

Widescreen TVs

NEED TO KNOW

Sales of conventional widescreen TVs have fallen, but our tests show that more often than not, conventional widescreen TVs have better pictures than LCD or plasma TVs. They're also cheaper. If you want an LCD or plasma TV, see p53.

IDTVs

Integrated digital TVs (IDTVs) can receive digital terrestrial TV and radio broadcasts via Freeview. Check that you're in the coverage area (0870 880 9980 or www.freeview.co.uk) before buying. Currently about 75 per cent of the country can receive Freeview signals.

NON-DIGITAL TVs

Conventional non-digital TVs have only an analogue tuner. To receive Freeview you need a set-top box costing from around £50.

CABLE AND SATELLITE

Both types of TV work with digital satellite and cable services. Subscription packages from Sky and cable operators Telewest and NTL offer more channels and interactive services than Freeview.

If you can't receive Freeview but don't want to pay a subscription, Sky offers a free satellite service called 'Freesat from Sky'. ITV and BBC are set to follow suit with a free satellite service in 2006. Satellite will fill the coverage gaps of digital terrestrial and cable services.



1 Panasonic
32 INCH

BEST BUYS

To be a Best Buy, a TV must score at least ★ for picture quality and have no other significant failings. Integrated digital TVs must have a seven-day electronic programme guide (EPG). Where we have the information, Best Buy TV brands must be average or above in our annual reliability survey.

32 INCH

The **Panasonic (1)**, £1,100 from Miller Brothers, is an excellent TV and the best 32-inch model on test. Sound quality is the best of the Best Buys and it has fast, easy-to-use Teletext. It's also the only set on test featuring picture-in-picture – a small image of one channel in the corner of the screen while you watch another channel. The 100Hz Plus digital processing combats flicker (see 'Screen flicker', right). But it only scraped a ★ for picture quality. Panasonic is a consistently reliable brand.



2 Toshiba
32 INCH

The 100Hz **Toshiba (2)** can be picked up for £680 online. It has good picture and sound and is fairly intuitive to use. Toshiba TVs are among the best for reliability.

The Philips (3) has picture and sound quality befitting a Best Buy but Philips is below average for brand reliability so isn't a Best Buy.

The **Sony (4)** is another 100Hz flicker-free set, available from Miller Brothers for £900. It might not be the easiest model to set up but once you're over that hurdle, sit back and enjoy excellent picture and sound

and easy-to-use Teletext. Sony TVs are very reliable.

The **Sony (5)** is a 50Hz Best Buy model and a fine addition to the IDTV canon. It has great picture quality and the interactive digital text responds quickly when you press the buttons, but there are better options when it comes to sound quality. It's available from Dixons for £800 without a stand.

28 INCH

Flat-panel technology is pushing up the average size of a TV screen (see 'Flat-panel TVs', p53), but a 28-inch set is more than big enough



SCREEN FLICKER

Conventional TVs work by scanning information on to a phosphor-coated surface. The frequency of this scanning is normally 50 times a second, or 50Hz. At this rate, some people see the screen flicker. To combat this, manufacturers increase the frequency of some models to 100Hz but that process can affect other aspects of picture quality. This Sony isn't flicker-free but has a picture comparable to any of the flicker-free models on test. If you've never noticed screen flicker, opt for a 50Hz set.

ELECTRONIC PROGRAMME GUIDE (EPG)

Most IDTVs can display Freeview's seven-day EPG. The EPG on this Sony is informative and clearly laid out. It displays six channels at a time covering a two-hour period – the best setting for comparing channels for an evening's viewing. But it isn't able to show the currently viewed channel as a picture within the text. Only the JVC (9) has this feature but as it has no EPG (merely 'now and next'), our experts were not impressed.

AS Categories	19:30	20:00	20:30	21:00
01.1 UNTV Gold	Speed 2	Merseybeat	The 90s	
01.2 The HITZ	The Digital 100 - Right Now			
01.3 UNTV Br'ndown	House Chat...	Adrian's Headshot	Garden Ch...	
01.4 F 30	Pin			
01.5 TAP	Let's Rough Zone		Pop Zone	
01.6 Ideal World	Geography...	Refer Jewellery Store...	Happy Feet	
	Previous	Next	Time	Category



for most of us. It's also usually cheaper than a 32-inch model.

The **Sony (12)** is another IDTV model. In fact it's the best IDTV we've looked at in the past two years. It can be found online for £900. The excellent picture and sound are complemented by an intuitive EPG (see 'Electronic

programme guide', above) that is easy to navigate and use in conjunction with your video or DVD recorder. Like all our 28-inch Best Buys, it is a 100Hz set (see 'Screen flicker', above).

The **Sony (13)** isn't widely available but you can find it online for £418. This is the best non-digital 28-inch TV

that we've looked at. The picture quality marks it out against its rivals. We also liked its easy-to-use, uncluttered remote control, as well as its clear menus and speedy Teletext.

The **JVC (14)** is a new flicker-free IDTV, available from Comet for £400. Its picture quality is

good – but better for moving images than for still photos. The EPG displays only one channel at a time but it's a doddle to navigate. Text is speedy and, in common with all JVC models on test, its sound is impressive. IDTV models from JVC are average when it comes to reliability.



USING THE TABLE

Where available, we tested the newest 32- and 28-inch widescreen models from the leading manufacturers.

Specification

Price For Best Buys we give the cheapest widely available high-street price. Prices for other models are a guide. Prices in *italics* are online prices.

Size Without stand.

SCORE

Ignores price and is based on:

Picture quality	35%
Sound quality	20%
Ease of use	20%
Text	10%
Features	10%
Reception	2.5%
Power use	2.5%

Features

IDTV Integrated digital TVs have a built-in Freeview digital tuner. **Flicker free** A ✓ indicates a 100Hz screen. See 'Screen flicker' on p51. **Scarts** The number of Scart sockets. These let you connect a DVD player, for example.

Performance

Picture Technical tests and expert panel's rating. **Sound** Technical tests and expert panel's rating. **Stills** Quality of still images, such as photos, displayed on screen.

Convenience

Ease of use Ratings for setting up, everyday use and more complex tasks. Includes ease of using digital TV features for IDTVs. **Text** Speed and legibility of Teletext and interactive features.

Widescreen TVs

32 INCH

1	Panasonic TX-32PD50	1,100	81x58x54		✓	4	☆	★	☆	☆	★	67
2	Toshiba 32ZP48	680	76x55x55		✓	3	☆	☆	○	☆	☆	67
3	Philips 32PW9509	895	87x56x57		✓	3	☆	☆	●	☆	★	65
4	Sony KV32FQ86	900	92x59x59		✓	3	☆	☆	○	○	★	65
5	Sony KD-32DX51U	800	90x57x58	✓		2	☆	○	○	○	★	64
6	JVC HV-32P37	570	94x55x55		✓	3	○	☆	●	☆	★	63
7	Panasonic TX-32PM12	600	91x56x55		✓	2	○	○	☆	☆	☆	62
8	Thomson 32WH403S	560	89x55x56		✓	2	☆	☆	○	○	☆	61
9	JVC HV-32D40BK	699	86x59x56	✓	✓	3	○	★	○	○	●	56
10	Daewoo DSC3220EGB	349	83x60x55			2	○	○	●	○	○	51
11	Sanyo CE32DFN3-B	500	88x57x57	✓		2	○	○	●	●	●	45

28 INCH

12 Sony KD-28DX200	900	80x53x53	✓	✓	3	☆	☆	★	○	☆	★	69
13 Sony KV28CS70	418	85x51x56		✓	3	☆	○	○	☆	☆	☆	67
14 JVC AV-28EX5BK	400	77x53x50	✓	✓	2	☆	☆	○	○	☆	☆	64
15 Philips 28PW6518	260	81x52x52			2	☆	☆	●	☆	●	●	63
16 Philips 28PW8719	346	81x52x52		✓	2	○	☆	●	○	☆	★	62
17 JVC AV-28T4	280	86x51x50			3	☆	☆	○	☆	●	●	59
18 Toshiba 28ZH46P	370	68x50x50		✓	2	○	☆	○	☆	●	●	58
19 JVC AV-28T5BK	400	77x53x41			3	○	☆	●	☆	○	○	56
20 Toshiba 28Z44B	270	68x50x49			2	☆	☆	☆	○	●	●	54
21 Panasonic TX-28DTX11	550	77x51x53	✓	✓	2	☆	○	☆	○	●	●	53
22 Sanyo CE28WN7-B	269	79x52x52			2	☆	○	○	○	○	○	51
23 Thomson 28WH101	240	80x49x52			2	○	☆	●	○	●	●	51
24 Hitachi C28WF560N	300	80x51x52			2	○	☆	●	○	○	○	48

Flat-panel TVs

NEED TO KNOW

Flat-panel TVs take up less space than ordinary widescreen TVs. There are three basic types – LCD, plasma and DLP.

LCD

The most popular of the new TV technologies, LCD TVs, work by passing an electric current through individual liquid crystals sandwiched between two glass plates. Expect to pay at least £1,000 for screens sized between 26 and 32 inches. Screens above 32 inches are uncommon.

PLASMA

The most popular plasma screens are 42 inches and cost around £2,000. A plasma display features an array of tiny gas cells, like mini fluorescent tubes, sandwiched between two sheets of glass.

DLP

Digital light processing (DLP) panels are similar in price to plasma screens but are usually even bigger again, at around 50 inches. DLP TVs work by bouncing coloured light off a microchip containing over a million tiny pivoting mirrors on to the screen.

HDTV

High definition (HD) TV pictures are exceptional. Sky launches HDTV subscription services in 2006. Many flat-panel TVs can screen HD broadcasts – look for the 'HD Ready' logo to see if your model is compatible. See our article on p20 for more details.



1 Sony
LCD

WALL MOUNTING

Most models, like this Sony, are supplied with table-top stands. You'll have to pay at least an extra £180 for the Sony-branded parts to mount it on the wall. All but the Hitachis (7 and 15) and Themescene (19) can be wall mounted but only the Pioneer (13) and JVC (16) come with the brackets. You can buy universal brackets for most brands, but it's worth checking availability and price before you buy the TV if you want to mount it on your wall. Make sure you attach your TV only to a solid brick or stud wall and don't place your precious new telly above a heat source because it may damage it.



BEST BUYS

As with conventional television sets, in order to be a Best Buy, a flat-panel TV must score at least a ☆ for picture quality and have no significant failings elsewhere. Additionally, IDTV models must have a full seven-day electronic programme guide (EPG). Where we have the information, Best Buy TV brands must also come out as average or above in our annual reliability survey.

We're happy to say that we've got our first two large-screen flat panel Best Buys. Conventional Sony TVs have always been consistently high scorers in both our product tests and brand reliability surveys – and they're carrying that record forward into the new technology arena with aplomb. Both our LCD and plasma Best Buys hail from Sony.

LCD

Our expert viewing panel says that the only LCD model worth considering is the **Sony (1)**, at £1,499 from Powerhouse. The colour balance, depth and sharpness of the picture make for an excellent viewing experience. Unfortunately, it's let down by average sound. Although not a crucial issue for many people, it isn't HD ready either, so you won't be able to make the most of broadcasts in this format. See our report on p20 for more details of HD ready. Our survey data shows that Sony TVs are very reliable.

The Loewe (2) is the only serious rival to the Sony and the only other LCD model with picture quality worth shouting about. The sound can hardly be faulted, it's HD ready and a newer IDTV version is now available. However, reliability data for Loewe TVs in general indicates that they break down too often to make this model a Best Buy.

Worth considering for the sheer array of features alone is the Humax LGB-32TPVR (see 'All change, June 2005, p30). It isn't up to Best Buy standard – the picture quality is average and text isn't anything to write home about – but, on top of the HD-ready TV, you get an integrated personal video recorder and twin digital tuners, so you can record one digital programme while watching another.

PLASMA

The **Sony (12)** scores well across the board, but picture quality raises it clearly above rivals. It offers vivid colours and good detail, especially on DVD movies. The sound is clear, too. Home-cinema fans should be in raptures, especially as this model is cheaper than most other big branded rivals. It's £1,795 at John Lewis.

On the downside, the Sony is not HD ready – the screen resolution is too low and it doesn't have the necessary sockets. So if you really want to 'future proof' your TV purchase, we suggest you look elsewhere.

The Pioneer (13) offers excellent sound but is let down by average picture quality so isn't a Best Buy. The JVC (14) and Hitachi (15) both feature good sound and stills photo quality but also just miss out on Best Buy status. They only just scrape a ☆ for picture and at £1,899 and £1,949 respectively we'd expect picture quality more in line with the Sony's. However, if you're thinking about HDTV all three are capable of screening higher resolution HD pictures in all their glory. The JVC (14) is also an IDTV but we can recommend it only in areas with a strong Freeview signal because we found it wasn't good at picking up weaker signals.

DLP

We've still to award our first DLP Best Buy because the models we tested fall woefully short of the mark. Picture quality deteriorates unacceptably when viewed at more acute angles and Teletext looks 'washed out'.



SCREEN RESOLUTION

Screen (or native) resolution is the number of pixels displayed on screen (width x height). For standard TV broadcasts higher screen resolutions don't automatically equate to better pictures. For instance, the Sony plasma Best Buy has a lower resolution (852 x 480) than its nearest rivals but a much better picture. However, higher resolutions capable of displaying 720 lines (look for at least 1,024 x 768) are needed to screen HDTV broadcasts.

When buying, ask to see a football match or a darkly-lit drama as this will show picture quality better than if you rely on the resolution figures. Look for juddery images, blurring and blocky, dark colours. Check the picture from an angle. Shops often display simple colourful images – cartoons, say – to disguise these failings.





12 Sony
PLASMA

USING THE TABLE

Where available, we tested the newest models from the leading manufacturers. LG and Panasonic launched their new ranges too late for our tests.

Specification

Price For Best Buys we give the cheapest widely-available high-street price as we went to press. Prices for other models are a guide. Prices in *italics* are online prices. **Size** Excluding stand. **Scarts** The number of Scart sockets. These let you connect VCRs, DVD players and set-top boxes to your TV. **HD ready** The TV has sufficient screen resolution (1,024 x 768 or higher) and sockets (HDMI or DVI input) to display high-definition broadcasts. See 'Need to know', p53. **Pic in pic** Picture-in-picture means the TV can display a small image of

one channel in the corner of the screen while you watch another.

Performance

Picture Technical tests and expert panel's rating. **Sound** Technical tests and expert panel's rating.

Stills Quality of still images, such as photos, displayed on screen.

Convenience

Ease of use Ratings for setting up, everyday use and complex tasks. Also includes ease of using digital TV features for IDTVs. **Text** Speed and legibility of Teletext and interactive features.

KEY



SCORE

Ignores price and is based on:	
Picture quality	35%
Sound quality	20%
Ease of use	20%
Text	10%
Features	10%
Reception	2.5%
Power use	2.5%

Flat-panel TVs

26- TO 32-INCH LCDs

	Specification						Performance			Convenience		Score
	Price (£)	Size w x h x d (cm)	Screen (inches)	Scarts	HD ready	Pic in pic	Picture	Sound	Stills	Ease of use	Text	(%)
1 Sony KLV L32M1	1,499	84x61x11	32	3			☆	○	☆	○	☆	64
2 Loewe Xelos A26	1,299	68x56x35	26	2	✓	✓	☆	★	☆	●	★	62
3 Sony KLV27HR3	1,000	70x58x25	27	2		✓	○	○	●	☆	●	56
4 Toshiba 32WL56P	838	79x57x12	32	2	✓		○	○	○	☆	☆	54
5 Samsung LW 26A33WXA	995	74x53x28	26	2		✓	○	☆	○	○	☆	51
6 Dell W2600	1081	83x51x21	26	2		✓	○	☆	●	●	★	50
7 Hitachi 32LD7200 ^a	1,495	112x55x13	32	3	✓		○	○	●	○	☆	50
8 Sharp LC32GA5E	995	80x58x11	32	2			○	○	●	○	☆	50
9 Samsung LE32R51BX	1,299	82x59x13	32	2	✓	✓	○	☆	●	○	☆	50
10 Sharp LC-26GA5E	795	66x56x29	26	2			●	●	●	●	○	40
11 Philips 26PF9946	600	79x50x26	26	2		✓	●	○	☆	○	●	37

42-INCH PLASMA

12 Sony KE-P42M1	1,795	108x75x11	42	3			☆	☆	☆	○	☆	66
13 Pioneer PDP 435 FDE	2,800	112x65x10	42	3	✓		○	★	★	☆	★	64
14 JVC PD-42DX6BJ ^b	1,899	107x72x11	42	3	✓		☆	★	☆	○	○	62
15 Hitachi 42PD7200 ^a	1,949	130x68x12	42	3	✓		☆	☆	☆	○	☆	61
16 JVC PD-42B50B	1,800	105x73x11	42	3		✓	○	☆	●	○	☆	50
17 Samsung PS-42D5S	1,495	108x73x10	42	2		✓	○	●	☆	○	★	47

50-INCH DLP

18 Thomson 50DSZ645	2,995	134x103x17	50	3	✓	✓	○	★	○	●	☆	50
19 Themescene TSRD50APXE ^a	1,599	117x91x38	50	3	✓	✓	●	○	●	○	★	40

^a Not suitable for wall mounting ^b IDTV