

MORE HD SCREENS THAN YOU CAN IMAGINE

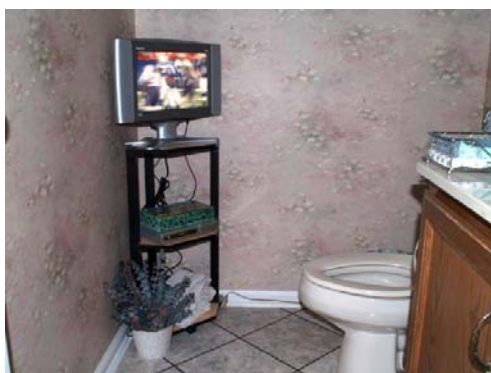
This week's TV TechCheck was prepared by Pete Putman, one of a growing number of off-air DTV reception believers (for good reason), who evaluates and writes about (H)DTV sets in several publications when not offering consulting services. Read more about his HDTV set evaluations at <http://www.hdtvexpert.com/>.

CBS' recent HD telecast of Super Bowl XLI was a top-notch engineering effort, despite the constant downpour during the game. The quality of those images was dazzling, at least to the 60-plus guests who congregated at Pete Putman's home in Doylestown, Pennsylvania to watch the Colts and Bears slug it out on no less than 10 different TV screens, with nine of them high definition displays.

With the exception of 2006, Putman has shown every Super Bowl since 2000 (ABC's inaugural 720p HD-cast) on multiple HDTV screens at this event. The big game has been projected on the snow, displayed in a bathroom, and illuminated his sliding deck doors. It's been seen on plasma and LCD HDTVs, along with front projection screens and rear projection monitors.



Samsung in Dining Room

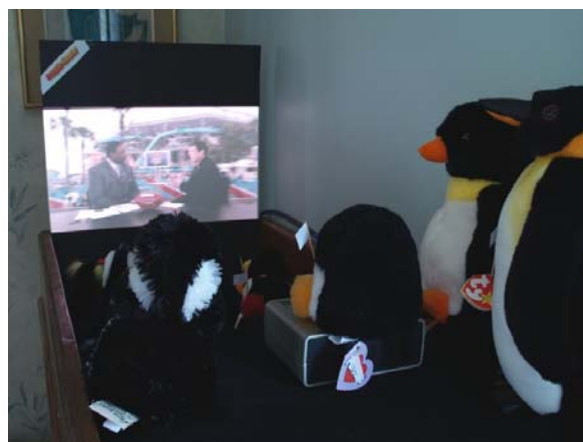


Samsung HDTV in Bathroom

monitor, Panasonic's TH-50PF9UK 1080p 50-inch plasma, and Samsung's LNS-4695D 46-inch integrated LCD HDTV, placed in his living and dining rooms. No one missed a play during bathroom breaks either, thanks to Samsung's LTM-1575W 15-inch LCD monitor. A Toshiba 34HF81 provided HD pictures to family room viewers.

This year, Putman arranged to have two complete 5.1 surround-sound theaters up and running for the game. One featured Mitsubishi's new HC5000 LCD projector, which has full 1920x1080 resolution while the other showcased Sanyo's PLV-Z5 LCD projector (1280x720). 92-inch and 82-inch front screens were installed in each theater, respectively.

The game was also displayed on Pioneer's PRO-FHD1 1080p 50-inch plasma



Mitsubishi PK20 "Pocket" DLP

Arriving guests saw the game on Sanyo's new waterproof CE42LM4WPN 42-inch LCD monitor, positioned along the front walk. Another Sanyo projector, the PLV-Z4, was positioned right outside the sliding deck doors, projecting the game onto a 62-inch Vutec rear screen.



Sanyo LCD

For the young at heart, a Mitsubishi PK20 "pocket" DLP projector was placed in the midst of a tiny, table-top theater with a 15-inch screen, capturing the attention of numerous stuffed and windup penguin toys – each holding tiny Colts and Bears pennants.

It took two weekends and a lot of wiring to get all of these screens up and running. Each and every screen took a terrestrial 8VSB feed from CBS O&O KYW-DT, broadcasting on UHF 26 from the Roxborough (Philadelphia) antenna farm with a 17.5+ MB/s 1080i stream.

Putman's house is located about 21 miles NNE of Roxborough and over the opposite side of a slight ridge – not the best location for DTV reception. He used a combination of roof-mounted and attic-mounted Channel Master 3023 suburban UHF yagis with Titan 2 UHF preamps to distribute the signals to a host of set-top receivers, including LG LST3100, LST4200, LST3410, and Samsung DTB-H260F models.

The rear deck and front walk displays employed Terrestrial Digital and Channel Master antennas to feed a Humax HFA-100 terrestrial STB and another Samsung DTB-H260F. A Terk HDTV amplified *indoor* UHF log-periodic antenna – placed on the dining room *floor*,

against the wall – was more than sufficient to drive the KYW HD signal to the Samsung 46-inch LCD HDTV with no drop-outs or hits.

Many of the guests had never seen HDTV before, let alone live sports. As expected, most were puzzled that the signals weren't coming in from cable TV, or from DirecTV or Dish Network. Putman placed fliers around the house at strategic locations to explain in layman's terms how HDTV works and how the signals get to each of the ten sets.

Needless to say, there were many post-game inquiries from these same guests about what HDTV to buy and how to go about getting this "free" signal! There were also plenty of "deer in the headlights" looks on guests' faces as they slowly wandered from room to room, taking in the HD action and immersing themselves in the magic of Dolby Digital surround.



Rear Deck RPTV

Even the tiny, 50-lumens PK20 put up respectable down-converted images from the 1080i component signal feed (its native resolution is 800x600). The two outdoor Sanyo displays chugged along, providing beautiful HD images for hours in temperatures below 10 degrees, with wind chills dropping below zero as the game wore on.



Sanyo PLV-Z5 & Humax HFA-100

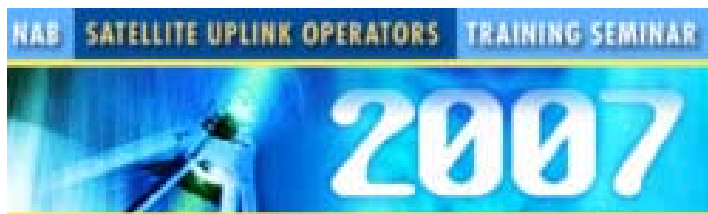
CBS Engineering has made no secret about their position that all of the bits in an ATSC transmission should be allocated to their 1080i HD signal, which is consistently one of the best to be found anywhere. The large-screen 1080p displays at this year's party would have clearly shown MPEG compression artifacts seen on some other HD broadcasts that allocate far less bits to 1080i and 720p content.

There's no question that terrestrial HDTV is a real win-win for consumers. The trick now is to let more of them in on the secret, and events such as Putman's annual party are an excellent way to do just that.

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