Unwrap a TV cracker

Choose from a dozen Best Buy TVs costing from £400 – plus we unearth an alarming audio problem

s Christmas approaches, many people take the chance to buy a better TV. In 2009 so far, we've tested 72 and found 19 Best Buys. This month we feature 12 Best Buys from £400, including models that feature big energy efficiency improvements, a rise in internet-connected TVs and a Samsung TV that has the best HD picture we've seen. But while new TVs are upping the ante in picture quality, the sound of some models hits a bad note.

Our tests show that as TVs have become slimmer, there is less space for decent speakers, and even the potential for distracting speaker noise. See p48 for more.

Meanwhile, we'll soon see TVs with integrated Freeview HD tuners and 3D-compatible TVs. Freeview HD launches in the Granada area in December, and Sky plans a 3DTV service next year.

Get the best deal when buying a TV

LOWEST PRICES

If you buy on the high street, Richer Sounds' prices are often the lowest. Quote the price given on its website (www.richersounds.com) and Richer Sounds will match it in store. Prices at online retailers tend to be even lower. Our Best Buys were on average 11% cheaper online than the high-street price in our table.

DISCOUNTS

You can buy bargain end-ofline, returned or reconditioned TVs online from retailers such as Argos, Comet and Tesco Direct. See www.which.co.uk/ bargaintvs for more on buying returned and refurbished TVs.

WARRANTIES

TVs are generally reliable, so shop warranties that cost hundreds are a waste of your money.

All TVs come with a one-year manufacturer warranty. Sony offers three years free and John Lewis, five years free.

EXTRAS

You probably won't get dramatic improvements in quality by splashing out on expensive cables. Avoid the cheapest – pay about £10 for a decent Scart (to connect a DVD player) and £20 for a high-definition HDMI cable (to connect to an HD box).

Most TVs can be wall mounted – fittings are sold separately and cost around £40 to £200. Get this done professionally, otherwise your warranty may be invalidated.

GETTY IMAGES

Best Buys under £700

Panasonic Viera TX-L37G10 £690

Which? test score 73% Brand reliability rating 98% PROS This easy-to-use TV has a natural, detailed picture that won't fade from an angle. It includes a Freesat tuner and an ethernet port that can access proposed internet services using Freesat.



CONS The picture lacks a bit of sparkle and sound is dull. Full review www.which. co.uk/PanasonicTXL37G10

Energy use (Watts) On 113 Eco mode 100.2 Light sensor 89.6 Standby 0.3 Off 0.2 We found it cheapest at Richer Sounds Also available at Argos, Comet, Currys, John Lewis Also tested 72%, TXL32G10, 32-inch version. Virtually identical performance.

Panasonic Viera TX-L32X15 £470

Which? test score 71% Brand reliability rating 94% **PROS** The picture is an excellent balance of detail, depth, sharpness and strong colour. In high definition, it's among the best we've seen on a 32-inch TV. Easy to use.



CONS OK sound, panel vibrations can distort bass. Full review www.which. co.uk/PanasonicTXL32X15

Energy use (Watts): On 86.7 Eco mode 76.3 Light sensor 68.9 Standby 0.3 Off 0.2 We found it cheapest at Richer Sounds Also available at Argos, Comet, John Lewis Also tested n/a

Panasonic Viera TX-L32S10 £480

Which? test score 71% Brand reliability rating 94% **PROS** Fine detail stands out, motion sequences are smooth and the picture looks solid from an angle. It's easy to use. **CONS** The sound is OK, but the bass is woolly and lacks clarity.

Energy (Watts) On 87.8 Eco mode 75.5 Light sensor 68.3 Standby 0.3 Off 0.2 We found it cheapest at Richer Sounds Also available at Argos, Comet, Currys, John Lewis, Tesco Also tested 62%, TX-P42S10, 42-inch plasma version let down by colour inaccuracies

Panasonic Viera TX-L26X10 £400

Which? test score 69%



Changes in backlight brightness are noticeable. Full review www.which. co.uk/PanasonicTXL32S10

Brand reliability rating 94% **PROS** The natural picture doesn't fade at an angle. Motion is great, especially in HD, and sound is reasonable. **CONS** Lacks some features found in recent TVs such as



an internet connection. Full review www.which. co.uk/PanasonicTXL26X10

Energy use (Watts) On 74.5 Eco mode 63.5 Light sensor 58.6 Standby 0.3 Off 0.2 We found it cheapest at Richer Sounds Also available at Argos, Comet, Currys, John Lewis Also tested 75%, TXL32X10, 32-inch version. Deep, rich colours, great picture

Sony Bravia KDL-32V5500 £490

Which? test score 69% Brand reliability rating 98%

PROS The Bravia brims with energy-saving extras and can stream media files from a PC. The finely detailed picture is natural and Freeview looks good as well.



CONS Picture fades when watched from an angle. Full review www.which. co.uk/SonyKDL32V5500

Energy use (Watts) On 78.9 Eco mode 48.3 Light sensor 65.8 Standby 0.2 quick-start off (15.2 on) Off 0.1 We found it cheapest at Richer Sounds Also available at Argos, Comet, Currys, John Lewis, Tesco Also tested n/a

Samsung **LE37B550** £500

Which? test score 66% Brand reliability rating 96% PROS A blend of depth, detail and sharpness gives a super picture. Freeview looks soft and natural. The TV uses exceptionally little power. **CONS** Picture can be too vibrant, it fades from an angle.

Energy use (Watts) On 66.5 Eco mode 57.6 Light sensor n/a Standby 0.3 Off n/a We found it cheapest at Argos Also available at Asda, John Lewis Also tested 64% LE32B554, 32-inch version. 65% LE40B550, 40-inch version. Pictures and power use excel



The sound suffers from woolly

bass and slight resonance.

Full review www.which.co.

uk/SamsungLE37B550

Best Buys over £700

Sony Bravia KDL-40E5510 £1.299

Which? test score 73% Brand reliability rating 98% **PROS** Cutting-edge

features such as the ability to stream media files from a PC combine with a striking wood-edged design and a richly-coloured picture that has depth and sharpness.

Energy use (Watts) On 110.7 Eco mode 63.3 Light sensor 87.9 Standby 0.2 Off 0.2 We found it cheapest at John Lewis Also available as E5500 with black frame, or E5520 with aluminium Also tested n/a

40-INCH

CONS Picture fades from

the side, hefty price tag.

Full review www.which.

co.uk/SonyKDL40E5510

Sony Bravia KDL-46X4500

£2.660

Which? test score 70% Brand reliability rating 98% **PROS** Great picture with vibrant colours, detail and depth. HD is excellent. Dynamic, balanced sound. **CONS** Picture fades from an angle. As with other Sonys,



avoid the energy-wasting quick-start mode.

Full review www.which.co. uk/SonyKDL46X4500

Energy use (Watts) On 176.8 Eco mode n/a Light sensor 110 Standby 0.4 quick-start off (19.6 on) Off 0.4 We found it cheapest at Currys Also available at John Lewis Also tested n/a

Samsung **UE55B7020** £2,799

Which? test score 70% Brand reliability rating 96% **PROS** The HD picture is great, standard definition has rich colour and detail. This TV is very slim, energy efficiency is ground-breaking and you can even use it to watch YouTube.



55-INC

Sony Bravia KDL-40WE5 £970

Which? test score 69% Brand reliability rating 98% **PROS** Energy-saving extras such as a sensor that turns off the picture if you leave the room. Picture has natural colour and depth. **CONS** Picture fades from an



CONS Harsh sound and the

lack of sockets is a letdown.

Full review www.which.

co.uk/Samsung

UE55B7020

angle. We've tested TVs that are more energy efficient. Full review www.which. co.uk/SonyKDL40WE5

Energy use (Watts) On 93 Eco mode 63.2 Light sensor 76 Standby 0.2 quick-start off (15.2 on) Off 0 We found it cheapest at Currys Also available at Richer Sounds, Comet Also tested n/a

Sony Bravia KDL-40W5500 £760

Which? test score 68% Brand reliability rating 98%

PROS It bristles with extras such as on-screen instructions and media streaming. The colour, depth and detail are impressive.

CONS The picture fades a



40-INCH

lot from the side.

The sound is dull.

Full review www.which.

co.uk/SonyKDL40W5500

Samsung LE32B650 £800

Which? test score 65% Brand reliability rating 96%

PROS Detailed, glossy picture with natural-looking Freeview. The TV uses very little power and its sound is better than you will find on most current TVs.

CONS The picture is

Energy use (Watts) On 70.5 Eco mode 53.2 Light sensor n/a Standby 0.3 Off n/a We found it cheapest at Argos Also available at Tesco Also tested 68%, LE40B650, 40-inch version. Rich, detailed picture plus loads of extras



co.uk/SamsungLE32B650

sometimes too vivid and

Full review www.which.

fades when seen off centre.



LOOKS GREAT, BUT WHAT'S WRONG WITH THE SOUND?

We investigate why so many modern TVs sound thin, scratchy and harsh

Many slim TVs look good and give great picture quality, but our experts have found that some sound crude, scratchy and processed. The problem is they can't house the same size speakers as big-box TVs.

The result is slim speakers usually deliver a thin, unrefined sound. Manufacturers tell us they're aware of the problem and are working to address it. Audio outputs let you connect to external systems to bypass built-in speakers. One answer in future may be TVs with detachable sound bars (a speaker that runs at the base of the TV).

Panasonic acts after Which? finds problem

We criticised Panasonic's top-of-the-range TX-L37V10 TV when chronic distortion caused by a resonating back panel made us think there was a design flaw, rather than the usual slim speaker problem. We tested two samples and presented the evidence to Panasonic. It apologised and admitted a 'vibration effect' with a 'very small quantity' of V10s. If you have one with this problem, call the retailer or an authorised service centre (Panasonic has a list of these) and they'll get it fixed. Without the resonance, the V10 should score much like the Best Buy TXL37G10.



Hear the Panasonic sound problem for yourself in our video review at www.which.co.uk/TXL37V10.

You can watch video reviews of the Samsung UE40B8000 and Sharp LC40LE700 – both LED back-lit models – and Sony's 200Hz KDL-46Z5500.

This is in addition to the 200 plus in-depth TV reviews already online at which.co.uk/tvs.



USING THE TABLE

The more stars the better.

Specification

Price See p27. Type LED TVs are LCD sets with LED backlights. Screen Size in inches, measured diagonally. Freesat Includes built-in Freesat HD tuner. Freesat is a non-subscription digital satellite service from the BBC and ITV. HD ready 1080p A ✓ means the TV has a 1,080-line screen resolution and can process the 1080p/24 format used on Blu-ray. Models without a tick are HD ready and have a lower screen resolution, but still work with Blu-ray. **Scarts** Socket for connecting to standard-definition equipment (number with high-quality RGB signal in brackets). **HDMI** Socket for HD equipment. **USB/SD** Means you can view photos from digital camera memory cards or a USB stick on the TV. **Audio Output** Coaxial (C) or optical (O) are digital outputs that can be hooked up to surround-sound equipment. Phono (p) are traditional red and white plugs for connecting to a stereo. **Internet TV** Allows you to access a handful of 'widgets' over the internet, providing snippets of

You can feel the resonance from the back panel of the Panasonic TX-L37V10 which created chronic distortion

MODEL

26 TO 32-INCH

PANASONIC Viera TX-L32S10 PANASONIC Viera TX-L32X15 PANASONIC Viera TX-L26X10 SONY Bravia KDL-32V5500 SAMSUNG | F32B650 PHILIPS 32PFL9604 SAMSUNG UE32B6000 LG 32LH2000 SONY Bravia KDL-26S5500 TOSHIBA Regza 32AV635 **GRUNDIG** GU26BLK2 SHARP LC-32DH57 HITACHI L32VP03U **37-INCH AND ABOVE** PANASONIC Viera TX-I 37G10 SONY Bravia KDI -40E5510 SAMSUNG UE55B7020 SONY Bravia KDL-46X4500 **SONY** Bravia KDL-40WE5 SONY Bravia KDL-40W5500 **SAMSUNG** LE37B550 PHILIPS 42PFL7404 LG 47LH7000 LG 37LF7700 PANASONIC Viera TX-L37V10 LG 42PQ3000 TOSHIBA Regza 42XV635

news, weather and finance. The Philips 32PFL9604 features full internet access.

Test performance

SD picture Rated by expert viewing panel when watching standard-definition material (DVD and Freeview). Most TV is broadcast in standard definition. **HD picture** Rated by expert viewing panel when watching

ON TEST TELEVISIONS

| SPECIFICATION | | | | | | | | | | WHICH? TEST PERFORMANCE | | | | | | SCORE (%) |
|---------------|--------|-------------|---------|----------------|--------------|------|---------|--------------|-------------|-------------------------|------------|--------------|-------------|----------|-----------|-----------|
| PRICE (£) | TYPE | SCREEN (IN) | FREESAT | HD READY 1080P | SCARTS (RGB) | HDMI | USB/SD | AUDIO OUTPUT | INTERNET TV | SD PICTURE | HD PICTURE | SOUND | EASE OF USE | FEATURES | POWER USE | |
| | 1 | 1 | I | r | Ĩ | 1 | 1 | ! | | | ł | r | ł | | : | |
| 480 | LCD | 32 | | 1 | 2 (2) | 3 | SD | P,0 | | **** | ***** | ** | **** | **** | **** | 71 |
| 470 | LCD | 32 | | | 2 (2) | 3 | SD | Р | | ***** | **** | ** | **** | *** | **** | 71 |
| 400 | LCD | 26 | | | 2 (2) | 3 | SD | Р | | **** | **** | ** | **** | **** | **** | 69 |
| 490 | LCD | 32 | | 1 | 2 (2) | 4 | USB | P,0 | 1 | **** | **** | ** | *** | ***** | **** | 69 |
| 800 | LCD | 32 | | 1 | 2 (1) | 4 | USB | P,0 | 1 | **** | ***** | ** | *** | *** | **** | 65 |
| 849 | LCD | 32 | | 1 | 2 (2) | 5 | USB | P,C | 1 | *** | **** | *** | ** | **** | **** | 60 |
| 799 | LED | 32 | | 1 | 1(1) | 4 | USB | 0 | | **** | ***** | * | **** | *** | **** | 60 |
| 350 | LCD | 32 | | | 2 (1) | 2 | | 0 | | *** | **** | *** | *** | *** | **** | 59 |
| 500 | LCD | 26 | | | 2 (2) | 3 | USB | Р | | *** | **** | ** | *** | ** | **** | 54 |
| 425 | LCD | 32 | | | 2 (1) | 4 | USB | 0 | | *** | **** | $\star\star$ | ** | *** | ***** | 54 |
| 200 | LCD | 26 | | | 1(1) | 2 | | С | | **** | **** | * | *** | ** | **** | 51 |
| 429 | LCD | 32 | | | 2 (1) | 3 | | P,0 | | *** | **** | * | ** | *** | ***** | 49 |
| 400 | LCD | 32 | | 1 | 2 (1) | 4 | USB | P,C,O | | ** | *** | *** | ** | ** | **** | 47 |
| | | | | | | | | | | | | | | | | |
| 690 | LCD | 37 | 1 | 1 | 2 (2) | 4 | SD | P,O | | **** | **** | ** | **** | **** | **** | 73 |
| 1,299 | LCD | 40 | | 1 | 2 (2) | 4 | USB | P,0 | 1 | **** | **** | *** | *** | ***** | **** | 73 |
| 2,799 | LED | 55 | | 1 | 1(1) | 4 | USB x 2 | 0 | 1 | ***** | ***** | ** | **** | *** | **** | 70 |
| 2,660 | LED | 46 | | 1 | 2 (2) | 4 | USB | P,O | | **** | ***** | *** | *** | *** | **** | 70 |
| 970 | LCD | 40 | | 1 | 2 (2) | 4 | USB | P,0 | 1 | **** | ***** | ** | *** | **** | **** | 69 |
| 760 | LCD | 40 | | 1 | 2 (2) | 4 | USB | P,0 | 1 | **** | ***** | ** | *** | ***** | **** | 68 |
| 500 | LCD | 37 | | 1 | 2 (1) | 4 | USB | P,0 | | **** | ***** | ** | *** | *** | ***** | 66 |
| 899 | Plasma | 42 | | 1 | 2 (2) | 4 | USB | P,C | | **** | **** | * | ** | **** | **** | 60 |
| 929 | LCD | 47 | | 1 | 2 (1) | 4 | USB | 0 | | *** | **** | ** | *** | *** | ***** | 59 |
| 644 | LCD | 37 | 1 | 1 | 2 (1) | 3 | USB | 0 | | *** | **** | *** | *** | *** | **** | 57 |
| 960 | LCD | 37 | 1 | 1 | 2 (2) | 4 | SD | P,0 | 1 | **** | ***** | * | **** | ***** | *** | 55 |
| 580 | Plasma | 42 | | | 2 (1) | 3 | USB | 0 | | *** | *** | *** | ** | *** | *** | 53 |
| 750 | LCD | 42 | | 1 | 2 (1) | 4 | USB | P,0 | | *** | **** | * | ** | *** | ***** | 51 |

1080i (satellite) and 1080p (Blu-ray) HDTV pictures via the HDMI input. HD pictures are more realistic and detailed. **Sound** Based on expert assessment of 12 audio clips. **Ease of use** Ease of set-up, getting the best picture and using the remote, EPG and manual. **Features** Includes number and functionality of sockets. **Power use** Based on when being viewed and in standby, and the presence and effectiveness of power-saving features, such as a light sensor or radio screen blanking.

Score

| Ignores price, based on: | |
|--------------------------|-------------|
| Picture quality | 40 % |
| Ease of use | 20 % |
| Sound quality | 20 % |
| Features | 10 % |
| Power use | 10 % |

Contacts

Freesat 0845 313 0052 freesat.co.uk

Freeview 0870 111 1270 freeview.co.uk

Grundig 0871 230 1777 grundig.co.uk

Hitachi 01628 643 3000 hitachi.co.uk

LG 0870 607 5544 http://uk.lge.com Panasonic 0844 844 3852 panasonic.co.uk

Philips 0870 900 9070 philips. co.uk

Samsung 0870 242 0303 samsung.com/uk

Sharp 0800 262 958 sharp.co.uk

Sky 0870 240 5651 sky.com

Sony 0870 511 1999 sony.co.uk

Toshiba 0870 442 4424 toshiba. co.uk

Virgin 0845 840 7777 virginmedia.com