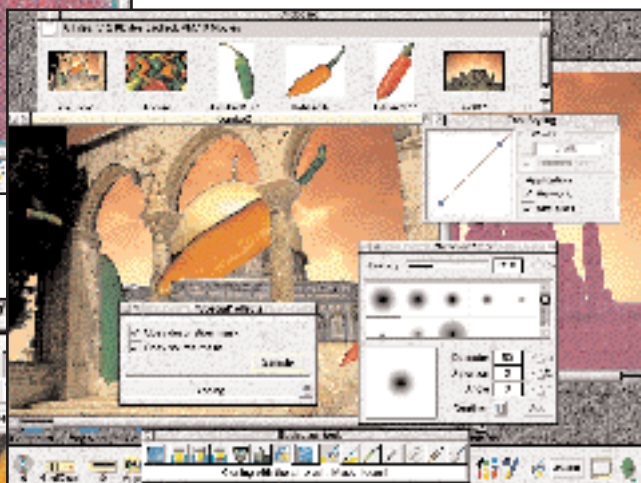
A mask can be created with any tool - in this case the filled parallelogram - and moved using the shift key.



Many operations can have as many as one million permutations. The depth of a mask can be from 0-100% in steps of one-tenth percent, as can the capacity of the application tool. Combined, a staggering variety of effects can be created.

yourself whether I have succeeded. Photodesk is billed as a studio-quality image processing and photo-retouching application.

Acorn users have never been short of graphics and image processing software - just take a look at the Image Processing Group Survey (7:2) in which no less than ten such packages were examined. However, the two words that everyone has been waiting to hear are studio



quality. Until now, all Acorn graphics programs have been constrained by the Archimedes 8-bit colour, rendering them unviable for professional use. With up to 16 million colours and a maximum of 256Mb of RAM, the Risc PC is the ideal platform for studio quality image manipulation. Photodesk is one of several new packages to take advantage of this power and offer Risc PC users similar functionality to that provided by

the industry standard graphics manipulation package, Photoshop, on the Macintosh.

Photodesk's dialogue boxes are a pleasure to work with.

THE USER INTERFACE

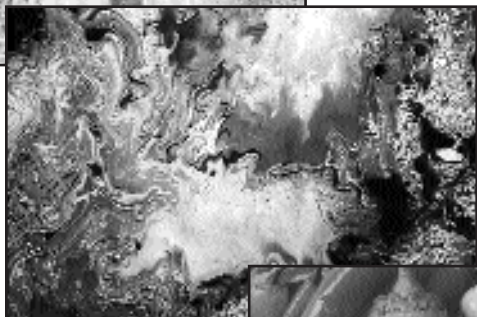
From the moment you double-click on its icon and are introduced to its title page, you start to realise that Photodesk is something special. The program oozes features, professionalism and quality.

Photodesk's user interface is outstanding - borne out by the fact that I barely glanced at the pre-release manual during the entire time I was preparing this review.

Vitality important for image processing is memory - the more the



These are the four images in their original states. The corn field and the oil were taken from a Macintosh textures CD-ROM, while the other two form part of the RISC PC image collection.



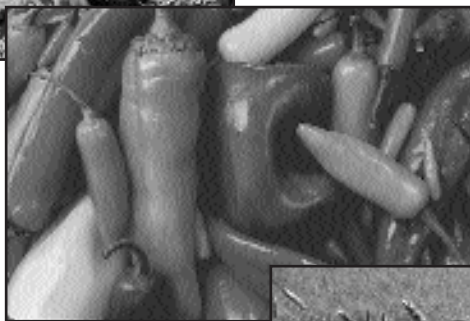
better. Photodesk uses a fast virtual memory system which allows you to edit images that are considerably larger than your computer's free memory. Whether you plan to work with a dozen 200K Sprites or several 20Mb TIFF images, so long as you have sufficient hard drive space, Photodesk will handle anything that you can throw at it. The individual images used for this review each came to over a megabyte in size, and the final combined image 6.5Mb. This is still fairly small however. An A4 page scanned at 300dpi in full colour requires around 20Mb, and Photodesk handles it perfectly, even on a 4Mb Archimedes 410. Believe me, I tried!

Quite staggeringly, Photodesk allows you to perform almost any operation with any tool, and the majority of the tools and

effects can each have 1,000 different strength settings (from 0-100% in tenths of a degree). Combine a tool with an effect and 1 million variations become available. This is the first time I have ever seen this type of versatility in any program on any computer system.

Photodesk provides a single tool bar containing fifteen beautifully designed icons. By default, the tools provided are the illustration tools. These include the air brush, paint brush and drawing tools, the magic wand, which allows you to perform operations on a range of colours, and the various colouring and processing functions. Clicking on any of them pops up the relevant dialogue box. These dialogue boxes are excellent examples of what RISC OS software should look like. They follow Acorn's guidelines to the letter - uncluttered, self-explanatory, and neither too big nor too small, they are a pleasure to use. And unlike many other popular applications, Photodesk's dialogue boxes don't obscure 75% of the desktop.

A extensive range of cut-and-paste functions are accessed by clicking on the scissors icon. This switches the tool bar into cut-and-paste mode, from where you can cut out objects using a very well implemented lasso, the magic wand, a drawing tool - a piece of text for example - or by simply dragging over the relevant section of the image. The cut-out object can be pasted onto a different section of



the same image, a different image, or the clipboard, and all current settings have full effect. Thus an object can be made to fade gradually into another image by using the effect gradient when pasting.

Photodesk's undo facility is nothing less than amazing. It is possible to undo any operation at any time and with any tool. You can create a mask with the magic wand at 100% strength and then undo part of the mask with the air brush at 25%. Merging several images together couldn't be simpler, as you can simply paste any object over any other one and then use the air brush to fade the joins between the various objects. You wouldn't waste your time doing this, however. The feather option does the fading for you.

IMAGE PROCESSING

Technically speaking, image processing is the application of mathematical algorithms to the data values within an image to produce variations or enhancements to the image. Although this may sound incredibly complicated, image processing simply enables you to do things such as brighten, darken, sharpen, smooth and change the contrast of an image.

Photodesk provides a very substantial 34 image processing functions divided into five categories: Enhance (sharpening etc), Gamma (contrast control), Emboss (textures), Math (solarizing etc) and Equalise (histogram control). As if this weren't enough, you can also customise most of these and add your own functions.

Suffice it to say, Photodesk's image processing functions perform as well as, if not better, than those provided by Photoshop.

MASKING

Of the four images that make up the main example, three of them were created making extensive use of masking. A mask is just what it says. It prevents an operation from affecting the area that is covered by the mask. Photodesk's masking facilities are extraordinarily powerful and flexible. The program uses an 8-bit mask, which means that the mask can have depth. You may decide for example that you want an operation to affect the light areas of an image more than the dark areas. By choosing the work into image function, the mask will adjust its strength according to the colours of the image. As with all other operations, a mask can be created using any tools, from the magic wand - useful if the image contains well-defined objects - to the drawing tools - used to create the bands of corn in the example - to the airbrush and so on.

Since the launch of the Archimedes back in 1987, I have used almost every art program that's ever been released for that computer. Photodesk's masking facility is the best that I've

seen!

IMPORTING AND EXPORTING

Photodesk can import and export a variety of different image formats. These include the entire range of Archimedes Sprite formats from 8 to 32-bit, TIFF, Clear, JPEG and PhotoCD. I would have liked to have seen support for EPS colour separations as well, as I use these extensively on the Macintosh with Quark Express. Spacetech does say that this is one of the facilities the programmers may be adding in a future release.

Image loading and saving are extremely fast - considerably more so than with programs such as ChangeFSI and Translator, and like greased lightning when compared to Photoshop on the Macintosh.

SYSTEM REQUIREMENTS

Image processing and photo-retouching is, unfortunately, a very expensive exercise. Your computer can never have too much memory, too large a hard drive or too fast a processor.

Photodesk allows you to adjust the memory it grabs dynamically as you work. You can thus force it to free computer memory without having to quit the application or discard images. It does this by storing more or less of the images being edited in the virtual memory on the hard drive. I did this review on a Risc PC with 10Mb memory and a 410Mb hard drive. In order to try and cut down excessive disk access I allocated a 5Mb memory cache to Photodesk. In no time at all, it had borrowed 39Mb of the hard drive to use as virtual memory! Even with the power and speed of the ARM6 processor, I still spent some time twiddling my thumbs while Photodesk munched, in the nicest sense only, its way through its temp file on the hard drive transferring parts of images to and fro.

I also used Photodesk on a very souped-up Archimedes 410. It works very well, but it's like connecting a pair of Celestion speakers to an Amstrad hi-fi - there is just no way you will appreciate what it can actually do.

The following 2 pages demonstrate the various effects that can be created with Photodesk.

PRODUCT INFO

Product	Photodesk
Supplier	Spacetech 21 West Woods, Portland, Dorset DT5 2EA
Tel.	0305 822753
Fax	0305 860483
Price	£169.95 ex. VAT £199.69 inc. VAT

