Top 10 Digital projectors & Flatbed scanners

Digital projectors		LCD/DLP techn- ology	Maximum brightness	Lamp life (hours)	Dimensions (wxdxh)	Max resolution	Wireless facilities	Econ- omy mode	Noise
			Contrast ratio	Replace- ment bulb	Weight		Memory card		
1 BEST BUY	**InFocus X1** 0800 028 6470 www.infocus.com Last month 1	• £1,174 inc VAT • 3-year parts & labour warranty • First review Apr 03	DDR DLP	1,000 Ansi lumens	3,000	249x318x106mm	800x600 (SVGA)	no	no	37dB
				2,000:1	varies	3.1kg		no		
	Not only is the InFocus cheap to buy and run, it's also equipped with cutting-edge DDR DLP technology to handle dark colours. The X1's clear display and sharp definition make it adept at both video and Windows apps. The device isn't particularly quiet in operation so it's more suited to the office than home environment.									
2 RECOMMENDED	**Plus U4-131SF** www.plus.uk.com Last month 2	• £1,639 inc VAT • 3-year parts & labour warranty • First review Sept 03	DDR DLP	1,500 Ansi lumens	2,000	190x239x53mm	1,024x768 (XGA)	no	yes	37dB
				1,500:1	£200	1.5kg		no		
	The U4-131SF has some impressive specifications that make it an ideal office projector. Its brightness rating ensures a clear image and the contrast ratio is also good, giving an extremely high level of colour depth. With its chic yet business-like casing, the lightweight Plus is a prized addition to any boardroom.									
3	**CTX PS-5140** 01923 810 800 www.ctxeurope.com Last month 3	• £949 inc VAT • 2-year parts & labour warranty • First review Mar 03	LCD	1,400 Ansi lumens	2,000	283x243x91mm	800x600 (SVGA)	no	no	37dB
				400:1	£249	2.7kg		no		
	Thanks to its brightness rating, the value-for-money CTX offers a display that remains visible in the lightest of conditions, although its basic LCD technology means the image isn't as sharp or well defined as the Best Buy (which uses DDR DLP). On office apps, in particular, you'll notice a reduction in colour scheme purity.									
4	**NEC LT220** 08459 404 020 www.nec.co.uk Last month 4	• £2,566 inc VAT • 3-year European onsite warranty • First review Apr 03	SDR DLP	1,800 Ansi lumens	1,500/2,000	260x275x92mm	1,600x1,200 (UXGA)	no	yes	32dB/ 29dB
				600:1	£298	3.2kg		no		
	The LT220 may be pricey but it's a superior projector that boasts one of the best images in the chart. Business users will appreciate the clean text display while cinephiles will relish the bright tints and warm hues. Another bonus is the large screen and lack of system noise – it can be restricted to a near-inaudible 29dB.									
5	**Epson EMP-53** 0800 220 546 www.epson.co.uk Last month 5	• £1,409 inc VAT • 3-year European (2-year worldwide) warranty • First review Apr 03	LCD	1,700 Ansi lumens	1,500	315x240x97mm	800X600 (SVGA)	no	yes	36dB/ 33dB
				500:1	£299	2.9kg		no		
	At £1,409, the EMP-53 offers a massive screen size for less money than the rivals. The contrast ratio is above average for an LCD model, but the SVGA resolution means that pictures lack depth of colour. A high brightness rating means it will work in the lightest conditions, while the powerful remote control is another bonus.									

Flatbed scanners		Inter- face conn- ection	Supported operating systems	True colour depth	Optical resolution	Trans- parency adapter	Dimensions (wxdxh)	Graphics software
					Software interpolated		Weight	Optical character recognition software
1 BEST BUY	**Canon CanoScan Lide 80** 0870 514 3723 www.canon.co.uk New	• £139 inc VAT • 1-year warranty • First review Nov 03	USB 2.0	98/Me/ 2000/XP	48bit	2,400x4,800dpi	built-in	258x374x38mm	Adobe Photoshop Elements
						9,600dpi		2kg	ScanSoft OmniPage
	Despite an extremely modest price tag, the Lide 80 offers crisp scan quality, high performance levels and a string of top-flight features within one beautifully designed package. Capable of scanning a 600dpi A4 image in just 39 seconds, this model is fast enough for most occasions. A worthy Best Buy winner.								
2 RECOMMENDED	**Visioneer OneTouch 9020** 01483 445 480 www.visioneer-europe.com Last month 1	• £100 inc VAT • 1-year warranty • First review May 03	USB 2.0	98/Me/ 2000/XP	48bit	1,200x4,800dpi	built-in	432x302x66mm	Adobe Photoshop Elements
						4,800dpi		3.9kg	TextBridge Classic
	The 3.9kg Visioneer OneTouch is a robust model that, thanks to its quick-scan buttons, is easy to use and ideal for novices. It's reasonably priced and produces sharp, clear images that would satisfy even the most demanding user. Thanks to its transparency adapter, the 9020 is also ideal if you wish to archive old slides.								
3	**HP Scanjet 5500c** 0870 547 4747 www.hp.com/uk Last month 2	• £249 inc VAT • 1-year warranty • First review Mar 03	USB 2.0	98/Me/ 2000/XP	48bit	1,200x2,400dpi	built-in	545x317x167mm	HP Suite
						9,600dpi		7.2kg	Iris OCR
	At a resolution of 300dpi the Scanjet 5500c took seven seconds to scan a colour A4 page, making it the fastest low-resolution model in the chart. 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 £249.								
4	**Canon CanoScan 5000F** 08705 143 723 www.canon.co.uk Last month 3	• £210 inc VAT • 1-year warranty • First review Mar 03	USB 2.0	98/Me/ 2000/XP	48bit	2,400x4,800dpi	built-in	278x508x107mm	PhotoStudio, PhotoBase
						9,600dpi		3.4kg	ScanSoft OmniPage SE
	The CanoScan 5000F isn't cheap but it offers plenty of features to keep professional users happy while being straightforward enough for a novice. The USB 2.0 interface is used to good effect and is best demonstrated at high resolutions – it outstrips even the speedy HP at 1,200dpi and beyond.								
5	**Umax Astra 6700** 0870 906 3300 www.umax.co.uk Last month 4	• £150 inc VAT • 1-year warranty • First review May 03	USB 2.0	98/98SE/Me/ 2000/XP	48bit	2,400x4,800dpi	optional	578x272x87mm	MGI PhotoSuite III
						19,200dpi		2.8kg	Abbyy FineReader Sprint
	Umax has gone for a balance between speed and price. The Astra can scan an A4 colour page in less than 70 seconds and, although this is no match for the Visioneer's time of 24 seconds, it's fast enough for most users' needs. We weren't keen on the 6700's design – it's longer than is necessary and has a flimsy lid.								

Buying advice

Digital projectors

Projector brightness is measured in Ansi lumens. On a business model look for at least 1,000 Ansi lumens; for home use more than this will be overpowering. If the projector's confined to a small room then a short throw lens will produce a larger picture, although colour and focus options may be reduced. Economy mode sacrifices brightness in favour of longer lamp life and less noise.

If you need to carry the projector long distances look for a model that's 1.5kg or lighter. A memory card slot means you can leave the notebook behind in the office, while wireless facilities let you control the projector from several PCs without the added hassle of connecting and disconnecting leads.

The higher the resolution support the more detail used to generate the image. XGA (1,024x768) support is preferable for displaying apps, although for low-detail programs or home video SVGA (800x600) will suffice.

Unless you're using the projector constantly you're unlikely to need to change the lamp too often. However, it's worth comparing the price of a replacement with the number of hours it will burn.