

# 10 Frequently Asked Questions about Digital & High Definition TV

## **What is high definition TV (HDTV)? How is it different from analog television?**

HDTV is a name given to one of the digital television (DTV) formats. HDTV provides high resolution programming. A current analog TV picture is made up of horizontal lines on the picture screen; an HDTV picture can have more than twice as many lines, allowing for stunning picture detail.

HDTV uses a “widescreen format.” “Widescreen format” refers to an image's aspect ratio, which is a comparison of screen width to screen height. Analog television has an aspect ratio of 4 by 3, which means the screen is 4 units wide by 3 units high. The aspect ratio of HDTV is 16 by 9, similar to a movie theater screen. HDTV programs can include Dolby Digital surround sound, the same digital sound system used in many movie theaters and DVDs.

HDTV uses the same amount of bandwidth (the size of the communications channel) as the current analog system, but with HDTV, about six times more information is transmitted. This capability translates to much better quality in picture and sound.

## **Is HDTV the same thing as DTV?**

No. HDTV is the highest quality of DTV, but it is only one of many formats. In addition to HDTV, the most common formats are Standard Definition Television (SDTV) and Enhanced Definition Television (EDTV).

## **How do I get DTV or HDTV?**

Receiving the DTV and HDTV signals over-the-air requires an antenna and a new DTV receiver that can decode the digital signals. In general, an antenna that provides quality reception of over-the-air analog TV signals will work for DTV reception.

Cable and direct broadcast satellite (DBS) subscribers will need a new DTV receiver and other special equipment to receive DTV programming. A “Digital Cable Ready” DTV or other device will allow digital cable customers plug directly into the cable jack and does not require a separate set-top box. You must have a CableCARD from your cable company to receive scrambled digital programming and premium one-way services. Also, a set-top box can be obtained directly from the cable or satellite provider.

### **What is the difference between integrated DTVs and HDTV monitors?**

An Integrated DTV set is a digital television with a built-in digital decoder or DTV receiver. If you have an Integrated DTV and live in an area served by a DTV broadcast station, you will not need any additional equipment, with the exception of an antenna (preferably an outdoor one) to receive over-the-air DTV broadcast programming. Integrated TVs can usually receive and display current analog signals too.

In contrast, a HDTV monitor is not capable of receiving DTV broadcast programming without additional equipment; it is simply a display device without the processing capability for DTV reception. A DTV set-top decoder must be connected between the antenna and the monitor to receive and display over-the-air DTV programming.

Confirm with your retailer that the DTV receiver or set-top decoder is compatible with the HDTV monitor that you are purchasing. Most monitors have a built in analog receiver and can display regular analog TV programming. They can also display standard resolution video from DVD players and VCRs.

### **With the new transition from analog to digital, will analog televisions be obsolete?**

No. Set-top boxes which convert digital signals to analog signals are available now and will continue to be available at lower prices to consumers as the transition progresses. However, to enjoy the full benefits of Digital TV, including superior sound and clarity, you must own a Digital TV set. An analog television, with the addition of a set-top box, will still allow viewers to enjoy all of the programming they have always enjoyed.

### **Will I need a special antenna to receive DTV over-the-air?**

In general, dependable reception of DTV will require the same type of signal reception equipment that currently works to provide good quality reception of analog TV signals. If you now need a roof-top antenna to receive television, the same antenna generally will be needed to receive DTV.

### **Will I need a new TV?**

Your current television will work as it does now until analog broadcasting stops. Under federal law, analog service will continue until most homes (85%) in an area are able to watch the DTV programming. Even after the transition is over, your current TV will not become obsolete. A converter box can be used to receive broadcast DTV signals and change them into the format of your current television. In addition, if you use your analog set with a multichannel pay service like cable or satellite, it will continue to work as it always has. Even with a converter box, however, your current analog television will not be capable of displaying the full picture quality of DTV. To enjoy the full picture quality, you

must have a DTV set.

**What do DTV sets look like and what will they cost?**

Most DTV sets have wider, more rectangular screens than current analog TVs. This widescreen format allows for images that are more like those shown in a movie theater. Like current TV sets, a range of sizes is available.

As with most new consumer electronics technologies, DTV sets have become less expensive since their introduction. Prices are expected to continue to decrease over time and will vary depending on screen size, display technology, and other features.

**Can I see a big difference between analog TV and DTV?**

Yes. Viewers cannot ignore the dramatic improvements offered by the DTV conversion. Visually, HDTV captures viewers with crystal clear resolution and razor sharp detail. Individual hairs, labels on footballs and the subtle effect of wind blowing through grass are all clearly visible through HDTV. Also, the detailed resolution and color provides an image similar to a movie-theater screen. Combined with the capacity to deliver enhanced Dolby Digital surround sound, HDTV produces an advanced home theater effect. DTV provides viewers with sharper images, better sound, and more viewing options than have ever been available over the air.

**What about my VCR, DVD player? Will I be able to use them with an HDTV set?**

HDTV sets typically provide connections for your VCRs, DVD players, camcorders, video games, etc. Their video will be displayed in the maximum resolution that your attached device is able to produce.