Gadget Freak: The Lowdown on HDTV

Five-and-a-half things you should know before you buy your first HDTV.

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"You're drooling again," my wife said as she attempted to drag me away from the row of flat-screen HDTVs gracing an aisle of our local warehouse store.

"But they've got 50-inch plasmas for less than $2000," I whined. "Can I please have one? Can I, can I?"

Needless to say, we have not made the jump to HDTV yet, but it's only a matter of time. According to a survey by Parks Associates, nearly 50 percent of U.S. households plan to buy one in the next year. (I'm guessing that mostly men answered the survey.) But when it comes to buying an HDTV, you have to know its speeds and feeds. So I talked with experts and learned some new things.

Know your resolutions: The HD spec includes two resolutions: 1280 by 720 (used for 720p broadcasts) and 1920 by 1080 (used for 1080i and 1080p). But you may also find HDTVs with other resolutions like 1024 by 768 and 1366 by 768.

Depending on the signal and your set, an HDTV either scales the picture to fit the screen or leaves some pixels unused. At 720p, a set uses a progressive scan, in which every line of the picture is painted in each pass--that's better for fast-motion video. At 1080i (1080 interlaced), the set paints only half of the lines on each pass but offers better detail for static images. The bigger the set, the more important high resolution becomes. If the screen is less than 40 inches diagonally or sits across a big room from you, you may see little difference between 720p and 1080i--but you could pay a premium of $500 or more for the higher resolution.

Buy 1080p for tomorrow, not today: So-called "True HD" sets display 1080p images. That translates into sharper images and a higher level of detail--plus a higher price. The problem? You'll get 1080p in some high-definition DVD movies, but in few other video sources, says Mark Kersey, founder of BuyingHDTV.com. "A 1080p set will scale up a 1080i picture to make it look better, but that may not be reason enough to buy one," he says; 1080p "is good when you want to future-proof your purchase for the next ten years."

Buy with your eyes... Comparing sets side-by-side as they show the same content--especially fast-motion video images such as sports--is still the best way to pick a good one, says Kris Peterson, vice president of strategy and brand development for Magnolia, a high-end home-theater retailer owned by Best Buy. If the soccer ball looks like a blur on its way to the goal or the football field's yard lines seem to bend, the set's probably using a cheap video processor or lower-quality screen.

...But don't be fooled by retail displays: Some big-box stores crank up the brightness and contrast settings on models they want to move quickly, says Kersey. To avoid deception, ask your salesperson to step you through the different display modes on each set before you buy.
**Not all HDMI ports are equal:** You'll need at least one High Definition Multimedia Interface (HDMI) port for attaching an HD tuner or movie player. Make sure the port is built to the HDMI 1.3 specification; otherwise, you might have to 'reboot the TV when you switch inputs, says Christopher Baker, senior technical training director for online retailer Crutchfield. Look for HDMI ports that accept 1080p input natively, since that will be the standard for next-generation Blu-ray and HD DVD players. Even sets that display 1080p may not accept 1080p; instead, they may take 1080i and scale it up. The movie will still look great, just not as great, according to Baker. These specs may be hard to find, especially in retail stores, so troll for them online.

**Look at the big picture:** A temptingly inexpensive set will feel like a bad investment if it breaks and its manufacturer has disappeared. "I would avoid 'mystery brand' products," says Joe Hart, a design specialist for HiFi House. "They may not survive what's increasingly become a dog-eat-dog market." In other words, don't be suckered in by mouth-watering deals that could leave you high and dry later on. Just like my wife told me. I hate it when she's right.

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