RELEASE NOTES FOR !
FaxScan V1.11 24-10-91

If you are already using an earlier version of FaxScan

If you have installed FaxScan on Hard disc, remove any previous version completely by deleting the old !FaxScan application before installing this new software. You must also reset the machine before using the new version, as this will remove any old FaxScan modules.

Fitting Instructions - A3000 only

The diagram in the FaxScan Installation guide refers to the Archimedes machines. Although the layout of the main circuit board in the A3000 is different, the same directions apply with the following amendments;

The A3000 cover is removed by fist loosening the two screws at the rear and lifting it up. Three plastic lugs along the front edge then need releasing before lifting the cover away.

With the rear of the machine furthest away from you, the Econet slots are located just behind and to the left of the keyboard. Two capacitors C12 and C14 may have to be bent over slightly to clear the underside of the FaxScan board. C12 (sat between the Black and red power terminals) should be bent down towards the back-left corner of the machine, while C14 (nearer to the keyboard than 012) should be bent towards the front-right corner.

In order to ensure the correct alignment of the pins before pushing the card home, match the longest row of pins on the Econet slot with the corresponding pins on the interface card, while looking in from the front edge of the machine. Then lower the edge of the card with the shorter row of pins down to meet the corresponding socket just behind the keyboard.

Operation in high resolution screen modes

Due to the high operating speed of the scanner (A4 page in 12 seconds!), scanning on the desktop while using certain high resolution screen modes may give rise to garbled images. In practice it is only the two 256 colour multisync modes 21 and 28, which both require 320Kbytes, which slow the processor down to a point where interrupts grind to a halt. This shouldn't be too inconvenient as the desktop is very slow in these modes anyway and Multisync modes 20 and 27 (16 colours) are generally more suitable. Machines fitted with ARMS do not have this problem, which is why no attempt has been made to 'lock out' operation in particular modes.
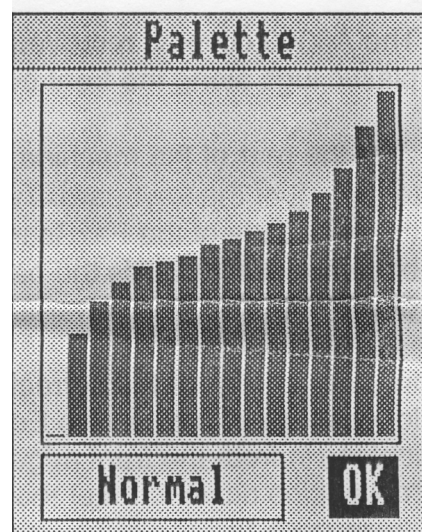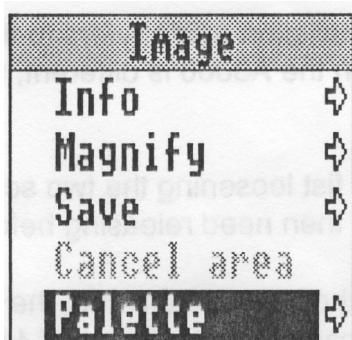
See over for more information...

Scanning results - improving the image.

For most types of pictures, it is recommended that scanning is performed with 'Halftone' selected on the Fax machine. There are two types of Halftone, each one 'dithers' the image in order to obtain shading. The effects are most easily seen at 200 dpi.

Greylevel reproduction is generally improved with the use of Halftoning but particular benefits are to be had when scanning at 50 dpi.

Note that the 'Document density' setting will have no effect when Halftoning is used. The only time that Halftoning may be undesirable is when scanning text or simple black/white images, it is under these circumstances that the Document density setting is used to determine the threshold between black and white.

In addition a new facility has been added to the FaxScan application to allow adjustment of the tonal range of 50 dpi, 16 colour images. It takes the form of a set of sliders which are dragged with the mouse to specify the saturation of each grey level from 0 to 100%. Of the 16 sliders the left-most represents black as seen by the scanner, and the right-most, white. The 'Normal' button puts the default linear gradation into the registers, while OK re-paints the image with the new palette. Experimentation is recommended and special effects such as inverse video or reduced contrast etc. are easily obtained. The settings shown in the picture on the right provides equalisation for images which have too much contrast.

Note that when viewing 50 dpi, 16 colour images on the desktop, only 8 greylevels are seen when using a 16 colour screen mode. To see all 16 greys, use a 256 colour mode such as 15 or 28 (Mullisync).

Changes to sprite modes.

The three sprite modes used for the three resolutions are now as follows:

50 dpi 16 colour mode 20
100 dpi 4 colour mode 19
200 dpi 2 colour mode 18

These modes are chosen for their 'square pixels'. Some RISC OS applications did not recognise the modes used in previous versions of FaxScan. They should now.