

Frequently Asked Questions About Digital Television

1. What does WEDU's conversion to digital technology mean to the typical viewer?

In a word: opportunity. WEDU-TV has many more hours of educational and entertaining programming and services than it has airtime. DTV enables WEDU to share more of its wealth of educational and cultural resources with every Central Floridian than ever before.

2. What are the benefits?

The picture you and other viewers currently receive is based on an analog transmission system that is 50 years old. In December 1996 the Federal Communications Commission (FCC) approved the U.S. standard for a new era of television -- digital television. In a digital system, images and sound are captured using the same digital code found in computers -- ones and zeros.

The digital revolution not only dramatically improves the quality of the television picture, but also makes possible the over-the-air delivery of several simultaneous services to you and other viewers.

3. What is high definition television?

Digital television allows stations -- like WEDU -- to telecast programs in much higher resolution or clarity than standard analog television. This is called high definition television or HDTV. Viewers are able to receive high-quality, crystal-clear pictures. These visually stunning pictures, with more than twice the resolution and clarity of standard television, are displayed in a widescreen format with a 16 by 9 width-to-height ratio compared to today's 4 by 3, or basically square, format. And because HDTV is digital, viewers have the option of a six-channel CD-quality "surround sound." In other words, viewers are able to enjoy a true home theater experience.

4. Why aren't the majority of the programs you are telecasting on WEDU-HD in "True HD?"

At this time, PBS only has a limited selection of new programming in the "True HD" format. We are telecasting in "True HD" when it is available.

5. What is multicasting?

WEDU is able to transmit multiple channels of television programming simultaneously.

6. Why does WEDU's transition to digital technology deserve your support?

The FCC has mandated that all public TV stations -- like WEDU -- must convert to digital programming, which imposes a significant financial burden on WEDU and other public television stations. WEDU is not able to make the transition without your support and that of other viewers in the west central Florida community. Unlike our commercial TV counterparts, WEDU is constrained in our ability to obtain substantial financing for this major capital expenditure. We can't issue bonds, obtain a loan or seek venture capital.

Only WEDU uses its digital spectrum to ensure that all west central Floridians have access to high quality education services and programming in the digital era -- just as we have for the last 50 years. The commercial marketplace cannot be relied upon to provide the quality, noncommercial educational services in the public interest.

7. Why can DTV offer so much more information?

The key is video compression. Compression allows a vast amount of data -- in this case, gigabits of a television picture or other information -- to be reduced for transmission. In the United States, the DTV signal is reduced to 19.4 million bits per second! (To put this in perspective, the telephone line to your home handles 28,000 bits per second.)

8. Will I be able to watch digital television on my existing set/s?

Yes, but you will need new equipment, such as a digital converter box. DTV information is encoded in a different way from the analog television signal and therefore will require a different kind of receiver. Manufacturers are developing converter boxes that will allow you to receive programs broadcast on DTV channels on your analog TV sets. However, in order to experience the full benefits of digital television, including HDTV, you will eventually need new digital television sets.

9. How much will new DTV receivers cost?

Currently, new DTV sets are priced at a \$500 - \$1,000 premium over current, comparably featured analog sets. However, prices are beginning to fall rapidly. Consumer electronics manufacturers have a track record of quickly adapting complex technology so that it becomes affordable and accessible to the general public.

10. What do the new digital television sets look like?

New DTV sets have wider screens than your current TV sets, allowing the pictures to be viewed more like those you experience in a movie theater. The wider picture, especially in larger set sizes, is expected to enhance sports and drama viewing, making you feel more involved in the action, as well as rendering more realistic pictures. As with current TV sets, a range of sizes eventually will be available, although initially larger screen size DTV sets probably will be most common. Larger screen size takes greatest advantage of the higher "resolution" of DTV pictures and may better justify the initially high price of the first DTV receivers. The expectation is also that there will be a range of prices that will coincide with a range of picture quality, as with current TV sets.

11. Do I need a special new antenna in order to receive WEDU Digital?

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

12. How quickly will DTV become available across west central Florida and America?

As of May 2002, all commercial TV stations were required by the FCC to be transmitting a digital signal on their respective DTV channels.

13. How will digital television benefit me or other viewers in west central Florida?

The advent of DTV will benefit you and others because of the improved quality, and possibly quantity, of free television service and the availability of much more information on your television set. In addition, one of the most important benefits of DTV is the fact that it will free up parts of the broadcast spectrum and allow its return to the government for other important uses. A part of this additional spectrum has already been designated for public safety, police and fire usage, and other options will be available for other business purposes.

14. How will digital television enhance WEDU development of educational services?

Already a major source of educationally stimulating programming material for thousands of Central Florida teachers and even more parents and care givers in our community, WEDU will use DTV's capacity to broadcast multiple signals to offer several simultaneous "channels" of programs -- dedicated to children's programs, cultural events, ethnic and multicultural issues, and other lifelong learning experiences for those who would like to continue their education.

15. What happens to Analog Channel 3 (or 2) after the conversion to Digital is completed?

The FCC currently anticipates the transition to DTV-only service for February of 2009. After the transition is complete WEDU and other broadcasters will be required to return to the government the portion of the spectrum currently used for analog stations.

16. What happens if digital television is not widely available by the end of the transition period?

This transition period is subject to periodic progress reviews by the FCC to make sure that DTV service is widely available. In addition, the Balanced Budget Act of 1997 includes provisions that would extend the continuation of analog service beyond the year 2009 deadline if DTV is implemented more slowly than expected.

The FCC has noted specific conditions that would extend the transition period. Those conditions may delay the transition if fewer than 85 percent of the TV households in the community are able to receive digital TV signals over-the-air either with a digital TV set or with an analog set equipped with a converter box or by subscription to a cable-type service that carries the DTV stations in the market.

17. How is DTV different from digital broadcast satellite (DBS)?

Broadcast DTV and DBS both use digital transmission. However, DTV uses the ATSC format (which brings you HDTV, multicasting, datacasting, and other ancillary services). Another key difference is that terrestrial broadcast DTV will be over-the-air, and is free to you and all viewers, whereas DBS is a pay subscription

service.

