Archimedean

Featuring:

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5th Edition

The Archimedes makes an excellent DTP machine, so why is it rarely considered as a serious option in mainstream publishing?

Over the past two years we've seen Impression develop into a very capable publishing tool. Against the established leaders of the Mac and PC world - QuarkXPress, PageMaker and Ventura - Impression has caught up quickly and even surpassed them in many respects. Undoubtedly its major advantages are speed and price. Running on an A5000 it is much faster than Macintosh or PC equivalents.

The Mac succeeded because it was the only machine with publishing software (PageMaker) when the traditional market was ready to accept it. Apple, recognising when they were on to a good thing, grasped the opportunity and pushed themselves forward into the publishing arena.

Acorn concentrated on their established Educational sales and the home users who recognise a good machine when they see one. Consequently Acorn lack the publishing focus of Apple.

Looking forward, we're working with Acorn to make the Archimedes in 1992 the great success it deserves to be in the publishing marketplace. Look out Apple...

The next Archimedean

We're flattered that you like The Archimedean so much that we're constantly asked when the next issue will be available. It's been nearly six months since the previous issue, but we hope the next will be out sooner.

Scanner prices down

ScanLight A4 prices have been reduced, so that the price now offered for the A4 scanner with sheet feeder is the same as it was previously for the scanner alone, with the price for the scanner alone massively reduced too.

ScanLight A4 is ideal for anyone needing to scan full A4 page widths and is ideally suited to use with Fax-Pack if you're considering fax as an option for the future.

The scanner, sheet feeder, software, manual and interface now retail for £399 + VAT (£468.83 inc VAT).

One scanner, two machines ?

We've had a surprising number of customers telling us that they have two machines and wish to be able to use their scanner on either - without having to swap the expansion card between them. In response, we can now offer owners of ScanLight scanners an additional expansion card at a special price of just £60.00 + VAT (£70.50 inc VAT).

Production

This issue of The Archimedean was created entirely in Impression 2, using an Archimedes 440 with 4MB RAM and a 20MB hard disc. All proofing and layout checks were output through LaserDirect. Final negative film was created from PostScript output files through a Linotronic 300 imagesetter. All colour separations were created with the aid of The Impression Business Supplement. Photographs were scanned using either Scan-Light Junior 256 or Scan-Light Professional and placed in their required positions. No manual film stripping was performed.

New TurboDrivers on the way ... New Bubble Jet support

New printers seem to be coming on to the market so often that it's hard to keep up. The new Canon BJC800, for example, is a milestone in the area of high quality colour from the desktop.

At Computer Concepts we've been looking at new printers and just as we created fast, innovative drivers for LaserDirect, we have new products on the way. TurboDrivers will be our range of new drivers for various printers we consider worth supporting.

The first TurboDrivers to be released will be for the very popular low-cost Canon BJ10E, at a price in the region of £50 + VAT. Shortly after (early summer '92) will come Turbo-Drivers for the Canon BJC800 full colour bubble jet printer - available as a package with the printer at around £1900 + VAT (less than the RRP for the printer alone) or around £100 + VAT if you already have the printer and just want the TurboDrivers.

The new Canon BJC800 works on bubble jet technology and utilises Cyan, Magenta, Yellow and Black inks to create stunning full colour pages. The results seem better than other colour bubble jets currently on the market, which can be attributed to its use of four inks instead of just three (no black) used in others. With a resolution of 360dpi and a total print size of A3 it's ideal for colour visuals, posters, etc.

We don't expect to be the only company working on drivers for the BJC800, but we're confident that ours will be the best. This is the first time we've been able to provide support for printing 24-bit full colour (achievable from draw file formats and our forthcoming Artworks package). We doubt that anyone else will manage this, so make sure you check exactly what they mean by 'full colour' before you buy; if it's not 24-bit, don't buy.

BBC Micro software bargains

Maybe the Archimedean will seem a strange place to talk about software for the original BBC Micro, but we know a large number of Archimedes users also have one tucked away somewhere.

We're selling off some old stock to make way for new - hundreds of laser printers and scanners occupy a large amount of space !

While stocks last, we are offering the following (prices excl. VAT):-

Product	Was	Offer price
Termi II	£29	£10
Speech System	£30	£10
Communicator	£29	£10
Accelerator	£30	£10
Inter-Base	£60	£20

Network drivers for LaserDirect

Archimedes networks are becoming increasingly common, and with that trend comes the need to share valuable resources.

SJ Research and Oak Solutions have both produced drivers which allow LaserDirect printers to be used across networks. For further information contact either of these companies direct: S J Research Tel: 0223 416440 Oak Solutions Tel: 0274 620419.

New LaserDirect printer drivers

Version 2.05 drivers are now available to registered owners of LaserDirect. This version has a few minor problems fixed (e.g. it now works with text fields in Squirrel database), but also now provides compatibility with RISC OS 3 and the A5000.

Please note that although these drivers are now fully compatible with RISC OS 3, they are not strictly RISC OS 3 drivers, which means, for example, that they can't sit on the icon bar at the same time as true RISC OS 3 printer drivers.

Current versions

At Computer Concepts we continuously improve our products. Between major upgrades there are frequent minor improvements performed. At any time you can return your original program discs and we'll supply the latest revision, free of charge.

Changes are often very minor, so there's no need to get every update; just check every few months to see if you have the latest version. If you have a specific problem, check your version and if it's our latest release, supply us with full details so that we can investigate further. If it's an older version then upgrade.

Listed below are the current versions on release at the time of printing. If the version you have is significantly earlier, return to us your original master disc (only Program Disc 1 for Impression) and we'll send back the latest version to you*

Impression..2.17
Impression Junior..........................1.17
Equasor..1.02
ScanLight Plus software...............1.12
LaserDirect 2.05
ShowPage..3.31
Compression 1.10

* Upgrades are supplied to registered customers only. Computer Concepts Ltd. reserves the right to refuse supply of free upgrades.

What's not in this issue

As usual this issue is rather late in appearing. As a result there have been developments and new products that are now available or shortly to be available that are not covered in this issue. These will have to wait for the next issue now.

Therefore amongst other items to be covered in the next issue will be more details of our new Turbo-Drivers, for both monochrome and colour inkjet printers (mentioned on the left). Also we will describe our new Thesaurus product that integrates with Impression and Impression Junior.

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fax*pack*

Over the last few years faxing documents has become a very common and popular method of communication. Literally millions of fax machines are in use in businesses worldwide. In fact they are becoming so popular that it's not unusual to have more than one fax machine installed.

Fax machines allow documents that would traditionally be sent by post, to be sent over the phone. They are generally simple to use and understand, which is part of the reason they've become so popular.

A traditional fax machine consists of a relatively low resolution (200dpi) monochrome scanner, a simple microcomputer, a fast data modem and a printer, usually thermal. Looking at this list of components highlights one of the reasons for making fax part of an existing computer system, since it duplicates many of the same parts.

FaxPack is a standard single-width expansion board for the Archimedes range of computers. It brings the benefits of fax communication to Archimedes owners and integrates it with the world of the Archimedes desktop. An integrated fax machine works faster, more efficiently and more cost effectively.

Remote printing

FaxPack appears as a standard RISC OS printer to all applications. This means that sending a fax is exactly the same as printing any document, except that: a) it's rather quicker and b) the printed results appear on a remote fax machine anywhere in the world, rather than on the printer next to you.

Given that many faxes are created on word processors or computers of some description, it is an incredible waste of time, effort, paper and money that traditionally nearly all of these faxes are first printed, then immediately re-scanned into the fax

machine and transmitted. FaxPack includes printer drivers based on those used in our Laser-Direct printers. They are very fast, usually only taking a few seconds to print, and the actual sending of the fax is done in the background. The time taken to transmit a fax varies depending upon the complexity of the image and the quality of the telephone line, but is usually 30 seconds to 1 minute per page. Therefore it's a key feature that FaxPack can get on with the job of transmitting the fax while you continue to use the computer.

Another advantage of sending directly from the computer is the improved quality. Traditional fax machines have to re-scan the page and, given that most fax scanners are not very high quality, and can never be more than 200dpi anyway, the image always degrades. Sending direct from your application cuts out this print and re-scan process, thereby ensuring you always get a pixel perfect image at the far end. In practice this means you can send text as small as 9pt and be confident it will be readable at the far end - something that is far from likely if the document was printed and re-scanned.
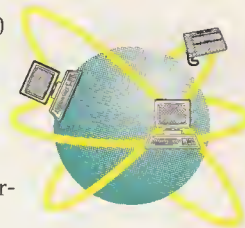
Fax receiving
FaxPack can also receive incoming faxes. Again it does this in the background so that you can continue to use the machine without having to stop when a fax is received. During receipt of a fax a small status window is displayed on screen, so you know immediately a fax has been received. The image is saved to disc during receipt and, although FaxPack will work with a floppy system perfectly well, it is preferable to have a hard disc especially if you are likely to receive a number of faxes.
Since a fax is just a 200 dpi scanned

image (usually 200 by 100 dpi in fact) it is rather like a large scanned sprite. FaxPack saves space by storing faxes as compressed images on disc occupying about 50k to 100k per page. If it wasn't compressed, a fax could occupy up to 500K per page!

Once received, faxes can be viewed on screen using a program called FaxView which is supplied as part of the FaxPack system. This shows a reduced and anti-aliased view of the fax in a window. You can scroll around the image, select any area, crop the area, print it or save it as a sprite. In this way it's simple to save a fax, or any portion of it, as a standard Acorn monochrome sprite.

Normally FaxPack would be set to save files in the background, although if you want FaxPack to act a little more like a traditional fax machine, it can be set to print the fax automatically on receipt. FaxPack can print to any standard RISC OS printer in which case it will take a few minutes to print, just as it would from any RISC OS application. If you have a LaserDirect system it can print entirely in the background and more quickly too.

Of course one of the benefits of a fax machine in a computer is that you don't *have* to print a fax at all. You can keep faxes stored electronically as

Configuration	
Display incoming fax	No
Print incoming fax	No
Local fax number	0442 231632
Local fax name	Computer Concepts
Line error limit	255
Page error limit	5
Minimum speed	2400
Mercury prefix	
Automatic dial	On
Automatic answer	On
Rings to answer	255
Dialing type	Tone dial
Dial tone detection	On
Incoming call indication	On
Transmission log file	Don't maintain
Receive log file	Maintain

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you would any other file. Computer files don't fade like most fax prints and they don't waste paper. One area of growing concern for fax users is that of junk faxes. Unlike junk mail where only the sender pays, with a fax machine you normally have to pay to receive a fax because it's printed on your fax paper (which isn't cheap). With FaxPack this is less of a worry since there is no paper involved and if you don't want to keep a fax you can just delete it.

Some people have pointed out that the real drawback of a computer based fax system is that in order to be sure of receiving a fax at any time of day or night you need to leave the computer on all the time. This is a legitimate criticism, but you have to remember that the same is true of a standard fax machine. These are left switched on all the time, and so the only difference is that your computer takes more power than a fax machine. However the difference in the costs of leaving the two machines switched on is not likely to be significant, especially since you wouldn't leave the monitor switched on. You might think that it doesn't do your computer any good to leave it on all the time? We don't think this is the case at all - in fact it's long been argued that computers last longer if they are *not* switched on and off.

File sending
The other area where Fax-Pack excels over a stand-alone fax machine is in the area of direct file transfer. If FaxPack detects that the machine that answers a phone is another Archimedes with a FaxPack installed, you can avoid the need to print the file at all. FaxPack will allow any file or directory of files to be transferred onto the disc of the receiving machine - all entirely in the background. Simply type the phone number into a dialogue box, then drop the file onto the FaxPack icon. That's it. You can carry on using the computer and be sure that a few minutes later the files will appear on the recipients' disc.

Please note that the early FaxPack boards will be supplied without the file transfer facility, but software upgrades will be sent to all customers who purchase FaxPack now.

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Combined phone/fax
FaxPack obviously needs a phone line. It is supplied with a two way phone adaptor that allows it to be connected alongside your existing phone, so all you need is a standard BT phone socket. You don't have to have a dedicated line.

If you do use the same line for fax and the phone, you can set FaxPack to answer the phone after a set number of rings, or not at all. If you answer the phone manually and you find it's a fax machine at the other end (it will

be producing a high pitched bleep), then you simply select the "Receive fax" menu option from the icon bar, and FaxPack will take over the line and accept the fax.

Scanners
Since the majority of faxes are computer produced documents a scanner is not a necessary part of the system. However if you do have a scanner (of any type) then this can be used to scan images for faxing. Since you can fax any sprite this simply involves scanning using your normal scanner software and printing to FaxPack. If your scanner software doesn't support printing, then simply place the sprite in another application to print.

Availability
FaxPack is available now at £299 + £10 carriage +VAT (£351.32 inc) and this includes the expansion board, all the software, two way phone adaptor, manuals etc.

FaxPack is compatible with all Archimedes including the A3000 where it can be fitted as an external expansion board. It is compatible with RISC OS versions 2 and 3.

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Computer Concepts Price List

Product	Price (excl.VAT)	Price (inc. VAT)	Availability
Impression 2.17	£169.00	£198.57	In stock
Impression 1 to 2 full upgrade	£20.00	£23.50	In stock
Impression Junior	£89.95	£105.69	In stock
Impression Business Supplement	£49.00	£57.57	In stock
FaxPack	£299.00	£351.32	In stock
Scan-Light A4 with sheet-feeder (A3000 v. available)	£399.00	£468.83	In stock
Scan-Light A4 (A3000 version available)	£299.00	£351.33	In stock
Scan-Light Junior 256 (A3000 version available)	£199.00	£233.82	see below
Scan-Light Professional	£899.00	£1056.32	In stock
Scan-Light Professional + SCSI Interface	£999.00	£1173.82	In stock
Scan-Light Junior 256 out of stock but deliveries expected soon – 'phone for availability			
LaserDirect HiRes4	£999.00	£1173.82	In stock
LaserDirect HiRes8	£1495.00	£1756.62	In stock
LaserDirect LBP4 board	£399.00	£468.82	In stock
AvantG font pack	£20.00	£23.50	In stock
BookM font pack	£20.00	£23.50	In stock
Compression	£39.00	£45.83	In stock
Impression II Borders Disc	£12.77	£15.00	In stock
Equasor	£49.00	£57.57	In stock
ShowPage	£149.00	£175.07	In stock

Note: some hardware products are subject to P&P. All products are available by mail order from Computer Concepts or from all good Acorn Dealers throughout the country and overseas. Computer Concepts: 0442 63933

VISA *MasterCard*

The Acorn Publishing System

Recognising how well suited the Archimedes is to publishing, Acorn have announced The Acorn Publishing System. This basically consists of all the parts necessary to create a complete Archimedes based DTP machine: an A540 and multi-sync monitor, LaserDirect HiRes8, Scan-Light Professional, running Impression 2 with the Impression Business Supplement and Equasor.

A particularly admirable feature is that the system comes pre-installed. Expansion boards are fitted and the software is already on the hard disc, ready to plug in and go. As you can imagine, we're very proud that several of our products were selected as parts of the system.

As all Impression owners will know, especially those with an A540

and a LaserDirect HiRes, this is a highly competitive, productive and very fast DTP solution. With its 600 dpi printing, expandability to 16Mb RAM, super VGA screen and 256 greyscale flatbed scanner, there's no doubt that Acorn have put together an excellent combination.

Acorn will sell the system through selected dealers for £4995 +VAT, which is far less than the RRP of the combined parts, and considerably less than any equivalent system based on either PC or Mac.

We see this as a significant step towards a stronger market position for Acorn. By combining readily available components to make an effective publishing system, they are more able to compete for sales in the publishing sector.

During 1991 we heard that Impression had been nominated in the Computer Shopper awards. This was quite a surprise as our software, and the Archimedes, receives little exposure outside the Acorn world.

Although Computer Shopper is dominated by PCs, it's very refreshing to see a top selling magazine giving space to other computers. Indeed it has sections on the Mac, Atari and Amiga. James Hope writes an interesting column every month on the Archimedes and is clearly an Archi fan. His column is perhaps the only place where PC owners will ever hear about the Archimedes.

When the time came in December last year, we were invited to the prestigious black tie award dinner, hosted in London by Jonathon Ross. Five of the programmers who worked on Impression went to the dinner (at a cost not dissimilar to the GNP of a small nation!). Once there we found out the identities of the other nominated products. Each was a respected piece of software, including WordPerfect for the Mac, Adobe Illustrator 3, Excel 3, and ClarisWorks. We wondered quite how you compare Impression with a spreadsheet or a drawing package?

To our surprise we were announced as the winners! We wondered how Microsoft, Adobe, Claris and others felt about being beaten by a small UK company they'd probably never heard of, especially when their entries were genuine world-class products? But despite curiosity, it didn't seem polite to ask them!

A Company with Vision

We're pleased to be able to announce that Computer Concepts have acquired a major stake in the well known Newcastle-based hardware development company Wild Vision, best known for their Hawk series of colour digitisers and Genlock card.

This news follows a period in which Computer Concepts' expansion cards have been manufactured by Wild Vision at their purpose-built facility in Boldon, Tyne and Wear. The decision to cement the business relationship permanently is set to increase the prominence of both companies in the fields of electronic publishing and multimedia on Acorn Machines.

Charles Moir, Managing Director of Computer Concepts, said "It has become clear that the two companies complement each other very well, Wild Vision with its hardware background, and Computer Concepts with its experience in software development. To produce the finest quality

hardware and software we must recognise the increasing interdependence between the two areas, which is why the arrangement can only prove to be mutually beneficial."

Peter Wild, Managing Director of Wild Vision, went on to emphasise the value of the alliance in terms of technological progress: "We are now poised to forge ahead in multimedia applications. Not only will our relationship with Computer Concepts provide excellent software opportunities and financial advantages; I also believe that this turn of events will prove to be catalytic in giving Wild Vision's desktop video products a considerable step-up in the multimedia arena as a whole, which is a very exciting prospect."

We plan to bring you more details of Wild Vision's products in the next issue of The Archimedean. For immediate information contact Wild Vision on 091 519 1455.

2.17 Development ...... continues

Unfortunately Impression II had a few problems with the newly introduced A5000 machine. This was due to changes in the parallel printer hardware on the new machine which prevented Impression from checking for its dongle.

Contrary to some reports, the fix involves only a small software change and does not require a new dongle. It was unfortunate that this problem occurred, but we were unable to cure the problem quickly enough prior to the official launch of the A5000 at the Acorn User Show.

Because we had to release a new version of Impression, we made a few other small changes at the same time. So version 2.17 takes advantage of a few new features in RISC OS 3. An important point to note is that this new version works not only with the A5000, but is of course fully compatible with all other models - there just won't be any need to upgrade unless you're running RISC OS 3.

RISC OS 3 features

So what changes have we made at this stage for machines running RISC OS 3? Well, there's a new format for Draw files that allows rotated text and sprites. Impression II owners have always been able to rotate sprites in frames and so this feature is nothing really new. However with version 2.17 it now allows sprites that are included in Draw files to be rotated. Also, more usefully, Draw can now rotate lines of text, and again version 2.17 now supports it. This means the FontDraw utility is no longer necessary. You can just type a line of text in Draw, drop the file in an Impression frame, and then rotate this to any angle directly (with the Adjust button as usual).

The only other notable change that is specific to RISC OS 3 concerns printing to PostScript devices. The new printer drivers support automatic downloading of fonts to PostScript devices and Impression has been altered slightly to take advantage of the feature. It means far quicker and easier printing to Post-Script printers.

Other features

There have been a few minor changes to Impression that may be of benefit even if you don't have RISC OS 3. It now retains the settings of the buttons on the Save Text dialogue so that if you save a text file without styles and with linefeeds, it remembers the settings for the next time you save text. The settings are also saved as part of the preferences now.

More significantly for any owners of ScanLight we've made Impression cope with true 256 grey-level sprites. As part of the RISC OS 3 developments Acorn have specified a new format for proper 256 grey-level sprites and we've added support for it in version 2.17. This feature does not require RISC OS 3 and so will work on all machines, although it will work faster on RISC OS 3 machines. So at last ScanLight owners can put 256 grey-level sprites in Impression and no longer have to bother with the 176 grey-level option. Therefore we recommend that all ScanLight owners, especially those with 256 grey-level scanners, upgrade to Impression 2.17.

Note - ScanLight has always had the ability to save in this 256-grey-level format and so it's not necessary to upgrade ScanLight. Yes that's right - Acorn have adopted the ScanLight file format for 256 grey-level sprites.

The other change to this version has been to allow our forthcoming thesaurus to integrate better with Impression. On version 2.17 (and 1.17

of Impression Junior) whenever you double click on a word to select it, the thesaurus can instantly look up the word and display a list of synonyms. This feature is not available on earlier versions of Impression. If you're interested in our new thesaurus (still under development at the time of writing), please contact us for details.

Impression Business Supplement

Just as for Impression itself, some changes were needed in The Business Supplement to take advantage of the new PostScript facilities. A new version of the ExpressionPS utility has therefore been released as part of the Business Supplement. If you are upgrading to Impression 2.17 and you also own an Impression Business Supplement, return that disc at the same time and ask for both to be upgraded.

Conclusion

Impression version 2.17 is the first proper RISC OS 3 version. It is compatible with both RISC OS 2 and 3 (all Acorn machines), so you don't have to have a new machine to use it. We are now shipping version 2.17 as standard for all machines and operating systems. Any existing owner can upgrade simply by sending their Impression-II disc 1 back to us. We will replace it for the latest version. There is no charge for this upgrade, but please only request it if you have a genuine reason.

Some A5000 owners will have received early versions of Impression that included temporary fixes to allow it to work on the machine. We recommend that all A5000 owners now upgrade to version 2.17.

A5000
Compatibility issues

After an extremely successful launch, and corresponding shortage, the A5000 is now freely available. There is no doubt that this is clearly the best machine Acorn have produced at its price. However the machine is quite different from previous Archimedes in two distinct areas. Firstly, the hardware design has changed in several key areas. Secondly, it runs a new version of the operating system, RISC OS 3. Together these changes mean that, although almost all existing products do run on the new machine, and in most cases perfectly well, few of our products were initially 100% compatible. In addition there are some new operating system features of which almost all RISC OS applications could take advantage. It's therefore likely that all software houses will be bringing updated versions of their applications to the market, either to fix problems on the A5000 or to take advantage of new A5000 features.

A bug in RISC OS 3 affects Impression and ScanLight when selecting a greyscale palette. (The "Greyscale dithering" preference option in Impression and the "Set greyscale palette" option in Scan-Light.) Once the grey palette has been set, the font manager stops anti-aliasing, producing spindly, jaggy text. Only if the default palette is set again does the text become anti-aliased once again. We know that Acorn has a patch for this problem and we are hopeful we can include it with future upgrades.

The following summarises exactly how our products stand with regard to the A5000.

Impression II

As explained on page 5 in this issue, versions 2.14 and earlier did not run at all on the A5000. This was due to hardware changes that meant the dongle was not being detected. We hurriedly released version 2.15 that overcame the problem (and uses the existing dongle), but we have since fixed a couple of minor problems to reach version 2.17, currently shipping at the time of writing. We recommend that all A5000 owners, and imminent owners, upgrade to this version, which will now run on all Acorn hardware and OS versions.

Impression Junior

All versions of this ran perfectly well on the A5000. However we have produced a new version 1.17 (which corresponds to the new Impression II version). This has some changes that allow it to take advantage of some new OS features and so again we recommend all Impression Junior owners who have an A5000 to upgrade to version 1.17.

Impression Business Supplement

Due to quite extensive changes to the PostScript printer drivers on RISC OS 3 it has been necessary to upgrade the ExpressionPS PostScript utility. Note this new version is suitable only for the A5000 and is available as a free upgrade to existing owners. Also the WordPerfect loader has had to be upgraded.

ScanLight

Apart from the palette problem described above, this product appears to be completely compatible with the A5000 and RISC OS 3.

LaserDirect

Due to changes in the font format of the new operating system, the Fast Text feature of LaserDirect did not work with RISC OS 3. This was not a severe problem as this feature can easily be switched off with the result that it all works again (albeit slower). However we have now updated the software to version 2.05 which uses the new font format and is available to all registered owners. (*With Fast-Text on, the LaserDirect on an A5000 is very fast indeed.*)

Equasor

This product is completely compatible with the A5000 and RISC OS 3.

Compression

This works perfectly well with RISC OS 3. However, there is one obscure area that does not work. When using the new RISC OS background copying feature, if you expand a large file by dropping it back on itself (from the Compression window into the normal filer window) it will error. We have yet to track this down and are not sure if this is a problem within Compression. This can be overcome simply by not copying the file onto itself. Instead copy it into another directory at which point it should all work fine.

Art Works

Bird at 167%

ArtWorks is our forthcoming design and illustration package, mentioned briefly in the previous Archimedean. It will be a few months before Art-Works is ready for release, so this article is intended as a brief introduction to some of its capabilities.

Traditionally, DTP work requires illustrations and diagrams of all descriptions. The only real drawing program available for the Archimedes is !Draw which, for a program bundled free with the machine, is admirable. But a productive and flexible tool it is not. The power of the Archimedes for drawing has yet to be unleashed !

A good design and illustration program is of fundamental importance in making the Archimedes a truly useful publishing system. Without good illustrations it's near impossible to create good looking documents - even technical documents need diagrams.

More than a drawing program

We call ArtWorks a design and illustration program, rather than just a drawing program. It is an object orientated program, along the lines of Draw, rather than a painting program such as Paint. Being object orientated gives it several advantages over painting programs. Firstly drawings are assembled from a collection of objects, which remain as separate objects. At any time changes can be made by moving, scaling or transforming any part of the drawing in a variety of ways. Secondly, the drawing is resolution independent. This means that it always prints at the highest quality of the printing device, and no matter how much you enlarge it you will never get visible pixelation as you do with painting programs.
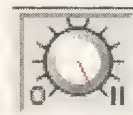
ArtWorks goes way beyond what Draw can produce, just as, for example, Impression goes way beyond 1st

Word Plus. ArtWorks has been designed to be as easy to use as possible, but also to provide a set of features and tools that allow it to produce drawings that would be impossible with Draw. ArtWorks will bring the facilities of the very best illustration programs to the Archimedes in a way which we believe is faster, easier to use and more productive than on any other machine.

Simple user interface

ArtWorks' user interface is the key to its ease of use. It's near impossible to make disastrous mistakes, because every action can be reversed. Every thing you do is recorded, so you can undo the most recent action, or a series of actions right back to where you started.

All the main tools of ArtWorks are presented in a tool palette - shown on the right. The tool palette is configurable to suit your way of working. It can appear vertical (as here) or horizontal; it can be one icon wide, or two icons wide - the choice is yours.

The astounding speed of ArtWorks is the feature that makes people stop and look when we've shown early versions at exhibitions. Programs on Mac and PC computers usually provide the option to work in a purely wire-frame mode to make the speed usable; in WYSIWYG mode they are painfully slow. ArtWorks is very fast in any mode, but just the same we provide a fully variable control of the on-screen representation - from wire-frame to fully WYSIWYG.

There isn't room to cover all the features of ArtWorks here but the next issue of The Archimedean will go into more detail. See the outside back cover for a list of features.

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Hints & Tips

When you call for help, be prepared !

Please make sure that when you call Computer Concepts for technical help you are prepared with all the relevant information at your fingertips. Have your product's serial number ready to quote, but also check what version you have - it's very important. Above all, please do check the manual; more than half the calls we deal with could be prevented by checking the manual first - it's quicker and cheaper for all concerned.

General Hints & Tips

Edit crashes as soon as it's started

RISC OS 2 versions of Edit can immediately terminate with a fatal error if too many fonts are installed. To get over this problem we suggest dividing your fonts between two folders: one with a basic set of fonts and another with the remainder. Change the !Run file of the second directory so that it adds itself onto the font$path variable. This should mean that double clicking on the second font folder gives you a full set of fonts. Clicking on the original set gives you the basic set. Impression will notice this change on certain actions such as going to the font effects menu. Below is an example of what to change in the run file:-

```
If "<Font$Prefix>"="" Then SetEval
Font$Path "<Obey$Dir>"+"."
```

```
If "<Font$Prefix>"<>"" Then SetEval
Font$Path Font$Path+","+<Obey$Dir>
"+"."
```

The Alt key doesn't work

If, when using Alt plus a number on the numeric key pad or Alt plus a character sequence to obtain the special top bit set foreign or symbol characters nothing happens, this usually means that the International module is unplugged. Press F12 and type UNPLUG then Return to see a list of currently disabled modules. If the name "international" appears then this confirms the problem. To re-enable it, from the "*" prompt type:
`rmreinit international`
being careful to type accurately. Just to be sure it's worked, you could type UNPLUG again to see that it's no longer in the list of unplugged modules. Even though you may never have felt the urge to disable this module, beware that some games and versions of PipeDream (prior to version 3) unplug it for you!

LaserDirect/Equasor/ ShowPage complain about fonts

All these programs, and some others, require access to the outline font manager and some outline fonts, usually found in a directory called !Fonts. This is *not* the same as the !Fonts directory found on the Apps1/Apps2 disc supplied with RISC OS 2. This is the !Fonts folder supplied with packages such as Impression-II and Impression Junior, and nowadays with RISC OS 3. You can usually tell the difference between an old !Fonts folder and a new one by double clicking on it. If it is the new one then it will say 'Outline font manager 2.42 installed'.

Expansion card stops working

If you find that after playing a game or using an untried utility one or more of your expansion cards have stopped working, they may need to be re-initialised. To check, use F12 from the desktop to reach the "*" prompt and type:
`podules`
(Acorn used to call expansion cards Podules.) This will list what the machine is aware of having fitted in each expansion slot. However, if a 'dirty' program interferes with CMOS RAM settings or deliberately disables certain facilities - but fails to restore them - your machine can be left in a state where it no longer thinks an expansion card is present. So, if a card you know is fitted does not appear in the list, you will need to re-initialise it. If the *podules command produces a "Bad command" error, then the Podule manager itself has been disabled.
As with reinitialising the International module (see above), you can list all of the currently disabled modules by typing UNPLUG at the "*" prompt. To reinitialise any module listed, type `rmreinit` followed by the module name and then press Return. Pressing Return again will get you back to the desktop.

Impression

Last page won't delete

If you drop a text file into an Impression or Junior default page and that text is too large to fit on the page, it automatically creates more pages. At this point, even if you specifically try to delete the last page, it appears not to work. What actually happens is that as soon as the page has gone, the program realises that the text is too long for the remaining pages and recreates a new page. The only way to avoid this is to shorten the text, then delete the empty pages.

On most occasions, this is a very convenient and obvious way for the program to work. However, in one particular circumstance it appears to be a fault. If so much as one blank line exists on the end of the text (you hit Return after the last paragraph), this blank line can cause a new page to be created. Because you can't see the blank line, it looks as if the page is empty and you wonder why it won't delete. This is a very common situation, so look out for it...

Draft mode prints as small characters

If printing in draft mode results in tiny 'condensed' type, this usually means that you are using the default Trinity font, which is proportionally spaced, in your document whereas the printer only has a monospaced font. This is very common for dot matrix printers. The driver module selects the best choice it can at this point, which is to use a small monospaced font so that it has a chance of the text matching the font on screen in some small way.

Given that this is the best the printer can do, the only option is to use Corpus or some other monospaced font on screen, so that the screen and printout will match each other.

Guide frames disappear

Guide frames on master pages are automatically at the back of the frame stacking order on a document page. This means that when the guide frame is not selected, it often becomes invisible, hidden behind the default frame.

To select a guide frame when it's behind a foreground frame, hold down the Alt key and click where the guide frame should be. Repeated use of Alt-Select will work through the frame stacking order, selecting frames further and further to the back.

Shift-F12 doesn't work

In order to comply with some new user interface guidelines from Acorn (primarily for RISC OS 3) we have had to change our use of Shift-F12. Traditionally, we have used Shift-F12 in Impression to double the current viewing scale. However, this function can now be attained by pressing Shift-Ctrl-F11. This change came into effect from Impression version 2.16.

If you cannot get Shift-Ctrl-F11 to work (and you have a version 2.16 or later), it is probably because you have assigned this key combination as a short cut for applying a style. Look though your style definitions until you find it, and change it to something else. Note that if you pass documents to other users it would be wise to avoid assignment of Shift-Ctrl-F11 for styles; otherwise the recipient will be left wondering why they can't change to double viewing scale when the file's loaded!

Please inform us of problems and errors

Sometimes we hear of problems in software or errors in documentation with the comment "I thought someone would have told you about it...". But if everyone assumes that - we may never know!
If you encounter a problem, no matter how 'obvious' it may seem, please do tell us about it, preferably in writing. We don't just ignore problems, we try to put them right as soon as possible. The sooner we know about them, the sooner they can be fixed.

Hints & Tips

☞ Very fast screen update. Twice as fast as !Draw, and many times faster than alternatives on the most powerful PC and Mac machines. The faster the screen redraw, the more productive the program.

☞ Anti-aliased drawing. Archimedes users will know the benefits of anti-aliased text, especially on the higher resolution screens. ArtWorks provides the ability to anti-alias all drawings in real time. This provides an apparent increase in screen resolution to double, or more, that normally available on the Archimedes.

☞ Compatible with all the important drawing and illustration programs. It can load files from !Draw, Corel-Draw on the PC, Adobe Illustrator and Aldus Freehand on the Mac. This makes it ideal for those people used to working on these machines as they can bring their existing artwork with them. With a MS-DOS disc reading utility you can load the files directly from PC or Mac discs. Artworks can export as Draw, EPS and Illustrator files (compatible with Corel and Freehand).

☞ Multiple level undo. Every step that goes to make a drawing is recorded and can be undone. You never need worry about making a mistake since you can always undo the last operation. However it goes further than any other program in that all previous steps are recorded so you can step back and back through the previous actions (and of course re-do them again if necessary). In addition the undo record can be stored with the file, so that you can still undo in a drawing after you've loaded it.

☞ 24 bit colour support throughout. It uses specially developed on-screen dithering routines to simulate a full spectrum of colours, even in 16 colour screen modes. The dithering is all performed in real time and is optimised for graduated shading. It supports three colour models (RGB, HSV and CMYK) and three colour types - full process colour, spot colour and tints. Colours can be named and later altered (like Impression styles) and loadable colour tables are supported.

☞ Full colour separation facilities including overprint control. (Faster and more powerful than the Impression colour separating facilities).

☞ Very fast and simple colour graduation facilities

☞ Freehand drawing for the fastest and simplest possible line and curve drawing.

☞ Fast envelope features allow any drawing (or part of) to be bent or distorted as if it were on a sheet of rubber.

☞ 3D perspective facilities. It allows any 2D drawing to be rotated into the distance by any angle to produce simple and accurate three-dimensional effects.

☞ Object orientated internal design and modular construction allowing extension tools and features to be added.

☞ Text rotation and text around a curve features. The text remains editable on the page at all times - even when rotated, distorted or graduated shading has been applied.

☞ Select object by clicking on the actual object (rather than anywhere in the bounding box, as you would in !Draw). This makes it simplicity itself to select objects even when dozens are overlapping on top of each other.

The illustrations on this page show the type of work that ArtWorks can produce.

Computer Concepts Ltd

Gaddesden Place, Hemel Hempstead, Herts. HP2 6EX
Tel 0442 63933 Fax 0442 231632