

Digital Answer Man: **HDTV and the Digital Transition**

If you're thinking of buying a new TV, you probably have a lot of questions. In today's column, Jim Barry the "Digital Answer Man" of the Consumer Electronics Association (CEA) and a leading authority on HDTV, helps set the record straight ...

1) What is the difference between analog and High Definition TV?

The real difference is between analog and digital TV. Analog, the technology we've been using in radio and TV for nearly a century, converts sound and pictures into magnetic waves. Digital technology converts them into the ones and zeroes of computer code, providing crisp, lifelike high-quality video and sound.

The best digital TV is high-definition (HDTV). Simply because a picture is digital doesn't mean it's High Definition. It can be "good" Standard Definition (SDTV), "better" Enhanced Definition (EDTV) or "best" HDTV.

HDTV offers an image five times better than an analog signal and is transmitted in a wide screen (16 X 9) format, with Dolby Digital surround sound, creating a much more realistic home theater experience that makes you feel as if you're at the stadium watching the game or in the movie scene.

2) Why is TV switching to HDTV now?

All electronics are becoming digital. Among others we now have digital video discs (DVD), digital cameras, digital satellite and digital cable. Broadcast TV stations are required by the Federal Communications Commission (FCC) to make the transition to digital television (DTV) over the next several years.

CEA reports consumers bought about 4 million digital televisions in 2003. This year, it expects that number to jump to almost 5.5 million and all the way to 16.2 million by 2007.

3) Are the new flat-panel TVs HDTV?

Some are and some aren't. Prices are coming down quickly on thin, flat panel TV sets. And sales more than tripled in 2003, according to the CEA.

There are two main types available today – Plasma displays (PDP) or Liquid Crystal Displays (LCD). Each of these technologies enables monitors and TVs that can be as thin as four inches and hang on the wall. Until now plasma was the only choice in the bigger screen sizes – 40 inches and up – but now LCD, which once was confined to smaller sets, are growing in screen size and sales.

Both can deliver HDTV, but not all do. If you're shopping for a flat-panel, be sure to find out if it's a monitor (which means you'll have to connect a tuner), or a TV (which means it has a tuner built in.) Then be sure to find out if it's truly capable of HDTV.

4) What is there to watch in HDTV and how do I get it?

The good news is that more and more HDTV programs are available. Almost all CBS, NBC and ABC primetime shows are broadcast in HDTV. The WB network has a dozen hours a week, PBS does many shows in High Definition and almost all big sports events are now broadcast in HD. If you subscribe to cable or satellite, you can choose from a variety of programming from HBO to Showtime to 24-hour pay-per-view HD movie channels and more.

To get HDTV, you need a digital High Definition TV, which come in a variety of types and sizes – picture tube sets up to 38-inch screen size, rear projection sets up to 80-inch screens and flat-panel LCD and plasma up to 60 inches.

TV sets have always included a tuner and display. With digital TV you can buy a separate HDTV tuner and HDTV monitor or an “Integrated Set” that includes both. Check out www.CE.org/HDTVguide for more information.

5) Do I need satellite or cable TV to fully enjoy HDTV?

Not necessarily. It depends on what you like to watch. You can get digital HDTV over the air using a set top or rooftop antenna, over satellite using a High Definition satellite receiver and dish, or through cable using a digital High Definition cable box.