

TOP 10 FLATBED SCANNERS

	Flatbed scanners	Maximum scanning area	Interface connection	Supported operating systems	Scanning element	Optical resolution Software interpolated resolution
1	 Canon CanoScan D1250U2 08705 143 723 www.canon.co.uk LAST MONTH 1	<ul style="list-style-type: none"> • £69 ex VAT • 1-year warranty • First review Aug 02 	A4 (216x297mm)	USB 1.1, USB 2.0	Windows 98/Me/2000/XP	CCD 1,200x2,400dpi 9,600dpi Colour photo 600dpi 32 sec Colour page 300dpi 32 sec
2	 Visioneer OneTouch 9020 01483 445 480 www.visioneer-europe.com NEW	<ul style="list-style-type: none"> • £107 ex VAT • 1-year warranty • First review May 03 	A4 (216x297mm)	USB 1.1, USB 2.0	Windows 98/Me/2000/XP	CCD 1,200x4,800dpi 4,800dpi Colour photo 600dpi 60 sec Colour page 300dpi 24 sec
3	 HP Scanjet 5500c 0870 547 4747 www.hp.com/uk LAST MONTH 2	<ul style="list-style-type: none"> • £212 ex VAT • 1-year warranty • First review Mar 03 	A4 (216x297mm)	USB 1.1, USB 2.0	Windows 98/Me/2000/XP	CCD 2,400x2,400dpi 9,600dpi Colour photo 600dpi 20 sec Colour page 300dpi 7 sec
4	 Canon CanoScan 5000F 08705 143 723 www.canon.co.uk LAST MONTH 3	<ul style="list-style-type: none"> • £152 ex VAT • 1-year warranty • First review Mar 03 	A4 (216x297mm)	USB 1.1, USB 2.0	Windows 98/Me/2000/XP	CCD 1,200x4,800dpi 9,600dpi Colour photo 600dpi 31 sec Colour page 300dpi 22 sec
5	 Umax Astra 6700 0870 906 3304 www.umax.co.uk NEW	<ul style="list-style-type: none"> • £127 ex VAT • 2-year warranty • First review May 03 	A4 (216x297mm)	USB 1.1, USB 2.0	Windows 98/Me/2000/XP	CCD 1,200x4,800dpi 9,600dpi Colour photo 600dpi 63 sec Colour page 300dpi 68 sec
6	 Visioneer OneTouch 7100 01483 445 480 www.visioneer-europe.com NEW	<ul style="list-style-type: none"> • £58 ex VAT • 1-year warranty • First review May 03 	A4 (216x297mm)	USB 1.1	Windows 98/Me/2000/XP	CCD 1,200x4,800dpi 4,800dpi Colour photo 600dpi 117 sec Colour page 300dpi 52 sec
7	 Canon CanoScan 8000F 08705 143 723 www.canon.co.uk NEW	<ul style="list-style-type: none"> • £164 ex VAT • 2-year warranty • First review Apr 03 	A4 (216x297mm)	USB 1.1, USB 2.0	Windows 98/Me/2000/XP	CCD 1,200x4,800dpi 9,600dpi Colour photo 600dpi 49 sec Colour page 300dpi 48 sec
8	 Trust 240H Easy WebScan Gold 0800 328 0261 www.trust.com NEW	<ul style="list-style-type: none"> • £51 ex VAT • 2-year warranty • First review May 03 	A4 (216x297mm)	USB 1.1	Windows 98/Me/2000/XP	CIS 1,200x2,400dpi 4,800dpi Colour photo 600dpi 178 sec Colour page 300dpi 62 sec
9	 Epson Perfection 3200 Photo 0800 220 546 www.epson.co.uk NEW	<ul style="list-style-type: none"> • £289 ex VAT • 1-year warranty • First review May 03 	A4 (216x297mm)	USB 1.1, USB 2.0, FireWire	Windows 98/Me/2000/XP	CCD 3,200x6,400dpi 12,800dpi Colour photo 600dpi 66 sec Colour page 300dpi 30 sec
10	 Umax Astra 4500 0870 906 3304 www.umax.co.uk LAST MONTH 4	<ul style="list-style-type: none"> • £595 ex VAT • 2-year warranty • First review Aug 02 	A4 (216x297mm)	USB 1.1	Windows 98/Me/2000/XP	CCD 1,200x2,400dpi 9,600dpi Colour photo 600dpi 36 sec Colour page 300dpi 33 sec

1 Canon CanoScan D1250U2



It's rare that a product dominates our Top 10 chart for months on end, but sometimes we come across a piece of hardware that breaks the mould. Combining a top-notch specification and low price tag, the Canon CanoScan D1250U2 is one of those products. Little wonder, then, that it's been the Best Buy flatbed scanner since our August 02 issue.

The competition might be able to match Canon's offering in terms of performance – the third-placed HP is

faster at lower resolutions and outputs an image of the same, if not better, quality – but, considering its high-quality features, the Canon is unbeatable in terms of value for money.

The D1250U2 has a speedy USB 2.0 interface that is capable of transferring data at a rate of 480Mbps (megabits per second). This is much faster than the old USB 1.1, with its measly 12Mbps, and is why the Canon boasts low scanning times. When we first reviewed this model back in

August the opposition couldn't get anywhere near the Canon's performance rate. Fast forward nine months and its time may have been beaten by newer models but it doesn't make the CanoScan any less impressive.



True colour depth	One-touch scanning	Transparency adapter	Dimensions (wxdxh)		Graphics software OCR software	Other extras
			Weight			
48bit	Scan, copy, email	optional	257x460x71mm	2.4kg	ArcSoft PhotoStudio ScanSoft OmniPage Pro	Canon PhotoRecord
Text 600dpi		34 sec				
48bit	Scan, copy, email	built-in	432x302x66mm	3.9kg	Adobe Photoshop Elements ScanSoft TextBridge Classic	ScanSoft PaperPort Deluxe, ArcSoft PhotoImpression
Text 600dpi		61 sec				
48bit	Scan, copy, email	built-in	545x317x167mm	7.2kg	HP Suite Iris OCR	automatic photofeeder
Text 600dpi		22 sec				
48bit	Scan, copy, email	built-in	278x508x107mm	3.4kg	ArcSoft PhotoStudio ScanSoft OmniPage Pro	ArcSoft PhotoBase
Text 600dpi		29 sec				
48bit	Scan, copy, email	optional	578x272x89mm	2.8kg	MGI PhotoSuite III Abbyy FineReader Sprint	Papercom document manager
Text 600dpi		60 sec				
48bit	Scan, copy, email	n/a	430x300x66mm	3.6kg	ArcSoft PhotoImpression none	ScanSoft PaperPort
Text 600dpi		72 sec				
48bit	Scan, copy, email	built-in	284x493x104mm	4.6kg	Adobe Photoshop Elements ScanSoft OmniPage Pro	ArcSoft PhotoBase, Canon PhotoStudio, Toolbox
Text 600dpi		48 sec				
48bit	Scan, copy, email	n/a	420x276x45mm	2.6kg	Ulead PhotoExpress 4.0 TextBridge Pro Millennium	none
Text 600dpi		208 sec				
48bit	Scan, copy, email	built-in	476x304x122mm	6kg	Adobe Photoshop Elements none	SilverFast SE 6.0
Text 600dpi		33 sec				
48bit	Scan, copy, email	optional	270x440x41mm	2.4kg	MGI PhotoSuite SE TextBridge 2.0 SE	Papercom document manager
Text 600dpi		23 sec				

This scanner's 1,200x2,400dpi (dots per inch) optical resolution may be one of the lowest in the chart but, in tandem with the 48bit colour depth, scanned images are of fantastic quality with vibrant colours and brilliant detail. The software package is generous, too, with Canon bundling ArcSoft PhotoStudio, ScanSoft OmniPage Pro and its own PhotoRecord digital photo album package.

The CanoScan D1250U2 might have been around for a while, but we don't see it being toppled from first position

in the chart any time soon. Its price tag is almost unbelievable when you consider the quality of the product.

2 Visioneer OneTouch 9020

Visioneer may have missed out on the top spot due to the CanoScan's unbelievable low price, but the OneTouch 9020 is still an excellent flatbed scanner that deserves its second-place Recommended award.

Visioneer has opted for speedy USB 2.0 in the OneTouch, although it hasn't



used this interface to its full advantage. A colour A4 scan at 600dpi (dots per inch) took 67 seconds – nearly half a minute longer than the time posted by the third-placed HP – but still some two minutes quicker than any scanner using the USB 1.1 interface.

The optical resolution of 1,200x4,800dpi might not be the highest offering in the chart but, thanks to its 48bit colour depth, the Visioneer produces sharp, clear images that would satisfy even the most demanding user.

If you wish to archive old photos from negatives then the OneTouch 9020 could be the device for you – its built-in transparency adapter lets you scan 35mm slides and negatives. The bundled software package is also impressive, including ScanSoft's TextBridge Classic, PaperPort Deluxe, Adobe's Photoshop Elements and ArcSoft's PhotoImpression.

The 3.9kg Visioneer OneTouch is a robust and slightly bulky model that, thanks to its quick-scan buttons, is easy to use. At £107 ex VAT it's a reasonably priced device – about half the price of the third-placed HP – but still a good deal more than the Best Buy Canon. Indeed, if the CanoScan D1250U2 wasn't such a bargain the Visioneer could quite easily have nabbed the number one spot.

3 HP Scanjet 5500c

Down one place from last month, the HP Scanjet 5500c hangs on to a Recommended award despite all the new entries. There are some speedy scanners in the chart – as you'd expect when all but three entrants use the USB 2.0 interface – but the HP



is the fastest of the lot. At a resolution of 300dpi (dots per inch) the Scanjet 5500c took just seven seconds to scan a colour A4 page.

This turn of speed makes the HP the fastest low-resolution scanner we have ever tested. And when you consider that it only took 41 seconds to scan the same A4 page at the higher resolution of 600dpi – eight seconds quicker than the Best Buy Canon – you'll realise just what a serious piece of kit the Scanjet is.

There's a wealth of extra features including an automatic photofeeder, which makes scanning large numbers of photographs a breeze, and a transparent material adapter that is perfect for 35mm slides. The scan quality is also fantastic – the 48bit colour depth is rich, accurate and more than a match for any of the other competitors' scans.

All of this comes at a price, though: a steep £212 ex VAT. If money wasn't a consideration then the HP Scanjet 5500c would be reigning at the top of the chart. However, as both the Best Buy CanoScan and Recommended OneTouch offer nearly the same quality for considerably less the HP is consigned to third place.

4 Canon CanoScan 5000F

 Pushed down one place from last month but still retaining its Recommended award is the CanoScan 5000F. Although Canon's offering isn't especially cheap, it's a good-quality scanner with plenty of features to keep professional users happy while being straightforward enough for a beginner to get to grips with easily.

There were no problems setting up the CanoScan and we were soon churning out scans at a healthy rate. The USB 2.0 interface is used to good effect and this is best demonstrated at very high resolutions – it outstrips even the speedy



third-placed HP at 1,200dpi (dots per inch) and beyond.

The optical resolution is a healthy 2,400x4,800dpi and the now commonplace 48bit colour depth means that this scanner can deal with very detailed reproductions. The resolution can also be enhanced to 9,600dpi using Canon's bundled software.

Although £152 ex VAT is an extravagant amount for most people to spend on a scanner, if you're prepared to splash out then the Canon is well worth it for its ease of use and scan quality.



5 Umax Astra 6700

Umax has gone for a balance between speed and price – and it works to good effect. Unfortunate to miss out on a Recommended award, the Astra only charts in fifth place due to the excellent performance and features offered by the top four prizewinners in our chart.

That's not to say that the Umax doesn't have some outstanding features of its own – the USB 2.0 interface means that the Umax can scan an A4 colour page in less than 70 seconds. Although this is some 20 seconds slower than the Best Buy Canon, it's still fast enough for most users' needs.

One thing we aren't too keen about was the Astra's design. The device is longer than it needs to be, so it takes up vital desk space. It's also lightweight with a flimsy lid. The scan quality was reasonable without being outstanding, particularly in terms of colour. There's a good software bundle, though – all for just a shade under £130.

6 Visioneer OneTouch 7100

Hardware manufacturers looking to keep down the price of their products always cut corners. In the case of the budget OneTouch 7100, Visioneer has decided to stick with



USB 1.1 technology. This inevitably means that the scanner is slow compared to a model using a USB 2.0 or FireWire interface. However, if you don't mind waiting that little bit longer for your scans – and don't want to fork out an extra £12 for the Best Buy Canon – then the £58 OneTouch makes good economical sense.

With an optical resolution of 1,200x4,800dpi (dots per inch) and a 48bit colour depth the 7100 has the specifications to churn out good quality scans – and it does. In spite of the USB 1.1 interface the scan times for images at a resolution of 300dpi were very good, though they slowed down considerably when the resolution was upped to 600dpi.

7 Canon CanoScan 8000F

First seen in last month's Reviews section, we were very impressed by the CanoScan 8000F. This flatbed scanner only manages to enter the chart in seventh place, however, due to the quality of the opposition.

Aimed more at serious hobbyists than first-time buyers, the Canon's Multi-Photo function makes it perfect for photographers who want to digitally archive their photography with minimal fuss. A whole page of pictures can be scanned in a single pass and the 8000F can automatically separate them – guaranteed to speed up the process if you have a lot of photographs to scan.

However, the CanoScan 8000F is a bulky device and expensive to boot – not ideal for the novice. You get what you pay for in this world, though, and the Canon produces great quality images at a quick pace.





8 Trust 240H Easy WebScan Gold

One of the smallest scanners in this month's chart, the Trust 240H Easy WebScan Gold weighs just 2.6kg and has a footprint of 420x276mm (width x depth). This eighth-placed device is therefore a good option if you don't have a great deal of deskspace.

You won't need to hook up the Trust to the mains either – all the power is drawn through the USB 1.1 connection. On the down side, though, this means tediously slow scanning times at all resolutions – waiting three and a half minutes for an A4 image to scan at 600dpi (dots per inch) is like watching paint dry.

The Trust's scan quality isn't fantastic either – the image is neither as sharp nor as bright as it could be. However, the package costs just £51 ex VAT, is bundled with TextBridge Millennium Pro and Ulead PhotoExpress 4.0 and there's even a two-year warranty.

9 Epson Perfection 3200 Photo

The Epson offers a choice between two high-speed interfaces: USB 2.0 and FireWire. The latter connection may not be as quick as USB 2.0 but it still manages to make the old USB 1.1 interface look pretty tardy. Be warned, though: if your PC doesn't have USB 2.0 or FireWire ports then you'll have to be satisfied with the 12Mbps (megabits per second) data transfer rates of USB 1.1.

The Epson offers an optical resolution of 3,200x6,400dpi (dots per inch) and 48bit colour depth. Scans are of remarkable quality although copy times aren't as quick as other

USB 2.0-based



models – particularly at higher resolutions.

The expensive Perfection 3200 Photo is a robust and sturdy scanner, although it's too cumbersome for our liking. The bundled software package is also far from generous.

10 Umax Astra 4500

A winner of our Recommended award from as recently as our February 03 issue, the Astra 4500 from Umax moves down to tenth place this month. For the money you're paying, though, it's still a good value device although it wouldn't win any prizes for speed.

A USB 1.1 interface means that the Umax gets left behind by the competition when scanning at higher resolutions.

An A4-sized colour image took more than three minutes to scan at a resolution of 600dpi (dots per inch) – the Best Buy CanoScan took less than a minute using the faster USB 2.0 interface.

Costing just £59 and covered by a two-year warranty, it's hard to write the Umax Astra 4500 off – unless it's an absolutely must to have lightning-fast scans. The software package is also sufficient for beginners. ■



Buying advice

Due to their growing popularity there's a wide range of scanners available, making it harder to pick the right model for your needs. While you can spend thousands of pounds on a professional device, home and small business users don't have to shell out over £200 – you can even pick up a bargain unit for around £50.

- **Scanner type** The scanner market is much simpler now than it has been in previous years, as virtually all models are flatbed. Flatbeds hog deskspace but boast a large scanning area (usually A4 size). On some models you can also unclip the lid to scan 3D objects, such as books.
- **Interface** USB is the standard interface for scanners. FireWire units are available but USB 2.0 is the quickest option. Unless your PC has these ports you'll need a specialist card.

- **Resolution** Take interpolated resolutions with a pinch of salt – scans are produced by software which adds more dots by predicting colours in the image, but the results can range dramatically in quality – concentrate on the optical resolution instead. Optical resolution is a measure of what a scanner's hardware can achieve; 1,200x2,400dpi (dots per inch) is widely available, although some high-performance scanners boast resolutions in excess of 2,400x4,800dpi.

Higher resolutions use more pixels to give a greater level of detail, but remember that the higher the resolution the more disk space you will use.

- **Colour depth** Another feature to look at is colour depth. This indicates the number of distinct colours that can be displayed: the higher the number of bits, the more colours your scanner will be able to represent. It's best to opt for 48bit colour.

- **Software** A generous software bundle should be included. The very best you can expect to get for image manipulation is Adobe Photoshop Elements, a cut-down version of the full package aimed at the novice user. OCR (optical character recognition) applications 'read' printed text into the PC. Good options to look for are TextBridge or OmniPage.

