











# TOP 10 FLAT-PANEL DISPLAYS & GRAPHICS CARDS

		Flat-panel displays	Screen size	Max resolution	Pixel pitch	Dimensions (wxdxh)	Weight	Digital connector	USB port	
1		<b>LG L1710B</b> 0870 604 5544 <a href="http://www.lge.co.uk">www.lge.co.uk</a> <b>NEW</b>	<ul style="list-style-type: none"><li>• £304 ex VAT</li><li>• 3-year warranty</li><li>• First review Jun 03</li></ul>	17in	1,280x1,024	0.264mm	370x223x421mm	6.6kg	yes	3
				Offering an actual viewing area only 0.5in smaller than the average 19in CRT, the L1710B draws the eye with to its chic silver casing and high-calibre picture quality. The LG feels light and focused and is ideal for general Windows use. The colour scheme is rich and the L1710B can handle animation without any blurring.						
2		<b>Samsung SyncMaster 181T</b> 0800 521 652 <a href="http://www.samsungelectronics.com">www.samsungelectronics.com</a> <b>LAST MONTH 1</b>	<ul style="list-style-type: none"><li>• £475 ex VAT</li><li>• 3-year warranty</li><li>• First review Spr 03</li></ul>	18.1in	1,280x1,024	0.281mm	398x208x443mm	5.8kg	yes	no
				If you want one of the best 18.1in flat-panels on the market then Samsung's generous offering is hard to refuse. The SyncMaster 181T offers top image quality – we experienced no dead pixels – and is a bit of a looker to boot. Despite being a high-end corporate model, the 181T is also aggressively priced.						
3		<b>Fujitsu-Siemens F5110FA</b> 0800 004 003 <a href="http://www.fujitsu-siemens.com">www.fujitsu-siemens.com</a> <b>LAST MONTH 2</b>	<ul style="list-style-type: none"><li>• £899 ex VAT</li><li>• 3-year warranty</li><li>• First review Feb 03</li></ul>	20in	1,600x1,200	0.255mm	482x200x458mm	9.2kg	yes	no
				The F5110FA may be expensive, but it's the best 20in flat-panel on the market. The Fujitsu-Siemens shines with high-quality output and, due to its top-notch specs, it's possible to use the display in a bright room. The 170-degree viewing angle also means that several people can watch the screen at the same time.						
4		<b>Sharp LL-T1620H</b> 01923 434 647 <a href="http://www.sharp.co.uk">www.sharp.co.uk</a> <b>LAST MONTH 3</b>	<ul style="list-style-type: none"><li>• £314 ex VAT</li><li>• 3-year warranty</li><li>• First review Mar 03</li></ul>	16in	1,280x1,024	0.248mm	352x185x370mm	5.3kg	yes	no
				Sporting a 16in diagonal viewing area, the Sharp is a great budget model that performs well on text and graphics but isn't so impressive as a home entertainment display. The LL-T1620H's integrated speakers will also be a lifesaver if you're short on desk space. One for the office rather than the living room.						
5		<b>NEC MultiSync LCD1760NX</b> 0870 120 1160 <a href="http://www.nec-mitsubishi.com">www.nec-mitsubishi.com</a> <b>LAST MONTH 4</b>	<ul style="list-style-type: none"><li>• £389 ex VAT</li><li>• 3-year warranty</li><li>• First review May 03</li></ul>	17in	1,280x1,024	0.264mm	374x205x454mm	6.8kg	yes	no
				The MultiSync is good value in light of its 17in screen and spec list, although the 160-degree viewing angle is a problem. Unless you're standing directly in front of the screen, picture quality degrades quickly. However, there are tools for adjusting image quality so this bright screen can display detailed pictures and sharp text.						

Graphics cards			Graphics processor	Installed RAM	DDR RAM	Ramdac	8x AGP	Maximum resolution @ 75Hz	DirectX version	DVI	
1		<b>Gigabyte Maya II R9700 Pro</b> 01908 362 700 <a href="http://www.giga-byte.com">www.giga-byte.com</a> <b>LAST MONTH 1</b>	<ul style="list-style-type: none"><li>• £246 ex VAT</li><li>• 3-year warranty</li><li>• First review Dec 02</li></ul>	ATI Radeon 9700 Pro	128MB	yes	400MHz	yes	2,048x1,536	9x	yes
				The R9700 Pro is crammed with technology that pushes frame rates and graphics quality to new levels. Its benchmark results are equally impressive. In our Comanche 4, Aquanox and Quake III tests, the 9700 established a clear lead at lower resolutions and destroyed its rivals at 1,600x1,200 and beyond.							
2		<b>Sapphire Radeon 9700 Atlantis Pro</b> 08702 200 700 <a href="http://www.savastore.com">www.savastore.com</a> <b>LAST MONTH 2</b>	<ul style="list-style-type: none"><li>• £213 ex VAT</li><li>• 1-year warranty</li><li>• First review Dec 02</li></ul>	ATI Radeon 9700 Pro	128MB	yes	400MHz	yes	1,920x1,440	9x	yes
				This 128MB version of the Radeon 9700 Pro trounced the GeForce4 Ti 4600, regularly achieving between 10 and 20fps (frames per second) more. The Sapphire is slightly slower than our Best Buy graphics card, software is sparse and the warranty covers just one-year support. However, it's also over £30 cheaper.							
3		<b>MSI FX 5800 Ultra</b> 0870 727 2100 <a href="http://www.msi.com.tw">www.msi.com.tw</a> <b>NEW</b>	<ul style="list-style-type: none"><li>• £325 ex VAT</li><li>• 2-year warranty</li><li>• First review Jun 03</li></ul>	nVidia GeForce FX 5800 Ultra	128MB	yes	400MHz	yes	2,048x1,536	9x	yes
				The 5800 Ultra features nVidia's next-generation 3D processor. Its FX Flow system is designed to keep the card cool, but it's very loud in operation. The FX chip uses the smaller 0.13 micron core and DDR2 RAM, so it's the fastest card in terms of frame rates – in our tests it effortlessly outpaced the ATI Radeon 9700 Pro.							
4		<b>Sapphire Atlantis 9500</b> 08702 200 700 <a href="http://www.savastore.com">www.savastore.com</a> <b>LAST MONTH 3</b>	<ul style="list-style-type: none"><li>• £115 ex VAT</li><li>• 1-year warranty</li><li>• First review Mar 03</li></ul>	ATI Radeon 9500	128MB	yes	400MHz	yes	1,920x1,440	9x	yes
				ATI's Radeon 9500 chip fits into the 'performance at a modest price' category. Although there's less in the way of brute force and graphics rendering facilities, most of the important features are still present – such as support for DirectX 9.0. The 9500 also scores high marks for overall image quality.							
5		<b>Abit Siluro GF4 Ti 4200 8X Otes</b> 01438 226 333 <a href="http://www.abit.com.tw">www.abit.com.tw</a> <b>LAST MONTH 4</b>	<ul style="list-style-type: none"><li>• £120 ex VAT</li><li>• 1-year warranty</li><li>• First review Mar 03</li></ul>	nVidia GeForce Ti 4200	128MB	yes	350MHz	yes	2,048x1,536	8x	yes
				The Abit Siluro features a revised Ti 4200 chip with 8x AGP support and an innovative heat pipe cooling system that helps keep the card from overheating, although you do lose a PCI slot in the process. The Ti 4200 8X Otes is an improvement, but it's playing catchup to the Radeon 9500 chip.							

## Buying advice: graphics cards

It's generally the graphics chip rather than the card itself that determines ultimate speed. Look for the nVidia GeForce FX 5800 Ultra or the ATI Radeon 9700 Pro for the highest frame rates. At the other end of the scale, the Radeon 9000 Pro is a great bargain. Buying a sub-£100 card doesn't mean you can't enjoy the latest

games, you'll just have to play them at a lower resolution (around 1,024x768).

Memory is important. While average 3D performance is possible with 64MB, it must be DDR RAM rather than the slower SDR variety. For the works, you want at least 128MB of DDR RAM.

If you're paying £150 or more for a card, support for DirectX 9 and 8x AGP will keep your graphics up to date in the

coming months. Digital connectors are becoming increasingly common and, to ensure future compatibility, demand a DVI (digital visual interface) connector.

One attractive extra is dual-monitor support. This allows you to stretch your Windows desktop over two screens, which effectively doubles your workspace and means you won't need to keep flipping from one window to another.