



Buying Into High Definition Television (HDTV)

What you need to know before buying a HDTV system for your home or apartment.

By Bruce Bahlmann, CEO ■ *Birds-Eye Network Services*

As a proud owner of a new plasma monitor and High Definition Television (HDTV) tuner, I can attest to the fact that HDTV is here, it works, and once you got it, there is no going back to analog. The question is, however, do you really know what your getting before you sign that credit card receipt. This article is all about raising your awareness, cutting through the hype, and best of all helping you spend your hard earned money wisely.

Comparison Shopping

I have wanted a plasma television since I first saw one at a cable convention. The clarity, the contrast, and best of all the compactness of these sets caught and have held my eye ever since. The biggest problem for me was the price tag—I couldn't justify spending \$60 grand on this luxury item. However, gradual lowering of prices gave me ample time to carefully think about just what I wanted in a plasma television set. Having been a television connoisseur my whole life, I rarely settled for less than the very best I could afford. Sony XBR was my standard for television experience, anything less was well, inferior. The day I heard Sony was discontinuing its assembly of CRT based monitors (an area I believed Sony clearly dominated) I knew that finding an equivalent quality in a plasma television set was not going to be as easy as buying the next XBR in plasma—

after all Sony is not (yet) synonymous with "HDTV pioneer." Because HDTV can be broken down into its components, each of which can be mastered independently, it will be much tougher for any one company to dominate this field.

Sony definitely tempted me with its fairly recent release of an XBR plasma series, however, by that time my mind was pretty much made up in terms of price range, features, and screen size. I already have a good sound system, so I limited my search to plasma television monitors that did not have any sound component. I would argue that looking for HDTV sets with speakers merely provide a distraction away from the focus of your purchase—the display. Some HDTV sets also come with limited tuner options, however none that I know of come with what I would call a quality HDTV tuner so you end up buying that separately anyway. Ideally, the best tuner for HDTV does not do just ATSC (Advanced Television Systems Committee standards / www.atsc.org) which receives both

HDTV means buying a subscription to HDTV from your satellite or cable operator, you do not need a tuner so why pay for this feature within your monitor?)

When you go looking for a HDTV monitor, be prepared to receive a significant education and if you think you can go buy this off the Internet, think again! I looked at dozens of monitors large and small, looked at different resolutions, and pretty much drove my salesperson insane with the number of questions, requests for side by side comparisons, etc. This was a major purchase for me and I was very nervous about making a rushed decision on such an expensive piece of equipment. In fact, I was so nervous the first time I looked at plasma monitors I couldn't make up my mind definitively while in the store

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HDTV and digital television signals but also NTSC (National Television Systems Committee standards / www.ntsc-tv.com.) - which is used by most of today's televisions. By separating out the components you are left making two to three separate purchases (monitor, tuner, sound system). However, this allows you to find the best overall system that meets your needs for space, picture quality, and reception—if you need it. (Note, if your idea of

and ended up just leaving without buying anything. It actually took me four trips to the audio video store before I left with a major purchase receipt in my pocket. Only then was I motivated by something other than dropping a large chunk of change—on that day my motivation was to see the Vikings play that evening! The primal motivation to watch football got the best of me and I finally broke down and bought the goods.

After careful consideration, interestingly I did not even buy a HDTV monitor. Instead, I bought Samsung's (www.samsung.com) 42" plasma EDTV (extended definition television) monitor. The salesperson tried very hard to sell me on a true HDTV monitor but try as he might, I could not honestly see the difference between extended definition and high definition—especially when the source was 1080i. The cost of extended definition is half that of high definition and because money was a factor in my purchase, not seeing an appreciable difference between the two was justification enough for me to save money and go with the lower definition.

I originally bought a Samsung HDTV tuner in preparation to receive over the air content, however, after only a couple days, I found that the Samsung tuner was pretty weak. For you techies, Zenith (www.zenith.com) wrote the book on HDTV and probably has one of the best tuners available. After my bad experience with the Samsung (had trouble locking in signals), I researched other available tuners on the Internet and finally limited my choices to either Toshiba or Zenith. The newer Toshiba tuner was not yet available, so I went with the Zenith. The Zenith is good, but if the Toshiba is available, that is the smart buy if you plan on primarily using over the air reception for your HDTV content. Both the Zenith and Toshiba boast a more sensitive ATSC tuner and the Toshiba also supports NTSC that allows you to watch analog sources when digital is not available or reception problems occur. The importance of NTSC reception becomes obvious once you watch a poorly received over the air HDTV broadcast.

HDTV Purchase Terms

When you buy HDTV sets they typically come with a one-year warranty (as they should considering your spending thousands of dollars). However, some things you should know about extended warranties. The industry standards on longevity of plasma television



sets is around seven years and extended warranties only cover you for up to four years for a significant premium over the base cost of the HDTV set. I bought an extended warranty this time but as these sets come down in price and the technology is perfected the utility and realizable value of an extended warranty will be nullified. We are already seeing third or fourth generation plasma sets ushering in huge jumps in performance, features, and reliability to the

point where if your set works flawless through the initial burn-in it will most likely go on working for the next seven years or die within the first year.

Receiving Over the Air HDTV Broadcasts

Unlike NTSC, ATSC will not ghost. However, ATSC has its own unique set of problems. ATSC can tile on you meaning if the signal gets distorted or impeded you might see missing squares



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in your picture. You can also experience brief interruptions including: loss of sound, picture, and or both for short or long durations of time. Unlike NTSC that is analog, ATSC is digital so instead of receiving a snowy picture if your reception is poor you receive nothing at all – with digital it is truly all (on) or nothing (off). To get around this you need a quality antenna. Some antennas now advertise themselves as HDTV ready including Terk (www.terk.com), but don't buy it! Instead, seek out a knowledgeable television shop that sells Winegard (www.winegard.com) or Channel Master (www.channelmaster.com) antennas. Winegard antennas are the very best over the air antenna you can buy—especially their HDTV antennas. Note HDTV signals are entirely within the UHF spectrum so your antenna must have good-to-high capability (gain) in terms of UHF. If you live within a big city with lots of choices, don't skimp on a small antenna. Get something mid-range and don't be afraid to amplify your signal—even if your television shop warns you not to over drive your tuner as it is best to have more signal and pad than not enough and have a loss of picture. You can run NTSC and ATSC televisions off the same antenna signal but if you do make sure you don't split your signal too much. Regardless of how far you are away from television towers I

highly recommend you use a pre-amp for UHF along with a distribution amplifier to supply each of your television sets. This combination will ensure you have more than enough signal to drive your ATSC tuner that for all practical purposes tends to be quite finicky.

Finding HDTV Content:

My maiden voyage with HDTV content came from an unlikely source, Public Television. Here in the twin cities, Public Television maintains six digital channels, one of which offers 24-hour HDTV content. Before I bought my HDTV setup, I sampled satellite and cable and neither held a candle to what was offered "FREE" over the air. In the twin cities of Minnesota, no less than 20 digital channels offer either regular or occasional HDTV content along with very clear digital picture and sound with no monthly fee. While both satellite and cable do offer HDTV options, both come with their own tuner and both with only a handful of local channels (10-12), if any, and did not include all the channels I could receive free.

To this day, Minnesota Public Television is still not carried on either format and I would argue that it is perhaps the best HDTV source available. One terrific program carried by Public Television is called Soundstage. Soundstage (www.pbs.org/wttw/soundstage/) fea-

tures popular musical performers like Peter Cetera, Tom Petty, Lyle Lovett, etc. and carried over true HDTV and digital Dolby sound. It is one of my favorites and the fact that it is in HDTV makes it captivating and quite impressive.

Other programs that are quite impressive include ABC's Monday Night Football and CBS's JAG. Both shows are in a class by themselves in terms of quality and detail with particular attention paid to how the show will look in HDTV. Some notable scenes include my first Monday Night Football game that included a close up shot of Washington Redskins coach holding his game plan up to his face—you could read the words circled in red. HDTV's wider screen also makes football more enjoyable as you can see more of the field—often times seeing the quarterback and receiver at the same time the pass is thrown. Another notable scene was a recent episode of JAG where a particular shot showed a close up of Harm riding a big motorcycle on a sunny day then panned back to show him riding through the countryside while the engine roared though digital clarity—it was an awesome piece of photography.

Overall, I have been extremely happy with this new addition to my home theater system and haven't given a second thought about spending the money. Having the luxury of watching HDTV within my own home allows me to maximize the little time I am able to watch football or view a Netflix (www.netflix.com) movie. The combination of my Netflix account along side my good antenna reception gives me all the news, sports, local programming, and movies I want without paying extra for a cable or satellite subscription. ■

About the Author

Bruce Bahlmann is CEO for Birds-Eye Network Services, a provider of market research, authoring, competitive custom development, and a growing array of network monitoring and reporting solutions. He may be reached at 651-398-4679 or info@birds-eye.net.