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In close-up this month are a Dell Pentium II PC with AGP graphics, a backup device that uses video cassette tapes, a digital imaging kit from HP and a PC synchronisation program for the Psion Series 3

Close-up

Visioneer PaperPort Strobe

W e've always liked Visioneer's PaperPort scanners – a fact illustrated by the ones in regular use in the *What PC?* office. If it has a failing though, it's that it's only mono whereas other page scanners have long since offered colour.

The PaperPort Strobe is therefore a welcome arrival. Not only is it much more compact than earlier models (and frankly, rather more stylish) but it now offers 24-bit colour scanning. This boost in functionality has meant a change in the Strobe's connection and it now plugs into a parallel rather than a serial port. There's only a single thin cable leading from the scanner though, and a largish box on the end of this provides connections for the mains adaptor and a printer.

The Strobe's operation is much the same as before. Pages are detected as soon as they are fed into the slot, and automatically scanned. The paper path is either a tight curve or straight through, depending on the position of a plate at the rear, and scanned pages appear on the PaperPort software's desktop.

The PaperPort 5 Deluxe software displays scans as thumbnail images and these can be stored in nested folders. The image adjustment side has been beefed up in this version and there are now some tools for manipulating both colour and black-and-white images.

Monochrome scan quality is good and impressively quick at 100dpi (dots per inch), making the Strobe perfect as the input for fax software. Colour scanning and higher resolutions obviously slows things down but the Strobe is still pretty nippy. Colour scan quality is below that of a flatbed scanner but nevertheless acceptable for all but the most demanding of applications.

Providing that you're happy with the limitations of a single-page document scanner, the PaperPort Strobe is one of the best around. Julian Prokaza

Specifications

24-bit colour page scanner
600x300dpi optical resolution
2,400dpi interpolated resolution
Parallel port connection with printer pass-through
£233.83 (inc VAT)
Visioneer: 0800 973245

Visioneer PaperPort Strobe	
Build quality	★ ★ ★ ★ ★
Ease of use	★ ★ ★ ★ ★
Performance	★ ★ ★ ★ ☆
Value for money	★ ★ ★ ★ ★
Overall	★ ★ ★ ★ ★

Toshiba Equium 6200D

Toshiba's first desktop PC is a network-ready Pentium Pro with integrated multimedia features

It's still something of a novelty to see a desktop PC bearing the name of a company previously associated exclusively with notebooks. Nevertheless, Toshiba's Equium range looks as though it's here to stay and that name may soon become a familiar sight in the office as well as on trains and aeroplanes.

The system on test here is the second most powerful in the line, based on a 200MHz Pentium Pro processor and fitted as standard with 32Mb of EDO RAM and a 2.95Gb hard disk. There's a choice of monitors but we were sent the flagship 17in TekBright (not pictured), which has stereo speakers built into its sides to provide audio without desk clutter. The whole line is aimed at the business market, so prices are higher but £2,275 plus VAT isn't excessive for a fully featured system like the 6200D, given its target audience.

It's apparent at a glance that this is a PC that has been designed rather than simply assembled. The styling is consistent throughout, from the case to the keyboard and the Equium has an attractive, modern look that should complement most office environments.

The three-button Toshiba-badged Logitech mouse is comfortably chunky and the keyboard has a smooth, quiet action which instantly adds to the general impression of quality. The only irritant was the slightly over-loud cooling fan in the case.

Toshiba's TekBright monitor has a relatively flat screen with a 15.75in diagonal and comes with a Windows-based control utility. This looks far prettier than the usual monitor-based on-screen menus but does exactly the same things, offering comprehensive geometry correction and up to five fully customisable colour presets. A vertical refresh rate of 85Hz at 1,024x768 resolution is supported, thus preventing annoying flicker but the monitor's focus, at least on the review sample, was marred by large areas of roughness caused by moiré patterns. The speakers set into either side were quite good, with a reasonably full bass response, clear middle and high frequency reproduction, and plenty of volume.

The relatively slimline case offers modest but probably sufficient expansion potential, with room for a single additional drive in a front-opening 5.25in bay below the CD-ROM drive. The expansion slots are on a riser board and as currently set up, you get one full and two half-length ISA slots, plus a barely usable PCI slot on the side of the riser that faces the drive cabling.

At a pinch, you could move the tiny Intel LAN adaptor PCI card over to this slot, freeing up an unobstructed PCI slot on the 'good' side of the riser. The LAN adaptor itself is an autosensing device that will switch up from 10Mbits/s to 100Mbits/s when connected to the new type of high-speed network.
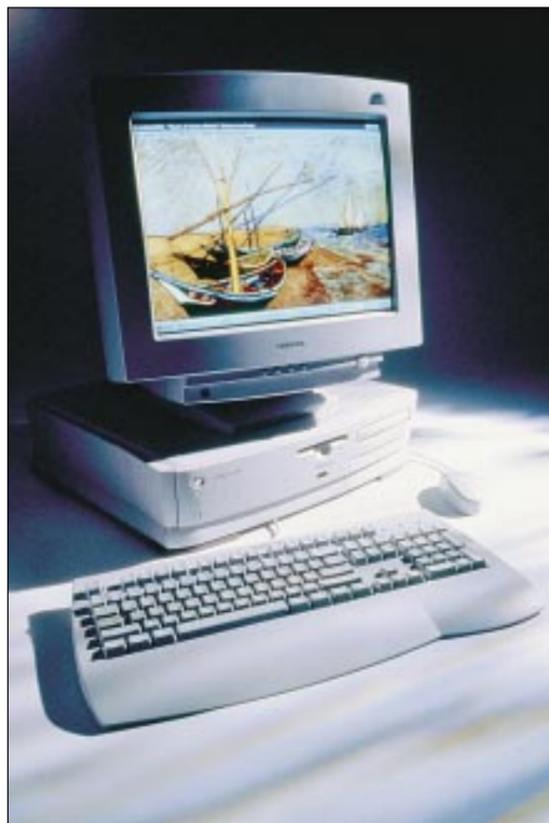
The networking angle gets a big boost from the machine's hardware support for the Desktop Management Interface standard (DMI 2.0). This, in conjunction with the bundled copy of Intel's LAN-Desk Client Manager, allows the machine to be turned on and off remotely ('wake on LAN'). Operations such as software audits, software upgrades, testing and security checking (the machine senses and reports if its case is opened) can also be carried out at any time.

It's the combination of the fast LAN adaptor with DMI 2.0 that should make the Equium particularly attractive to companies seeking the most up-to-date network workstations. The three-year warranty, the first year of which is on-site, probably won't do any harm in this respect either.

A sleek, sophisticated business desktop PC that combines reasonable graphics and multimedia capabilities with up-to-the-minute networking features. Toshiba's Equium 6200D is not for the typical home user but it should do well in the business market.   Dominic Bucknall

Toshiba Equium 6200D					
Build quality	★	★	★	★	★
Performance	★	★	★	★	☆
Features	★	★	★	★	★
Value for money	★	★	★	★	☆
Overall	★	★	★	★	☆

Canon PowerShot 350

Digital cameras tend to come in two guises – those that look like a James Bond prop and those resemble a giant 35mm compact camera. Although the Canon PowerShot 350 sits in the former camp, this isn't at the expense of ease of use (as can so often be the case).

The PowerShot 350 looks sufficiently different from a 35mm compact, so there's no danger of bystanders mistaking it for one. Small and square, it's designed to be held in one hand, where the shutter release falls neatly beneath your forefinger and the LCD screen is easy to see. It's clear, reasonably bright and flips out about 45 degrees from the body of the camera. This is useful if you want to take a shot from ground level but otherwise is only handy to the discerning poseur. Considering that the maximum resolution of the camera is 640x480, the image quality is good, despite the fact that flash photographs come out rather dark. It's certainly possible to blow up pictures to A4, though at this scale they look distinctly grainy. They're fine though if you have a need for electronic images for a Web site, for example.

Unfortunately, the PowerShot 350 still can't record as much detail as a conventional camera costing a fifth of the price. It stores its pictures on flash memory cards – a 2Mb card can store 47 economy images but only 11 in fine mode. Digital cameras have a reputation for fearsome power consumption and because of its screen, the PowerShot 350 is no exception. Canon has tried to minimise the wallet damage though. The camera has high-capacity rechargeable batteries which can be charged in the camera and if these run down, you can use normal alkaline cells. **The PowerShot 350 is neat and a pleasure to use but unless you've got a specific use for it, it's little more than an expensive toy.**   John Sabine

Canon PowerShot 350					
Ease of use	★	★	★	★	☆
Performance	★	★	★	★	☆
Features	★	★	★	☆	☆
Value for money	★	★	★	☆	☆
Overall	★	★	★	★	☆

Psi-Sync for Microsoft Outlook

If you use PIM (Personal Information Manager) software in the office and a Psion PDA (Personal Digital Assistant) on the move, the chances are they each contain information that isn't in step. Try and resolve this with Psion's PsiWin though, and you'll more than likely be frustrated since it isn't the easiest or most compatible program around.

If so, you'll be intrigued by Psi-Sync for Microsoft Outlook. It provides one-step data synchronisation between a Psion Series 3a, 3c or Siena (no Series 5 just yet) and a desktop PC. The downside is that it only works with Microsoft Outlook but seeing as it's shareware and works extremely well, it's a small point.

Psi-Sync works like the USR Palm-Pilot's HotSync feature. Connect a Series 3 to the PC, start Psi-Sync, click 'synchronise' and both Outlook's Contacts list and the Series 3's address database are synchronised to contain the same information. It's also possible to upload a Psion Agenda to Outlook or send an Outlook Calendar to the Series 3, and e-mail can even be composed on the Series 3 for later sending through Outlook.

Although shareware, Psi-Sync is very polished and extremely easy to use. The registered version supports the full list of Outlook Contacts' fields and these can be mapped to any database field on the Series 3. It also transfers alarms and repeating Agenda entries, plus notes stored in Outlook's Notes folder. Usefully, Psi-Sync has the option to sit in the Windows 95 system tray, where it will automatically detect a connected Series 3 and synchronise in the background.

The shareware version of Psi-Sync can be downloaded from the Psi-Sync Web site and can be found on this month's cover CD.

This is cheap, slickly programmed and works extremely well. Why on earth Psion couldn't have produced something like this is a mystery.   Julian Prokaza

Psi-Sync for Microsoft Outlook					
Ease of use	★	★	★	★	☆
Performance	★	★	★	★	★
Features	★	★	★	★	★
Value for money	★	★	★	★	★
Overall	★	★	★	★	★

Minimum requirements: Windows 95, Psion Series 3a, 3c or Siena, Psion link cable (PsiWin not required).

EasyPhoto Drive

Colour image scanners are no longer the reserve of wealthy professionals, with an abundance of good-quality flatbed devices now available at affordable prices. The EasyPhoto Drive, however, is quite unlike any other scanner because it fits into a PC's standard 5.25in drive bay and sucks in photographs in much the same way as a cash machine draws in a credit card.

Fitting the unit is quite straightforward, so long as your PC has a free ISA expansion slot, and a CD-ROM drive is required to install the necessary drivers and software. After that, the EasyPhoto Drive just sits there, quietly waiting for a picture to be inserted. As soon as you do so, the scanning software bursts into life and the image is subsequently drawn through the slot and under the scanning window. Inserted photographs disappear completely inside the unit before being ejected at speed once the scan is finished. Usefully, EasyPhoto Drive can be pulled out like a drawer to retrieve jammed photographs.

The software presents scanned images as though on a roll of film. They can be rearranged using standard drag-and-drop operations and by double-clicking an image, you can view it in close-up and edit it in a number of ways.
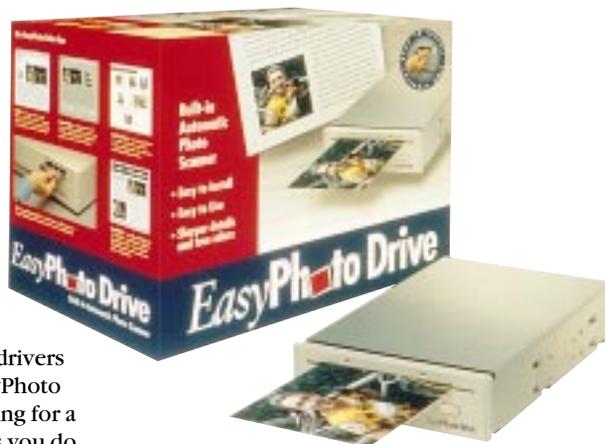
The quality of scanned images is as good as any other 400dpi scanner we've seen and each scan completes in just a few seconds in one pass. The EasyPhoto Drive's major drawback is that it can only scan images (or documents) the size of a standard photograph, meaning it's not possible to scan anything larger than 5x7in. **The EasyPhoto Drive is a quality colour scanner with a space-saving design. Its use is restricted to photograph scanning and unless you've got a very small desk, you're probably better off buying a cheap flatbed model.** Scott Colvey

Specifications

400dpi optical scan resolution

1,200dpi interpolated resolution

24-bit colour depth (16.7 million colours)

TWAIN-compliant

£129 (inc VAT)

Lincoln Beasley: 01608 645756
www.easyphoto.com

EasyPhoto Drive					
Ease of use	★	★	★	★	★
Build quality	★	★	★	★	★
Performance	★	★	★	★	☆
Features	★	★	★	★	☆
Value for money	★	★	★	☆	☆
Overall	★	★	★	★	★

Minimum requirements: 486 processor, ISA slot, 5.25in drive bay, Windows 3.1, 8Mb of RAM, 13Mb of hard disk space, CD-ROM drive.

NetAccelerator 1.0

The delay caused while your modem downloads Web pages is irritating and costs money, in both connection time and telephone charges. NetAccelerator tries to minimise this waiting time by downloading the pages you want to read, before you click on the links summoning them.

After you have downloaded a Web page, you normally spend a while reading it before you move to the next one. Your modem, however, is sitting twiddling its metaphorical thumbs while you read, running up bills at the same time. NetAccelerator puts it to work, analysing the links on the page that you are reading in the background. It then downloads the graphics and text and stores them in your Web-browser's cache. Depending on how busy the Web is and the speed at which data is sent to your machine, when you click on a link to move on, the page should already be downloaded and ready for reading.

When we tested NetAccelerator on a Sunday morning, we found that the speed increased by a factor of eight (IMSI claims that factor of 12 increases are possible). More often than not, the pages were displayed as soon as the links were clicked.

No manual or on-line help is supplied with the product and we thought an explanatory booklet would have been useful. We also discovered that, although IMSI says that NetAccelerator supports Internet Explorer 3, it will not work with version 3.0, only versions 3.1 and 3.2. There is also a problem with a spurious error message that a number of users (including us) have discovered. IMSI intends to release a version fixing this problem soon.

A cheap and useful way to make your modem earn its keep, downloading linked pages that are ready for reading as soon as you click a link. Steve Cotterell

Specifications

Makes intelligent use of your modem's 'idle' times

Loads Web pages before link is chosen

Monitors favourite pages for changes and updates your cache

Automatic updates available from IMSI's Web site

£39.99 (inc VAT)

IMSI: 0181 581 2000

NetAccelerator 1.0					
Ease of use	★	★	★	☆	☆
Performance	★	★	★	★	☆
Features	★	★	★	★	☆
Value for money	★	★	★	★	☆
Overall	★	★	★	★	★

Minimum requirements: 486 processor, Windows 95, 8Mb of RAM. 2.5Mb of hard disk space, 14.4Kbits/s modem, Internet access, Netscape Navigator 3.0 or Internet Explorer Version 3.1.

IMSI
GO 12X FASTER ON THE INTERNET!
Net Accelerator
With Powerful Utilities to Make the Most of Your Internet Connection
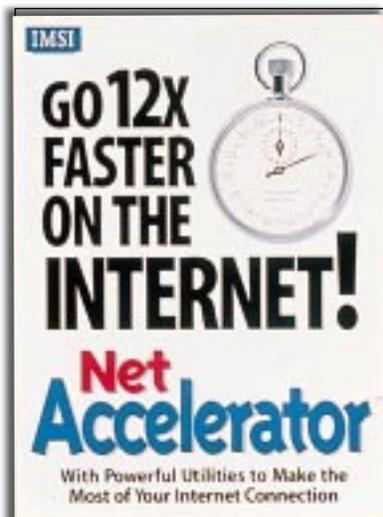
Easy CD Creator Deluxe

The latest version of Adaptec's data, audio and video CD creation software that includes a tool for cleaning up vinyl recordings

Affordable CD writers have been long dreamt of but it's only recently that falling prices have made them a reality. Not many people realise though, that as well as data CDs (CD-ROMs), CD writers can also create audio CDs – providing they have the right software.

Adaptec's Easy CD Creator Deluxe is a suite of tools that sets out to provide just that. We tested it with the Yamaha CDR400tx SCSI drive reviewed last month and, although it should work with most CD writers, there can be some incompatibilities and it's worth checking with Adaptec if you're not sure about your drive. For those who are interested, the software replaces two existing Adaptec products – Easy CD Pro 2 and CD Creator 2.

If you're not too concerned about getting bogged down in the complicated aspects of CD creation, Easy CD Creator offers an extremely simple solution. Start up the program and you're presented with a Wizard, offering to hold your hand through the CD creation or 'burning' process. For a data CD, it's simply a matter of selecting the files you want and clicking the 'Add Now' button. There is a more traditional Explorer-like interface for putting together CDs but this offers little benefit over the Wizard and is probably only of interest to the more technically oriented.

The first few times you burn a CD, the Wizard advises you to run a test to assess your PC's performance in order to fine tune the CD creation process. The aim is to match the rate at which the CD-ROM drive reads discs to the rate at which the CD writer writes them. If they're not matched, buffer underrun (and then a crash) can occur – the CD writer tries to write data to a CD faster than the CD reader can provide it.

The test takes a while to complete, since it simulates the entire writing process but it can thankfully be abandoned once performance has be optimally set. On our test PC – a Mesh P200MMX with 48Mb of RAM – a Windows 95 performance was noticeably affected during the writing process, so realistically, it makes sense to leave the software running when you're away from the PC.

Creating an audio CD is much the same – add the tracks required (from one or more audio CDs) to the list and then click 'record'. Track lengths are shown as a bar along the bottom of the Easy CD Creator window and a warning is shown if there are too many tracks to fit on one disc. There's also a simple design tool for making CD labels, so the only thing stopping you producing your own professional compilation CDs is copyright law.

Copying audio from CD to CD is all well and good but Adaptec has realised that people also want to make CD copies of old vinyl LPs. CD Spin Doctor takes care of this and offers a few useful features besides. Leads are supplied to link a turntable or other sound source to a sound card and CD Spin Doctor can then works its magic.

This 'magic' is that CD Spin Doctor can filter out the pops and crackles that can crop up on vinyl records, resulting in a clearer recording. The source must be recorded onto the PC's hard drive first though, so several hundred megabytes of free space are needed for a full CD's worth of music. The results, though hardly quick to produce, are pretty impressive and although you're not going to get CD-like sound from a battered 78, CD Spin Doctor is great for bringing new life to elderly vinyl. **Reasonably cheap and stuffed with useful tools, Easy CD Creator is an ideal application for anyone looking to get the most out of a CD writer.** Julian Prokaza

Specifications

Easy CD Creator creates CD-ROM, audio CD and mixed mode CD formats
....
CD Spin Doctor 'cleans' scratched vinyl recordings
....
Video CD Creator creates MPEG video CDs
....
Sound Editor edits digitised audio
....
Creates ISO 9660, multisession and bootable CDs
....
Joliet filename support
....
£81.08 (inc VAT)
....
Adaptec: 01276 854500
www.adaptec.com
....

Adaptec Easy CD Creator Deluxe Edition				
Ease of use	★	★	★	★ ★
Performance	★	★	★	★ ☆
Features	★	★	★	★ ★
Value for money	★	★	★	★ ☆
Overall	★	★	★	★ ☆

Minimum requirements: Windows 95, 11Mb of free hard disk space, CD writer.
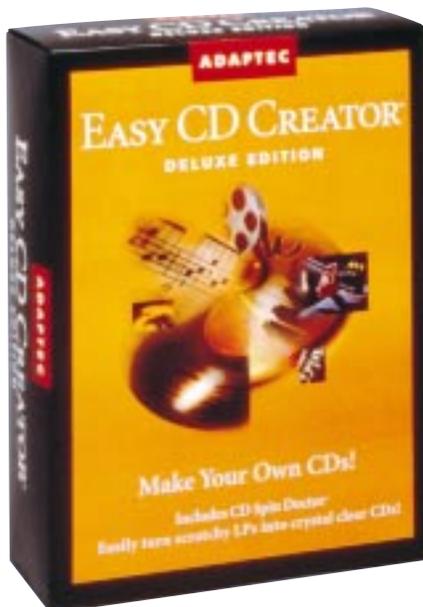
Panasonic CF-35

At the risk of starting off with the conclusion, the Panasonic CF-35 is a notebook PC characterised by puzzling inconsistencies. The first one arises out of the clash between the elegant design of the case, with its distinctive slimness and styling, and the cheap-looking, lightly coloured keypad which completely spoils the look of Panasonic's machine.

Then there's the CD-ROM drive. Despite the notebook's list price of £3,524 (inc VAT), you don't get one, although there's a multipurpose bay containing the floppy drive which can be used for the £199 optional 10x CD-ROM module. The machine has an infra-red serial port but, although the current standard for data transmission speed is 4Mbits/s, it operates at the old 115Kbits/s speed.

An even more puzzling technological aspect of the CF-35 notebook hinges around the motherboard chipset. The machine is the first notebook to use Intel's 430TX chipset, designed to work with MMX processors and bring speed benefits by allowing the use of faster memory and hard disk technologies. Yet despite this apparent advance, the notebook has standard EDO RAM and a standard hard disk, negating the most important potential advantages of having TX in the first place.

The active matrix screen delivers crisp 800x600 resolution in 65,536 colours and there's adequate if unexceptional audio from a 16-bit Yamaha sound chip and built-in stereo speakers. The keyboard is comfortable and the machine is very light at just 2.2kg. The standard 16Mb of RAM is a bit skimpy given the price but you get a 2Gb hard disk and a 150MHz Pentium MMX processor.

A well-made but expensive notebook, troubled by almost inexplicable omissions at a technical level, there's work still to be done before the CF-35 is a winner. Dominic Bucknall

Specifications

Intel Pentium 150MMX processor

16Mb of RAM

2Gb hard drive

800x600, 16-bit TFT screen

16-bit sound with stereo speakers

Optional 10x internal CD-ROM drive

£3,524 (inc VAT)

Panasonic: 0500 404041
www.panasonic.co.uk

Panasonic CF-35					
Build quality	★	★	★	★	☆
Performance	★	★	★	★	☆
Features	★	★	★	☆	☆
Value for money	★	★	☆	☆	☆
Overall	★	★	★	☆	★

ThumbsPlus 3.0

If you're struggling to manage those countless images – clip-art, paintings, drawings, fonts, animation, scanner output, digitised photographs and so on - strewn across your PC's hard disk, floppies and CD-ROMs, then ThumbsPlus 3.0 can make it a lot simpler.

ThumbsPlus displays thumbnails of all your files, so you can easily identify them and operate on them in various ways, from simple browsing to advanced editing. The program briskly scans your chosen targets, such as your entire hard drive, then presents the results in a nicely designed window with a colour-coded directory list on the left and thumbnails on the right. You can even display the archived images inside ZIP files just as if they were a folder.

Using drag and drop, you can move and copy thumbnails, or click to display the image in a View window at various zoom levels, opening up to 40 at a time. You can also edit the image in many ways, such as crop its size, adjust contrast and brightness, apply a range of filters, change colour depth and so on. Rotation is fully variable and there's a handy Autocrop feature which automatically removes borders of the same colour. Edited files can be saved in BMP, GIF, JPG, TIF, TGA, PCX or WMF format.

Comments can also be added to images, catalogues printed, slide shows created and searches performed based on keywords, entered either manually or automatically. You can even select one of your images and with one click, have it appear as your Windows wallpaper.

If you're working with images either for leisure or work, then the versatility and ease of use of ThumbsPlus 3.0 makes it highly recommended. Terry Pinnell

Specifications

Over 40 file formats readable

Keywords and searching

Many filters

£49.35 (inc VAT)

Thompson Partnership: 01889 564601
www.cerious.com

ThumbsPlus 3.0					
Ease of use	★	★	★	★	★
Performance	★	★	★	★	★
Features	★	★	★	★	★
Value for money	★	★	★	★	★
Overall	★	★	★	★	★

Minimum requirements: 386 processor, 8Mb of RAM, 5Mb of hard disk space (plus generous database space), Windows 95 (or Windows 3.1 with Win32s)

Net2000 SpaceStation

A low-specification PC that connects to an ordinary TV, designed for browsing the Internet

If some respected industry voices are to be believed, in a few years' time we'll all be trading in our PCs for so-called Network Computers (NCs). An NC is essentially box of electronics that sits on (or under) a television set and runs software directly from the Internet, rather than its own hard disk.

The unofficial Microsoft-Intel alliance denies that such devices will ever succeed but, just in case, it has produced an 'insurance policy' in the shape of specifications for a 'Net PC'.

Northwood's new Net2000 Space-Station is something of a hybrid. It's aimed at people who want only to connect to the Internet and yet conforms to neither the NC or Net PC standards. On the inside it's just a bog-standard PC with familiar (albeit ageing) components such as a processor and graphics card. But on outside, it's styled like a hi-fi separate and, fittingly enough, is coloured black.

Unlike a traditional PC, the Space-Station lacks a floppy disk drive but does have a CD-ROM drive. This means that although software can be easily installed, any files you might download or documents you create can be stored only on the hard disk drive and there is no easy way to take backup copies. The Space-Station isn't intended to be used like a traditional PC; its main purpose is to get the user hooked up to the Internet.

For this purpose, Northwood has fitted a 33.6Kbits/s modem and the machine comes pre-installed with Windows 95 and all the other bits and pieces needed to get connected successfully, including a year's subscription with the Internet Software Provider SoftNET. Without doubt, this is the SpaceStation's main strength. Power it up and you can browse the Web within seconds, sending e-mails and 'chatting' with on sline.

However, unlike with a PC, the SpaceStation allows you to surf the Internet from the comfort of an armchair. The reasons for this are twofold. For a start, it doesn't come with a monitor, but connects to a television set (SCART connections only) rather than a monitor. The fitted graphics card is capable of displaying up to 16.7 million colours and as standard the resolution is set to a low 640x480 which, although pokey, is really the viewable limit on most TV screens. The graphics card has been custom-designed to include a '3-Line Flicker Filter', so displayed images are steady on a TV, if not as sharp as on a monitor.

The second reason is that the Space-Station is controlled via a compact infra-red keyboard, which incorporates a thumb-sized trackball and buttons at the top corners. The underside of this battery-powered unit is ergonomically designed to fit comfortably in the hands, so it feels almost as through you're using an over-sized game console-style joypad.

Performance-wise, the SpaceStation proved to be a bit unpredictable. A comparatively ancient 100MHz K5 processor from AMD powers the machine and it has just 8Mb of RAM. As a result, while sending and receiving e-mails and downloading files caused no problems, browsing the Web was at times laboured. Scrolling pages was painfully slow as the SpaceStation struggled to update the screen in time with our actions.

If all you want to do is surf the Internet then the Net2000 SpaceStation will do the job. However, bear in mind that for just a few pounds more you could get hold of a complete and better-specified PC system. Scott Colvey

Net2000 SpaceStation				
Build quality	★	★	★	★ ☆
Ease of use	★	★	★	★ ★
Performance	★	★	☆	☆ ☆
Value for money	★	★	☆	☆ ☆
Overall	★	★	★	★ ★

Minimum requirements: SCART-compatible television set, telephone line.

HP Pavilion 3110

A multimedia PC aimed at home users with limited space and a limited budget

The Pavilion 3110 is the entry-level model in Hewlett-Packard's revised range of home PCs. It's available for as little as £1,099 with a 14in monitor, though it's worth scraping up an extra £100 for a 15in monitor if you intend to use the PC intensively.

As far as desktop PCs go, the Pavilion 3110 is extremely compact and comes with a matching monitor, keyboard and mouse, all finished in the same contrasting light/dark grey plastic. The monitor stands on top of the slimline system unit and the speakers are attached to the sides of the monitor, so the entire system requires very little desk space and will fit comfortably onto a dining room table.

Setting up the Pavilion 3110 for the first time should not trouble even the most inexperienced purchaser and Hewlett-Packard's 'welcome mat' tells you how to connect all the various bits and pieces. The assorted cables are colour-coded to make the job even easier and the 72-page manual offers further advice on installation. Once the PC is up and running, there's more support in the form of the Personal Guide program. This is a very accessible introduction to the main features of the computer and it includes a number of step-by-step tutorials for beginners.

The Pavilion 3110's compact dimensions limit the scope for future expan-

sion but the basic specification will be sufficient for most users. There's an internal 33.6Kbits/s ISA modem in one of the two expansion slots and the graphics adaptor and sound hardware are integrated onto the motherboard. This leaves the PCI expansion slot free in case you want to fit a 3D accelerator card or similar accessory. The only other internal upgrade you can make is to add a second memory module to increase the 16Mb of RAM supplied as standard to a more versatile 32Mb. Other accessories can be connected to the two USB ports on the back of the case.

The processor is a 166MHz Pentium which, although not MMX enhanced, is still sufficiently powerful to cope with the pre-installed software on the 2Gb hard disk and any other programs a home user is likely to install. The graphics system is also some way off the cutting edge of technology, being equipped with only 1Mb of memory. This means running high-resolution graphics modes with millions of colours is out of the question, though on a 14in monitor, you probably wouldn't want to.

The Pavilion's multimedia features are otherwise quite strong for such a com-

petitively priced machine. Although the speakers are quite small, they still deliver sufficient undistorted sound for the average room. An icon on the Windows taskbar can be used to select three pre-set surround sound effects and there's a volume control on one of the speakers as well. The final multimedia element is a 16x CD-ROM drive which can be used to play video and audio CDs.

The choice of pre-installed software is somewhat predictable with Microsoft Works, Quicken and InfoPaedia for serious work, FIFA 97 for fun and EasyPhoto image editing for the day you buy your scanner. Windows 95 is not provided on CD-ROM but the computer offers to make a backup set of floppies for you. This is an extremely tedious process but not one you should ignore. For the first 60 days after purchase Hewlett-Packard also provides a telephone help line for problems connected with the pre-installed software.

In terms of specifications, Hewlett-Packard has had to cut a few corners in order to make the Pavilion 3110 PC a viable product at this price, but there have been no compromises on build quality and first-time buyers could do a lot worse. Paul Wardley

Specifications

16Mb of RAM

Pentium 166MHz MMX processor

33.6Kbits/s modem

14in monitor with clip-on speakers

2Gb hard disk

16x CD-ROM drive

Two USB ports

1Mb of video RAM

£1,099 (inc VAT)

Hewlett Packard: 0990 474747

Hewlett-Packard Pavilion 3110					
Build quality	★	★	★	★	☆
Ease of use	★	★	★	★	★
Features	★	★	★	☆	☆
Value for money	★	★	★	★	★
Overall	★	★	★	★	★

Kingston Datapak 520

I n the high-tech world of computing, it's not unusual for things to get bigger at the same time as getting smaller. A prime example is Kingston's new Datapak 520 – it's physically as small as hard disk drives currently get and yet at the same time, its 495Mb storage capacity makes it the largest product in its class.

The Datapak comes on a Type III PC Card, a hitherto under-utilised form factor. A Type III PC Card is in fact just a double-height Type II PC Card and thus will plug into any notebook PC with two of these. In other words, it will work with just about any new notebook PC.

Getting the Datapak working is simplicity itself. Plug it into the PC Card socket and Windows 95 recognises it more or less instantly, and duly requests the drivers disk. With drivers loaded, the Datapak appears as just another hard disk drive icon, assigning itself the next available drive letter (such as 'D:'). The drive functions just like any other hard disk too and, but for a slight whirring sound, you could easily forget that it's there at all. During our tests its performance was a little under that of an equivalent internal model but certainly not so slow as to cause annoyance.

Like one or two other hard drive manufacturers, Kingston Technology is being a little naughty in claiming the Datapak 520's capacity as 520Mb. 'Mb' stands for 'megabytes' and the Datapak has considerably less than 520 of these. As it turns out, Kingston Technology is using the term Mb to refer to 'millions of bytes' – something usually referred to as 'MiB'. Do your maths and 520MiB comes out as 495Mb.
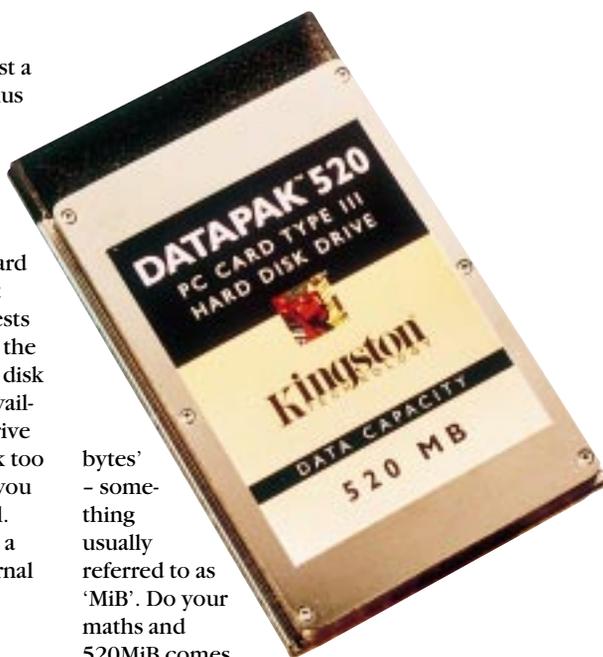
A total of 495Mb of storage isn't a lot for a normal hard disk but then the Datapak is hardly 'normal'. If you're running short of space on your notebook PC though, this is an exceptionally convenient product. Scott Colvey

Specifications

Type III PC Card

495Mb of formatted storage

£450 (inc VAT)

Kingston Technology: 01932 738888
www.kingston.com

Kingston Datapak 520				
Build quality	★	★	★	★	★
Ease of use	★	★	★	★	★
Performance	★	★	★	★	☆
Value for money	★	★	★	★	☆
Overall	★	★	★	★	★

Minimum requirements: Type III PC Card (PCMCIA) socket.

WinCheckIt 4.0

W inCheckIt 4.0 claims to be an all-in-one problem-solving package for Windows 3.1 and Windows 95 users. It offers to clean up disk space, release spare Windows memory, rescue lost or corrupted startup and INI files, benchmark all aspects of your PC's performance, resolve hardware conflicts and advise you about installing new hardware and software.

First the program gathers system information automatically. You save the results so that in future sessions, you can collect data again and see if recent changes have had an effect on performance. Unfortunately, this area is confusing because of poor documentation and flawed design.

For example, the software's user guide warns you against one of the program's options on a Windows 95 system, instead of making it inaccessible. However, WinCheckIt 4.0 can show you detailed parameters from the innards of your PC's hardware and operating system – CMOS and BIOS data, interrupt vectors, IRQs – it's all here if you know what to do with it.

Three other utilities come with WinCheckIt 4.0 and can be run separately or from the main WinCheckIt 4.0 window. However, they are unimpressive. For instance, 'Uninstall' misleadingly identifies many happily working programs as 'orphans' and following that advice could waste a lot of your time.

WinCheckIt 4.0's best feature is its performance tracking. It measures system performance under both DOS and Windows, and presents results in an attractive fashion. You can easily compare your present configuration either against previous tests on your own PC or against other 'standard' PCs selected from a generous list. Choosing the 8088 or 286 could give you a warm glow.

WinCheckIt 4.0 has some attractive features but falls short of its claims in several areas and is over-technical for the average user. Terry Pinnell

Specifications

Extensive diagnostics

Benchmark comparisons

Duplicate finder

£39.99 (inc VAT)

Touchstone UK: 0181 875 4456
www.checkit.com

WinCheckIt 4.0				
Ease of use	★	★	☆	☆	☆
Performance	★	★	★	☆	☆
Features	★	★	★	★	☆
Value for money	★	★	★	☆	☆
Overall	★	★	★	☆	★

Minimum requirements: 386 processor, 8Mb of RAM, 8Mb of hard disk space, Windows 3.1.

HP PhotoSmart suite

A complete home photo-imaging system that allows you to manipulate and print both digital and 35mm photographs

Digital imaging is no longer the preserve of professionals and suitable setups can be easily had for a reasonable sum. A one-stop digital solution could certainly be Hewlett-Packard's intent since it makes colour printers, colour scanners and now a digital camera. At the moment though, you can't buy the three photo-oriented devices reviewed here as a single outfit.

First, the printer. Like most affordable colour printers, it's an inkjet. It uses a two-cartridge system but rather than having one for black and one for coloured inks, it has one for the brighter shades like yellow and red and one for bluer tints. What's more, it uses six inks rather than the usual four – cyan, magenta, yellow and black are complemented with light cyan and light magenta inks.

Technological jiggery-pokery aside, the PhotoSmart Printer's output is excellent. On glossy or coated paper, prints are virtually photographic quality and are still highly acceptable on plain paper. We could pick out some banding but only when we were being very picky and we'd have no hesitation about framing any of the prints made on glossy paper. It's also the best HP inkjet we've ever seen and although it's still a whisker off the Epson Stylus Photo, it is £80 cheaper.

Surprisingly, the PhotoSmart Printer operates at a resolution of just 300dpi (dots per inch). This seems paltry next to that of Epson's inkjets but the comparison isn't a fair one. With a normal inkjet, the higher the resolution, the smaller the dots and therefore the clearer the picture. The PhotoSmart, however, can actually vary the size and position of its dots, as well overlaying them on the page. This gives a better approximation of continuous tones as found on a photograph, so the absolute resolution of the printer becomes less important.

The scanner is a compact unit designed solely for scanning prints and slides – both inserted in a slot at the front of the unit. The scanner's plastic picture guides are motorised for picture insertion and there are settings for 35mm slides, negatives and prints. Like other scanners of this type though, it's impossible to scan anything other than single sheets that are no bigger than 5x7in.

Nonetheless, the scanner is fast – it produces a preview scan almost immediately and generates a full image in only a few seconds. What's more, it's good – 35mm transparencies and negatives are scanned at 2,400dpi and even blown up to fit a page of A4, still look quite acceptable. Prints scanned at 300dpi are less impressive but still satisfactory.

The scanner software includes basic image-editing tools, letting you rotate or crop the image or change the colour balance. These are simple to use and work on the preview scan, being applied to the final image when the true scan is done. Although this makes them swift, they're only suitable for very basic tasks and Microsoft PictureIt is supplied for more demanding tasks.

Sadly, the camera completing the trio is woefully inadequate. Although designed to look like a conventional compact, it's about twice the size and the capacity is very unimpressive – just four pictures in high-quality (640x480) mode. It's easy to use though, despite the fact that it has no LCD display but this is its only virtue. A replacement is due in the spring but until then there are better, cheaper digital cameras around.

Although they're currently priced separately, HP does intend to make the scanner and PhotoSmart printer available as a bundle. The price has yet to be set but it should be available in the shops in the run-up to Christmas.

For digital imaging, the PhotoSmart Printer and Scanner are ideal but neither is versatile enough to stray far beyond this limited application. The camera is best avoided. John Sabine

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HP PhotoSmart Printer

Performance	★ ★ ★ ★ ☆
Value for money	★ ★ ★ ★ ★
Overall	★ ★ ★ ★ ★

HP PhotoSmart Scanner

Performance	★ ★ ★ ★ ☆
Value for money	★ ★ ★ ★ ☆
Overall	★ ★ ★ ★ ★

HP PhotoSmart Camera

|	
Performance	★ ★ ★ ☆ ☆
Value for money	★ ★ ★ ☆ ☆
Overall	★ ★ ★ ★ ★

Solo Pro Classic

Voice-recognition software for controlling a PC through spoken commands; it can also be used to dictate text into many ordinary Windows programs

Talking computers are now common-place and you can buy toys with a digital voice for a few pounds. What will really revolutionise the way we use computers though is not voice production but voice recognition – computers have to be able to listen to what we say and act accordingly.

Dragon Dictate's Solo Pro Classic is just the first step along the way to a listening PC. It offers the ability to talk to your PC and have it respond – either by carrying out your commands as if you'd used a mouse, or by entering your words into a program as if you'd typed them. Sadly, what it won't do is what we really want a listening PC to do – respond to spoken instructions such as 'Find me the letter I wrote to Bill last week and fax a copy to Mary.' This level of intelligent co-operation is still science fiction.

Dragon Dictate Solo Pro Classic is the latest enhancement to the original Dragon Dictate program introduced in 1993. It takes advantage of the more
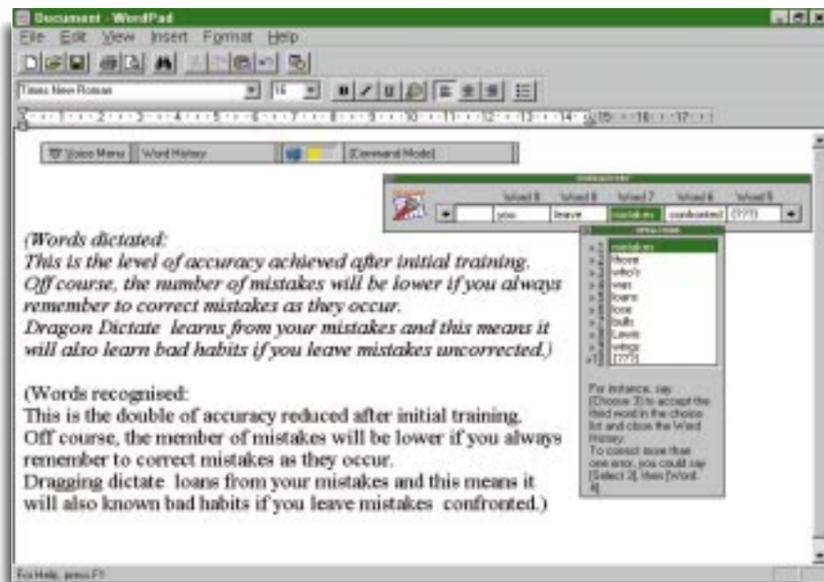
powerful hardware now available but it's beginning to show its age, particularly in terms of the way it supports Windows 95 applications. It cannot, for example, be used to control Microsoft Office 97, though it can be used for dictation with any version.

Installing the software is straight-forward and the next step is to plug in the battery-assisted headset microphone and calibrate sound levels. Once this has been done, you need to carry out some basic exercises to familiarise the soft-ware with your voice. This is a 25-minute job that consists of reading out four long lists of words. When this has been done you can start using Solo Pro to control Windows applications.

The response is impressive and Solo Pro has no trouble identifying spoken commands and bringing up the correct menu accordingly. You can switch between multiple applications and even control the position of the mouse cursor by referring to a grid system super-imposed on the screen.

The other use for Solo Pro and poten-tially its main attraction, is to enable you to dictate words and numbers into stan-dard Windows applications instead of using the keyboard. There's a big draw-back to this in that the Solo Pro never knows what you're going to say next, so despite addressing it in a stilted way with a pause between each word, it never

achieves the high level of recognition it does with predictable menu commands .

Our first attempts at dictation resulted in one word in seven being misrecog-nised. The temptation is to let the errors stand and correct them afterwards but this would prevent Solo Pro learning from its mistakes – something that it's designed to do. Mistakes are corrected by using voice commands (naturally) and Solo Pro is pretty good at coming up with alternative suggestions for words it has got wrong. If it can't guess your word, you can type it in yourself.

We are told that a fully-trained system is 95 percent accurate, which means it will misinterpret one word in 20. Even assuming this level of accuracy, all but the most ham-fisted of typists would probably be able to type faster than they could dictate and correct using Solo Pro. The program is best used as a supple-mentary means of data entry rather than as a replacement for a keyboard and mouse but it is nevertheless a viable alternative for anyone who is prevented, either physically or environmentally, from using conventional input devices. **Solo Pro does the job it was designed for but it's not a replacement for a keyboard. If you really want voice dicta-tion on your PC, wait for Dragon Dic-tate's forthcoming NaturallySpeaking, for it promises speech recognition at conversational speed.** Paul Wardley

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Backer 32

Backing up hard disk drives has always been a bit of a problem, even with specialist equipment and with storage capacities on the increase, it's becoming more and more difficult. Danmere's Backer 32 presents a novel solution to the problem – it's a device that allows the contents of a PC's hard drive to be stored on a video cassette using nothing more than your domestic VCR or camcorder.

The Backer 32 is an external unit and connects via the PC's parallel port, so it can be used on both desktop and note-book PCs alike. However, though installation would seem to be simple enough at
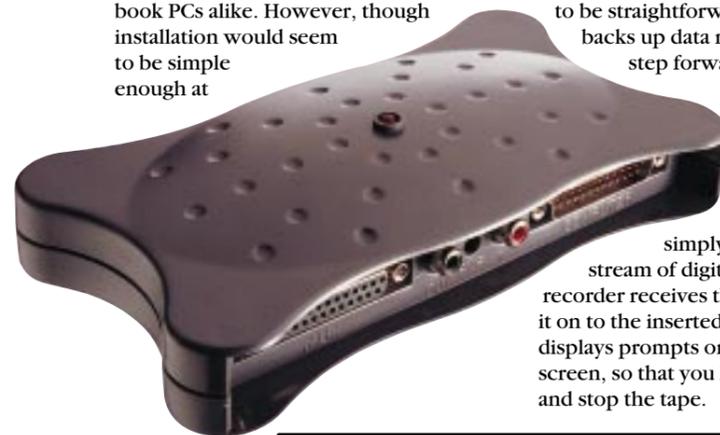
first – just a few cables to route between the various components – it could prove to be anything but. The Backer 32 requires a certain type of parallel port BIOS setting (ECP) to be made and in some instances, jumpers on the PC's motherboard may also need to be moved. In extreme cases, a new parallel port interface board may need to be fitted.

That warning out of the way, the good news is that most modern PCs have an ECP-compatible parallel port and we found setting up and using the Backer 32 to be straightforward. The way the unit backs up data represents no great step forward in technology though. Like floppy disks, videotapes are a magnetic medium and the software supplied with the Backer 32 simply converts files into a stream of digital data. The video recorder receives this signal and records it on to the inserted tape. The device also displays prompts on the television screen, so that you know when to start and stop the tape.

The Backer 32 provides a useful and cheap method of backup storage but it can be very slow – a little under 3Mb/min during our tests – and it's not helped by the necessity to tediously verify a completed backup. Scott Colvey

Intel 200MMX OverDrive

After months of waiting, Intel has finally released the 180 and 200MHz versions of its MMX Over-Drive processor. Already available at speeds of 150 and 166MHz, these life-saving chips allow you to upgrade your existing Pentium PC to MMX technology without going to the expense of a buying a new machine.

MMX technology is designed to make your PC faster and more 'fun' by improv-ing its graphics, audio and video capabili-ties. Intel now builds it into every processor it sells, including the new Pentium II.
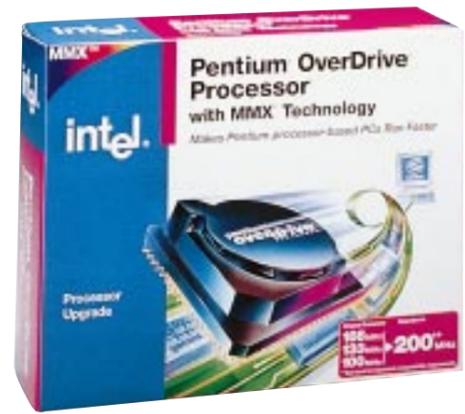
The 180MHz OverDrive is aimed at users with 90, 120 and 150MHz Pen-tiums, while the 200MHz version reviewed here is suited for 133 and 166MHz machines. In reality, most PCs with modern motherboards should be compatible with this faster chip but if you've any doubts, it's best to stick with Intel's guidelines.

Perhaps the best thing about Over-Drive processors is that they are remark-ably easy to install. Once you've run the diagnostic program supplied, you just open the PC's case, remove the existing chip from its socket and pop in the new one. Circuitry on the chip configures your motherboard with the correct settings automatically and once you've got the case back on, that's it. Running the diagnostic software again will tell you if everything has gone smoothly.

Of course, the reason for installing a new processor is to get more power. Our Labs tests showed that the 200MHz version gives a speed increase of around 48 percent on a 133MHz system, though running MMX-specific software will increase performance still further.
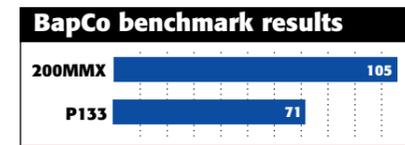
Dimension XPS D266

A high-specification PC from Dell and one of the first to feature an AGP graphics card for blisteringly-fast graphics performance

Innovation is nothing new in the PC business. If manufacturers gave us a penny every time they used the words 'fastest' or 'best' in their press releases, we'd add at least a pound to each of our salaries. Dell's new Dimension XPS D266 though, is different. Simply put, it's the fastest PC we've yet to test.

On paper, the D266 doesn't look too different from the PCs we tested in last month's 'Dream machines' feature. It has 64Mb of RAM, a 266MHz Pentium II processor, Nokia-made/Dell-badged 17in monitor – basically all the things you would expect when you've just paid over £2,000 for a PC. When we ran our tests, though, it blew the others away.

The machine reviewed was a pre-production model and wouldn't run our full battery of tests. Preliminary results though, were very impressive and it gave a score of 375. By comparison, the best result from the Dream machines test was just under 300 for the same specification. What then, has Dell got so very right?

First is the chipset. A processor relies on extra chips on the motherboard to allow it to communicate with essential components like memory and the graphics card. Dell has used the very latest chipset from Intel – the 440LX chipset. This allows Pentium II processors to use SDRAM (a faster type of memory, supplied on DIMMs not SIMMs) and speedy Ultra DMA hard disks.

Second, also linked to the 440LX chipset, is a brand-new graphics technology called Accelerated Graphics Port (AGP). It's been under development for the past year but the 440LX chipset is the first to support it. As the 440LX was only officially launched at the beginning of September, it was only then that AGP machines could go on sale.

Even if you don't care about any of the technical details, you will want to know that the STB Velocity 128 card fitted to the Dell is about three times as fast as any other graphics card we've tested. That translates to much faster screen redraws in graphics packages such as Corel Draw and super-smooth 3D graphics in games.

AGP is an entirely new bus design, much as PCI was a few years ago. Unlike PCI though, it is designed solely for graphics cards. It allows data to be transferred without interference from the other devices that may be connected to a computer's PCI bus. It also runs faster than PCI (at 133MHz rather than 66) and this combination means that it can shift data at up to 528Mbits/s, shattering the PCI limit of 133Mbits/s.

What's more, an AGP graphics card has a direct link to the computer's main memory. In much the same way as Windows 95 can use the hard disk as virtual memory to pretend a PC has perhaps 70Mb or RAM rather than 32, so an AGP card can use RAM to extend its video memory. This is vital for speedy 3D graphics as the textures for a single high-resolution image or scene take up far more than the 4Mb of video RAM available on the video card itself. Fortunately, this all takes place seamlessly – you gain faster graphics without slowing down your PC.

There's very little to criticise about the Dimension XPS D266. Build quality is up to the usual high Dell standard and the tidy internal layout provides lots of access for expansion. The AGP standard may add a little confusion to the existing set of expansion card standards but if these levels of performance are anything to go by, it's more than welcome. **For once, it seems to be worthwhile being an 'early adopter' of the latest technology. The Dimension is a very good machine indeed and exceptional value considering its speed.** John Sabine

266MHz Pentium II processor
64Mb of RAM
6.4Gb hard disk
12/24x CD-ROM
Internal Zip drive
17in monitor
STB Velocity 128 AGP 4Mb graphics card
AWE 64 sound card
Altec Lansing SCS290 speakers and sub-woofer
Two USB ports
£2,055 (inc VAT)
Dell: 01344 720000 **www.dell.co.uk**

Dell Dimension XPS D266	
Performance	★ ★ ★ ★ ★
Features	★ ★ ★ ★ ☆
Build quality	★ ★ ★ ★ ★
Value for money	★ ★ ★ ★ ★
Overall	★ ★ ★ ★ ★

Lotus Organizer GS

The most up-to-date version of Lotus's PIM , with new features for everybody and a group scheduler for Lotus Notes users

Lotus Organizer was a ground-breaking product that managed to cash in on the public's fascination with ring-bound organisers in the Eighties. It has since been revamped several times and has grown from a neat little program on a single floppy disk to a 27Mb monster.

The interface in the Organizer GS (Group Scheduling) version has hardly changed, apart from a few extra icons and buttons. It still looks like a real organiser, complete with metal rings in the centre and tab indexes down the sides. Apart from being user-friendly, this approach also makes it easy to use since there are extra facilities to manipulate the data in the book electronically. You don't have to buy expensive refill pages every year either.

In the Address section you can find any text in an entry, instead of simply looking for a name alphabetically and if you've got of lot of contacts whose names begin with the same letter, you'll never run out pages for them. In the Calendar section, which is actually an appointments book, if you can't remember the date and time of an appointment, you can search for the name of the person you're meeting or anything else that you do remember.

The To Do section of Organizer lets you prioritise lists of tasks. Alarms sound when tasks are due and entries from To Do lists can be made to appear in the Calendar section as constant reminders. Similarly, in the Planner section (an on-screen version of those wall charts on which you stick coloured strips to show what's happening through the year), you can also see any appointments made in the Calendar.

The Notepad section is used to store any type of information and an almanac of public holidays, time zones and the like is supplied, updated versions of which can be downloaded from the Organizer Web site. Notepad has been enhanced from previous versions in that you can now use fonts and formatting in your entries.

The two remaining sections are for anniversaries and calls. If you keep the Anniversary section up to date, you will be reminded in good time to send a card or present. The Calls section records details of incoming and outgoing tele-phone conversations and automatically times them. You can enter notes about a call and assign a follow-up call, which will appear in the Calendar section on the appropriate day.
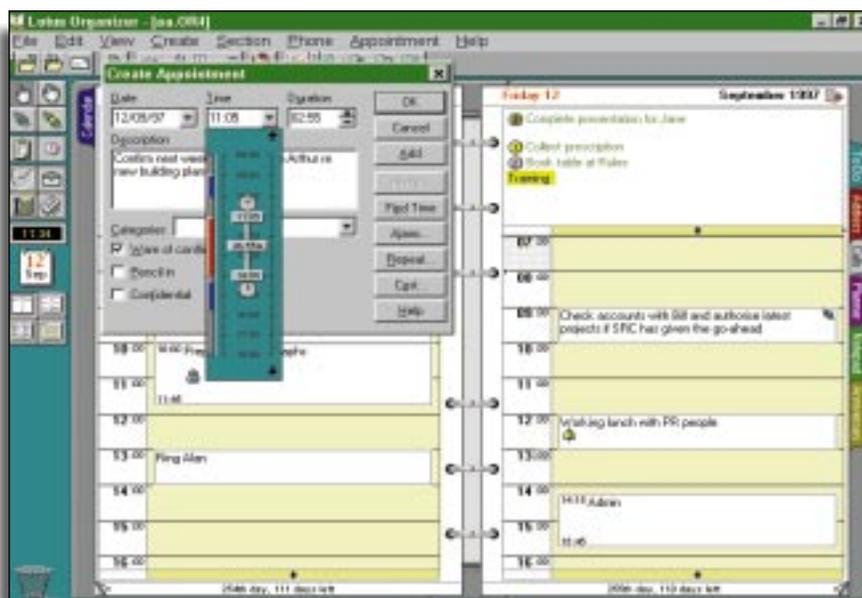
Organizer GS's group scheduling features are only available if you're on a network and use Lotus Notes v4.5. If so, you can create a time for a meeting and then invite attendees from your Notes address book. Organizer displays a graph showing the times when those you've invited are free and displays a list of appropriate meeting times. Once you've selected a time, Organizer notifies each attendee and keeps track of their replies to your invitation.

Organizer is great at what it does but there are too many obvious features missing. Although you can dial a voice telephone number from the address book, you can't send a message to the e-mail address it contains. Neither is there an address field for Internet Web sites, though you can rather laboriously set up an OLE link to a site and connect in this way. Costs can be assigned to entries in Organizer but there's no way to analyse or total them without export-ing the data to another application. It's also difficult to use Organizer in conjunc-tion with palmtop computers – only the US Robotics Palm Pilot is supported. **Lotus Organizer GS is too little, too late. Lotus Notes users will love it, but as a** **general-purpose personal information manager (PIM) it's been overtaken by the opposition. Maybe that's why Lotus now describes the package on the box as a 'Time Manager'.** Paul Wardley

Contents

Address book

Appointments calendar

Phone dialler and call logging

Prioritised To Do lists

Yearly planner

Freeform notebook entries

Group scheduling with Lotus Notes 4.5

Synchronises data with USR PalmPilot

£57.57 (inc VAT)

Lotus: 01784 455445

www3.lotus.com

Lotus Organizer GS					
Ease of use	★	★	★	★	★
Performance	★	★	★	☆	☆
Features	★	★	★	☆	☆
Value for money	★	★	★	☆	☆
Overall	★	★	★	★	★

Minimum requirements: 486 processor, Windows 95, 20Mb of RAM, 17Mb of free hard disk space.