Inkjet photo printer
Epson Stylus Photo 935

exclusive

The ex-Recommended Epson Stylus Photo 925 (see November 02) was packed to the rafters with connectivity options, combining versatility and innovation in a standalone photo printer that delivered great results. It wasn't cheap to run or particularly quick off the mark, but we'd never seen such a feature-rich device being sold at such an impressive price point.

We managed to get an exclusive look at the 925's latest sibling, the all-singing, all-dancing Epson Stylus Photo 935, and we couldn't wait to get it into the Test Centre to see if it lived up to our expectations.

Big brother

In effect the Photo Stylus 935 is the same model as its predecessor with a few funky add-ons. Print quality and speed are identical as it utilises the same six-colour ink system and engine as the older 925, but there's a spread of features that make the 935 peerless.

Base specifications alone are nothing to get excited about – there's an optimised resolution of 5,760dpi (dots per inch) for photo printing and a quoted print speed of 8.5ppm (pages per minute) for both mono and colour. If you feel the need for speed then avoid the 935 – we could only achieve 5ppm mono and 4.5ppm colour on the fastest setting. To Epson's credit, though, it made no wildly exaggerated print speed claims.

You can hook up the 935 to a PC via a USB connection, it's easy to install and is well complemented by a generous software bundle. But it's in the 935's capacity as a no-PC-required printer that Epson really went to town. This is the first Photo Stylus to feature Epson's USB direct print technology, which allows you to output straight from a digital camera without removing the storage card.

At the moment there are six manufacturers in Europe – including Nikon and Minolta – that support direct print and we've no doubt more companies will continue to join up. If your camera doesn't support direct print then you can use one of the built-in slots for memory storage cards. Secure Digital, CompactFlash, Microdrive, Memory Stick, Multimedia and SmartMedia are all supported, although the 935 can only take a SmartMedia card up to 128MB.

Just print and go

With built-in Bluetooth, the 935 can wirelessly exchange data with other Bluetooth devices. Another interesting addition to the Epson Stylus Photo is a USB port. If you have an external USB-based CD-RW drive you can plug it into the 935 and print photos from your CD or archive images from a memory card to a CD-R. Epson has made it virtually impossible to be unable to connect to the Stylus Photo 935 and anyone after home photolab printing without the use of a PC need look no further.

> Anyone after home photolab printing without the use of a PC need look no further

We were impressed to find onboard facilities for photo glossy roll media and a built-in cutter for cropping the paper. There's also support for edge-to-edge printing – something we haven't seen on any other inkjet models. The comprehensive menu system is navigated by hardware buttons on the 935, so you can set up all the options required to tailor your printing.

How well does it actually print? Well, draft mode printing in colour text and graphics is far too light and suffers from banding. The already-expensive running costs are tabulated on this setting so you need only imagine the increased expenditure when you turn up the resolution. On the plus side, as a photo printer the Stylus 935 performs perfectly. The six-ink colour system provides a pleasing colour palette and detail is pin sharp.

Verdict

The 935 is not a great all-round inkjet printer – but then it's not meant to be. However, within its remit as a standalone home photolab, the Stylus Photo is an excellent buy. If money is no object then investing in this Epson model won't leave you disappointed. ■

Spencer Dalziel

Epson Stylus Photo 935

- Epson: 0800 220 546
- www.epson.co.uk
- £229 ex VAT

Specifications

Optical res 5,760dpi; USB 1.1; 8.5ppm mono; 8.5ppm colour; £23/£19 black/colour cartridge; 540 mono pages coverage; 220 colour pages coverage; 4.2/8.4p per page mono/colour; 100-page input tray; 492x290x228mm; 6.4kg

Good points

Connectivity options; photo-quality printing; six-ink colours

Bad points

Draft mode printing; running costs; slow print speeds

Build quality ■■■■■■■□
Features ■■■■■■■□
Value for money ■■■■■□□

Compact PC
Systemax Encore 3602

PC makers continue to look for new ways to sneak machines into our living rooms and Systemax's latest attempt is the Encore 3602. The system closely resembles a compact home stereo unit and doubles up as a radio, CD and MP3 player when it's not being used as a computer. However, it's only when you power up the 3602 that you realise it's more than a mere novelty item.

Multimedia madness

Boot into Windows and the Encore transforms into a multimedia extravaganza, offering DVD, TV, radio and web access at the touch of a button. The TV component lets you timeshift (pause live broadcasts and watch what you missed later), channel surf, and capture stills from TV signals. And because you can store video to the hard drive, you won't need to fiddle around with piles of videotapes.

DVD playback is handled by nVidia's own nvDVD 2.0 package, while radio broadcasts can be aired in the Windows Mega Radio application. You'll need to buy a separate antenna for high-quality FM coverage, though.

The bundled DVD-authoring package, MovieFactory 2.0, is a strange choice since most of its functions require the presence of a DVD burner – one of the few items this PC doesn't have. The video-editing program VideoStudio 6.0 is also of limited use unless you have a video camera.

The illustrative manual quickly gets you up to speed, but it's a shame such clarity couldn't be stretched to the remote control. The huge number of buttons and poor response means that only the most patient users will rely on this for their multimedia needs.

Ports-a-plenty

The Encore's diminutive size doesn't mean cutting back on functionality. The front panel drops down to reveal a slew of ports and connectors, including two USB 2.0 ports (two more are positioned at the rear), one FireWire port and an SPDIF connector. The nVidia Personal Cinema module provides extra S-Video and audio/video connectors.

Another useful addition is the selection of memory card slots. You can port files to and from the PC using all six major formats – CompactFlash, Secure Digital, Multimedia Card, SmartMedia, Memory Stick and Microdrive.

Concept PCs aren't known for their speed, but the Encore's specifications are competitive. The 512MB of PC2700 DDR RAM and 2.66GHz Pentium 4 processor produce a satisfactory WorldBench 4 score of 121. The CD-RW/DVD combo drive offers mighty 52-speed CD-R facilities, while the stylish 17in flat-panel has a clear image and rich colour palette.

High marks go to the meaty Videologic ZXR-500 speakers, although we would have preferred to have seen a Creative Audigy solution in place of the onboard sound. The Encore's graphics sub-system produced fairly good frame rates, despite lack of power from the MSI GeForce FX 5200.

Another down side of compact PCs is they tend to provide little room for expansion. The extremely nimble-fingered might find a few areas to build on, however – there's room to double the memory or upgrade the drives, for instance.

Verdict

The Encore is portable, discreet and possessed with enough power for everyday Windows tasks. Upgrading is difficult and it's debatable whether the audio quality is good enough to replace a home stereo. But if you're not expecting to get bleeding-edge performance, the Encore offers plenty for the money. ■

Robin Morris

> The Encore transforms into a multimedia extravaganza, offering DVD, TV, radio and web access at the touch of a button

Systemax Encore 3602
☐ Systemax: 0870 729 7364
☐ www.systemaxpc.co.uk
☐ £999 ex VAT

Specifications
2.66GHz Intel Pentium 4; Windows XP Home; 512MB DDR; 120GB hard drive; combo CD-RW/DVD drive; 17in CTX S700B flat-panel; 128MB MSI GeForce FX 5200; Realtek onboard sound; Videologic ZXR-500 speakers; 202x320x151mm; under 6kg; cordless keyboard; 3-year warranty

Good points
Light and compact casing; versatile TV/VCR facilities

Bad points
Limited upgrade potential; remote control fiddly to use; dedicated gamers or audiophiles will find it unsatisfactory

Build quality
Features
Value for money

7.1-channel speakers
Videologic ZXR-750

exclusive Not content with being the first manufacturer to market affordable 5.1-channel surround sound speakers with its ZXR-500 set, Videologic has is now also the first to release 7.1-channel units. With 7.1-channel sound cards set to be the future standard for ultimate PC audio, the ZXR-750 setup is a must-have, value-for-money accessory.

Externally it's similar to the ZXR-500 but with two extra speakers in the bundle. The silver finish gives it that stylish touch, while the four front and side speakers (three of which are shown above with the subwoofer) have stands with rubberised feet to prevent slipping. The two back speakers (one of which is shown below) have wall-mounting brackets, but it's a shame you can't swivel each unit to suit your position.

Though the ZXR-750 doesn't provide any more audio muscle than Videologic's 5.1 speakers, it still offers more than enough power to get the best out of DVD, gaming or music playback. With three volume controls for centre, rear and subwoofer, you can tweak the output to perfection.

If you don't own a 7.1-channel sound card, Videologic's proprietary technology, SurFE (surround field enhancement), converts a 5.1 signal into 7.1 playback. We tested this and, sure enough, you can hear the transition from speaker to speaker – the two back channels don't just repeat the same sound information.

To get the most out of the ZXR-750 speaker compatibility with several surround sound formats – including the new Dolby Digital EX – you'll need a separate decoder or a compatible software DVD player. But the setup sounds fine to us without them, offering crisp clear audio.

Verdict

If you can put up with the cable mayhem that 7.1-channel speakers bring then you're in for a treat. The immersive pleasure of sitting in the middle of a 7.1 sound source is excellent and it won't cost the earth to do it. ■

Spencer Dalziel

Videologic ZXR-750
☐ Videologic: 01923 277 488
☐ www.videologic.co.uk
☐ £82 ex VAT

Specifications
7.1-channel surround speakers; 7x satellites 8W rms; 1x subwoofer 25W rms; max power 81W; 35Hz-20KHz frequency response; SurFE technology; Dolby Digital, Dolby Digital EX, DTS, DTS ES, Dolby Pro Logic & Dolby Pro Logic ll compatible

Build quality

Features

Value for money

Digital projector
Toshiba TDP-D2

The TDP-D2 is aimed specifically at the travelling worker who needs to give presentations to companies and individuals in unpredictable surroundings. The Toshiba weighs a solid 2.4kg so, while it lacks the portability of the 1.1kg InFocus LP70 and IBM iLM300, it's light enough to be comfortably carried from one office to another.

Where the TDP-D2 really impresses is with its high brightness rating. Find yourself presenting in a room filled with sunlight and your pitch-perfect presentation could be reduced to a shadow of its former self. The TDP-D2's huge 2,500 Ansi lumens ensures that your presentation will be seen no matter what the circumstances. Should you not need such brightness you can conserve lamp life with the eco mode. This has the added benefit of reducing operating noise.

A DVI (digital visual interface) connector is included but the cable isn't, so if you want to take advantage of digital images you'll have to purchase your own lead. Picture size is average and the TDP-D2 would be unsuitable for very large venues since its maximum image size

(at a distance of six metres) is a mere 180in.

Though the TDP-D2 has a high brightness rating, images seemed overcast and slightly unfocused while the muddy colour palette was unimpressive. The skimpy menu options offer little help, and although the TDP-D2's picture quality is perfectly adequate for most purposes it doesn't compare well with other XGA (1,024x768) projectors such as the InFocus LP70 or NEC LT260.

Verdict

On paper the TDP-D2 looks the perfect portable projector. High brightness levels still make this model worth considering but overall performance is disappointing. The price is fairly high as well. Shop around and you can probably find the vastly superior NEC LT260 available for only a couple of hundred pounds more. ■

Robin Morris

Toshiba TDP-D2
☐ Toshiba: 01932 828 828
☐ www.toshiba.co.uk
☐ £2,300 ex VAT

Specifications
2,500 Ansi lumens; 250W lamp; 2,000 hours lamp life; replacement bulb £299; 2.4kg; max res 1,024x 768; 248x201x90mm; contrast ratio 800:1; 37dB; 3-year warranty

Build quality

Features

Value for money

Power notebook
Sony Vaio PCG-Z1SP

Sony is the latest manufacturer to embrace Centrino technology. Centrino products use the new Pentium M processors as well as the Intel 855 chipset and integrated 802.11b wireless capabilities.

With its 1.5GHz Pentium M chip, 512MB of DDR RAM and a 60GB hard drive, we expected to see a good turn of speed from the Vaio PCG-Z1SP. However, it didn't blow our socks off.

The 111 WorldBench 4 points is reasonable, but it's some way off the record score achieved by competitors' laptops.

But speed isn't everything and the Vaio easily has enough grunt to cope with everyday tasks. More promising is the claimed battery life of up to six hours – our MobileMark 2002 battery life test lasted for just over two-and-a-half hours but this is an intense benchmark so that's the minimum you can expect from the PCG-Z1SP.

Vaios have always set the standard in terms of notebook styling and the PCG-Z1SP is no exception. A hardwearing magnesium casing in silver and a super-slim chassis combines with smooth curves to create a good-looking notebook.
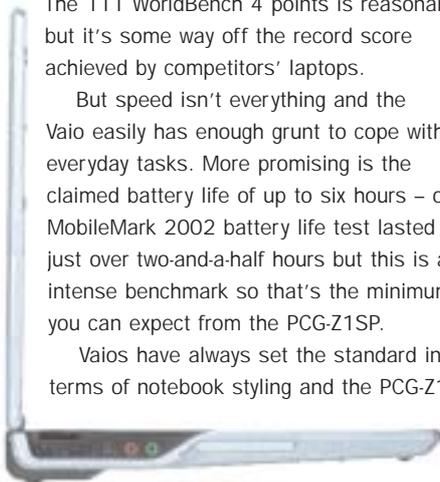
The top-notch 14.1in TFT screen displays a flawless image. The ATI Mobility Radeon graphics chip may only have 16MB of dedicated memory but you're unlikely to need any more than this unless you'll use the Vaio to play games. The Windows XP Professional operating system is combined with a decent software bundle that includes Norton AntiVirus 2003 and Adobe Photoshop Elements 2.0.

Verdict

The PCG-Z1SP looks good and, though the performance is not outstanding, it's perfectly adequate for everyday use. It could be an outright desktop replacement and, at a lightweight 2.1kg, could just as easily adapt to life on the road. The £1,701 ex VAT price tag may be steep, but you're getting a top-quality notebook for your money. ■

Ben Camm-Jones

Sony Vaio PCG-Z1SP
☐ Sony: 0870 542 4424
☐ www.vaio.sony-europe.com
☐ £1,701 ex VAT

Specifications
1.5GHz Pentium M; 512MB DDR RAM; 60GB hard drive; 16MB ATI Mobility Radeon; 14.1in 1,400x1,050 TFT screen; 24x/8x/4x/8x CD-RW/DVD combo drive; 56K modem; 316x247x39mm; 2.1kg

Build quality
Features
Value for money

Budget notebook
Rock Xeno SP

It's becoming more unusual to see standard P4 desktop processors powering notebooks these days as the Mobile Pentium 4 and Pentium M chip, at the heart of the Centrino product range, are commonly used instead. Rock, on the other hand, has opted for sheer performance rather than mobile technology.

Pushing the processing capabilities of its desktop 2.66GHz P4 to the limit, the Xeno SP scored an impressive 118 in our WorldBench 4 tests. Backed up by 512MB of DDR RAM, 32MB of which is dedicated to the onboard graphics chip, and a 40GB hard drive, the Rock marries a decent specification with good performance.

Even though it's intended to be used as a desktop replacement system, you won't need to be Superman to carry around the 2.4kg Xeno. The 14.1in TFT screen gives a good quality image and, considering that it doesn't use a dedicated Mobile chip, battery life is also good.

In our tests, we got two-and-a-half hours of use out of the lithium-ion cell. This is partly thanks to the SmartPower technology programmed into the system Bios. In simple terms it adjusts the power consumption to cater for the utilisation of the processor, so if the notebook is only carrying out basic tasks the power consumption will be minimal.

The Xeno SP has no wireless LAN or Bluetooth capabilities but it does have a network card so you'd be able to connect it up to an office network without any bother. For backup purposes there's a CD-RW that doubles up as a DVD-ROM drive.

Verdict

Matching portability with performance, the Xeno SP is a true all-rounder. Although the lack of Bluetooth and wireless LAN capabilities is disappointing, not everyone needs them. It therefore makes sense to leave these facilities out to keep the price of the unit down. The Rock may not be the prettiest notebook on the market but it's easy to carry around and has a good battery life. ■

Ben Camm-Jones

Rock Xeno SP
☐ Rock: 0870 990 8888
☐ www.rockdirect.com
☐ £899 ex VAT

Specifications
2.66GHz Intel Pentium 4; 512MB DDR RAM; 40GB hard drive; 14.1in 1,024x768 TFT display; 24x/24x/10x/8x combo CD-RW/DVD; 56K modem; lithium-ion battery; 305x270x25; 2.4kg

Build quality
Features
Value for money

Budget notebook
IBM ThinkPad R40e

Aesthetics aren't considered to be of great importance in the world of business. If you need any proof then just take a look at IBM's latest offering. Aimed at business users, the ThinkPad range is designed to be as efficient as possible in terms of cost and performance – ideal for bulk-buying firms – but you can tell that all expense was spared on its design.

Sporting a 1.7GHz Celeron chip and just 128MB of DDR RAM, we weren't expecting a scorching performance score and the R40e's 81 points in WorldBench 4 lived up to this. If you're only going to use a notebook for spreadsheets, PowerPoint presentations and the like then you won't need a job lot of processing power anyway.

In terms of battery life, we managed to get just under three hours of performance from the lithium-ion battery. The major attraction of the ThinkPad, though, is its price – £640 ex VAT is likely to have the boss smiling.

The budget price means IBM's specification isn't great. There's no CD-RW, just a CD-ROM drive, and the hard drive only stretches to 20GB – measly by current standards, even for a notebook. But if you're only planning to use the ThinkPad when you're out of the office then this isn't going to matter much.

At 2.7kg, the ThinkPad is a fairly lightweight device but it is an ugly brute. With edges sharp enough to take your eye out, you're not going to get any jealous looks while using the R40e on the train. There's no touchpad either, although the red rubber pointing device is set high enough above the keyboard to prevent you from accidentally pushing buttons when you use it.

Verdict

With a design somewhat reminiscent of the Sinclair ZX Spectrum keyboard, the ThinkPad certainly isn't easy on the eye. The R40e's specifications are very basic and it isn't a viable option as a primary work device. But it's cheap and it gets the job done – eventually. ∎

Ben Camm-Jones

IBM ThinkPad R40e
- IBM: 0800 169 1458
- www.ibm.com/uk
- £640 ex VAT

Specifications
1.7GHz Intel Celeron; 128MB DDR RAM; 20GB hard drive; 14.1in 1,024x 768 TFT display; 24x CD-ROM; 56K modem; lithium-ion battery; 313x 273x29mm; 2.7kg

Build quality

Features

Value for money

Ultra portable
NEC Versa S800

Small is beautiful and the Versa S800 from NEC certainly had us cooing in the *PC Advisor* Test Centre. This cute notebook weighs in at a mere 1.1kg and is so tiny that you could probably lose it down the back of the sofa.

Last month we looked at JVC's Mini Note MP-XP7230GB. And although the Versa is slightly bigger and heavier that its JVC rival, it's also £300 cheaper. Like the JVC it's powered by an ultra-low voltage 933MHz Mobile Pentium III processor and achieves exactly the same WorldBench 4 score of 79. With 512MB of DDR RAM we thought the Versa might have fared better in our benchmarks, but the main feature of this notebook is size rather than performance.

Measuring near enough the size of an A4 sheet of paper, the Versa S800 is very portable – even if you carry the external USB CD-RW/DVD drive around as well. There are three USB 2.0 ports and an 802.11b card for hooking up to a wireless network. Add to this Bluetooth capabilities and Windows XP Professional and you've got a great system for the busy travelling executive.

The Versa is durable too. Its magnesium alloy casing means that you won't have to worry about bumps and scratches while on the move. Another plus for those on the road is battery life. During our tests we managed to get two hours 27 minutes out of the lithium-ion cell before it conked out, so it will be able to keep on powering the Versa for a fair while even when you can't plug it into the mains.

Verdict

The good-looking, lightweight and compact Versa S800 won't give you aching arms no matter how long you lug it about for. It isn't a brilliant performer but should complete day-to-day tasks adequately. There's plenty of options for connecting to a network and other devices and, at £1,099 ex VAT, it doesn't cost the earth. ∎

Ben Camm-Jones

NEC Versa S800
- NEC: 0870 010 6328
- www.nec-online.co.uk
- £1,099 ex VAT

Specifications
933MHz Mobile Pentium III; 512MB DDR RAM; 20GB hard drive; 12.1in 1,024x768 TFT display; 24x/24x/ 10x/8x CD-RW/DVD combo drive; 56K modem; lithium-ion battery; 280x222x22mm; 1.1kg

Build quality

Features

Value for money

Digital SLR camera
Sigma SD9

In a digital SLR market dominated by 6Mp (megapixel) cameras, the first impression of Sigma's SD9 is that it's lacking in the resolution department – after all, it's only got 3.5Mp. But then this isn't any ordinary model. Not only is the SD9 Sigma's first digital camera, it's also the first from any manufacturer to feature Foveon's revolutionary X3 sensor.

Foveon's X3 captures full colour with every pixel. In contrast, traditional digital camera sensors only capture either red, green or blue light on each pixel then use software to create a full-colour result. Foveon claims the X3 delivers sharper images which are free from colour artefacts present in conventional digital cameras.

This raises the question of how best to compare pixel numbers. Traditional camera sensors quote all their pixels despite each only capturing red, green or blue detail. Since each pixel in Foveon's X3 chip captures full-colour RGB detail, it could arguably be described as having an effective colour resolution three times higher than a traditional sensor. But can the 3.5Mp SD9 really be equivalent to a conventional 10Mp camera?

First impressions

Before answering that question we'll describe the SD9 itself. It's a relatively chunky camera that, while larger than its competitors and lacking their stylish curves, feels comfortable in use. Two sets of batteries are supplied, although they aren't rechargeable.

The SD9 is fitted with an SA mount for Sigma's own lenses. Since the X3 sensor is physically smaller than a frame of 35mm film, the effective focal lengths of attached lenses are multiplied by 1.7 times. As with other digital SLRs composition is with the optical viewfinder only, leaving the 1.8in screen for image playback and menu navigation.

Images are stored on CompactFlash cards (which are not supplied – another extra expense alongside rechargeable cells) and the SD9 is happy to accommodate the IBM Microdrive, along with supporting the Write Acceleration of Lexar's Pro cards. There's FireWire connectivity plus a conventional USB 1.1 port, although there's no internal pop-up flash or a sync plug for external studio lights.

In the RAW

Where the SD9 really differs, though, is in its inability to record conventional Jpegs or Tiffs. Instead, you're limited to shooting proprietary X3F RAW files. This has the advantage of making the most of the data from the sensor, but has two major down sides. First, 3.5Mp RAW files measure between 6MB and 10MB each, so will quickly fill a memory card. Second, you must use the supplied software, via a PC or Mac, to acquire and process files into usable Jpegs or Tiffs.

Fortunately, the supplied Photo Pro software is easy to use and can automatically deliver a series of Jpegs. You need only spend a few extra minutes, though, to extract the most detail and tonal range from RAW files. To be fair, this equals the time most enthusiasts spend post-processing their images in Photoshop anyway. That said, if you're a reporter who needs to deliver Jpegs immediately after shooting, the SD9 is not ideal.

Images are vibrant but not oversaturated. More impressively, the SD9 can equal the detail resolved by its 6Mp rivals and Photo Pro's double-size output delivers pictures than can be greatly enlarged. There was also no coloured moiré blurring the finest details.

Verdict

Sigma's SD9 may only have 3.5Mp, but its X3 technology matches the detail captured by 6Mp rivals. It doesn't generate Jpegs, forcing you to process RAW images using PC software, but it's by far the cheapest digital SLR available. The SD9 is excellent value for money – so long as you're happy with its unique way of working. ■

Gordon Laing

> The SD9 is Sigma's first digital camera; it's also the first from any manufacturer to feature Foveon's revolutionary X3 sensor

Sigma SD9

☐ Sigma: 01707 329 999
☐ www.sigma-imaging-uk.com
☐ £1,106 ex VAT (body only)

Specifications

3.54Mp X3 sensor; 2,268x1,512 pixels output; 3:2 aspect ratio; Sigma SA bayonet mount lenses (not supplied); field of view 1.7 times; Type-I/II CompactFlash cards (not supplied); approx 8MB image in RAW format; 1.8in LCD and optical SLR viewfinder; 2 x CR123A and two CR-V3 batteries (nonrechargeable); 152x120x79mm; 803g; 1-year warranty

Good points

X3 sensor; FireWire and USB connectivity; support for Microdrive and Lexar Write Acceleration

Bad points

Doesn't generate Jpegs or Tiffs; nonrechargeable batteries; bulky design

Build quality ■■■■■■□□□□

Features ■■■■■■■□□□

Value for money ■■■■■■■■■□

Intermediate digital camera
Canon Digital Ixus 400

The latest in the Ixus line is exactly what we would expect from Canon's quality range: a sleek, efficient and easy-to-use pocket snapper that takes sharp, colourful shots. You're paying over the odds for styling and the 400 lacks plenty of manual tweaks, but if you want one of the best automatic compact cameras around then the Ixus 400 is it.

This 4Mp (megapixel) shooter has a maximum resolution of 2,272x1,704 and a 3x optical zoom – specifications on a par with low-end intermediate cameras. While we liked the inclusion of a 32MB storage card, we were surprised Canon opted for CompactFlash memory rather than something smaller. After all, this model is all about compactness.

As ever, the Ixus' design is a winning feature. No bigger than a packet of cigarettes, it fits easily into your pocket, and at 227g it won't weigh you down. The 400 doesn't have a case, but Canon says the cerabrite chassis (a mixture of metal and ceramic) is highly scratch resistant.

The camera's buttons and jogdial are well positioned and easy to reach. While the shot button responds wonderfully to finger pressure, the menu buttons and jogdial feel small and awkward. However, the menus are easy to navigate and the camera is a pleasure to use thanks to the quick response time.

We were particularly impressed with the Ixus' focusing and redeye prevention. Try as we might, we couldn't get a glimmer of glowing red in the pupils. A rechargeable lithium-ion battery is always a welcome addition but a camera of this size with a metal chassis tends to generate a lot of heat quickly. The Ixus 400 was no exception, heating up considerably on the front left side after just a couple of minutes of use.

Verdict
Anyone after photographic versatility should look elsewhere, but for compact, point-and-click simplicity the Canon can't be beaten. ■

Simon Easterman

Canon Digital Ixus 400
☐ Canon: 0870 514 3723
☐ www.canon.co.uk
☐ £425 ex VAT

Specifications
4Mp; max res 2,272x1,704; 3x optical zoom; 3.6 digital zoom; f2.8/f4.9; Jpeg file format; 32MB CompactFlash Type I; 14/338 min/max photos; 87x57x27mm; 227g; lithium-ion rechargeable battery plus charger

Build quality ■■■■■■■☐
Features ■■■■■■■☐☐
Value for money ■■■■■■■☐☐

Digital multi recorder
Panasonic SV-AV20 D-Snap

We've seen handheld devices that do everything bar making the tea, but none with the design panache of Panasonic's D-Snap. While you're paying over the odds for the styling and innovation you get the benefit of a tiny mobile gadget that can take digital stills and record Mpeg-4 film or voice memos. Oh, and you can use it as an MP3 player as well.

Smaller than the palm of your hand, the clamshell SV-AV20 couldn't be easier to use. A mode button flips between the voice memo, camera, film and music options. Film and images are viewed on the clear 1.5in LCD, while voice memos and MP3s can be played back using the tinny built-in speaker or, for improved sound quality, the headphones.

Panasonic bundled a slim rechargeable lithium-ion battery – an absolute must – and an adapter, so when you're downloading data to your PC via the USB connection you don't have to run the battery down.

With all this functionality on one device we'd have liked more storage than the 32MB Secure Digital card. To be fair, though, you can fit a fair amount of data on it as Panasonic has kept the quality settings low. You can shoot about 42 minutes of film at a resolution of 176x144 but quality isn't great. It's best to stick to the maximum resolution of 320x240 at 15fps (frames per second) and get five minutes of high-quality film.

With a maximum resolution of 640x480 for images you're never going to get great digital shots. Composition is difficult because the lens sits where your fingers naturally fall but it doesn't take long to get to grips with it.

Verdict
The D-Snap is a jack-of-all-trades mobile product. It won't provide the end user with the best quality results but that probably wasn't in Panasonic's original design remit. The SV-AV20 is all about easy-to-use mobile functionality and on these grounds it's a winner.

Spencer Dalziel

Panasonic SV-AV20 D-Snap
☐ Panasonic: 0500 404 041
☐ www.panasonic.co.uk
☐ £250 ex VAT

Specifications
Image compression 640x480; video compression 320x240; music expansion MP3, MP2, AAC; 32MB Secure Digital; rechargeable lithium-ion battery; 1.5in LCD; 62x75x26mm; 92g

Build quality ■■■■■■■☐☐
Features ■■■■■■■☐☐
Value for money ■■■■■■☐☐☐

Graphics card
PNY Verto GeForce FX 5900 Ultra

The GeForce FX 5900 Ultra firmly dispels any rumours that the GeForce FX 5800 marked the beginning of the decline for nVidia. The excessively loud cooling system that marred the 5800 has been discarded but what of the specifications? With a reduced 450MHz clock speed and a reversion to standard DDR RAM, the 5900 may look like a step backwards. But free of the manacles of DDR-II RAM it can now house a 256bit memory bus.

Its healthy memory bandwidth of 27.2GBps (gigabytes per second) can also handle far more. At a resolution of 1,024x768 the FX 5900 Ultra beat the Radeon 9800 Pro by just 1-4fps (frames per second) but ratchet up the detail levels and the lead widens. At 1,600x1,200 the gap opens up to an impressive 8-16fps.

Anti-aliasing is better thanks to the 5900's new IntelliSample HCT (high compression technology) feature. According to nVidia the enhanced texture compression is up to 50 percent more efficient – a claim borne out by the results. The 5900 registers a performance drop of just 18 percent when switching on 4x anti-aliasing and 8x anisotropic filtering at a resolution of 1,600x 1,200. In contrast, the Radeon 9800 Pro and FX 5800 Ultra suffer drops of 36 and 48 percent respectively.

The 5900's UltraShadow feature lets programmers define certain portions of the scene in which the effect of the light sources will be most visible. This should allow stunning shadows to be created with less impact on game speed. Add to this the increased power and versatility of the pixel shaders, DirectX 9.0 support and gorgeous 128bit colour, and you have a card that looks as good as it plays.

Verdict
PNY's 256MB GeForce FX 5900 Ultra isn't the cheapest of cards, but its immense firepower and essential feature set will make it a star performer, whether you're talking about today's or tomorrow's games. ■

Robin Morris

PNY Verto GeForce FX 5900 Ultra
☐ www.dabs.com
☐ £340 ex VAT

Specifications
nVidia GeForce FX 5900 Ultra processor; 256MB DDR RAM; 400MHz Ramdac; 8x AGP; max res 2,048x1,536@75Hz; DirectX 9x; DVI; TV-out; 5-year warranty

Build quality
Features
Value for money

Graphics card
Gainward FX PowerPack Ultra/760 XP Golden Sample

If you want high frame rates but can't stretch your budget to the high-end FX 5800/5900 cards, the ideal option has always been a GeForce 4600 or 4800 chip. But with the FX 5600 Ultra chip, nVidia and Gainward hope to lure you with the promise of DirectX 9.0 support.

Games that take advantage of the latest version of DirectX can use the 5600's more sophisticated pixel and vertex shaders. They can also pack images with an almost infinite palette of colours thanks to the 128bit quality. Unfortunately, though, we have yet to witness the first batch of games that can take full advantage of DirectX 9.0.

Gainward's implementation of the FX 5600 Ultra uses higher core and memory clock speeds than the original specifications, bumping up both figures from 400MHz to 450MHz. This is justified by the superior component quality and the card showed no signs of instability during testing. The host of extras include a FireWire expansion card, video-in/video-out, a video-editing/DVD software suite and WinCinema.

In our Unreal Tournament 2003 and Quake III tests, the 5600 Ultra averaged 10-20fps (frames per second) lead over the Ti 4200 8x and Radeon 9500/9600 chips at a resolution of 1,024x 768. At 1,600x 1,200 the lead increased to 15-25fps.

Compared to the Ti 4600/4800 cards, however, the fight is much closer. If anything, the older 4600/4800 boards will be slightly faster at lower resolutions. But turn up the detail levels, bolt on some anti-aliasing and the 5600 Ultra's extra memory bandwidth gives it the edge. And, of course, for DirectX 9.0 games the older cards simply won't be able to compete.

Verdict
It's only a matter of time before the 5600 Ultra replaces the Ti 4600/4800s and Gainward's board is an excellent implementation. Strong DirectX 9.0 support should see it looking good in the future and it also works as a replacement for a Ti 4200 8x or Radeon 9500/9600. ■

Robin Morris
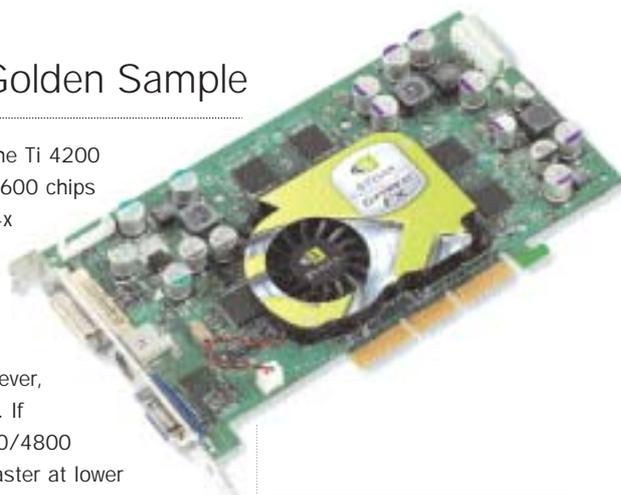
Gainward FX PowerPack Ultra
☐ Gainward: 0870 220 0700
☐ www.gainward.de
☐ £165 ex VAT

Specifications
nVidia GeForce FX 5600 Ultra; 128MB DDR RAM; 400MHz Ramdac; 8x AGP; max res 2,048x1,536@75Hz; DirectX 9x; DVI; TV-out; video-in/-out; 3-year warranty

Build quality
Features
Value for money

Graphics card
Matrox Millennium P650

With companies like nVidia and ATI grabbing the games segment of the graphics business, Matrox has had to rewrite its sales pitch and find a whole new market for its cards. Luckily it had a perfect outlet thanks to its pioneering multiscreen DualHead technology, which allows you to work from one monitor while using a second for reference.

Belatedly nVidia and ATI have incorporated similar technologies, but DualHead remains the most versatile solution. Dual-screen video is particularly impressive compared to the competition; combined with strong 2D video performance, this makes the P650 an excellent choice for video enthusiasts.

The Matrox completed our video tests in a faster time than even the high-end ATI and nVidia products. Of course, if your main interest doesn't lie in video you need to consider whether the Matrox Millennium P650 is worth £117. Few of DualHead's advanced features make a real difference to productivity – the basic concept is handled adequately by the ATI and nVidia cards. A more interesting product is the P750 (around £60 more), which offers three-screen support rather than two.

Leaving 2D video aside, for 3D processing or games the Matrox's 64MB of memory and sluggish graphics chip leaves it trailing even the cheapest ATI and nVidia boards. Two DVI (digital visual interface) connectors are supplied as standard (both ports have analogue converters so don't worry if either of your screens use non-digital RGB connections) but for most users this will be of little real use.

The chip also features true 10bit colour precision, which allows the card to display billions rather than millions of colours. Again, though, while the technology is good it's no better than the 128bit colour available with the sub-£70 GeForce FX 5200 chips. While anti-aliasing makes text clearer to read we could see little difference between this and a high-quality LCD panel using Microsoft ClearType.

Matrox Millennium P650
- Matrox: 01753 665 544
- www.matrox.co.uk
- £117 ex VAT

Specifications
Matrox Millennium P650 processor; 64MB DDR RAM; 400MHz Ramdac; 8x AGP; max res 2,048x1,536 @75Hz; 8.1x DirectX; DVI; TV-out; 3-year warranty

Build quality
Features
Value for money

Verdict

There is a market for the Matrox Millennium P650 – for strong video editing with the most powerful dual-screen implementation around this graphics card will prove a wise purchase. However, for the average user there's little that the P650 can do that a low-end nVidia or ATI board can't at half the price. ■

Robin Morris

Graphics card
Sapphire Atlantis Radeon 9200

The battle for the best low-end games card looks like one skirmish that ATI can't win. Neither the Radeon 9200 nor nVidia's GeForce FX 5200 chips have the firepower to pay anything but lip service to today's games, so perhaps this segment of the market isn't worth bothering with. After all, if high-end graphics don't matter to you then there's plenty of adequate cards available for half the Radeon 9200's asking price.

But let's assume that you want a games card and can't afford to spend over £100. Essentially a Radeon 9000 chip with 8x AGP support, the 9200 shares several features with cards two or three times its price – for example, a 128bit memory bus and 128MB of DDR RAM. Unfortunately, there's also plenty that it lacks.

The 9200 only has four pixel pipelines (the components through which the graphics data is pumped) and these are equipped with one texture shader unit rather than the usual two.

Adding detail to objects will therefore prove a time-consuming task for the 9200.

The GeForce FX 5200 is similarly afflicted but that chip has a substantial memory bandwidth of 10.4GBPs (gigabytes per second), allowing it to process plenty of data at once, compared to the Radeon 9200's paltry 6.4GBps bandwidth.

This explains why the 9200 struggles against even the FX 5200 in our games tests. In Unreal Tournament the 9200 is over 7fps (frames per second) slower than the FX 5200 at a resolution of 1,024x768. In Quake III it starts out 9fps behind at 1,024x768 and by 1,600x1,200 the FX 5200 has opened up a 17fps lead.

Verdict

If you want an enjoyable gaming experience we suggest raising your sights on the Ti 4200 cards. And if you must buy a sub-£75 card, the lacklustre performance and DirectX 8.1 compatibility of the Radeon 9200 makes it a clear second choice to the GeForce FX 5200. ■

Robin Morris
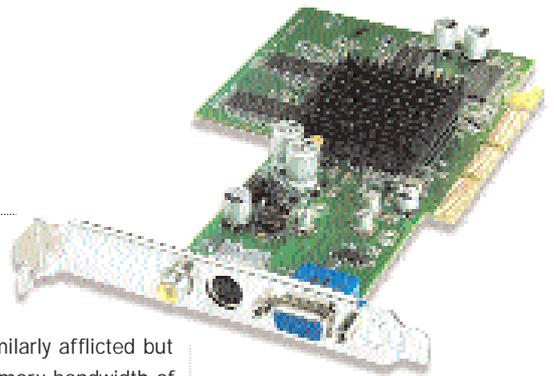
Sapphire Atlantis Radeon 9200
- Sapphire: 0870 443 0880
- www.overclockers.co.uk
- £59 ex VAT

Specifications
ATI Radeon 9200 processor; 128MB DDR RAM; 400MHz Ramdac; AGP 8x; max res 2,048x1,536@75Hz; 9x DirectX; DVI; TV-out; 2-year warranty

Build quality
Features
Value for money

Flat-panel display
CTX PV722E

Following on from the popular PV722i, the attractive and lightweight 17in PV722E flat-panel aims to push itself to the top of your shopping list by offering almost every feature and accessory under the sun.

One of the major benefits of buying a flat-panel instead of a much cheaper CRT monitor is the desk space you can reclaim. For the majority of users, then, it makes little sense to go to such expense only to clutter up the desk with a large speaker setup.

The PV722E addresses this problem by providing a detachable speaker unit which can be clipped on to the front of the display and connected straight to the sound card. Games players and music buffs will find the canned audio inadequate, but a headphone socket is easily accessible.

USB support is far from standard in the flat-panel market but CTX goes one better by kitting out the PV722E with four full-speed USB 2.0 ports. Both digital and analogue interfaces are included and the hardware pivot feature is a huge boost to productivity. This allows you to physically turn the screen through 90 degrees

and view more lines going down the display, making it easier to work with text-heavy programs such as word processors and web browsers.

The specifications, which include a native resolution of 1,280x1,024 and 0.264mm pixel pitch, are good. The 25ms response time – a measure of how quickly the screen can redraw the image – is acceptable too, and means the PV722E should easily cope with games and video output.

The CTX's UltraVision screen offers a bright and colourful image, although it doesn't match the subtle shading of the very best flat-panels. Text definition is excellent and the strong 500:1 contrast ratio results in a clean picture that is comfortable to work with for long periods.

Verdict
There are displays that offer superior colour palettes, but few can match the PV722E's excellent text output and tempting price tag. Combine this with the huge range of features and accessories and you have a screen that's ideal for office and home use. ■

Robin Morris

CTX PV722E
- CTX: 01923 810 800
- www.ctxeurope.com
- £384 ex VAT

Specifications
17in flat-panel; native res 1,280x 1,024; 0.264mm dot pitch; 500:1 contrast ratio; 170/170-degree viewing angle; brightness 250cd/m²; 438x166x447mm; 7.5kg; digital connector; USB port; 25ms response time; hardware pivot; 3-year onsite warranty

Build quality
Features
Value for money

Flat-panel display
Samsung SyncMaster 172T

Samsung has long specialised in that irresistible combination of ravishing case design, high-calibre image quality and a beautifully pitched pricing strategy. The SyncMaster 172T is another winning model that gives the competition plenty to chew on.

The casing may lack the clean lines of the Porsche-designed SM171P, but the 17in 172T is still a compact design that will take pride of place on any desktop. The lightweight casing also means that its 4.7kg frame requires little effort to move from one room to another.

The specifications are practically identical to those of the CTX PV722E (see page 50) such as a 500:1 contrast ratio, 250 cd/m^2 brightness rating and 170-degree viewing angle. The 1,280x1,024 native resolution and 0.264mm pixel pitch are good and, as with the CTX, the 25ms response time lets Samsung users dip into the latest games and video titles without any blurred motion.

The screen isn't top-heavy with extras, although the DVI (digital visual interface) connector will prove useful should the digital revolution sweep through the flat-panel industry. It's a shame that Samsung didn't bundle any USB or pivot facilities. No integrated audio solution is built in as standard, although users can snap up the onboard audio option and fit it into the stand for maximum deskspace.

Image quality is reminiscent of the highly capable CTX PV722E, with an extremely bright and vibrant colour palette. Text output is excellent and the sharp character recognition means you can comfortably use the screen for intensive work sessions.

Verdict

It was extremely hard to make a choice between the CTX PV722E and the SyncMaster 172T as both have good image quality and excellent text definition. The Samsung is around £20-£30 cheaper than the CTX, but we felt that the latter's bulging features list – in particular the hardware pivot – should earn it the nod over this excellent screen. ■

Robin Morris

Samsung SyncMaster 172T
☐ Samsung: 0800 521 652
☐ www.samsungelectronics.com
☐ £362 ex VAT

Specifications
17in flat-panel; native res 1,280x 1,024; 0.264mm dot pitch; 500:1 contrast ratio; 170/170-degree viewing angle; brightness 250cd/m^2; 385x216x400mm; 4.7kg; digital connector; 25ms response time; 3-year warranty

Build quality
Features
Value for money

Flat-panel display
AG Neovo S-15V

Buying on looks alone can land you in deep water in the IT market, and in no area is this more true than in the flat-panel sector. At first glance the Neovo looks every bit the office essential – its polished glass screen and fold-down stand both suggest that this is a display to be reckoned with. But in operation the Neovo reveals its true colours and, unfortunately, they aren't pretty.

For the most part the Neovo's specifications are middle of the road – the pixel pitch is 0.297mm while the native resolution is a comfortable 1,024x768. The 400:1 contrast ratio and 250 cd/m^2 brightness ratings are less than stunning, although the 160-degree viewing angle is good. The AG's standout feature is the response time – the Neovo can refresh graphics in a mere 10-15ms so it'll be able to play video and games without any sign of flicker.

However, the omission of a digital connector marks out the S-15V as a screen with one foot in the past. The Neovo also fails to offer any USB ports, pivot or integrated audio facilities.

An almost impenetrable menu system made it difficult to find the screen's ideal setup. Even when we did, the Neovo's image quality and washed-out colour palette failed to measure up. Worst of all is the uneven focus and picture deterioration towards the corners. Even text output is marred by the erratic screen coverage.

Verdict

It's hard to justify spending £319 on a 15in flat-panel when a 17in model can be bought for just £70 more. What makes it even harder to justify is that the Neovo's overall image isn't of a consistently high quality. Aside from the response time, the Neovo's performance is no more than average and there are better flat-panels on the market. ■

Robin Morris

AG Neovo S-15V
☐ AG: 01884 232 060
☐ www.paysan.co.uk
☐ £319 ex VAT

Specifications
15in flat-panel; native res 1,024x768; 0.297mm dot pitch; 400:1 contrast ratio; 160/160-degree viewing angle; brightness 250cd/m^2; 5.5kg; 386x169x360mm; 3-year warranty

Build quality
Features
Value for money

DVD writer
NEC ND-1100A

Reviewing DVD writers is never easy in an industry being rife with competing standards. Having weeded out most of the competitors, the final fight for supremacy is between the high-speed DVD+R/+RW and DVD-R/-RW. Although media is currently available for both writing formats, there's a good chance one of them will slip into obscurity, leaving its supporters high and dry in the process.

As if this wasn't enough to contend with the NEC ND-1100A drive is shrouded in mystery, with several versions circulating around the internet. Early incarnations of the ND-1100A were designed to write to both standards (DVD+R/+RW and DVD-R/-RW), but the drive that has made it into UK stores only writes to DVD+R/+RW. To add DVD-R/-RW compatibility you'll have to spend an extra £40-£50 on the ND-1300A.

Although the safe move would be to pay extra for a multiformat drive, the ND-1100A makes a sensible enough choice for anyone who wants to gamble. Its specifications are good, allowing you write to DVD+Rs and DVD+RWs at rates of quad-speed and 2.4-speed respectively. We were able to copy our 3GB test files to a DVD+R in a fairly impressive 16 minutes 11 seconds.

The 140ms access time is in keeping with the competition, but we would have preferred a larger memory buffer. The 2MB version should be able to stave off most buffer underruns, but is unlikely to match the peerless record of the Sony DRU-500A's 8MB memory buffer.

Ahead Software's Nero 5.5 is always a safe choice as it's incredibly intuitive and user-friendly, while the capable Sonic MyDVD and CinePlayer packages round off a decent software package. Sample media is supplied with the drive, so you'll have plenty of chances to test out the drive's abilities.

Verdict
The NEC is an affordable drive that boasts strong performance and a solid software bundle. But Sony's excellent DRU-500A, which costs an extra £25, is still the best deal as it supports both major formats. Should you wish to gamble on DVD+R/+RW having the last word, though, this drive stands you in good stead. ■

Robin Morris

NEC ND-1100A
☐ NEC: 020 8752 3665
☐ www.nec.co.uk
☐ £186 ex VAT

Specifications
DVD+R/+RW drive; 4x DVD+R; 2.4x DVD+RW; 12x DVD read; EIDE; 2MB buffer; 40x/16x/10x CD; Ahead Nero; Sonic MyDVD Video Suite & CinePlayer; 1.07kg; 140ms access time; 2-year warranty

Build quality
■■■■■■■□□
Features
■■■■■□□□□
Value for money
■■■■■■■□□

Video capture and editing device
Pinnacle Studio MovieBox USB

While video editing is touted as a killer app, most PCs come bereft of any video input sockets. It's therefore not always obvious how you get footage to and from your hard disk. This can be a particular problem if you are one of the millions of analogue camcorder owners who don't even have a FireWire option.

Pinnacle offers a number of solutions, the latest of which is the natty-looking Studio MovieBox USB. Designed by FA Porsche, the device is an external video digitising box. It accepts composite, S-Video and phono audio inputs while outputting DVD-quality Mpeg-2 stream (at the top setting) to your PC's USB port. Capture and editing is done using the accompanying Studio 8.0 software which is still one of the best budget video-editing packages around. Analogue outputs are also included on the MovieBox, so your films can be recorded back to VHS tape or viewed on a TV.

Apart from the awkward tangle of wires that spoils the sleek brushed metal design, the MovieBox is easy to set up. The installation manual warns that certain configurations may have difficulties when it comes to transferring video to disk and offers some tips on how to optimise your PC. Thankfully, we encountered no such problems.

The real success of MovieBox depends on your existing connections. If your PC is equipped with USB 2.0, faster transfer rates and better quality results are possible. The device can connect via a USB 1.1 port, but this does compromise quality. If your PC already has a FireWire socket then you might be better advised to opt for the similar, although slightly more expensive, MovieBox DV.

Verdict
MovieBox offers those with USB 2.0-equipped PCs a relatively simple, convenient and stylish way of seeing video projects through from capture to completion. ■

James Bennett

Pinnacle Studio MovieBox USB
☐ Pinnacle: 01895 424 228
☐ www.pinnaclesys.com
☐ £124 ex VAT

Specifications
Compatible with Windows 98/2000/Me/XP; S-Video; composite video and stereo phono audio inputs and outputs; USB 1.1 & 2.0 compatible; captures footage in either Mpeg-1 or Mpeg-2

Build quality
■■■■■■■■□
Features
■■■■■■■□□
Value for money
■■■■■■□□□

Digital terrestrial TV and radio tuner card
AverTV DVB-T

Fast web connections mean we can watch video and TV webcasts using our PCs but these still tend to be staccato and reception is dependent on the amount of bandwidth at our disposal. The AverTV card isn't hobbled in this way – instead, it picks up free-to-air digital TV and radio stations via a standard television aerial. In theory you should be able to get as many as 30 TV channels but you'll need good reception to receive more than a handful.

As with Freeview set-top boxes – a non-techie, non-subscription approach to getting digital TV that's proved a success in the eight months since its launch – this is a no-frills package. The £80 card fits into a spare PCI slot inside your PC and, in theory at least, you can enjoy these extra TV and radio channels from the comfort of your sofa, switching between them via the remote control. In practice the short infrared cable that plugs in to the tuner card hampered our attempts at armchair viewing.

Armed with the rest of the necessary kit you can also record TV programmes in Mpeg-2 format and radio broadcasts as MP3 files, capture video to DVD or VCD and experiment with video-conferencing.

The EPG (electronic programme guide) function isn't supported, so you'll need to do some homework or it will be a shot in the dark what you end up watching. A 16-channel preview feature cycles through what's currently on air.

However, once set up, both TV channels and digital radio come in clean and clear without the lag and fade-out that makes listening to web radio a frustrating experience.

Verdict

While we eventually got it up and running, the AverTV wasn't the most reliable package. It took half a dozen attempts before the software successfully installed, claiming time and again the card wasn't there even though XP recognised its presence from the off. The interface isn't that intuitive so you'll need to experiment to work out how to scan for available channels and set up a recording schedule.

The real pull of this product, though, is that it's a low-cost way of previewing what TV will be like in the imminent, digital future. ■

Rosemary Haworth

AverTV DVB-T
☐ Aver Media: 01908 218 800
☐ www.avermedia.com
☐ £79.99 inc VAT

Specifications
PCI digital TV & radio tuner card; infrared remote control; Mpeg-2 and Mpeg-1 video capture; pause and resume TV playback; schedule digital TV recordings (with additional hardware and software); inputs for S-video, VHF-UF antenna, video cable and infrared remote control

Build quality
■ ■ ■ ■ ■ ■ □ □ □
Features
■ ■ ■ ■ ■ □ □ □ □
Value for money
■ ■ ■ ■ ■ ■ ■ □ □
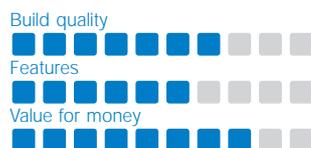
Power adapter
Mobility Electronics iGo Juice

If your job requires business travel – frequent two-night stays in Brussels or Frankfurt, say – you probably take a laptop and a mobile phone with you. You'll also know all about the hassle of ensuring you have the chargers for both devices and two three-pin-to-two-pin adapters.

Not that it's a lot of equipment, but if you left out the mobile phone charger you could get another clean shirt in your hand-luggage-only shoulderbag that after the fourth circuit of Heathrow duty-free has acquired the mass of a neutron star and is dislocating your clavicle.

Wouldn't it be helpful if manufacturers used one universal charger? Then you'd only need the one transformer brick, lead and adapter. This is where Mobility Electronics' iGo Juice comes in.

Comprising an AC/DC transformer, splitter, cabling and a multipack of adapter tips, it's a universal power kit that will enable you to simultaneously charge two mobile devices from a single power outlet – be that a mains, car, boat or other source. Juice works with about 600 of the most of the big-name notebook computers,

including Apple, Compaq, Dell, HP, Toshiba, IBM and Sony, as well as the popular mobile phones and PDAs.

The only problem with Juice is that there is so much of it. Admittedly, the transformer is no larger than that of a conventional notebook and it does all pack down into a shaving-kit-sized bag. But there's 3.3m of cabling in the standard setup and another 0.9m if you carry the car adapter lead. And you still need a plug adapter for whatever mains outlet is available.

Verdict

The iGo Juice is a useful piece of kit for the business traveller who goes everywhere, has a number of portable devices and might need to charge them from a car or boat. If all you want to do is charge a mobile phone and laptop simultaneously, though, a better solution is a USB adapter which costs less than £20. ■

Andrew Charlesworth

Mobility Electronics iGo Juice
☐ Mobility Electronics: 01793 441 457
☐ www.mobilityelectronics.com
☐ £82 ex VAT

Specifications
AC: i/p 100-230V, 2A at 50/60Hz; o/p 15-24VDC, 65W max. DC: i/p 11.75-16V, 8A max; o/p 15-24VDC, 70W max.

Build quality
■ ■ ■ ■ ■ ■ ■ ■ □
Features
■ ■ ■ ■ ■ ■ ■ ■ □
Value for money
■ ■ ■ ■ ■ □ □ □ □