

## PC WORLD

### More HDTV for Your Money

LCD, DLP, or plasma? Big, bigger, or biggest? We lab-tested 15 screens to find the best values in next-generation TV.

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Photograph: Marc Simon

Now more than ever, both bargain hunters and luxury seekers can find an HDTV to satisfy their high-def needs and their budgets. Whether you want an LCD, plasma, or DLP HDTV set, you can choose from a wide range of prices, and even the high-end models aren't as expensive as you might think. And you'll find more high-def content--from network and cable broadcasts to HD DVD movies--than ever before.

Deals abound in every size and technology category. *PC World* tested a total of 15 TVs across three popular technologies

(LCD, plasma, and DLP) and three popular screen sizes (37 inches, 42 inches, and 50 to 52 inches). For a little over \$1000, you can buy an LCD or plasma TV with impressive picture quality. And today, thanks to DLP technology, a gigantic screen and even 1080p resolution may be within your reach.

To test each of the TVs, we played several high-definition clips, a couple of standard-definition clips, and scenes from two DVDs on each set. Our panel of judges scored each model based on its brightness, sharpness, and color clarity. Our verdict, after a thorough comparison of the sets: Lower-priced HDTVs frequently equal or better the performance of higher-priced sets. In addition to pinpointing which of the tested models are true screen stars, we have tips on how to shop for deals. Armed with this information, you'll be able to tell whether the next bargain that catches your eye is a great deal--or just a snare for the unwary.

#### Big: LCDs



Photograph: Robert Cardin,  
Chris Manners

In our tests many cheaper HDTVs, including bargain sets from little-known brands like Olevia and Vizio, more than held their own against higher-priced models from makers such as Samsung and Sharp. In the 37-inch LCD category--a size that we've never previously evaluated--the Best Buy award goes to Vizio's L37HDTV, which climbed to the top with particularly high scores for brightness, color, and DVD content. At a street price of just \$1000, this set may be the one for shoppers on a limited budget. Not far behind, however, are the \$1299 ViewSonic N3760w and the \$2000 Sharp Aquos LC-37D90U, the latter model the only LCD we tested that supports a 1080p resolution. Westinghouse's \$1299 LTV-37w2 and Olevia's \$1499 537H claim the fourth and fifth positions, respectively. Though not as well equipped as other sets, they provide enough of the basic features; and more important,

their TV images earned decent scores in our image-quality tests.

Many consumers are familiar with the workings of LCDs, in the form of LCD monitors. For LCD TVs, the technology is the same: A matrix of cells contains Liquid crystals that twist and untwist in response to the provided voltage, allowing light from the source to pass through and thereby creating color images.

A 37-inch LCD TV looks big in a small living room, and it's a good option if you want a wall-mountable model. If this is your ideal dimension for an HDTV, an LCD set is your only budget choice: Aside from Panasonic, no plasma TV manufacturer makes 37-inch models, and DLP televisions aren't made in this size at all.

**LCD HDTVs: Good Value in Moderately Priced Sets**

Vizio's I37HDTV delivers attractive image quality at a great price. ViewSonic's N3760w shows a pleasing picture, too.

Rank	37-INCH LCD HDTV	PCW Rating	Performance	Features and specifications	Bottom line
1 <b>Best Buy</b>	<b>Vizio L37HDTV</b> \$1000 <b>NEW</b>		<ul style="list-style-type: none"> <li>■ HDTV: Good</li> <li>■ SDTV: Good</li> <li>■ DVD: Good</li> <li>■ Overall design: Superior</li> </ul>	<ul style="list-style-type: none"> <li>■ 1366-by-768-pixel screen</li> <li>■ Tuners: one NTSC, one ATSC</li> <li>■ Inputs: one HDMI, two component</li> <li>■ No CableCard slot</li> </ul>	Easy-to-use high-definition television offers a pleasing design and satisfying image quality, without breaking the bank.
2	<b>ViewSonic N3760w</b> \$1299 <b>NEW</b>		<ul style="list-style-type: none"> <li>■ HDTV: Good</li> <li>■ SDTV: Good, DVD: Good</li> <li>■ Overall design: Very Good</li> </ul>	<ul style="list-style-type: none"> <li>■ 1366-by-768-pixel screen</li> <li>■ Tuners: one NTSC, one ATSC</li> <li>■ Inputs: one HDMI, two component</li> <li>■ No CableCard slot</li> </ul>	The first ViewSonic TV we've tested, this model impressed our jury with natural skin tones and an appealing picture.
3	<b>Sharp Aquos LC-37D90U</b> \$2000 <b>NEW</b>		<ul style="list-style-type: none"> <li>■ HDTV: Good</li> <li>■ SDTV: Good</li> <li>■ DVD: Good</li> <li>■ Overall design: Very Good</li> </ul>	<ul style="list-style-type: none"> <li>■ 1920-by-1080-pixel screen</li> <li>■ Tuners: one NTSC, one ATSC</li> <li>■ Inputs: two HDMI, one component</li> <li>■ No CableCard slot</li> </ul>	This HDTV's support for 1080p resolution is a rarity for a set of this size, but its performance didn't measure up to that of less pricey TVs.
4	<b>Westinghouse LTV-37w2</b> \$1299 <b>NEW</b>		<ul style="list-style-type: none"> <li>■ HDTV: Good</li> <li>■ SDTV: Good</li> <li>■ DVD: Good</li> <li>■ Overall</li> </ul>	<ul style="list-style-type: none"> <li>■ 1366-by-768-pixel screen</li> <li>■ Tuners: one NTSC, one ATSC</li> </ul>	Cleverly designed television with all connectors located on a "spine" makes connecting cables to the wall-mounted set easy.

5	<p><b>Olevia 537H</b> \$1499 <b>NEW</b></p>		<p>design: Very Good</p> <ul style="list-style-type: none"> <li>■ HDTV: Good</li> <li>■ SDTV: Very Good</li> <li>■ DVD: Good</li> <li>■ Overall design: Very Good</li> </ul>	<ul style="list-style-type: none"> <li>■ Inputs: one HDMI, two component</li> <li>■ No CableCard slot</li> <li>■ 1366-by-768-pixel screen</li> <li>■ Tuners: one NTSC, one ATSC</li> <li>■ Inputs: one HDMI, three component</li> <li>■ No CableCard slot</li> </ul>	<p>This model's color and image quality are a good deal for the money, but you'll have to boot up your PC to read the CD-only manual.</p>
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**CHART NOTES:** Prices and ratings are as of 10/6/06. For more information on our testing, see [How We Test HDTVs](#).  
**Bigger: Plasmas**



Photograph: Robert Cardin, Chris Manners

In the 42-inch HDTV category, it's difficult to beat the value of a plasma. Among 42-inch models, the Vizio P42HDTV is our reigning champion; pleasing images and a bargain price of \$1400 propel it to the top of the chart. On its heels is the \$2250 LG Electronics 42PC1DA, a premium HDTV that outscored others in the 42-inch plasma category thanks to a superior feature set and image quality that garnered raves from our judges. Philips's strikingly designed, \$1900 42PF9631D captures third. The newly tested Samsung HP-S4253 (\$1999)--an excellent performer--and the nicely priced AOC A42HD84 (\$1500) take fourth and fifth place, respectively.

We also evaluated Norcent's \$1899 PT-4291HD and retested Maxent's \$1600 MX-42HPM2C HD monitor, but neither of them reached the chart. The Norcent's so-so performance/price ratio left it short of the elite models, and the Maxent's skimpy features and forgettable design knocked it out of contention.

Plasmas pack chemically stable gases (xenon and neon, normally) in pixel cells enclosed by glass panels. Electrodes excite the gases to produce light and color. Because each pixel generates its own light, plasma sets have wider viewing angles; as a result, more people can observe the action on the TV from oblique vantage points in the room. Not only is a 42-inch plasma appealingly large for a midsize room, it's good for ensuring that everyone watching has a clear view.

**Plasma HDTVs: 42 inches is the sweet spot**

The bargain-priced Vizio P42HDTV earns our Best Buy, but LG Electronics' 42PC1DA has the best image quality of the group.

Rank	42-INCH PLASMA HDTV	PCW Rating	Performance	Features and specifications	Bottom line
1 <b>Best Buy</b>	<p>Vizio <b>P42HDTV</b> \$1400</p>		<ul style="list-style-type: none"> <li>■ HDTV: Good</li> <li>■ SDTV: Good</li> <li>■ DVD: Good</li> </ul>	<ul style="list-style-type: none"> <li>■ 1024-by-768-pixel screen</li> <li>■ Tuners: one NTSC, one</li> </ul>	<p>A bright screen helps this budget-friendly model achieve competitive image quality at a cost that trounces rivals' prices.</p>

			<ul style="list-style-type: none"> <li>■ Overall design: Good</li> </ul>	<ul style="list-style-type: none"> <li>■ ATSC</li> <li>■ Inputs: one HDMI, two component</li> <li>■ No CableCard slot</li> </ul>	
2	<p><b>LG Electronics</b> 42PC1DA \$2250</p>		<ul style="list-style-type: none"> <li>■ HDTV: Very Good</li> <li>■ SDTV: Good</li> <li>■ DVD: Good</li> <li>■ Overall design: Very Good</li> </ul>	<ul style="list-style-type: none"> <li>■ 1024-by-768-pixel screen</li> <li>■ Tuners: one NTSC, one ATSC</li> <li>■ Inputs: two HDMI, two component</li> </ul>	<p>This beauty delivered great sound and image quality, and its ports are easy to identify and reach--but all of the appealing tweaks add up on the bill.</p>
3	<p><b>Philips</b> 42PF9631D \$1900</p>		<ul style="list-style-type: none"> <li>■ HDTV: Good</li> <li>■ SDTV: Good</li> <li>■ DVD: Good</li> <li>■ Overall design: Superior</li> </ul>	<ul style="list-style-type: none"> <li>■ CableCard slot</li> <li>■ 1024-by-768-pixel screen</li> <li>■ Tuners: one NTSC, one ATSC</li> <li>■ Inputs: two HDMI, two component</li> <li>■ No CableCard slot</li> </ul>	<p>Elegant, well-designed plasma TV produced above-average image quality; the set's built-in ambient backlighting adds an unusual touch.</p>
4	<p><b>Samsung HP-</b> S4253 \$1999 <b>NEW</b></p>		<ul style="list-style-type: none"> <li>■ HDTV: Good</li> <li>■ SDTV: Good</li> <li>■ DVD: Very Good</li> <li>■ Overall design: Very Good</li> </ul>	<ul style="list-style-type: none"> <li>■ 1024-by-768-pixel screen</li> <li>■ Tuners: one NTSC, one ATSC</li> <li>■ Inputs: two HDMI, two component</li> <li>■ No CableCard slot</li> </ul>	<p>The slickly designed HP-S4253 impressed our judges with its nice image quality and excellent surround sound, but it's pricey.</p>
5	<p><b>AOC</b> A42HD84 \$1500</p>		<ul style="list-style-type: none"> <li>■ HDTV: Good</li> <li>■ SDTV: Poor</li> <li>■ DVD: Fair</li> <li>■ Overall design: Good</li> </ul>	<ul style="list-style-type: none"> <li>■ 1024-by-768-pixel screen</li> <li>■ Tuners: one NTSC, one ATSC</li> <li>■ Inputs: two component</li> </ul>	<p>Attractive, low-priced model produced disappointing television image quality, but it would make a great conference room monitor.</p>

- No CableCard slot

**CHART NOTES:** Prices and ratings are as of 10/6/06. For more information on our testing, see [How We Test HDTVs](#).

**Biggest: DLPs**



Photograph: Robert Cardin, Chris Manners

Per square inch, DLP sets cost less, making DLP the lowest-priced large-screen HDTV technology. The latest sets run no smaller than 42 inches, and the 50- and 52-inch models we tested are an unbeatable deal. The Best Buy laurels go to the RCA Scenium M50WH185, a 50-inch low-priced beauty. Though it lacks some features of the more expensive DLPs we evaluated, it produced realistic images with natural colors that satisfied our judges--and at \$1599, it's a bargain. Samsung's 50-inch unit, the HL-S5087W, finished a close second overall. Priced at \$2499, it offers a raft of extras that the RCA model doesn't, including two HDMI inputs and support for 1080p resolution, which may make it a more attractive buy for shoppers with bigger budgets; it was our image-quality champ, too. The 52-inch WD-52631 from TV veteran Mitsubishi, on the other hand, fell short on performance, receiving cumulative scores of merely Fair in many tests. When set to vendor defaults and calibrated in the same way that *PC World* tests all HDTVs, it showed inaccurately colored images. When we examined it later on, however, we manually tweaked the colors to make them more pleasing. With that fact taken into consideration, the WD-52631's fine color adjustments, plethora of connectors, and 1080p resolution could justify its \$2499 price for some buyers.

DLPs use a matrix of millions of micromirrors to project light through a lens and onto the TV screen. A high-intensity lamp shines through a color wheel to the micromirror device, which then rapidly turns the micromirrors on and off, producing images. Though this flat-screen technology doesn't yield HDTVs as thin as plasma or LCD models, DLP sets are still far thinner than traditional CRTs. (New, high-end Slim DLPs are even more slender than the budget models reviewed here.) If you buy a 50- or 52-inch DLP to put in a large room, remember to factor in the space between the back of the screen and the wall.

Some DLPs now employ a six-color wheel, adding magenta, yellow, and cyan to the basic red, green, and blue (RGB) of the older three-color wheel. A six-color wheel enables users to control their set's color with great precision. The Mitsubishi DLP TV we tested, a 1080p set, possesses a six-color wheel. The Samsung DLP adds yellow and pink controls, for a total of five--up from the original three.

**DLP HDTVs: More Screen Acreage for Your Dollar**

RCA's DLP HDTV wins our Best Buy award on the strength of its low price, while the Samsung delivers the highest image quality.

Rank	50- OR 52-INCH DLP HDTV	PCW Rating	Performance	Features and specifications	Bottom line
1 <b>Best Buy</b>	RCA Scenium M50WH185 \$1599 <b>NEW</b>		<ul style="list-style-type: none"> <li>■ HDTV: Good</li> <li>■ SDTV: Good</li> <li>■ DVD: Good</li> <li>■ Overall design: Superior</li> </ul>	<ul style="list-style-type: none"> <li>■ 1280-by-720-pixel screen</li> <li>■ Tuners: one NTSC</li> <li>■ one ATSC</li> <li>■ Inputs: two HDMI</li> <li>■ three component</li> </ul>	This simple 50-inch, 720p model offers a pleasing picture and remarkably strong sound. At this price, "big HDTV" doesn't translate into "big budget."

2	<b>Samsung HL-S5087W</b> \$2499 <b>NEW</b>		<ul style="list-style-type: none"> <li>■ HDTV: Very Good</li> <li>■ SDTV: Very Good</li> <li>■ DVD: Very Good</li> <li>■ Overall design: Superior</li> </ul>	<ul style="list-style-type: none"> <li>■ CableCard slot</li> <li>■ 1920-by-1080-pixel screen</li> <li>■ Tuners: one NTSC</li> <li>■ one ATSC</li> <li>■ Inputs: two HDMI, two component</li> <li>■ No CableCard slot</li> </ul>	Samsung's handsome 50-inch, 1080p DLP showed excellent color and minimal artifacting in tests. The unusually intuitive menu system is easy to master.
3	<b>Mitsubishi WD-52631</b> \$2499 <b>NEW</b>		<ul style="list-style-type: none"> <li>■ HDTV: Fair</li> <li>■ SDTV: Fair</li> <li>■ DVD: Fair</li> <li>■ Overall design: Very Good</li> </ul>	<ul style="list-style-type: none"> <li>■ 1920-by-1080-pixel screen</li> <li>■ Tuners: one NTSC, one ATSC</li> <li>■ Inputs: two HDMI, two component</li> <li>■ No CableCard slot</li> </ul>	High-end 52-inch, 1080p DLP TV provides granular controls for six separate colors. You may need to tinker with them to get an attractive picture, however.

**CHART NOTES:** Prices and ratings are as of 10/6/06. For more information on our testing, see [How We Test HDTVs](#).

### Pleasing Pictures for Penny-Pinchers

Makers of low-priced TVs are catching up to the bigger brands in set performance, for one main reason. Ross Young, founder and president of market research and consulting firm DisplaySearch, thinks that the gap in panel quality between what he calls "top-tier" and "emerging" television vendors is narrowing. "Most companies produce A-grade panels, so then [the difference in the resulting products] becomes a function of the electronics that they put in them." For example, Young says, top-tier vendors such as Samsung and Sony "customize with their own algorithms put into the panel's chip." But for the most part, he observes, the quality is very close, and our comprehensive TV tests confirmed this: Lower-cost HDTVs--such as those from Olevia, Vizio, and RCA--collected decent overall scores from our judges, spelling good news for buyers who want satisfactory images from an inexpensive set.

Prices are falling fast for HDTVs, and particularly for LCD TVs, says Young. LCDs predominate at sizes under 40 inches, holding an 84 percent market share in North America during the second quarter of 2006. Riddhi Patel, principal television systems analyst for research firm iSuppli, says that plasma makers are focusing their marketing push on the 42-inch category, though they've been trying to make inroads in the 50-inch market as well.

Despite facing future competition in the 50-inch segment from plasmas, DLPs are likely to remain the price leader for a while. Two of the three DLPs we tested--the Samsung HL-S5087W and the Mitsubishi WD-52631--already support the highest-quality HDTV format of 1080p, making them attractive to discriminating videophiles. Though 1080p support imposes an extra expense, the DLP technology's lower base price per square inch makes its overall cost easier to manage.

Even with their fast and furious recent price cuts, LCDs are more expensive per square inch than plasmas and DLPs of comparable size--but only for models greater than 40 inches. For smaller sizes, like the 37-inch LCD HDTVs we tested,

this technology is the most cost-efficient. Patel points out that price cuts for LCD panels have reduced the difference between LCDs and plasmas to about \$300, bringing them into dueling range. For medium-size to large sets, comparing models across technologies can be useful. If you want the biggest picture and the biggest bang for your hard-earned buck, though, DLPs such as the \$1599 RCA Scenium M50WH185 are hard to beat.

## The I's and P's of HDTV

In the terms that manufacturers use to describe TV or digital-signal resolution, *i* and *p* refer to *interlaced* and *progressive*. The two techniques govern how a TV set draws the vertical lines on its screen. In the interlaced method, the TV draws odd-numbered lines first, and then it draws even-numbered lines. The progressive approach draws all lines in succession.

All of the units we tested have a resolution of 1780 by 720 pixels (720p), 1366 by 768 pixels (also 720p), or 1920 by 1080 pixels (which can be either 1080i or 1080p). The pixel numbers alone don't tell you whether a television set uses interlaced or progressive scanning--to determine that, you must check the specs for an *i* or a *p*. In the 37-inch LCD category, only the Sharp Aquos LC-37D90U is compatible with 1080p, whereas both the 50- and the 52-inch DLPs from Samsung and Mitsubishi, respectively, have that resolution. Bear in mind, though, that many 720p sets can also accept 1080i content; they just can't show it in its full glory.

Currently, much of the content available is 720p or 1080i; 1080p content is available now on HD-DVD and Blu-ray movie titles. But as we saw in our tests, HD content doesn't necessarily look best on the highest-resolution TVs. Consult test results and trust your own eyes, instead of being swayed by a vendor's spec.

## Suitability Factors: Which HDTV Matches Your Criteria?

HDTVs aren't just about pretty pictures. Here are other factors that influence how well an HDTV set works in a room--and how much getting a TV up and running costs.

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KEY FACTOR	37-inch LCD	42-inch plasma	50-inch DLP
Viewing angle	Contrast falls as you move away from the direct front of the screen (up to 160 degrees horizontal)	Superior viewing angles (up to 170 degrees horizontal with consistent contrast)	Consistent contrast (up to 160 degrees horizontal)
Weight (average)	58 pounds	87 pounds	69 pounds
Minimum thickness	4.8 inches	4.5 inches	15.3 inches
Wall mountable	Easy	Sometimes challenging; best done by a professional	Possible only with pricey Slim DLPs
Shipping	\$150 to \$300	\$150 to \$300	\$250 to \$350
Setup costs	About \$100 to \$200 for wall-mounting hardware	\$400 to \$500 for professional installation (recommended), plus \$100 to \$200 for wall-mounting hardware	Usually no setup costs; not wall-mountable
			User-replaceable bulb rated at

Life span	Rated at 60,000 hours to half luminance	Rated at 60,000 hours to half luminance	5000 to 8000 hours to complete burnout (\$250 to \$500 to replace)
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**CHART NOTE:** Measurements and shipping costs are based on the 37-inch LCD, 42-inch plasma, and 50-inch DLP HDTV units tested for this article.

## The Eye of the Beholder

Each of the three HDTV technologies has advantages, so picking one is a matter of your viewing preferences. But keep in mind that many formerly common problems are passing into history.

LCDs may experience motion blur, due to limitations in pixel response times. This is hardly a problem with plasmas and DLPs, and it's less pronounced with today's LCDs than with past models, but generally a fast pixel-response time is desirable to minimize the effect in an LCD TV. All but one of the LCDs we tested for this review have a vendor-rated gray-to-gray response time of 8 milliseconds--speedy by industry standards. Sharp lists an even faster gray-to-gray response time of 6ms for its Aquos LC-37D90U.

A plasma TV's life span was a consumer concern during that technology's infancy. According to iSuppli's Patel, however, plasma tubes are now rated for an average life of 60,000 hours--so even if you watch 5 to 8 hours of TV a day, your plasma TV panel won't diminish to half its original brightness for 20 to 30 years. Burn-in on plasma TVs--wherein repeated, prolonged exposure to the same image causes the image to sear into the glass of the TV screen--has also become a rarity.

DLPs sometimes suffer from a "rainbow effect," in which some viewers see a rainbow trail when their eyes move from one part of the screen to another. Not everyone sees this, and Patel says that manufacturers have tried to reduce the "margin of error" by adopting technological innovations such as the six-color wheel, color wheels that spin at double speed, and a color processing technology called BrilliantColor from Texas Instruments (which invented DLP technology).

Color control is important to videophiles, and DLPs equipped with the six-color wheel are unrivaled in this area. The Mitsubishi DLP we tested, for example, offers controls for red, green, blue, yellow, cyan, and magenta. Controls for RGB appear in some LCDs, but normally are included only in higher-end sets. Oddly, of the LCDs we tested, the value-priced Olevia 537H alone has one of these powerful RGB controls. Meanwhile, all of the plasma screens we tested except the Vizio P42HDTV have RGB controls; and its omission is likely a matter of cost-cutting by Vizio to reach the set's \$1400 price, rather than of technological limitations. (Other, more-expensive plasma sets provide RGB--or even six-color--controls.)

Patel of iSuppli states that if you "put an LCD, plasma, and DLP set side-by-side, the LCD looks the best." Nevertheless, she thinks that plasmas do well with movies, because "black levels are very nice and colors have a lot more warmth." In addition, she notes that DLPs have a significant advantage with BrilliantColor, which adds brightness and color vibrancy.

Young has a different take. He cites a test that DisplaySearch performed comparing the viewing angles of various LCD, plasma, and DLP sets. Although "LCD TV has improved," he notes, "[plasma] is still superior." Even better are DLPs, which, like other rear-projection TVs, "are much more consistent across the viewing cone" (referring to horizontal, vertical, and diagonal views), Young observes.

*PC World's* test procedures entail direct comparisons of TVs that have screens of the same size. This approach prevents us from crowning any technology in this review as overall champion. Even among our panel of testers, and among experts like Patel and Young, personal preferences influence evaluations. HDTV screen quality is subjective and best appraised by the person who will view it regularly.

## What Else to Look For

All of the units we tested have HDMI connections, which are necessary for an optimum HD picture. You also need to have an HDMI cable, which almost never comes with a set. Check to see whether your peripherals already have them, or whether you need to buy a separate one. On the set you're considering, also look for an ATSC tuner, which accepts a digital signal and thus is the only way to receive over-the-air HD broadcasts. All of the TVs on our charts have such a tuner (in addition to an analog NTSC tuner) and can be called HDTVs. Some other models, such as the unranked Maxent MX-42HPM20, are actually HD monitors, meaning that you'll need to obtain a separate tuner for them, which can add to the total cost; if you already have a cable box with a tuner, buying a monitor can save you hundreds of dollars.

A few of the HDTVs we reviewed, such as the budget RCA Scenium M50WH185 DLP and the ritzier LG 42PC1DA plasma, have CableCard slots--an appealing extra. Shaped approximately like a PC Card slot, the CableCard option promises to someday replace bulky cable boxes with a slim card that's hidden from view. For the present, however, cable providers do not widely support this feature.

Though none of the models' built-in speakers produced home-theater-quality audio, many of them performed adequately in our tests, and a few--notably the RCA DLP's speakers--rose above average. Some TV sets, like Samsung's HL-S5087W DLP, offer more-unusual connections, such as USB ports to which you can attach a digital camera for viewing photos directly on the TV.

## HDTVs Need HD Content

Of course, what good is a high-definition TV without high-definition content? Already, iSuppli's Patel notes, the old deadline of January 2007 for moving TV content to an all-digital format "is long gone," replaced by a newer deadline of February 2009. Fortunately, several providers are now rolling out at least some popular programming in HD. Patel says that "the majority of sporting events are broadcast in HD."

The resolution of current HD programming varies by channel, but as of this writing most content is either 720p or 1080i. DisplaySearch's Young points out that most of the networks broadcasting in high definition do so at 1080i resolution; the exceptions--ABC, ESPN, and Fox--use a 720p high-def signal. For instance, ABC broadcasts its HD-enabled shows, such as *George Lopez* and *Grey's Anatomy*, in 720p, while NBC offers programs like *Law & Order* and *Late Night with Conan O'Brien* in 1080i. True 1080p compatibility, incorporated into a few of the models we tested, ensures that you'll get the full experience when DVD movies and TV shows formatted at that resolution finally become widely available; very little 1080p content is currently on the market.

This holiday season, several Blu-ray players and a few HD DVD players will be on store shelves; but these devices and the compatible media they require are, as yet, hard to find. One popular game console, the Xbox 360, has many games available in 720p or 1080i, and the new PlayStation 3 likewise promises support for games and movies with 1080p resolution.

## Definitely High Definition

Low-priced HDTV sets keep getting more affordable, and our testing shows that some of them display good images. A few high-end features and adjustments are trickling down, too, so these days you can more easily obtain what you want without paying for irrelevant frills. If you are raring to see movies or the Super Bowl in high-def, check out these models--because "high-definition" no longer necessarily means "high-priced."

## Shopping Advice: Buy Low, Receive High-Def in the Bargain--Online

For Web-savvy bargain hounds, the traditional brick-and-mortar experience is no substitute for deals a few mouse clicks away. Saving hundreds of dollars may be the biggest consideration for some HDTV hunters. Here's a guide to help you find hidden buys on the Web.

**Deal forums:** [FatWallet](#) and [DealCatcher](#), Web sites for deals in many categories, often post special prices for HDTVs from different retailers. In addition to noting manufacturer coupons and sales, the sites' forums also post clever price-matching strategies and coupon "stacking" techniques (ways to use several coupons for a bigger discount).

[Techbargains](#) devotes an area specifically to TVs.

**Online outlets:** Going to an outlet mall used to mean driving a hundred miles for deals that turned out to be so-so. But online manufacturers' outlet stores don't require a car--and the deals they offer, if you don't mind refurbished sets, deserve a serious look. [Philips's outlet site](#) presents a nice selection from the company's LCD and plasma lines, and the occasional DLP bargain. [Sony's outlet store](#) also has refurbished or closeout TV sets now and then. [Dell](#) has a bigger inventory of LCDs and plasmas at its outlet and often sweetens the pot with special offers, such as free shipping.

**Price-comparison sites:** For ease of finding retailers that offer a specific model, few resources can match the efficiency of price-comparison Web sites. [NexTag](#), [Pricewatch](#), and [PriceGrabber.com](#) all qualify as reliable favorites. (Note: PriceGrabber.com is PCWorld.com's longtime pricing partner.)

Keep in mind that return policies vary greatly. Getting service for an online-purchased TV may turn out to be more difficult than getting it for a model you bought at a local electronics store. But if you think the potential service loss is a risk worth taking for the savings you'll reap, a cheap HDTV may be just a click away.

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