



Flatbed scanners



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Product	Epson Perfection 1650	Epson Perfection 2450	HP ScanJet 4470c	HP ScanJet 5490c	Microtek ScanMaker 4800	Microtek ScanMaker X12 USL Professional
Price (inc VAT)	£149	£199	£109	£279	£149.99	£299.99
Contact	0800 220546	0800 220546	08705 474747	08705 474747	01327 844880	01327 844880
Web site	www.epson.co.uk	www.epson.co.uk	www.hp.scanjet.com	www.hp.scanjet.com	www.microtek-europe.com	www.microtek-europe.com
Optical resolution (dpi)	1600 x 3200	2400 x 4800	1200 x 2400	2400 x 2400	1200 x 2400	1200 x 2400
Interpolated resolution (dpi)	12800 x 12800	12800 x 12800	claimed unlimited	claimed unlimited	9600 x 9600	9600 x 9600
Scan area (mm)	216 x 297	216 x 297	216 x 297	216 x 297	216 x 297	216 x 355.6
Colour depth (bits)	48	48	48	48	48	42
Interface	USB	USB 2 and FireWire	Parallel and USB	Parallel and USB	USB	USB and SCSI
Software included	Epson Smart Panel, ArcSoft PhotoImpression 3, Epson TWAIN 5.5	Epson Smart Panel, Photoshop Elements, Epson TWAIN 5.5	IRIS OCR, ArcSoft PhotoImpression, Trellix Web Express, HP Print Creator, ACDSee	IRIS OCR, Corel Print Office 2000, Net Objects Fusion/Matrix, HP Print Creator, ACDSee	PhotoDeluxe, Acrobat Reader 4, FineReader Sprint OCR, Ulead PhotoExplorer, Microtek ScanWizard 5	Photoshop LE, Caere PageKeeper & Omnipage LE, Lasersoft SilverFast standard with silver version of scanner
Extras		Detachable transparency adaptor	Detachable transparency adaptor	ADF and detachable transparency adaptor		Transparency adaptor in lid
A4 preview scan (seconds)	6	6	12	7	7	14
A4 text scan at 300dpi (secs)	30	31	45	19	25	25
A4 colour scan at 150dpi (secs)	16	23	18	13	31	22
A4 colour scan at 300dpi (secs)	41	77	53	43	55	55
A4 colour scan at 600dpi (mins)	2.34	5.42	3.34	2.28	4.44	2.51
6 x 4 photo scan	16	14	25	15	23	20
MTF test	0.54	0.66	0.74	0.61	0.45	0.62
Greyscale RGB tracking test	6.74	7.63	2.97	2.84	1.00	1.24
Build quality	★★★	★★★	★★★	★★★★	★★★★	★★★★
Ease of use	★★★	★★★★	★★★★	★★★★	★★★	★★★
Scan quality	★★★	★★★★	★★★	★★★★	★★★	★★★★
Value for money	★★	★★★★	★★★	★★	★★	★★★
Overall	★★★	★★★★	★★★	★★★★	★★★	★★★

★ = Poor ★★ = Below average ★★★ = Average ★★★★ = Good ★★★★★ = Excellent ADF = automatic document feeder



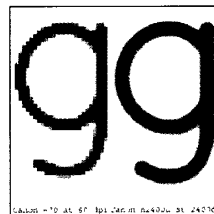
Scanners with transparency adaptors, either in the lid or as an attachable option, can transfer information from slides and films.

lem for those with less desk space. If you do have little room on your desk for a new scanner then you might consider the CanoScan N670U. This has a special stand, which allows you to put it on its side while scanning. This clever idea

saves a tremendous amount of space and gives it by far the smallest footprint of all the scanners in the test.

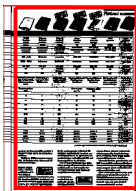
Image quality

So far we've covered speed, colour depth, resolution and features, but the real marker of any good scanner is how good the actual finished scans look. We got quite a mixed bag here but the real winner for overall image quality was the CanoScan D2400UF. Photos were true to the originals and the text scans were unbeatable in quality. In our 'g' test - where a lower case letter 'g' is captured at the scanner's true optical resolution



The Canon N670U (left) was no match for the D2400UF (right).

then zoomed in on repeatedly - the D2400UF's effort was so good it made the others look very grainy (see above). We also took a scan of a watch, to check the quality when scanning a textured object. As you can see from the pictures on page 58, the Visioneer 8700 scan is extremely clear and sharp com-



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Mustek Bear Paw 2400TA	Visioneer OneTouch 5800 USB	Visioneer OneTouch 8700 USB	Canon CanoScan N670U	Canon CanoScan D2400UF	Umax Astra 4500	Umax AstraSlim
£76.94	£69.99	£99.99	£69	£329	£79.99	£59.99
0870 870 4457	01483 445480	01483 445480	0800 252223	0800 252223	0870 906 3300	0870 906 3300
www.mustek-europe.com	www.visioneer-europe.com	www.visioneer-europe.com	www.canon.co.uk/canoscan	www.canon.co.uk/canoscan	www.umax.co.uk	www.umax.co.uk
1200 x 2400	600 x 1200	1200 x 4800	600 x 1200	2400 x 4800	1200 x 2400	600 x 1200
19200 x 19200	2400 x 2400	4800 x 4800	2400 x 2400	9600 x 9600	9600 x 9600	3600 x 3600
216 x 297	216 x 297	216 x 297	216 x 297	216 x 297	216 x 297	216 x 297
48	48	48 internal 24 external	24	48	48	48 (software-enhanced)
USB	USB	USB	USB	USB	USB	USB
Photo Express, FineReader OCR, Mustek e-mail, fax & photocopy software, games	PaperPort Deluxe 7, TextBridge Pro OCR, MGI Photo Suite	PaperPort Deluxe 7, TextBridge Pro OCR, MGI Photo Suite	Photoshop 5 LE, Arcsoft PhotoBase, Canon PhotoRecord	Photoshop 5 LE, Arcsoft PhotoBase, Canon PhotoRecord	MGI PhotoSuite III SE, ScanSoft TextBridge Classic 2, PaperCom Document Manager	AstraSlim Driver, Ulead Photo Express, Readiris
Transparency adaptor in lid			Stand for upright scanning	Transparency adaptor in lid		
16	6	7	19	13	5	30
27	19	15	21	19	34	35
30	11	11	23	13	11	46
58	26	38	41	24	48	101
3.28	4.41	3.38	4.51	1.09	3.23	4.26
55	15	15	15	15	16	51
0.57	0.32	0.60	1.04	0.67	0.79	0.32
4.61	3.65	7.82	4.10	9.66	2.57	15.82
★★★	★★★	★★★★	★★★★	★★★★★	★★★★	★★★
★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
★★★	★★★	★★★★★	★★★★	★★★★★	★★★	★★★
★★★★	★★★★	★★★★★	★★★★★	★★★★	★★★	★★★
★★★	★★★★	★★★★★	★★★★	★★★★★	★★★★	★★★

Don't forget to mention *What PC?* when ordering any of these products

pared to the Umax AstraSlim, and this is almost certainly due to the CIS head on the latter.

The Epson 2450 scans came out very well, as did those of the Visioneer 8700 and the Umax 4500.

Now we have to make a decision and this time it is very tough to separate the winners from the also-rans. The CanoScan D2400UF stands head and shoulders above the rest in nearly every respect, and especially in scan quality. The trouble here is the price, as it is by



far the most expensive in the test. We also need to consider the excellent connectivity options on the Epson 2450, the excellent driver on the Microtek X12 and the handy ADF on the HP 5490c.

But at the end of the day, for a good-value, good-quality scanner that doesn't cost the earth, we had to opt for the Visioneer OneTouch 8700, which narrowly claims our Best Buy.

As to the recommended slots, we just had to give the CanoScan D2400UF recognition because of its superb perfor-



mance, drivers, software and remarkable image quality. Despite the large price, this is well worth a look for the more ambitious users out there.

We really liked the great FireWire and USB 2 connectivity options on the Epson 2450, which also produced great-quality scans at a good speed, so this claimed a recommended slot as well.

If you want a good scanner, with great software and good performance at an incredibly low price, look no further than the Canon N670U. This really is fantastic value and gains the final recommended slot in our test.

Ben Lewis