How we test



Putting the smaller TVs on trial

Expert witnesses

Our technical tests include measuring how much light is reflected off the screen plus how good the tuner is at picking up a weak signal. But our viewing panel is at the heart of our tests.

Faced by a row of TVs, our panel adjusts each set to get the best possible picture. The panel views both standard and high-definition signals, in a room whose light replicates that of a normal lounge. A test card and video clips are used to help assess different aspects of picture quality. TVs that score well offer a good compromise between different viewing demands.

Stars of the small screen

Big TVs may be all the rage, but if you want something a little less cinematic, we've got a few great models to choose from

The current trend in TVs is 'big and then bigger still', with 40-inch screens fast becoming the norm. That's fine if you have the space to accommodate a huge TV and fancy turning your living room into your own personal Odeon cinema.

However, for many of us, a second set in the bedroom or kitchen should be a little more discreet. Similarly, if you don't want a TV to dominate your living room, a smaller screen is more appealing.

Size isn't everything

Smaller TVs have other attractions, too. Typically, the smaller the screen, the less power it uses, reducing your bills and carbon footprint. On average, a 26-inch LCD TV screen uses less than 90 watts when switched on and costs £13 a year to run. A 40-inch LCD uses almost 100 watts more power and costs twice as much to run.

In addition, if you want to mount your TV on the wall, brackets usually have to be bought separately. A wall kit for a 42-inch flat-panel plasma will set you back around £150 or more. Brackets for LCD TVs of 26 inches and under are a fraction of that price.

If you're buying for your children's room, make sure they treat the set with care. LCD TVs are much lighter than old conventional CRT TVs and it's much easier to break the screen. Although the sets we tested are all stable, flat-panel LCD TVs can be easily pulled or tipped over. Wall mounting is a much more secure option. If you don't want a TV to dominate your living room, a smaller screen is more appealing

What you should look for

AUDIO OUTPUTS

These red and white phono sockets (below) let you connect your TV to a hi-fi – useful if the TV's speakers aren't up to the job. Digital audio sockets



allow you to connect to a homecinema system. There are two types: coaxial (wire) and optical (fibre optic)



FREEVIEW TUNER

Integrated digital TVs (IDTVs) have Freeview tuners built in. You can get free digital channels plus an on-screen electronic programming guide (EPG)

COMPUTER LINKS



(right). Some digital HDMI sockets support computer connections, too

SCART LINK

This allows you to control compatible recording equipment via your EPG – much like a personal video recorder

OUR RESEARCH

At the time of selection, we choose the TVs we test by talking to manufacturers about their bestselling models and future plans. consulting industry experts and market intelligence reports, and checking models in the main high-street shops and websites. The TVs in this report include, where possible, the most recently launched top-sellers from brands with the largest market share. We also may include models with innovative features from less well-known brands. Visit www.which.co.uk/tvs for full reviews of over 90 full-sized models. This information is updated every month with new models, prices and availability. For help logging in, visit www.which.co.uk/loginhelp

ON TEST SMALL SCREEN TVS



1 26 INCH 79% Panasonic Viera TX-26LXD70 £750

It's difficult to fault this super 26-inch HD-ready IDTV from Panasonic.

Our experts were hugely impressed by the vibrant colours, detail and excellent high definition. The sound is generally pleasing and, although not crystal clear, it has a nice bass feel.

The Panasonic TVs are the only models in this test with a light sensor. This dims the brightness of the picture to suit the ambient light of the room and can shave a few watts off the power consumption. It's cheapest from John Lewis.

WE LIKED The on-screen menus and EPG on both Panasonics are well laid out and simple to use.

Available John Lewis and Argos Primary sockets Scart RGB x 2, HDMI x 2, VGA Scart link Yes Light sensor Yes Weight 14.2kg

IDEAL PICTURE SETTINGS

Brightness 38/63 Contrast 43/63 Colour 30/63 Profile Normal Sharpness 3/6 Other Colour balance - Normal, Colour management – On, P-NR – Off



2 26 INCH 78% Panasonic Viera TX-26LXD7 £550

This 26-inch model is remarkably similar to the other Panasonic Best Buy (1). It's an HD-ready LCD TV with built-in Freeview tuner. And just like the more expensive version, this model boasts truly stunning standard and highdefinition pictures and good sound guality. As for differences, the LXD70 (1) has more sockets (PC input, HDMI) and fancy features (digital

processing software). This Panasonic is easy



to use and, compared with other 26-inch sets, fairly energy efficient too. It's widely available online.

WORTH KNOWING If you can do without the extra sockets and fancy features, save yourself £200 and opt for this over its sister set (left).

Available Online Primary sockets Scart RGB x 2, HDMI Scart link Yes Light sensor Yes Weight 15.2kg

IDEAL PICTURE SETTINGS

Brightness 34/63 Contrast 39/63 Colour 30/63 Profile Normal Sharpness 3/6 Other Colour balance -Normal, Colour management – On, P-NR – Off, 3D Comb - Off

It's difficult to fault the super 26-inch **HD-ready Panasonic TX-26 LXD70**



8 15 TO 23 INCH 63% Toshiba **23W330D** £480

This 23-inch HD-ready LCD IDTV stands out among the smaller models, thanks to a detailed picture. It looks pretty good whether you're watching standard or high-definition

pictures, although it can be tricky to make out detail in darker sequences.

The EPG is slow to load with channel information and the sound is somewhat lacklustre but still better than on the other smaller-screen TVs on test. It can be connected to either a hi-fi or homecinema system to boost the sound quality. The cheapest store is Comet. WORTH KNOWING The Freeview

tuner passed our sensitivity tests but the picture quality may suffer in areas with a weak digital signal, compared with the other IDTVs in the table.

Available Comet and Currys Primary sockets Scart RGB x 2, HDMI, VGA Scart link Yes Light sensor No Weight 9.9kg

IDEAL PICTURE SETTINGS

Brightness 63/63 Contrast 46/63 Colour 34/63 Profile Natural Sharpness 10/15 Other Colour temp - Normal, Noise reduction - Low, Film Mode - Off, 3D Comb - Off

THREE HD-READY PANASONIC TVS TO BE WON

Win a Best Buy TV

The Panasonic Viera TX-26LXD70 impressed our experts with its stunning colour and sound. Here's your chance to win one

TO ENTER, SIMPLY ANSWER THE FOLLOWING QUESTION

According to our report, on average how much does a typical 26-inch LCD TV cost to run each year?

(a) £125 (b) £56 (c) £13 To enter our Best Buy competition online, go to www.which.co.uk stbuycompetition or send your entry on a postcard to 'Best Buy October 07', Which?, PO Box 44 Hertford X, SG14 1SH. Include your name, address and postcode daytime phone number and Which? membership number (found on your Which? membership card as your user name). Entries received by 26 October 2007 will be entered. Our competition is open only to current Which? members Only one entry per household. Usual rules apply. See www.which. co.uk/bestbuy petition or Which?, June 2007, p49, for a full set of rules



Be prepared for the digital age

What are your options for switching from analogue to digital?

The switchover from analogue to digital TV will happen on a regional basis between 2008 and 2012, after which the analogue signal will disappear completely.

To keep receiving free TV channels, each set in your house will have to be either an integrated digital model (IDTV, see table) or be linked to a set-top box. Some people may also need an aerial upgrade to get all the channels (see p72) but, usually, if you get good analogue reception, digital channels should be fine, too.

There are other ways to get digital TV: Sky offers services via satellite; Virgin via cable; and Tiscali and BT through broadband. Only Freeview and Freesat from Sky currently offer non-subscription digital TV services.

Which should you choose?



Best for PC use

SAMSUNG LE2GR88BDX/XEU £550 The Samsung (5) can be connected to a computer via either analogue VGA or digital HDMI. Either way, results are impressive, with very clear widescreen images and text.

Best green buy

PANASONIC VIERA TX-26LXD7 £550 This Best Buy Panasonic (2) uses less than 80 watts when switched on – the lowest of all the 26-inch models. The LXD70 (1) uses slightly more when on but slightly less when in standby. Both have a light sensor. Of the 15- to 23-inch TVs, if you don't want to compromise too much on overall quality, the Toshiba models are the best option.





Best on a budget

LG 26LC55 £380 The LG (3) may not come close to the Panasonic models for picture quality, but for the price it does have a few things going for it. It's on a par with the other Best Buys for sound, features an integrated Freeview tuner, shows decent high-definition pictures and looks good when used as a PC display. The PC images and text are not viewable in true widescreen but still look nice

and sharp. It's widely available online, or exclusively at Dixons under a different code – LG 26LC46.

Contacts

BT 0800 917 7611 www.btvision.bt.com Daewoo 0870 100 2525 www.daewooelectronics.co.uk

Freeview 0870 111 1270 www.freeview.co.uk

Goodmans 0870 873 0080

www.goodmans.co.uk Humax 0870 247 8800

0870 247 8800 www.humaxdigital.co.uk

0870 242 0303 www.samsung.com/uk/ Sanyo 01923 246363 www.sanyo.co.uk

www.toshiba.co.uk Virgin Media 0845 840 7777 www.virginmedia.com

DON'T BUY

This may be Good(mans) by name but definitely not by nature

The Goodmans GTVL19W17HD (15) is like a PC monitor dressed up as a TV. Sadly, the disguise is so inadequate that the TV would probably score better if it wore false glasses and a comedy moustache. We found it was missing a host of basic features, the picture was so bad that even Teletext is difficult to read, and our listening panel likened the sound to a weedy MW radio.



Scores

Interesting TV tidbits Audio aid

The two Panasonic Best Buys (1 and 2) support audio description on Freeview. This is an additional narration for visually impaired people describing significant visual information, such as body language and scenery.

PC via HDMI

The HDMI socket on the 26inch LG (3), Philips (4) and Samsung (5) are configured for connection to your computer. The Goodmans (15) also boasts the feature, but it's so bad as to be virtually unusable.

Two-day EPG

All the EPGs show programme schedules for at least seven days ahead, except for the Humax (12), which manages only two.

Non-widescreen

Most TVs are widescreen but the Toshiba 15VL64 (11), Sharp LC-2055E-BK (13) and LG 17LS5R (14) have a box-like 4:3 screen ratio. Digital TV is broadcast in widescreen (16:9). MODEL

26 INCH							
1 PANASONIC Viera TX-26LXD70							
2 PANASONIC Viera TX-26LXD7							
3 LG 26LC55							
4 PHILIPS 26PFL5522D/05							
5 SAMSUNG LE26R88BDX/XEU							
6 JVC LT-26DA8BJ							
7 SANYO CE26LD81-B							
15 TO 23 INCH							
8 TOSHIBA 23W330D							
9 TOSHIBA 20W330D							
10 DAEWOO DLT-20W2							
11 TOSHIBA 15VL64							
12 HUMAX LU23-TD2							
13 SHARP LC-20S5E-BK							
14 LG 17LS5R							
15 GOODMANS GTVL19W17HD							
a Connection via HDMI only b Claims to be							

USING THE TABLE The more stars the better.

Specification

Price For Best Buys we give the cheapest widely available highstreet price as we went to press. Prices for other models are a guide to what you can expect to pay. Prices for models that are available

Checklist

Our handy step-by-step auide to aettina the picture that best suits you

Basics Switch off any pictureenhancement features such as noise reduction (designed to reduce picture graininess) but note the original settings, to get them back if you want.

Black and white Turn the colour control right down to get a black-and-white picture. Play a DVD with lots of dark scenes and adjust the brightness so that you can just pick out the detail in the darker areas.

Bright eyes Find a bright scene and adjust the contrast until the picture is bright enough but not washed out.

Get the balance right

Go back to the dark scene and, if necessary, readjust till you arrive at a balance you're happy with. It can be difficult to get good levels of blackness without the bright areas looking washed out (or vice versa), so a compromise may be necessary. **Natural looks** Find a scene with close-ups of people's faces and adjust the colour so that

skin tones look natural. Some TVs have a colour tone option if so, neutral is typically the best setting.

Go online Check our Best Buy reviews for the ideal settings as used by our experts (see 'Ideal picture settings' under each Best Buy, p69). Visit www.which.co.uk/tvs to find ideal picture settings for every TV we test.

SPECIFICATION			FEATURES							WHICH? TEST PERFORMANCE					SCORE %	
101 101 10		SCREEN (in)	SIZE (cm) (hxwxd)	IDTV	HD-READY	SCARTS	НДМІ	AUDIO OUT	DIGITAL AUDIO OUT	РС	SD PICTURE	HD PICTURE	SOUND	EASE OF USE	FEATURES	
	750	26	47x67x12	\checkmark	\checkmark	2	2	\checkmark		✓	****	****	***	****	****	79
	550	26	47x66x11	\checkmark	✓	2	1	✓			****	*****	***	****	****	78
	380	26	48x68x8	\checkmark	✓	2	2		0	✓	***	****	***	***	**	61
	500	26	48x69x11	\checkmark	✓	2	2			✓a	***	***	***	***	**	58
	550	26	46x67x9	\checkmark	1	2	2	1	0	✓	***	****	**	***	**	56
	450	26	46x69x11	\checkmark	\checkmark	2	2		0		***	****	**	**	***	52
	430	26	50x71x11	\checkmark	\checkmark	2	2	\checkmark		✓	***	***	**	**	***	50
	480	23	42x61x9	\checkmark	\checkmark	2	1	\checkmark	С	\checkmark	***	****	***	***	***	63
	450	20	38x54x9	\checkmark	✓	2	1	\checkmark	С	✓	***	****	**	***	***	59
	320	20	38x51x9	\checkmark	\checkmark	1	1		С	✓	***	****	**	**	**	53
	200	15	35x38x7			2		✓		✓	**	n/a	**	****	**	52
	400	23	43x61x9	\checkmark	✓	1	1			✓	**	****	**	***	**	48
	280	20	40x49x8			2		\checkmark		✓	**	n/a	*	***	**	44
	235	17	35x41x6			1				✓	**	n/a	*	***	**	43
	250	19	37x48x6		see ^b	1	1			✓	**	***	*	**	*	36

HD-ready on the Goodmans website but the 14:9 aspect ratio is not true (16:9) widescreen

only online are in italics. Screen Diagonal measurement in inches of the TV screen. Size The dimensions of the TV without stand.

Features

IDTV Integrated digital TV with built-in Freeview tuner. HD-ready The TV has minimum

screen resolution and digital inputs to watch broadcast HDTV. Scarts The number of sockets available to connect extra audiovisual equipment to your TV. HDMI The number of highdefinition media inputs available to connect HD equipment to your TV.

Audio out The TV has a dedicated socket for connecting your TV to a hi-fi. Digital audio out You can connect vour TV to a surround-sound system. C = coaxial, O = optical. PC Can connect to a computer via VGA or HDMI.

Test performance

SD picture Standard

definition via ordinary DVD and broadcast TV. HD picture High-definition images broadcast via satellite. Sound Ratings are based on a combination of technical measurements and expert user assessments. Ease of use Ratings are based on expert assessment. Features Ratings are based on the presence

and versatility of features such as sockets.

Score

I

Ignores price and	
based on:	
Picture quality	40 %
Ease of use	20 %
Sound quality	20 %
Features	10 %
Power use	5 %
IDTV functions/	
Teletext	5 %