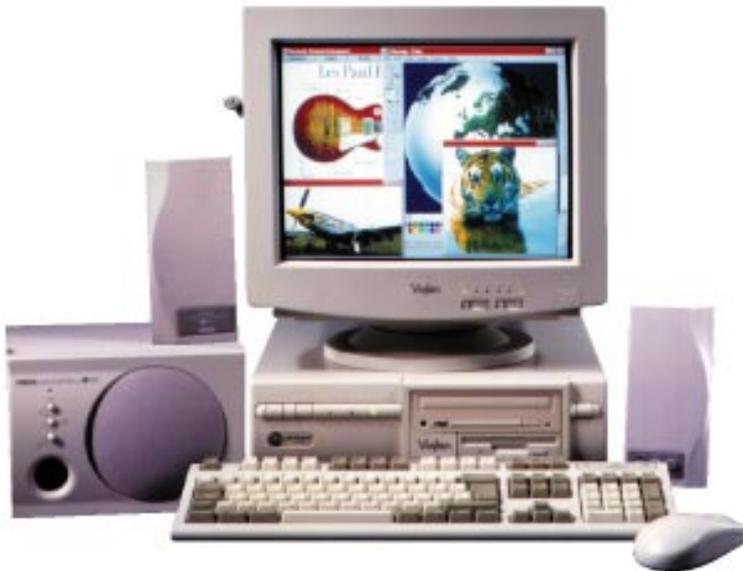


Among the new products under review are: CorelDraw 6 for the Power Mac, a package to aid lateral thinking, a 3D body-modelling program for illustrators, a notebook with integrated CD-Rom, three new printers, a flatbed scanner, and a distance-learning IT course



Viglen Genie PCI Executive P5/200

Scott Colvey

A 200MHz Pentium PC with 16Mb of Ram and a 2Gb hard disk.

- 200MHz Pentium processor on Intel's new Rhinestone motherboard.
- Teac eight-speed CD-Rom
- Built-in 16-bit Soundblaster card
- 16Mb of Ram
- 2Gb hard disk
- ATI Mach-64 video card
- Yamaha speaker system
- 15in monitor
- Microsoft mouse

Viglen's first 200MHz Pentium machine is certainly no disappointment, and the price is a surprising bonus for a top-end machine that is both well built and packaged.

- £2,302.49 (incl VAT)
- Viglen: 0181 758 7000

Viglen Genie PCI Executive

Build quality	1	2	3	4	5
Performance	1	2	3	4	5
Features	1	2	3	4	5
Value for money	1	2	3	4	5

Intel has taken yet another leap ahead of its competitors with the release of a 200MHz Pentium processor. Among the first UK companies to launch a machine based on this powerful chip is Viglen, with its Genie PCI Executive P5/200. The model we reviewed was in the final stages of production and could therefore be subject to changes.

Housed in a small-footprint, slimline case, the Executive P5/200 gives little indication of the power within. The front of the case has both power and reset buttons; the latter is awkwardly recessed, although this makes it less likely to be hit by accident. Removing the cover reveals three ISA and two PCI expansion slots, all of which are free. There are only two drive bays, which are already taken up by a CD-Rom player and a 3 1/2 in floppy disk drive. The machine has all the usual ports – parallel, two serial, keyboard, mouse and monitor – and two 3.5mm jack sockets for sound input and output.

The supplied monitor, an Envy 15D, can display non-interlaced resolutions up to 1,280x1,024 on its 15in tube. At the more useful 1,024x768 resolution, the monitor shows a sharp and steady image, thanks to its 75KHz refresh rate. The ATI Mach-64 video card, which drives the monitor, is supplied with var-

ious utilities, one of which enables you instantly to change screen resolutions using hot keys.

The keyboard is angled slightly away from you, which makes typing difficult, but this is easily remedied by tilting it using a pair of retractable legs. Its rigid-metal underside means it feels sturdy and is reassuringly heavy. The keys are a little on the firm side but, once you get used to this, the keyboard proves responsive.

The Executive P5/200 offers full multimedia capabilities through the built-in Creative Labs 16-bit Soundblaster card, eight-speed CD-Rom player and Yamaha speaker system. The Yamaha system comprises two small speakers and a larger sub-woofer. On their own the 10-watt speakers give reasonable renditions, but when used with the 25-watt sub-woofer the effect is dramatic, giving depth to sound reproductions and adding to the heart-pounding exhilaration of playing games.

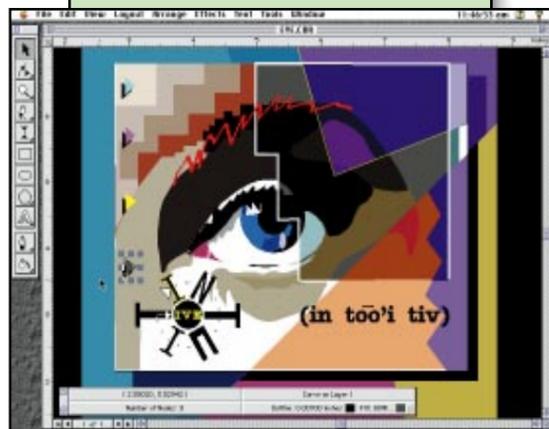
But with both 16Mb of Ram (expandable to 192Mb) and a 2Gb hard disk, the Executive P5/200 is much more than a games machine. Along with Windows 95, Viglen supplies a good range of software to get you started, including Microsoft's Works, Encarta 96, Money, Musical Instruments and Golf. You also get a Windows 95 tutorial, which is a good introduction for beginners.

CorelDraw 6 for Power Macintosh

Gordon Laing

The best-selling PC graphics suite arrives on the Power Macintosh platform. Elements of the Windows version are missing, while others are new.

- 100 percent file compatibility with files created in CorelDraw 3, 4, 5 and 6 for Windows
- 25,000 clip-art images and symbols
- 1,000 photographs
- 750 3D models
- Hundreds of TrueType and Type 1 fonts
- Extensive Apple Guide support
- Applescript enabled
- Kodak Precision Colour support

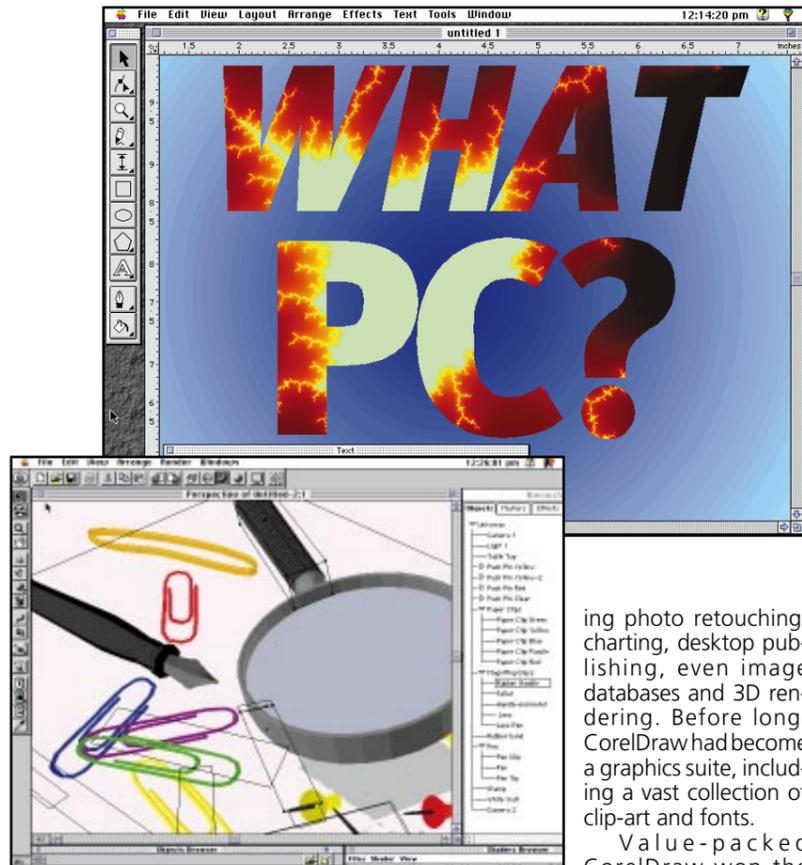


Applications:

- CorelDraw
- CorelImpressionist
- CorelDream 3D
- CorelWordperfect
- CorelTexture

Utilities:

- CorelMultimedia Manager
- CorelTrace
- CorelFont Organiser
- CorelChart



ing photo retouching, charting, desktop publishing, even image databases and 3D rendering. Before long, CorelDraw had become a graphics suite, including a vast collection of clip-art and fonts.

Value-packed CorelDraw won the

Yes, you read it correctly: The world-famous Windows graphics suite has finally made its long-awaited appearance on the Apple Macintosh platform.

To be perfectly honest, it's not quite here yet. We've taken a look at an early preview version, due to arrive in the summer, which had enough bits fitted and working to give a realistic impression of the final product.

It has been quite a wait: the original CorelDraw came out almost seven years ago for the fledgling Microsoft Windows 2, and was an interesting proposition for the PC platform. While the Apple Macintosh had firmly established itself as the preferred system for professional graphics, IBM PC-compatibles were primarily concerned with altogether more serious programming or business applications. Apart from Adobe with a version of Illustrator, it took the relative unknown Canadian-based Corel Corporation to make the brave move into decent Windows drawing packages.

It certainly made the right choice back then in 1989. While often criticised for being buggy and prone to crashes, CorelDraw has always offered remarkable value for money. Each new version is packed with even more features than the last and what started as just a drawing application grew to include additional modules, offer-

ing hearts of Windows users, who bought it in droves. The big question asked by graphic artists the world over was whether there would ever be CorelDraw for Macintosh. Freehand and Illustrator already appeared to have the market totally sewn up and a large helping of snobbery meant many Mac designers mocked CorelDraw simply because of its 'lowly' Windows origins.

This didn't stop Corel. The company, proud of its award-winning product, believes it is easier to use than the competition, and that it offers unbeatable value and a wealth of unique features. After an aborted Macintosh project some time ago, Corel started again from scratch last August. The fruit of its labours is CorelDraw 6 for Macintosh. Power Macintosh only to be precise, and one fitted with at least 16Mb of Ram and 50Mb of free hard disk space. We tested it on a Power Macintosh 8100, running at 80MHz, with 32Mb of Ram. It would be unfair to comment on performance until the final version is released this summer.

CorelDraw 6 for Macintosh is by no means identical to its Windows counterpart. The drawing and layout application itself is present, although with a new-look interface. CorelPhotoPaint, the Windows bitmap photo-retouching editor is missing, but in its place is something similar entitled CorelImpressionist.

CorelTrace, which is used to convert bitmaps into vector form, is here, as is CorelDream 3D, the modelling and rendering module new to Windows version 6 (although seen here in a later form). A brand-new texture generator, CorelTexture, is unique to the Macintosh suite, as is the inclusion of WordPerfect 3.51, fresh from Corel's acquisition of PerfectOffice.

Fonts are handled by the Master-Juggler utility, while Kodak Precision Colour Management System looks after, well, the colour management. CorelDraw wouldn't be the same without the reams of clip-art and font libraries, and indeed the Mac pack sports a similar, but not identical array to the Windows version.

So much for the similarities and differences; but what can you do with the suite? CorelDraw is a drawing application, which works primarily with vectors. These are descriptions of shapes which exist mathematically inside the computer, and can be stretched, rotated, filled, and generally modified to your heart's content without loss of quality. The beauty of vectors is that they are displayed or printed to your hardware's best ability. Whether on a low-resolution screen or high-resolution printer, the same vector file will make the best of the situation. Great for simple shapes, such as fonts or logos, with basic fills.

CorelDraw is a phenomenally capable drawing application, boasting all the advanced features touted by the other Mac heavyweights, Freehand and Illustrator. Tools include those to join overlapping shapes, create complex graduated fills, and distort using perspective lines or magnifying lenses. It also boasts more than competent layout facilities for desktop publishing. It is easily the star of the

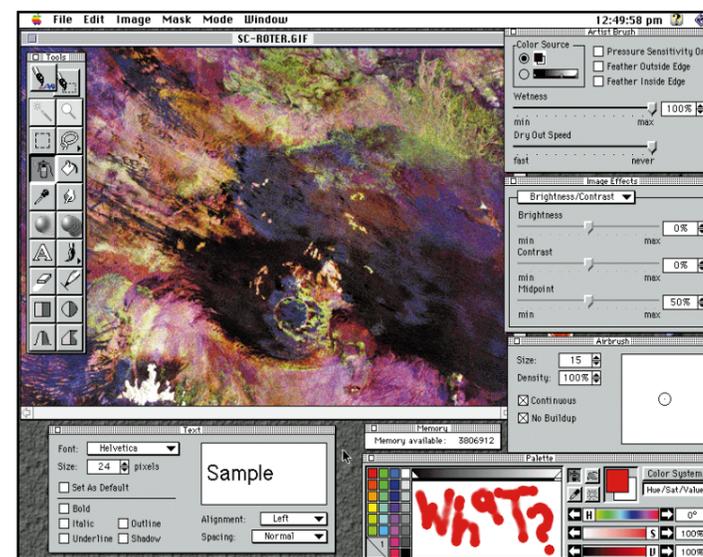
suite, and the reason most users will buy the pack.

Vectors are not so great for photographs, which consist of constantly changing colours and shades. These are best handled in a fixed-resolution, bitmap format. CorelImpressionist does the job, and includes the usual array of tools and effects for correcting blemishes, colour casts, and painting moustaches on unsuspecting colleagues. It is also compatible with Adobe Photoshop Plug-ins, offering access to a huge array of third-party filters, like Kai's Power Tools. Impressionist is fine, but most high-end Mac users will remain faithful to something more sophisticated like Photoshop.

CorelTexture is a welcome inclusion, and is very useful, along with being great fun to use. CorelDream 3D is not the greatest 3D modelling and rendering application around, but does a reasonable job.

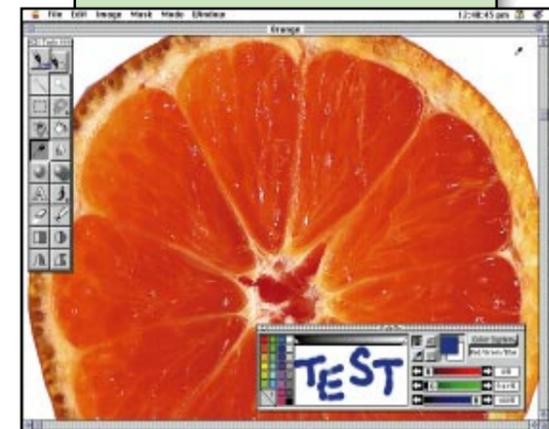
CorelDraw 6 for Macintosh undoubtedly offers excellent value with its many applications, utilities and extras. While there are some differences, the drawing portion is claimed to be 100 percent compatible with files created in CorelDraw 3, 4, 5 and 6 for Windows (our early copy was almost 100 percent). Corel reckons users will include those familiar with the PC version, or those in mixed-platform environments, desiring compatibility; there are certainly some curious Mac users out there who will want to see what all the fuss is about.

It is doubtful whether Mac illustrators will become evangelical and totally swap sides – but at least the option is there. More importantly, a company as competitive as Corel will shake up the market and force manufacturers of stale products to shape up or get out.



CorelDraw 6 for Power Macintosh

(continued)



CorelDraw for Power Macintosh, like the Windows version, is very capable and certainly offers excellent value for money. Draw is the best part, and can hold its own against the likes of Freehand and Illustrator. Impressionist is good, and Wordperfect, Dream 3D and the Texture generator are nice extras. It won't have Macromedia and Adobe shaking in their boots, but will teach them a valuable lesson in marketing and value for money.

- Price to be announced
- Channel Market Makers: 01703 814142

CorelDraw 6 for Power Mac

Features	1 2 3 4 5
Performance	na
Ease of use	1 2 3 4 5
Value for money	na

Requirements: Apple PowerMacintosh, at least 16Mb Ram, at least 50Mb hard disk space, CD-Rom drive, 256-colour monitor with minimum 640x480 resolution, System 7.5 or later.

Canon BJC-4100

Julian Prokaza

A four-colour inkjet printer that can print colour at 730x360dpi.

- 100-sheet feeder
- Four-colour printing with separate ink cartridges: one for black and another for cyan/magenta/yellow
- Ink cartridge separate from the printhead
- Maximum resolution (mono and colour) 730x360dpi
- Emulations: Canon enhanced mode, IBM Proprinter, Epson LQ-510
- Drivers: MS-Dos, Windows 3.1, Windows 95
- Six internal fonts
- Pressworks 2 DTP software is included

The Canon BJC-4100 may be a jack of all trades, but it is nevertheless more than adept at all of them. Whether it's printing pages of text or high-quality graphics, it always delivers the results. The only real drawback is that it needs really expensive special paper to give its best.

- £410 (incl VAT)
- Canon: 0121 680 8062

Canon BJC-4100

Ease of use	1	2	3	4	5
Performance	1	2	3	4	5
Build quality	1	2	3	4	5
Value for money	1	2	3	4	5



The BJC-4100 is the latest addition to Canon's range of inkjet printers – or Bubble Jets, as the company prefers to call them. Priced at just over £400, it sits in the mid-range inkjet category and its features make it suitable for all-round use in both colour and black-and-white.

The BJC-4100 is finished in light-grey and looks a little slab-sided, although curves and grooves prevent it from looking too dreary.

At first glance, it appears rather small, but once you've slid out the paper-collection tray tucked away underneath the case, the footprint is almost tripled. But, if you don't mind your desk acting as a paper collector, you can leave the BJC-4100's tray in place and save yourself 12in of work space.

Inkjet printers used to be covered in control buttons, but these days printer manufacturers have adopted a more minimalist approach. With the BJC-4100, if you want to do anything other than switch the printer on or reset it (one button for each), you have to use the accompanying control program. In addition to the usual settings for paper size and print quality, this control program provides access to such facilities as printing a test page and cleaning the printhead.

The control program also has a degree of intelligence. For example, if an incompatible selection is made, such as high-quality printing

with plain paper, then, rather than leaving you to wait until a print is made before realising the mistake (thus wasting ink and paper), it displays a 'set-up analyser' window. This gives you the option of fixing the problem automatically, returning to the printer's set-up window or, if you think you know what you're doing, ignoring the problem and carrying on.

The BJC-4100 is a four-colour printer – the cyan, magenta and yellow inks are stored in a single cartridge separate from the one containing the black. Both cartridges are stored in the printer at the same time, which means that any colour prints containing black can use true black ink, rather than the approximation produced by mixing cyan, magenta and yellow.

Also, the cartridges are independent from the printhead, which makes replacement units cheaper.

The BJC-4100 performs well. Text is crisp and well-defined, and the driver's use of edge-smoothing means there is little jaggedness. Colour prints on standard photocopier paper are a little pale, but the 360dpi resolution gives them a sharp finish and there is no evidence of banding.

On Canon's own Bubble Jet paper, colours are a little richer, blacks a little blacker. This paper is more expensive than standard paper at £12.99 for 200 sheets, but it can be printed on both sides and is water-resistant, which probably makes it a worthwhile buy if you want your prints to look good.

To achieve the maximum 720x360dpi resolution, it's advisable to print on Canon's high-gloss film. Unfortunately, this is expensive at £16.50 for 20 sheets, but the

Caere Omniform version 2

Julian Prokaza

An electronic form-creation and management program that can take scanned images of paper documents and convert them into fully-editable on-screen layouts.



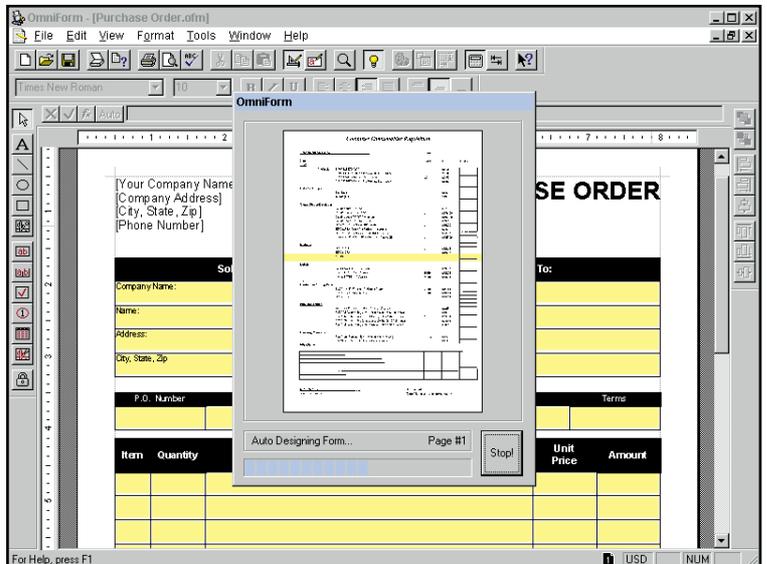
- 32-bit Windows 95 application
- Supports OLE 2.0 for drag-and-drop editing
- Uses Omnipage optical character recognition to produce editable text
- Supports HP, Visioneer or any Twain scanners
- Built-in spelling checker
- Forms can be exchanged using industry-standard ODBC
- Automatic calculation generates formulae based on identified keywords

Converting paper-based forms into electronic ones by hand used to be a tedious business, but Caere Omniform has changed all that. It is a near-essential program for anyone who wants to simplify the process of form filling, as well as saving paper.

- £269.08 (incl VAT)
- Caere UK: 0171 222 3200

Caere Omniform version 2

Performance	1	2	3	4	5
Features	1	2	3	4	5
Ease of use	1	2	3	4	5
Value for money	1	2	3	4	5



Someone once said that the paperless office is about as likely as the paperless toilet. As flippant as this sounds, it's probably not too wide of the mark. The reason? Paper is simply too useful to be completely replaced by computer programs. There are, however, some situations where software can do a better job than a sheet of A4.

Caere Omniform is a program for one such situation. It is used to create electronic versions of paper-based forms that can be completed on screen and then stored in a database for future reference.

The system has many advantages. For example, forms stored on computer can be quickly searched, unlike those stored on paper, and the information they contain can be processed in ways that would not otherwise be possible.

On-screen forms can be designed to mimic their paper counterparts to make them straightforward to fill in, and the potential for error can be minimised by having the computer perform calculations, rather than leave it to a human with a calculator.

Omniform can be used to create a form from scratch, or by scanning an existing paper form. Creating a form from scratch is similar to designing a page with a vector-based drawing program. A blank page is displayed and various text, line and shape tools can be used to create the layout. Graphics can also be incorporated, such as a company logo, and any object can be resized and repositioned until it looks satisfactory.

The creation of traditional row and column forms is further simplified by the inclusion of a 'table' tool. By selecting this and dragging the pointer across the page, a grid with any number of rows and

columns is automatically created. Once a form layout is complete, the next stage is to define its fields – the parts of the form where information is entered. Like form design, this is simply a matter of selecting the 'fill text' tool and dragging the pointer on the page.

To help reduce the mistakes often made when filling in forms, Omniform can restrict the contents of a field to certain values. For example, a name field could be limited to only letters; date of birth could be restricted to a date using the form day/month/year; and the sex field could be limited to the values 'male' and 'female'.

It is possible to create an entire on-screen form in this way, but the big advantage of Omniform is that this is completely unnecessary. If you have access to a scanner with a Twain driver (most modern ones have one), then you can scan your existing paper form and have Omniform convert it into an electronic one. The software produces a fully-editable form layout complete with fields.

Once a scan has been made, Omniform analyses the image and it uses Optical Character Recognition (OCR) to identify the text, the fields and their type. It will even look for words like 'total' in order to work out what calculations need to be made.

Incredible as it may seem, this system actually works. We tried several forms and, barring the odd mistake due to a poor scan or confusing layout, Omniform was able to produce remarkably accurate duplicates of the original.

All forms required a little work, such as correcting mis-recognised text or adjusting a calculation to make them perfect, but this involves far less work than creating an entire form by hand.

Internet-to-Go

Terry Pinnell

A one-box bundle to get you on to the Internet, including a fast external modem, software for accessing various on-line services and Internet providers, plus training materials and other accessories.

- Hayes-compatible modem, 28,800bps, V.34 bis
- Auto-dial and auto-answer, auto-data/voice switching
- Spare socket for phone
- One-hour tutorial video
- Mosaic Netscape browser (1994, 0.9 beta)
- Eudora e-mail program
- Trial Internet access via CompuServe, Pipex, Cityscape, Eclipse Networking, UK Online
- 'Free' technical support via 0891 number (49p per minute, 10am to 4pm)

Although this motley collection of disparate components will not get you up and running on the Internet 'in minutes', the bundle represents good value for money for the keen, would-be surfer.

- £233.83 (incl VAT)
- Cybertec: 01626 202020

Internet-to-Go

Features	1	2	3	4	5
Performance	1	2	3	4	5
Ease of use	1	2	3	4	5
Value for money	1	2	3	4	5

Minimum requirements: 386, 8Mb of Ram, 9Mb of hard disk space, Windows 3.1x or Windows 95, CD-Rom drive.



First, the bad news: no software can get a complete novice up and running on the Internet 'in minutes' and, despite the hype to the contrary, this new product from Cybertec is no exception. However, the good news is that Internet-to-Go's generous collection of components makes it good value for those who want a wide variety of software and are prepared to put some effort into getting it going.

The most important of the components, almost justifying the total cost in its own right, is the fast external data and fax modem. In its fax mode you can send or receive using the Delrina Winfax Lite fax software, which is also included in the package and should prove adequate for the newcomer and occasional user.

Installing the modem is simple, following the instructions provided, but for all the other components the documentation offers little help. Basically, you're left to your own devices to set up the programs independently.

This isn't an integrated package; it's simply a collection of potentially useful offerings, of widely varying styles and quality. Some of them have been available on magazine covers, and most are old versions, but it's certainly convenient to have them all to hand in one collection.

The six-software packages bundled with Internet-to-Go are Pipex Dial, CompuServe's WinCIM, UK Online, Turnpike, EZ Internet UK and Winwatch Lite. All but the last of these contain several distinct

programs, adding up to scores of programs altogether.

Version 1.4 of CompuServe's WinCIM program is supplied, rather than the more recent release. It comes with Netlauncher for accessing the Web, and includes ten hours of free access during your first month, plus five hours each subsequent month. Installation is easy, but you must be careful about the defaults you select if you're already using any other Internet software.

Turnpike comes on two floppy disks and is installed in two parts, the second directed mainly at systems administrators. Although it's claimed you don't need to be an Internet expert to use Turnpike, you will struggle a bit unless you are fairly experienced. Apart from the easy dialler that connects you to your chosen service provider, the Turnpike software includes Telnet and file transfer protocol (FTP), as well as its major application, Turnpike Offline, for e-mail and newsgroups.

EZ Internet UK is supplied on CD-Rom; its installation instructions tell you to run a non-existent set-up program, but after this small hitch it's fairly straightforward. You get seven days' free access to the Internet via Cityscape, plus various software including Trumpet Winsock and a very old version of Netscape.

Winwatch Lite allows you to control which areas of the Internet your kids can access. This evaluation version supports Windows 3.x and Windows 95, and you register using the Winwatch Web site.

Finally, there's a well-written and illustrated 620-page manual, *The Internet in a Week*, which would cost £22.95 if bought separately. The title is puzzling, as the book's introduction says it consists of 21 chapters, each representing a day of activities. Whether one or three, at least we're talking weeks now, not minutes.



There are a number of PC packages sold as aids to lateral thinking. Generally called ideas processors or outliners, they let you manipulate ideas rather than words, and work very much like the outlining components of the larger word processors. However, a recent innovation is the advent of problem-solving software. This is lateral thinking with teeth.

Many ideas processors use a tree motif. You move along the trunk in a linear way; at the same time, you hang ideas on the branches and twigs. The software makes it easy to jump from idea to idea, or to link them in special ways. Mindlink Problem Solver 1.0 uses a highly-specialised version of this kind of lateral approach to push you towards solutions to problems.

The package is aimed largely at the corporate market, but it works for individuals too. Having said this, it's better for problems with more than one component, such as 'how can I enhance my company's image'.

The first time you run Mindlink, you're asked to supply a name and optional company title. Enter this information and you are presented with the opening screen. From there, you can start problem solving immediately.

You need to bear in mind, however, that a full session can take two or three hours, and that this sort of free-form association – Mindlink's manual calls it 'generative thinking' – is actually fairly hard work as well as fun. If you haven't used an ideas processor before, you should allow yourself some time to become familiar with the way Mindlink works.

There are six separate modules. The Gym is where you go to hone your mental skills before you try to solve a problem. One of the three available exercises flashes two

words at you – for example, 'cow-like' and 'plane' – and invites you to type in as many connecting images as you can come up with in 60 seconds. The purpose of the exercises is to make you produce ideas without being judgmental.

Once you are ready to tackle a problem, there are three choices. For a relatively quick approach, you can launch the Idea Generation module. This guides you through the process of defining the problem. After this, you enter ideas without evaluating them.

Finally, you use a special feature which takes you away to unlikely scenarios, asks for your impressions and then forces you to relate them to the original problem. At the end of the process, you have a large number of ideas, one or more of which should be useful.

If you need a more detailed approach, use the Guided Problem Solving module. This involves an added element: wishes. You write down things you want to achieve as a means of generating further ideas. At the end of the process, you select an idea and expand it as a solution.

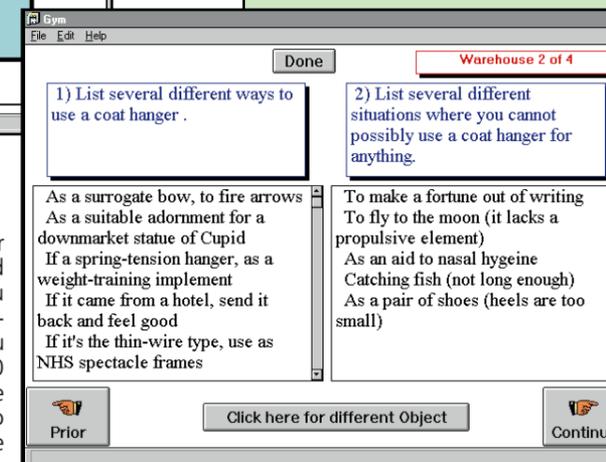
There's more to Mindlink than can be covered in a short review. Apart from more complex ways of analysing solutions, there is a fair amount of jargon-ridden whimsy, which may suit the American psyche but doesn't go down well here.

There's even a cloth bag full of cheap toys, which is described as 'Mindlink Portable, for creativity on the go' and comes with its own mini-booklet which urges you to take an object out of the bag, give it a personality and let it advise you about your problem. You have been warned.

Mindlink Problem Solver 1.0

Stephen Copestake

A lateral-thinking aid with a difference.



- Can be used by individuals or groups
- 'Thought Warehouse' built-in database for storing ideas and solutions
- Helps you perform creativity exercises
- Ideas and problems can be exported between modules and to other programs
- Solutions can be output automatically as printed reports
- Uses keywords to link unlikely ideas and force lateral thinking

This software can help you to think laterally and sometimes produce unexpected insights, but you may at times object to the style of presentation and to being pushed towards solutions so remorselessly.

- £233.83 (incl VAT)
- Guildsoft: 01752 895100

Mindlink Problem Solver 1.0

Ease of use	1	2	3	4	5
Features	1	2	3	4	5
Performance	1	2	3	4	5
Value for money	1	2	3	4	5

Minimum requirements: Windows 3.1x or Windows 95, at least 4Mb of Ram (8Mb preferred), 7Mb of hard disk space, VGA display.

Mannesmann Tally T9108

Dominic Bucknall

Mannesmann Tally's latest laser printer offers true 600dpi output, both PCL4.5 emulation and Windows Printing System compatibility, and operates at a quoted 8ppm.



- 600dpi laser engine
- 20MHz controller
- 1Mb of base memory, expandable to 17Mb with standard Simms
- PCL 4.5 emulation, driver included
- Windows Printing System compatible – drivers for Windows 3.1x and Windows 95 included
- Claimed 8ppm output speed
- 150-sheet feed tray
- Parallel interface (RS232C serial option)
- Approx 14in-square footprint

By and large the T9108 gets it right: it's compact, holds enough paper for day-to-day use, has a straight-through manual feed slot, takes standard memory, produces reasonable output at a reasonable speed, and it doesn't cost the earth.

- £527.58 (incl VAT)
- Mannesmann Tally: 01734 788711

Mannesmann Tally T9108

Features	1	2	3	4	5
Build quality	1	2	3	4	5
Performance	1	2	3	4	5
Value for money	1	2	3	4	5

Mannesmann Tally's T9108 is aimed at the small and home office market. It is reasonably priced at just over £500, which isn't bad going for a true 600dpi laser printer. In addition, the T9108 isn't a GDI printer that relies entirely on the host computer to process data; it has its own control processor and comes with 1Mb of on-board memory.

The documentation points out that you'll be better off with at least 2Mb of on-board memory if you want to operate the printer in 600dpi resolution, but the good news is that the T9108 takes industry-standard single in-line memory modules (Simms). This means you can shop around and insert the cheapest 72-pin 4Mb Simm you can find, which at the moment can cost less than £50. Upgrading is simple and involves no more than opening a panel in the side of the unit and slotting the memory module into place.

The printer is small enough, with its roughly 14in-square footprint, to lend itself to a domestic setting. It stands a modest 7in high, despite incorporating a fully enclosed 150-sheet feed tray in its base, making the machine compact and tidy with no parts sticking out awkwardly.

A parallel interface is supplied as standard, but you can have a RS232C serial port added so that the printer can be networked. There is little to setting up the T9108 – you simply connect it to the PC, fit the toner unit and install a suitable driver.

You get a choice between the Windows Printing System (WPS) or a more conventional PCL 4.5 driver. The WPS is Windows 95 compatible, but also works with Win-

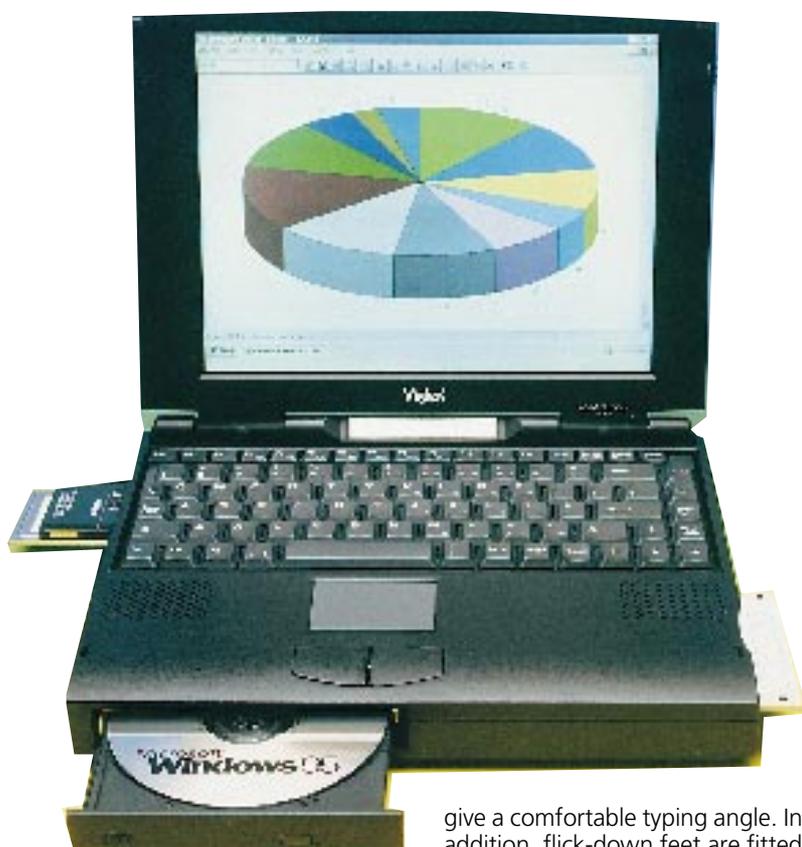
dows 3.1x, as does the PCL 4.5 driver. Both offer the usual options for orientation, paper size/type and number of copies. However, the WPS setup has more control over the halftoning method used (pattern or diffusion, with brightness and contrast adjustment) and the PCL4.5 driver operates only at 300dpi, not 600dpi.

Once you get going you can use the manual feed slot above the main paper tray for printing on heavy or special media. This can output either face down onto the top of the printer in the usual way, or face up through the back of the unit onto a flatter paper path.

The printer is silent in standby mode and no noisier than average when actually printing. Like the majority of modern printers, it has a power-saving sleep function that virtually turns it off after a user-defined period of inactivity.

Graphics pages take longer to process than text, but once the machine is off the blocks it prints pictures and text at almost exactly the same speed. We found that the T9108 comfortably managed 4ppm with all types of page (text only, graphics and mixed), but we couldn't persuade it to get up to its quoted top speed of 8ppm, or anywhere near it in its letter-quality 300dpi and 600dpi modes.

The print quality was generally good. We had no complaints about 600dpi text, which had smooth edges and was legible even at very small point sizes. The edge smoothness and general detail reproduction of text printed at 300dpi was perfectly acceptable for use in any normal business context. Graphics printed at 300dpi were fine, although they were less well shaded.



If you want a notebook which duplicates, as closely as possible, the features offered by a desktop machine, then you will probably be interested in the Dossier CD. There's plenty of power supplied by its 100MHz Pentium processor, which is backed up by 256Kb of fast, pipeline burst secondary cache, 8Mb of Ram and a 540Mb hard disk. This machine also offers stereo 16-bit audio, a quad-speed CD-Rom drive and high-resolution graphics.

The case has a lightly textured black finish and an angular styling. The Dossier weighs 7lb, which is acceptable for a machine with a built-in CD-Rom drive, especially when it coexists with the floppy disk drive rather than replacing it. The major mouldings, however, were about as thin as you can get away with, which made the machine feel slightly flimsy and resulted in a certain amount of give in the lid surface and palmrest.

The CD-Rom and floppy disk drives are fixed, not modular, but by releasing a pair of catches in the base the hard disk can be removed easily as a security measure or for upgrading. Various other panels under the case open to reveal the memory upgrade sockets, a space for what looks like a video input module (although this isn't documented) and a large NiMH battery pack. This has a handy LED charge level meter on it so you can check whether the battery needs charging.

A pair of stereo speakers and a mouse pad are set into the large palmrest, which is slightly angled to

give a comfortable typing angle. In addition, flick-down feet are fitted at the back which allow the tilt to be increased.

The mouse pad worked reasonably well, but sometimes seemed a little over-sensitive and, either the cursor moved when it wasn't meant to, or the pad picked up tap-clicks that didn't exist.

The speakers functioned adequately, although they weren't loud enough for presentations involving more than a couple of people.

The keyboard had the extra Windows 95 keys, but the Home, End and PgUp, PgDn keys were doubled with the cursor keys, and the backslash key was on the far right of the keypad. These idiosyncrasies can be annoying as they tend to trip you up repeatedly until you finally get used to them.

The image quality of the 10.4in-diagonal 800x600 resolution screen was crystal clear and couldn't be faulted. Not long ago, SuperVGA active panels were state of the art and priced accordingly, so it's encouraging to see one on a system costing less than £3,000.

The combined power drain of the Dossier's P100 processor, audio facilities and high-resolution screen shortens battery life considerably. A typical charge life seems to be in the region of one-and-a-half hours; trying to squeeze a bit extra out isn't made easy by the fact that you have to interrupt the boot process to get at the power management set-up screen. The ability to access this function from within Windows using hot keys, with immediate implementation of changes, is a must these days, and we're surprised it isn't included on a new machine like this.

Viglen Dossier CD

Dominic Bucknall

Viglen's latest addition to its Dossier range of notebooks features an integrated CD-Rom drive, stereo speakers and 16-bit audio processing, a removable hard disk and a high-resolution active-matrix colour screen.

- 100MHz Pentium processor
- 256Kb pipeline burst secondary cache
- 8Mb of Ram
- 540Mb removable hard disk
- Quad-speed integrated CD-Rom drive
- 1Mb Chips & Technologies 65548 PCI graphics card
- 10.4in active-matrix SuperVGA screen
- 16-bit Opti audio
- Integrated microphone and stereo speakers
- Mouse pad
- One Type II and one Type III PC Card slots
- Infra-red serial port
- NiMH battery
- Weighs 7lb
- Software includes Windows 95, MS Works 4, Lotus Organizer 2.1

The Dossier CD combines an integrated CD-Rom drive with a floppy disk drive and boasts an impressive high-resolution screen. It's a shame, however, that the power management is so hard to set and that ruggedness has been sacrificed for portability.

- £2,669 (incl VAT)
- Viglen: 0181 758 7000

Viglen Dossier CD

Features	1	2	3	4	5
Performance	1	2	3	4	5
Build quality	1	2	3	4	5
Value for money	1	2	3	4	5

Primax Compact 4800

Scott Colvey

Compact, flatbed, 24-bit colour scanner that handles A4 images with interpolated resolutions of up to 4,800dpi.



- Measures: 410mmx290mmx100mm
- Maximum scan size of 216mmx296mm (A4)
- Scan resolution of up to 1,200dpi (4,800dpi with interpolation)
- 'Intelligent' Optical Character Recognition (OCR) software
- Twain driver to tie in with other software
- One-pass operation regardless of resolution or scanning mode

This is a powerful scanner producing superb results at its higher resolutions; however, you'll need a top-specification PC to make the most of it.

- £369.99 (incl VAT)
- Primax: 01235 559922

Primax Compact 4800

Features	1	2	3	4	5
Ease of use	1	2	3	4	5
Build quality	1	2	3	4	5
Value for money	1	2	3	4	5

Minimum requirements: 386, 4Mb of Ram, Windows 3.1x or Windows 95, 20Mb of hard disk space, 8-bit lsa expansion slot.

Flatbed scanners generally offer higher resolutions than their hand-held counterparts and can scan larger images; they also do away with the problem of having to maintain a steady hand while scanning.

The Primax Compact 4800 isn't as bulky as most flatbed scanners. Measuring about three inches longer than a sheet of A4 paper, the Compact 4800 is the smallest flatbed scanner we've seen, but it is still fairly heavy and is not a machine you would want to move around too often. In common with most flatbeds, it is controlled using the supplied software.

Installation involves inserting a small interface card into your PC's lsa expansion slot and then attaching a connecting cable. This process is quite simple and shouldn't cause any problems. Installing the Windows software is also trouble-free, which is fortunate because the written instructions gloss over this step rather too quickly; in fact, the whole of the Compact 4800's very short manual seems to have been written for experienced users.

Raising the Compact 4800's hinged cover reveals an A4-sized scanning window with rulers displaying both imperial and metric graduations. The cover's hinges are on pegs which move up and down to accommodate thicker or irregularly-shaped images.

Finishing Touch, the scanning and retouch software supplied with the unit, has a good range of options. One we found particularly useful was the Magic Wand, which automatically traces and crops parts of an image. This is great if you want to isolate part of an image and use it elsewhere.

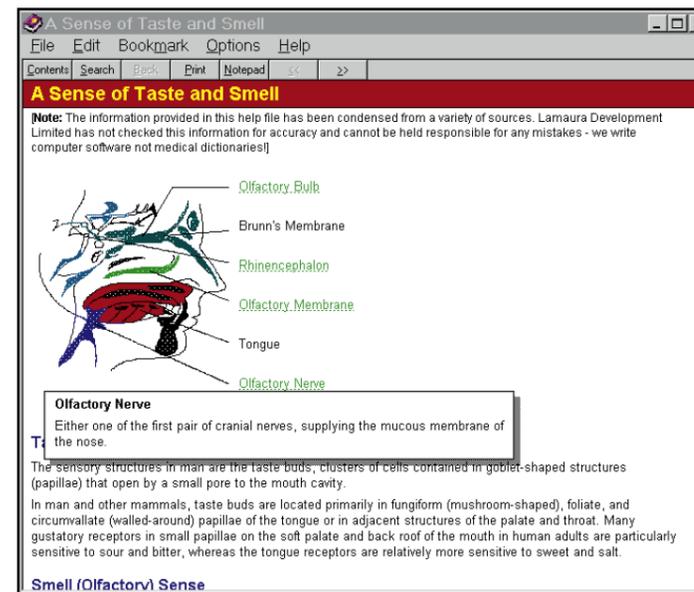
Also included is ReadIRIS Optical Character Recognition (OCR) software, which allows you to scan documents containing text and then convert them into an editable file. We found the accuracy of the OCR little more than reasonable, but it has a learning mode which means that the recognition should get better with extended use.

Scans can be acquired using resolutions ranging from 72dpi to 1,200dpi in colour, greyscale or line-art; there is also an option to scan in halftones, which is useful if you intend to use the Compact 4800 in combination with fax software. The scan quality is good with sharp-edged black-and-white images and superb colour reproductions.

The Compact 4800 is a one-pass scanner so, regardless of the image settings, the scan is completed quickly with just one sweep of the scanning carriage. However, depending on your computer's specification, the image processing may take considerably longer.

Although the maximum true resolution is 1,200dpi, this can be increased through software interpolation to 4,800dpi, hence the Compact's '4800' tag.

Interpolation is essentially statistical guesswork. It is very good guesswork, though, and although we could only manage to interpolate small areas of images – to interpolate an entire A4 colour image to 4,800dpi would have required several gigabytes of hard disk space – the effect was quite stunning. However, we do question how often you would make use of such high resolutions, especially when the hardware overheads are taken into account.



Spare a thought for hapless program developers. As well as writing slick, bug-free programs of sometimes amazing complexity, they've also got to write many thousands of words of help information – and make sure it pops up in the right place when a user presses the F1 key.

What's more, help files are the last part of a program to be written, so the pressure is always on to finish them in a hurry. SOS Help! Info-Author (SHIA for short) has been designed to speed up the creation of such help files by hiding the complexities of the Windows help compiler behind a point-and-click, fill-in-the-boxes approach familiar to all Windows users. SHIA can also be used to create information files for purposes other than formal program help.

Everything you need comes bundled with the program, especially the all-important compiler software from Microsoft. There's even a simple word processor and a spell-checker. Admittedly, most people already have these, but by building them into SHIA, the overall strain on the computer has been kept down.

The basic procedure for creating a help file (once you've set up the mundane things like which directories you'll be using) is to create a topic and then type in the required text or load it from disk. You can also add pictures or illustrations in three formats, including both the popular Windows formats, BMP and WMF.

Anyone who has ever used a help file will know that words are often picked out in different styles or colours. Clicking on them results either in a jump to another piece of help, or causes a box of additional

information to pop up on the screen. In SHIA this sort of jump is easy to set up; just shade the words you want to act as a trigger and then press F11 to create a link. A dialog box then appears to let you choose between a pop-up definition or a jump to another topic. If you haven't already defined such a topic you can create a new one on the fly.

The help screens you work on in SHIA look just as they will in the finished help file, but pop-up screens and other links will only work after the file has been generated. Fortunately, generating a help file is a simple procedure to invoke, and the whole process should take only a couple of minutes.

Although SHIA began life as a help file creator, it is now being promoted as an information authoring system. The idea is that businesses can use it to compile catalogues, parts lists, directories and the like and distribute them to their customers, safe in the knowledge that everybody has Windows and will be able to use the information without having to buy extra software.

Taking this concept one step further, SHIA can also save its help files in hypertext markup language (HTML) format. This is the coding system for documents on the World Wide Web of the Internet. The process of conversion is mostly automatic, apart from the way it handles inline graphics.

HTML pages must use graphics in JPG or GIF formats but SHIA creates files that refer to BMP images. Although you can run the HTML files SHIA creates, graphics will not display until you convert them into JPG or GIF yourself, using a program like Paintshop Pro, and manually edit the name of the image file in the HTML document.

SOS Help! Info-Author 2.3

Paul Wardley

A design tool for Windows help files, but now extended to include other forms of electronic publishing, such as automated Web page creation.

- Creates help files for all versions of Windows
- Integrated word processing
- Spell-checking
- Converts HTML files into help files
- Converts SOS Help! projects to HTML
- Includes Microsoft utilities: Winhelp 3 compiler, Winhelp 4 compiler for Windows 95/NT
- Hypergraphics editor
- Multi-resolution bitmap compiler

It brings the creation of Windows help and information files within the grasp of anyone prepared to put in a couple of days learning the techniques. Hardly intuitive, but a lot faster than learning programming.

- £230 (incl VAT)
- Lamura Development: 01707 643278

SOS Help! Info-Author 2.3

Features	1	2	3	4	5
Performance	1	2	3	4	5
Ease of use	1	2	3	4	5
Value for money	1	2	3	4	5

Minimum requirements: PC equipped with Windows 3.1 or later.

Digital HiNote VP CSS575

Dominic Bucknall

A mid-range Pentium notebook with a high-resolution colour display and a modular build which allows you to install a second battery or an internal power supply.

- 75MHz Pentium processor
- 8Mb of EDO Ram
- 510Mb hard disk
- 1Mb Chips & Technologies 65448 graphics controller
- NiMH battery
- Synaptics Touchpad mouse pad
- 10.4in passive-matrix SuperVGA colour screen
- One Type III/twin Type II PC Card slots
- Weighs 6lb
- Windows 95 included

This unit is fairly typical of current big-name products in terms of price and specification, but has the benefits of a high-resolution screen, reasonable battery life and a degree of modularity. Nevertheless, the VP could be a bit more robust and a brighter screen would be an improvement.

- £1,937 (incl VAT, street price)
- Digital: 0345 227228

Digital HiNote VP CSS575

Features	1	2	3	4	5
Performance	1	2	3	4	5
Build quality	1	2	3	4	5
Value for money	1	2	3	4	5



The HiNote VP CSS575 is the entry-level model in Digital's HiNote notebook range, and has a configuration and price similar to recent machines from companies like Dell, IBM, AST and Viglen.

The unit has a Pentium 75 processor, 8Mb of fast extended data out (EDO) memory, a 510Mb hard disk and a 1Mb Chips & Technologies graphics adaptor, coupled with a high-resolution passive-matrix colour screen.

A 100MHz Pentium version is also available, and you can specify an 810Mb hard disk and up to 40Mb of Ram. The systems can connect to a mini-docking station and there's also a multimedia option, which consists of integrated stereo speakers and a 16-bit audio processor.

The VP follows the standard clamshell design and has a fairly compact Nickel Metal Hydride (NiMH) battery pack slotted into the right side next to a removable module containing the floppy disk drive. If you don't mind forgoing the floppy disk drive, you can replace it with an optional second battery or a mains power supply unit, such as the Zenith Z-Note MX.

Other than this moderate degree of modularity, the VP sticks pretty closely to the norm; it has the usual pair of PC Card slots at the front on the left, next to a mini-DIN mouse/keyboard connector which can be used in conjunction with the standard 9-pin serial port for external operation.

The use of thin mouldings helps to keep the weight down, in this instance to a relatively portable 6lb (2.7kg), but some robustness has been sacrificed. A broad palmrest

helps to improve typing comfort, and there is a pair of tilt feet at the rear of the base which angles the body of the machine to reduce the strain on the forearms if it is being used on a flat surface.

The keyboard has an extra pair of Windows 95 keys and separate Home, End, PgUp and PgDn keys. The action is quite well sprung, with a shortish travel. The Synaptics mouse pad worked well and seemed more reliable and consistent in its interpretation of finger movement and tap-clicking than the more commonly encountered Alps Glidepoint mouse pads we've tried in the past.

There are two screen options available – a dual-scan panel or an active-matrix screen. Both have an overall diagonal measurement of 10.4in and are capable of 256 colours at 800x600 resolution.

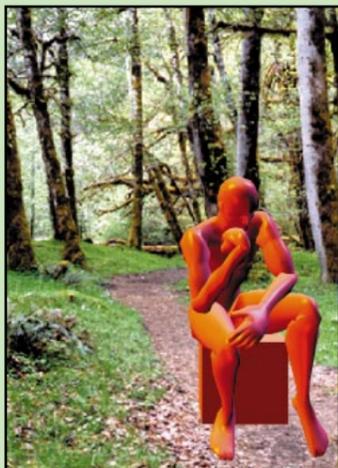
The dual-scan screen on the review machine was a little dark overall once the contrast was set up, although the image was reasonably even and free of the slightly mottled appearance that sometimes characterises passive panels. The extra resolution was a great improvement over standard VGA, and the screen was large enough for the display to be easily legible.

You set the VP's power management options from a text-based utility that can be called up using a key combination. The method looks rather primitive, but the options are comprehensive, with two default levels for saving, a custom set-up and a suspend-to-disk function; changes take effect immediately without having to reboot. The battery charge life was around two-and-a-half hours, which is fairly typical for this class of notebook. ▶

Poser

Scott Colvey

A design package for illustrators that enables them to manipulate the human form using a vast array of tools and techniques.



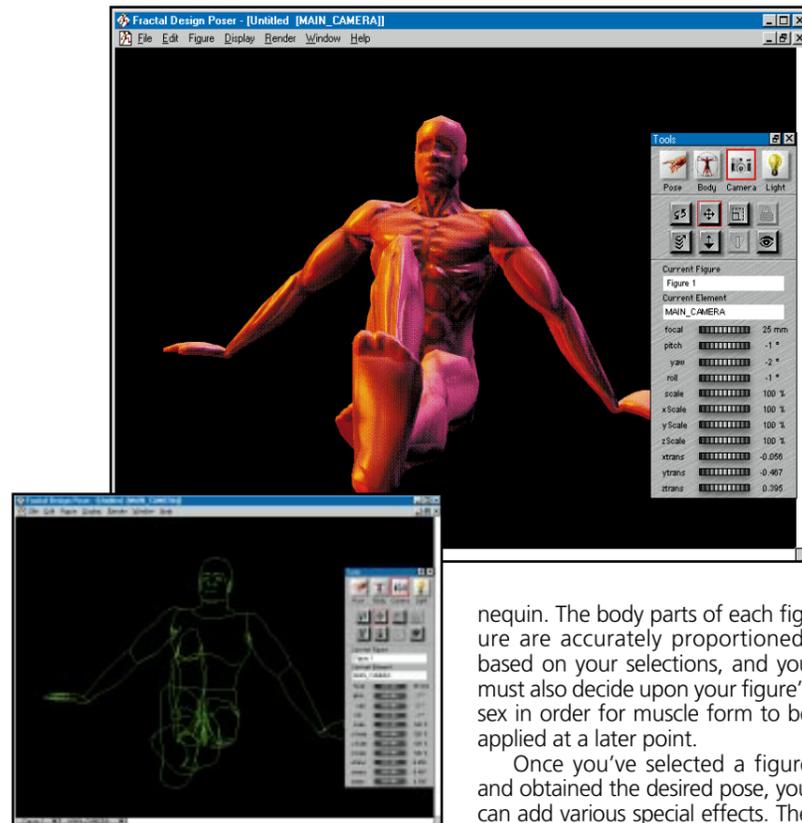
- Several different camera views
- Texture mapping using any bitmap image
- Three-dimensional lighting controls
- Large number of manipulation tools and techniques
- Fast render option for quick previews
- Good selection of predefined body frames

Poser is an incredibly versatile package for manipulating, distorting and shaping the human form. But how often you would want to use this facility is another matter.

- £175.08 (incl VAT)
- Computers Unlimited: 0181 200 8282

Poser	1	2	3	4	5
Ease of use	1	2	3	4	5
Performance	1	2	3	4	5
Features	1	2	3	4	5
Value for money	1	2	3	4	5

Minimum requirements: 486, 8Mb of Ram, Windows 95.



If you've ever wished for the perfect body, now's your chance to build one to your own specification, courtesy of this 3D body-modelling system from Fractal Design.

Poser's opening screen is clear and uncluttered, containing nothing more than a wireframe body and a toolbox. With barely a glance at the manual, you will find yourself pointing intuitively at body parts and placing them in all manner of inconceivable positions.

Clicking on a body part changes its colour, which indicates it is ready to be manipulated. The most basic tool, rotate, allows you to pivot a limb around its connecting joint and place it in a new position. But you are not limited to a joint's physical boundaries – knees can be bent forward, the head can spin round, and doing the splits has never been so easy. Other tools enable you to twist and taper body parts, and you can even perform amputations by reducing limb sizes to zero.

The default wireframe figure is a cruciform male, although you can change this by selecting from a predefined set ranging from 'baby' to 'heroic model'; you can also choose one of four body frames – normal, skeleton, stick figure or man-

nequin. The body parts of each figure are accurately proportioned, based on your selections, and you must also decide upon your figure's sex in order for muscle form to be applied at a later point.

Once you've selected a figure and obtained the desired pose, you can add various special effects. The simplest of these is a smooth render, which fills in your wireframe figure with a smooth but skin-like colouring. Even though the smooth render is designed only as a quick preview of how a fully rendered image will appear, the effect is quite pleasing.

To add realism, Poser has a lighting tool with which you can aim notional lights at your figure by directing arrows attached to a rotating disc. Getting the correct lighting is important for the rendering process; place all the lights at the rear, for instance, and your figure will become almost invisible when rendered.

Once the pose is complete and the lighting is set you may decide to expose your wireframe figure to the full rendering process. This is similar to the smooth render but you can opt to include muscle contours, and you might even want to replace the default skin texture with one of your own (you can use any bitmap image file as a texture).

A full render of an 800x600 resolution image with texture and contours took 105 seconds on a 486 DX2/66, with the simpler smooth render taking only 10 seconds.

The manual says you can replace the supplied male and female muscle contour maps with a design of your own. However, unless you're extremely patient this would seem unrealistic as the maps are very complex. It's a shame there aren't a few more maps as standard because a rendered figure of a baby looks rather silly with a highly developed muscle tone.



Page printers used to be one of the largest, most expensive peripherals that could be added to a PC. How things have changed. Oki's latest page printer, the Okipage 4w, is approximately the same size as some of the more compact inkjet printers and costs about the same.

A page printer is one that creates a whole page internally as an image before transferring it to paper. A line printer, such as an inkjet, prints a page a line at a time until it is complete. Usually, a page printer uses a laser beam to create a page, but the Okipage instead uses a series of light-emitting diodes (LEDs). Although this makes little difference in use, it does mean LED printers have fewer moving parts than laser devices, making them cheaper to manufacture.

The Okipage is compact but it still manages to pack into its case everything you'd expect to find on a page printer. There's a 100-sheet feeder at the rear, and printed pages pass through 180 degrees and come to rest in the same place. There is also a manual feed slot at the front (with an almost flat paper-path) that can accept both envelopes and thin card.

The toner cartridge used by the Okipage is much smaller than usual. Approximately the size of four 35mm film canisters placed end to end, the cartridge is actually separate from the drum unit that transfers the toner to the page.

Replacing only the toner cartridge (every 1,000 pages at 5 percent coverage) is significantly cheaper at £17 plus VAT than replacing the entire drum, which most laser printers require you to do. As an environmentally-friendly

bonus, the Okipage also recycles waste toner, placing it back into the cartridge for re-use.

Although you won't find it mentioned in any of the manuals, the Okipage is actually a GDI printer. This means it contains no memory (again reducing its cost) but instead relies upon that of the PC to which it is connected.

In everyday use, this doesn't make a great deal of difference, but it does mean that the PC has to work harder to print a page than it would with a laser printer with 2Mb of Ram, for example. It also means that the PC has to have plenty of Ram and hard disk space free to be able to print anything – the space is needed for the pre-processing of prints before they are sent to the printer.

In addition, GDI printers cannot be used from MS-Dos. But there is a way around this – simply run the Dos application in a window.

The Okipage has no internal fan, making it extremely quiet in use. When printing from Word 7 on a 486 DX2/66 with 12Mb of Ram, it takes about a minute for the first page of text to appear. Subsequent pages take around ten seconds to print out. Graphics take longer, mainly because the PC has to do more work on them before they can be sent to the printer, with a full page taking about three minutes to appear.

The Okipage's 600dpi resolution gives sharp, black text with well-formed characters that have few traces of jagged edges. Solid greys are less successful – certain shades have pronounced dots which are not normally visible at this resolution. Graphics performance is better and is on a par with other laser printers we've reviewed.

Okipage 4w

Julian Prokaza

A small-footprint LED page printer capable of printing 4ppm at 600dpi.

- Size: 150mmx310mmx191mm
- Weighs 3.8kg
- Printer life of 30,000 pages
- Toner cartridge life of 1,000 pages of A4 at 5 percent coverage
- Drum life of 10,000 pages of A4 at 5 percent coverage
- Maximum resolution of 600dpi
- 100-page paper feed
- Manual feed for envelopes
- No built-in fonts
- HP Laserjet IIP emulation via a Windows Dos session

The price of the Okipage 4w puts it firmly in the entry-level bracket which, considering its impressive performance, makes it something of a bargain. If you're on the brink of buying an inkjet printer, then it might be worth reconsidering and going for the 4w – as long as you're happy with monochrome printing.

- £279 (incl VAT)
- Oki Systems: 01753 819819:

Okipage 4w	1	2	3	4	5
Ease of use	1	2	3	4	5
Performance	1	2	3	4	5
Build quality	1	2	3	4	5
Value for money	1	2	3	4	5

Requirements: Windows 3.1, 386SX/25 with 4Mb of Ram and 10Mb of hard disk space; or Windows 95 on a 486SX/35, with 8Mb of Ram and 10Mb of hard disk space.

Computer Skills College City & Guilds 4242 IT course

Geoff Bains

Distance learning course for basic IT and PC applications in which your PC teaches, tests and verifies your work.

- 20-25 hour introductory PC applications skills course
- Covers word processing, databases, spreadsheets and graphics
- City & Guilds qualification
- Versions for MS Works, MS Office and Lotus Smartsuite
- For Windows 3.11 and Windows 95 (MS Works for Windows 3.11 only)

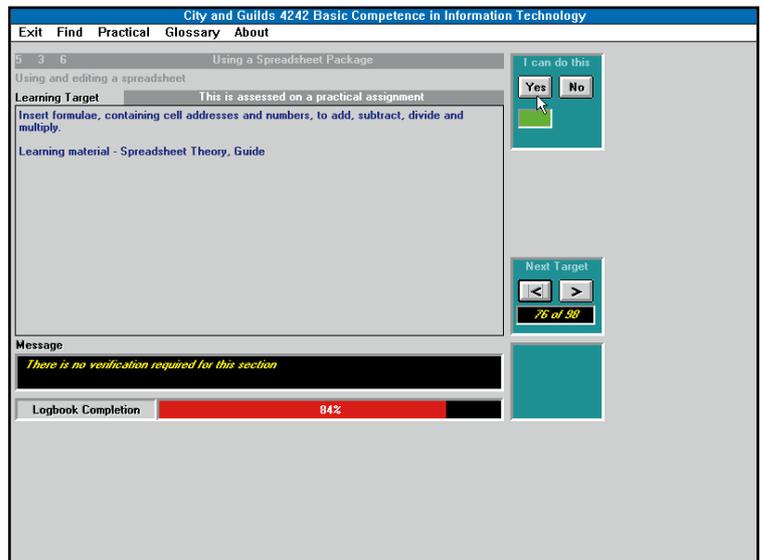
Although distance learning will never be quite as good as the 'real thing', this course provides a good introduction to PC applications with the convenient – and fun – aspect of using your PC as judge and jury.

- £179 (incl VAT); introductory offer: £149 (until 31st July for *What PC?* readers)
- Computer Skills College: 0990 383940

City & Guilds IT course

Features	1	2	3	4	5
Performance	1	2	3	4	5
Ease of use	1	2	3	4	5
Value for money	1	2	3	4	5

Requirements: 386 or later, 4Mb of Ram, Windows 3.11 or Windows 95, relevant applications software.



The Computer Skills College (CSC) has decided that one subject which really ought to be taught by computer is computing. This distance learning version of the City & Guilds course 4242 IT in basic computer applications is handled almost entirely by your own PC.

It is supplied as two books of tuition and three floppy disks. One of the disks is the 'Marking' disk which logs your progress and sets tests, and the other two are identical 'Work' disks on which the practical parts of the course are contained and your assignments are saved for sending off to the college for assessment. It should take between 20 and 25 hours to complete but, since you are not attending any classes or meeting any exam deadlines, you can follow it at your own pace.

The course covers the basics of how a PC works and the four major applications – word processing, databases, spreadsheets and graphics. Different versions of the course are available for MS Works, MS Office and Lotus Smartsuite. The graphics section is handled by the Paint/Paintbrush program supplied with Windows.

The level is pretty basic. You won't find anything in the course books that isn't in any of the innumerable teach-yourself books available. However, it is well set out with plenty of illustrations showing how to carry out tasks, and there are worked examples and tests.

The clever part of the course comes with the Marking disk. This is your classroom. The electronic log keeps a record of your progress through the course. In the screen for each subsection, you click the 'I can do this' button to register that you have made some headway. Certain sections include an onscreen verification test – they are

all multiple choice and you can try as often as you want.

For the word processing, database and spreadsheet modules there are also timed tests using the relevant software package. The course books have the assignments printed in them, and the work disks contain the files to work on, in an encrypted format.

When you elect to start a test the software decodes the file, starts a two-hour timer and adjudicates the test. There's also a one-hour test at the end of the course, the results of which are saved on the marking disk to be sent off in exchange for your certificate. The software prevents you retaking any test for a week.

This is all a little unhelpful when it comes to individual problems, so CSC provides a telephone helpline service, manned by college staff each weekday (and with a slot in the evenings) who can assist users on all aspects of passing the course.

The system may seem open to abuse, but CSC believes cheating is prevented by a rigorous security and checking system. Each student is allocated an ID number which is used to unlock the Marking disk (which only operates on a single PC). The electronic log includes anti-cheating checks, you have to include a witnessed statement with your final disk, and the college reserves the right to phone you up with some searching questions before delivering the certificate.

The real question, however, is not if it's possible to beat the system, but whether it's worth bothering. To be honest, this type of course is not as good as attending an evening class, but it's much more practical. It's probably too simple for most *What PC?* readers, however, who are more likely to be looking for a way to hone existing skills than achieve an elementary qualification as a job-finding aid.