



## LCD TV

Perhaps the biggest news is that there are now more than a dozen tested 3D models in our HDTV Ratings. More than half are LCD TVs, including the first 3D TVs from LG Electronics, Sharp and Toshiba, which join new 3D sets from Samsung and Sony. All are 240Hz models, and all but one--a Samsung--use LED backlights. We saw some differences among them, but all exhibited some similar characteristics in the 3D mode, most notably the presence of ghosted images. See the comments on each model for the specifics.

We're also noticing more TVs that provide access to online content, from services such as Amazon Video On Demand, Netflix, Pandora and Picasa. Roughly one-third of all the sets in our TV Ratings have Internet capability, and some allow you to connect wirelessly to a home network, a convenience if you don't have a nearby Ethernet jack.

With the exception of a few smaller sets, most of the TVs in the Ratings have very good or excellent picture quality, so there are plenty of good choices available. But there are a few larger sets that didn't do as well as the others, so check the detailed results for the highest-scoring models if you want top picture quality.

All tested LCD sets 40 inches and up, and some of the sets with smaller screens, have 1080p resolution.

In our latest Ratings, we also include some very small LCD TVs with 19- to 23-inch screens. These sets didn't perform as well as most of the larger sets we reviewed, but they may be fine given that few will be used as a home's primary TV or viewed very critically. Some of these are 1080p sets, so they can double as computer monitors.

We're continue to see more LCDs with 120Hz or 240Hz technology, though most sets still have a 60Hz frame rate. The 240Hz and 120Hz frame rate is currently most common on larger, higher-priced sets, but it is trickling down to smaller and lower-priced TVs. This feature addresses a weakness of LCD technology: motion blur. It can minimize the problem when implemented well, but doesn't eliminate it. It is often paired with an anti-judder feature, which can smooth the jerkiness of film-based content, but some viewers complain that the effect imparts a "shot-with-video-camera" look to movies. A few new sets let viewers control motion blur reduction and image smoothing separately, a plus.

A growing number of sets in this Ratings use LED backlights instead of the more typical fluorescent lamps. Only a few sets have full-array LED backlights with local dimming, which means some areas of images can be dimmed while others remain illuminated. While this can improve black levels, objects against a very dark background may exhibit a "halo," and dimming portions of the image can introduce unwanted lack of shadow uniformity.

Instead, more LCD TVs use "edge LED backlights," which typically don't allow local dimming, although some models from Samsung and LG do have this feature. Edge LEDs are mounted around the perimeter of the screen, with diffusers to distribute light across the back of the panel. This allows for a very slim panel design. These TVs automatically dim the LED backlight to lower brightness on scenes with very dark content. This can improve the depth of black level but also dims the overall image, and it can be distracting if not done in perfect sync with changes in image brightness.

We haven't seen widespread improvement in viewing angle, which continues to be a limiting factor for LCDs. With most LCDs, image quality declines as you move off to the sides. This can be a concern if a set isn't always watched from dead center. A few models in our Ratings, notably from LG and Panasonic, have fairly wide viewing angles, but none are close to those of a plasma TV.

Below are high-scoring TVs that stand out as noted.

### 52-inch and larger sets:



- [Samsung LN60C630](#)
- **Type:** 52-inch and larger models
- **Price as tested:**
- \$2200

This 60-inch 1080p LCD TV from Samsung offers a very large screen size and excellent picture quality at a fairly low price, making it a CR Best Buy. It has a few extra features, such as 120Hz technology and a built-in media player that can play music, videos and pictures stored on a USB drive, but it doesn't include access to Samsung's suite of online services, despite its Ethernet jack. It's a DLNA-compliant model that can access photos, movies and music stored on a PC via a network connection, and it includes AllShare, a proprietary technology that lets you connect to compatible mobile phones, computers, camcorders, digital cameras and other devices and view that content (such as phone text messages) on the TV. You can also use some Samsung phones as a TV remote. [See our ratings for this LCD TV](#)

### Overall score out of 100 - 75



- [Samsung UN55C5000](#)
- **Type:** 52-inch and larger models
- **Price as tested:**
- \$1800

This 55-inch 1080p LCD TV from Samsung, which uses an edge LED backlight, delivers excellent picture and some extra features at a fairly low price for a major brand. It features Samsung Apps, which provide access to a fair amount of online content including streaming movie services from Amazon, Blockbuster, Netflix, and Vudu. In addition, it's a DLNA-compliant model that can access photos, movies and music stored on a PC via a network. [See our ratings for this LCD TV](#)

### Overall score out of 100 - 75



- [Vizio XVT553SV TruLED](#)
- **Type:** 52-inch and larger models
- **Price as tested:**
- \$1700

This 55-inch 1080p LCD TV from Vizio, one of the few new sets we've seen with a full-array LED backlight, delivers excellent performance, a wider-than-average viewing angle for an LCD, and a lot of features for the money, making it a CR Best Buy. Sound, however, was only fair, below that of most other sets this size. The set's backlight has very effective local dimming, giving it better-than-average black levels and contrast for an LCD set. Features include 240Hz technology, built-in dual-band Wi-Fi, and Vizio's VIA online service, with access to streaming movies from Amazon, Netflix, and Vudu. It comes with a unique Bluetooth remote that has a full slide-out QWERTY keyboard. [See our ratings for this LCD TV](#)

### Overall score out of 100 - 73



- [Sanyo DP52440](#)
- **Type:** 52-inch and larger models
- **Price as tested:**

- \$1000

### Overall score out of 100 - 71

This 52-inch 1080p LCD TV from Sanyo, the largest set we've tested from this brand, delivers excellent overall picture quality at a surprisingly low price, making it a CR Best Buy. It's a 120Hz model that doesn't have a lot of features. [See our ratings for this LCD TV](#)



Overall score out of 100 - **69**

This 52-inch 1080p LCD TV from Samsung delivers the goods at a low price for a major brand, making it a CR Best Buy selection. Although it's a fairly basic set, it offers excellent overall picture quality.

[See our ratings for this LCD TV](#)



- [Samsung LN52C530](#)
- **Type:** 52-inch and larger models
- **Price as tested:**
- \$1170

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#### 46- and 47-inch sets:

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This 46-inch 1080p LCD from Samsung is a top-notch set that delivers excellent HD picture quality and a few extra features at a relatively low price, making it a CR Best Buy. The set includes 120Hz technology, and it's a DLNA-compliant model that can access photos, movies and music stored on a PC via a network connection. It also includes AllShare, a proprietary technology that lets you connect to compatible mobile phones, computers, camcorders, digital cameras and other devices and view that content (such as phone text messages) on the TV. Although it has an Ethernet port for local networking, the TV can't currently access online services.

[See our ratings for this LCD TV](#)



- [Samsung LN46C630](#)
- **Type:** 46- to 47-inch models
- **Price as tested:**
- \$900

Overall score out of 100 - **74**

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This 47-inch 1080p LCD TV from LG delivers very good overall picture quality and sound, plus a fairly wide viewing angle, at a relatively low price, making it a CR Best Buy. It's a more basic set, without features such as 120Hz technology and access to online content, and it has just two HDMI inputs, fewer than most sets. It does have several color adjustments, including a Color Management System.

[See our ratings for this LCD TV](#)



- [LG 47LD450](#)
- **Type:** 46- to 47-inch models
- **Price as tested:**
- \$750

Overall score out of 100 - **72**

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This 46-inch 1080p LCD TV from JVC offers excellent HD picture quality at a fairly low price. Especially noteworthy is its black levels, reminding us that you don't need LEDs or auto-dimming to produce deep blacks and great contrast. The TV is a 120Hz model that includes JVC's TeleDock iPod dock for playing music, videos, and photos stored on an iPod or iPhone, a feature augmented by the TV's very good sound quality.

[See our ratings for this LCD TV](#)



- [JVC LT-46P510](#)
- **Type:** 46- to 47-inch models
- **Price as tested:**
- \$1020

Overall score out of 100 - **69**



- **Price as tested:**
- \$1000

**Overall score out of 100 – 69**

This 46-inch 1080p LCD from Sharp offers excellent overall picture quality at a relatively low price. It's a fairly basic 120Hz model that doesn't have a lot of extra features.

[See our ratings for this LC](#)



- [Sharp AQUOS LC-46D78UN](#)
- **Type:** 46- to 47-inch models