# **Troubleshooting Guide for Digital-to-Analog Converter Boxes and Digital Televisions**

# FCC Consumer Facts

The digital television (DTV) transition refers to the requirement that all full-power television broadcast stations stop broadcasting in analog format and broadcast only in digital format by June 12, 2009. Your local broadcasters may make the transition before then, and some already have. So be ready. Apply for the \$40 converter box coupon today. Get your converter box, and enjoy the benefits of digital television now.

If you are having difficulty receiving digital broadcast stations in your area, this troubleshooting guide provides a connections checklist and tips on reception of digital signals.

### **Check Your Connections**

- Check that your digital-to-analog converter box or digital television is connected properly. Make sure
  your antenna is connected to the antenna input of your digital-to-analog converter box or digital
  television. If using a digital-to-analog converter box, also ensure that the antenna output of your
  converter box is connected to the antenna input of your analog TV. Refer to the owner's manuals of your
  components if you are unsure of the proper connections.
- Ensure that your components are plugged in and have their power turned on.
- If you have a digital-to-analog converter box, tune your analog TV to channel 3. You should see a set-up menu or picture displayed on your TV screen. If you do not see a set-up menu or picture, tune your TV to channel 4. If you still do not see a set-up menu or picture, recheck your connections.

# Perform a Channel Scan

- Digital-to-analog converter boxes and digital televisions have a button, usually on the remote control, that
  is labeled "set-up" or "menu" or some similar term. Press that button to access the set-up menu. Using
  the directional arrow buttons on your remote, scroll to the option that allows you to perform a "channel
  scan." The channel scan will search for digital broadcast channels that are available in your area.
  Consult the owner's manual of your digital-to-analog converter box or digital television for detailed
  instructions on how to perform a channel scan for your device.
- Once the channel scan is complete, you will be able to tune to the digital channels received by your antenna. You should perform a channel scan periodically to check whether additional digital channels have become available.

#### **Adjust Your Antenna**

- Small adjustments to your antenna can make a big difference in the number of digital channels you can receive. If you have an indoor antenna, try elevating it and moving it closer to an exterior wall of your home. After adjusting your antenna, perform another channel scan to see if your reception is improved.
- While adjusting your antenna, it may be helpful to access the "signal strength meter" on your digital-to-analog converter box or digital television to determine whether your adjustments are improving the signals' strength. The signal strength meter is usually accessed through the menu feature on your remote control. Refer to the owner's manual of your device for detailed instructions on how to access its signal strength meter. Remember to do another channel scan after you have adjusted your antenna.
- Television stations broadcasting in digital use both the VHF band (channels 2-13) and UHF band (channels 14-51). Many indoor antennas use "rabbit ears" for the VHF band and a "loop" or "bow-tie" antenna for the UHF band. Make sure you are using an antenna that covers both the VHF and UHF



bands and have connected it properly.

## If You are Still Having Difficulty:

- Until June 12, 2009, some stations will be operating at reduced power levels. If you are not receiving
  certain digital TV stations, this does not necessarily mean there is a problem with your antenna or digitalto-analog converter box or digital television. Check with the TV station to find out whether they are
  planning changes that will improve reception.
- When an analog TV signal is weak or receives interference, static, snow, and distortion will often appear
  on the screen. Digital broadcasting will provide a clear picture; however, if the signal falls below a certain
  minimum strength, the picture can disappear. This "cliff effect" means that if you watch analog TV
  stations that have static and distortion, you may have to adjust or upgrade your antenna system.
- Simple indoor antennas provide minimal performance that may not be suitable for your location. If you
  are unable to obtain satisfactory reception with your current indoor antenna, you may wish to obtain an
  indoor antenna that includes features for better reception of UHF signals and/or an amplifier to boost the
  received signal (often referred to as an active indoor antenna).
- Generally, an outdoor antenna will get better reception than an indoor antenna. However, the
  performance of outdoor antennas can degrade over time due to exposure to the weather. If you are
  having problems, check for loose or corroded wiring, broken antenna elements and that the antenna is
  pointed in the right direction.
- Try to keep the length of wire between your antenna and digital-to-analog converter box or digital television as short as possible for best reception.
- "Splitters" that are used to connect a single antenna to multiple digital-to-analog converter boxes or digital televisions reduce the amount of signal available to each device. If you are having problems, check whether reception is improved without the splitter. In some cases an "active" splitter that includes an amplifier can solve the problem.
- If you are near a station's broadcast tower, reception of that station, as well as other stations, can be impeded by signal "overload." Consider using an "attenuator" or removing amplifiers to improve your reception.
- If you decide to replace or upgrade your indoor or outdoor antenna, many types are available from electronics retail stores at a variety of prices. Websites such as <a href="www.antennaweb.org">www.antennaweb.org</a> provide information on the locations of broadcast towers and the types of outdoor antennas appropriate for the stations you wish to receive. If you need assistance with upgrading your antenna system, check with a local antenna retailer or antenna installer.

For more information about the DTV transition, go to <a href="www.dtv.gov">www.dtv.gov</a> or contact the FCC by e-mailing <a href="dtvinfo@fcc.gov">dtvinfo@fcc.gov</a>; calling 1-888-CALL-FCC (1-888-225-5322) voice or 1-888-TELL-FCC (1-888-835-5322) TTY; faxing 1-866-418-0232; or writing to:

Federal Communications Commission Consumer & Governmental Affairs Bureau Consumer Inquiries and Complaints Division 445 12th Street, SW Washington, DC 20554

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