

## Analog to Digital – The Switch Is On

The switch from analog to digital TV (DTV) has been going on for awhile now, but many consumers are not aware of it. The Federal Communication Commission (FCC) says that the mandate has a final switchover date set for **February 17, 2009**.

Congress has required that all analog channels be converted to digital because the analog channels have a broader bandwidth and are less efficient than digital broadcasting. Digital broadcasting will provide clearer sound and picture resolution and will offer multiple programming choices called **multicasting** and **interactive capabilities**. This changeover will free up the remaining analog channels for emergency response, fire, and police purposes as well as commercial wireless services.

### What this Means to the Consumer

The FCC's digital tuner rule specifies that as of **March 1, 2007**, all new TVs must include digital tuners.

- All analog TVs that receive broadcast signals over the air will need to be equipped with converter boxes to continue to receive television signals.
- Those who are currently receiving over-the-air TV with the help of indoor or outdoor antennas will also be affected by this new mandate.

TVs that do not have digital capabilities will need new equipment, such as set-top converter boxes. The analog antennae will also need converter boxes. Consumers will have to buy these devices.

According to [www.dtv.gov](http://www.dtv.gov), homes where paid providers, such as cable or satellite TV, are used will need to contact the provider to find out what equipment they will need to receive DTV.

- Cable subscribers may need new DTV equipment to view DTV programming in digital format. You should ask your cable provider what you will need and when.
- Satellite subscribers may need new DTV equipment to receive and view *high definition* digital programming. Ask your satellite company what you will need and when.

### How Do I Know if I Have a Digital TV?

**Check the TV manual that came with the TV.** It should clearly state the type of television set you have. Most DTVs and DTV equipment should be clearly marked with a label that indicates it contains a "Digital Tuner Built-in"; in other words, it is already integrated into the system and contains a "Receiver" that is able to read the new digital signal.

**Caution:** If your television set is labeled as: "Digital Monitor," "HDTV Monitor," "Digital Ready," or "HDTV Ready," it does **not** mean it actually contains a digital tuner. So, you will likely **need a separate set-top box**, which contains a tuner, to view programs in the new digital TV transmission standard (which includes HDTV formats) on such a set.

### Digital-to-Analog Converter Box Program

The FCC consumer advisory says that between January 1, 2008, and March 31, 2009, all U.S. households are **eligible to request up to two coupons**, worth \$40 each, to be used toward the purchase of eligible digital-to-analog converter boxes.

These converter boxes are for the conversion of over-the-air digital television signals. Therefore, they are not intended for analog TVs connected to a paid provider, such as a cable or satellite TV service.

The National Telecommunications and Information Administration (NTIA) will administer the coupon program. For more information, visit the NTIA website at <http://www.ntia.doc.gov>. The FCC's DTV website, [www.dtv.gov](http://www.dtv.gov), also provides information for consumers on the upcoming digital-to-analog converter box coupon program.

**Notice:** In January 2008, there will be more information given regarding the coupon program and where and when the converter boxes may be purchased, as well as the costs involved.

### What to Look for When Purchasing a New TV

**As of March 1, 2007, all TV receivers shipped in this country or imported from other countries must contain a digital tuner.** As of that date, the

FCC also requires anyone **selling** TVs or TV equipment to disclose whether the devices have the analog or digital tuner. Retailers must inform the consumer in a prominent place that states:

This television receiver has only an analog broadcast tuner and will require a converter box after February 17, 2009, to receive over-the-air broadcasts with an antenna because of the Nation's transition to digital broadcasting. Analog-only TVs should continue to work as before with cable and satellite TV services, gaming consoles, VCRs, DVD players, and similar products. For more information, call the Federal Communications Commission at 1-888-225-5322 (TTY: 1-888-835-5322), or visit the Commission's digital television website at: [www.dtv.gov](http://www.dtv.gov).

Digital TV will provide better quality, but as the consumer, you need to be aware of the many options available when purchasing a television. The following are a few tips from [www.dtv.gov](http://www.dtv.gov):

- Compare DTV picture quality. There are a variety of resolution levels, such as:
  - High Density (HDTV) – DTV at its highest resolution with Dolby surround-sound options
  - Enhanced Definition (EDTV) – quality resolution
  - Standard Definition (SDTV) – basic resolution
- Consider the various screen types:
  - CRT – Cathode ray tube – the traditional screen type
  - Rear Projection – digital light processing (DLP), liquid crystal display (LCD)
  - Flat Panel TVs – use LCD or plasma, and can be more expensive than the others
- Make sure you have the necessary equipment for the type of TV you own. For instance, a DTV set-top decoder must be connected between the antenna and the monitor to receive and display over-the-air DTV programming for older TVs to work.
- Other electronic equipment you have should work with DTV, but some may need connectors or new cables to work properly, including: DVD players, camcorders, VCRs, and video games.
- There is a difference between DTV and HDTV. Those who have HDTV need to speak with cable or satellite providers to have the proper set-top box to receive the maximum quality HDTV offers.
- Watch for lower prices on large screen HDTVs after the holidays. *The New York Times* reports

that some retailers may offer “professional” installation packages and “picture calibration” services for additional fees to compensate for low profit margins due to stiff competition in retail sales. It is wise to do some research before purchasing installation and repair services; they are oftentimes unnecessary, and some have had spotty records of success.

## What Kind of Equipment Do I Need to Receive HDTV?

According to the National Cable and Telecommunications Association, a digital television capable of displaying a high-definition signal, which uses either the 1080i or 720p format, will be needed to view high definition digital TV(HDTV). Most HDTVs will display these formats with an **integrated system** (iHDTV). Digital decoding and tuning functions are built into some digital television sets.

A digital monitor, capable of displaying HDTV, plus a tuner in a separate set-top box will be required in others.

## Summary

TV stations serving the United States are currently using both digital and analog signals, but on February 17, 2009, the analog programming will end. It is important for consumers to become aware of the equipment they presently have and what they will need to acquire before February 17, 2009. Being informed and planning ahead will make the transition from analog to digital TV much smoother. Happy viewing!

## Sources

“Buying the Right TV: What Every Consumer Should Know.” Federal Communications Commission. <http://www.fcc.gov> and [www.dtv.gov](http://www.dtv.gov).

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