

Consumer Reports®

GUIDE TO
YOUR CHOICES
IN THE

DIGITAL TELEVISION TRANSITION

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If you have an analog TV—likely to be an older set that is receiving signals through a set-top or rooftop antenna—you may need to spend at least \$20 to keep your current TV capable of receiving “free” broadcasts after Feb. 17, 2009, or roughly \$200 to replace it with a new digital TV.

Starting Feb. 17, 2009, television stations will discontinue use of analog signals and will broadcast only digital signals. This change is part of a nationwide technology upgrade that makes new services available to consumers. The federal government approved this change in 2005 with the aim of allowing stations to deliver more programming and to free up space on the airwaves for emergency services.

This will affect the more than 30 million analog TVs in households that rely on over-the-air broadcasts. It also affects the 40 million TVs in use for over-the-air broadcasts in homes that also have cable and satellite services. While the transition has some advantages, the bottom line is that many of us will have to pay money to keep perfectly good TVs working.

When the only option offered is to buy something—a converter box, a new TV, DVD recorder, or antenna—it pays to know more about your options. **Consumer Reports** wants to give you the information you need so you spend only as much time and money on this decision as you think is important.

What kind of television do I have?

Your television has an analog tuner, also called an NTSC tuner, if it is a picture-tube TV bought before 1998, a smaller LCD set (15- to 18-inch screen), or is a set that was sold as HD-ready. If you have a TV with an analog tuner and are receiving over-the-air broadcasts via an antenna you need to take action to continue to receive broadcast signals after Feb. 17, 2009.

Your television is more likely to have a digital tuner, also called an ATSC tuner, if it is a 25-inch or larger TV purchased since 2005. To confirm that your TV is digital, you should check the instruction manual for a statement that the TV has a digital tuner. If you don't have the manual handy, look for a menu function that allows you to scan for digital channels; this is typically in a submenu sometimes called "set-up" or "channels."

I subscribe to cable/satellite; what do I need to do?

Cable companies are required to carry both analog and digital signals until 2012. This means that if your analog set is connected to cable service, you have more time to make a change, but you will pay eventually, either in new equipment or higher service fees.

Your analog TV will not receive any over-the-air digital signal should your cable or satellite service go out, so you might still want to get a digital converter box now to be ready in an emergency.

If your set is digital, in the event of a service disruption you may want to receive over-the-air broadcasts. Make sure you have an antenna and know how to program your set to scan over-the-air channels.

What options do you have if your television is analog and currently receives over-the-air TV broadcasts?

OPTION	ESTIMATED COST
1 Buy a box that converts digital signals to analog signals that your set can display.	\$40-\$60 if you buy a basic converter box.
2 Buy a new television set with a built-in digital tuner.	\$200 and up.
3 Subscribe to cable, satellite, or telephone-company video service.	\$20/month (\$240/year) plus equipment rental for basic service.

Your best option might depend on whether you already have good over-the-air reception. Tall buildings, mountains, or trees can affect both analog and digital signals. If you have poor reception now, digital won't necessarily improve your reception.

Our advice is to try the least-expensive option first—the converter box—because the overall quality of your reception with your current set may be just fine. If you want better reception or more services, look at our consumer scenarios to determine what other options best fit your budget and needs.

DTV CONSUMER SCENARIOS: I have an analog TV receiving over-the-air broadcasts and ...

1 I am a cost-conscious consumer and am basically happy with my existing TV and reception.

The least expensive option is to purchase a digital converter box. The box is plugged in between your antenna and your television set and works by converting the digital signal into an analog signal that your television can display. The quality of your reception might be greatly improved by digital signals, but there is also a chance that poor reception will get worse. Once you've hooked up the converter box, if the digital signal is giving you an image worse than your original setup, try a new antenna before you buy a new TV. If that still doesn't give you what you want, return the box and the antenna and try one of the other options.

Buying Advice

- Converter boxes should be available at major discount and electronics retailers in early 2008. A basic box should sell for about \$40 to \$60.
- Get a rebate coupon to offset the cost of a basic converter box. Between Jan. 1, 2008, and March 31, 2009, the federal government is offering a \$40 converter box coupon (two per household). The coupon cannot be used for an antenna or any other peripheral and will expire 90 days after it is issued. There are no eligibility requirements; just call **888-DTV-2009** or go to **www.DTV2009.gov** and provide your name and address. Note that the number of coupons is large but not unlimited and that they will be given on a first come, first served basis.

- If you need to replace or upgrade your antenna, information on coverage and options is available at **Antennaweb.org**. Antennas can cost from \$10 to \$100 and up. The coupon cannot be applied to this purchase.

- Beware of bundling. Retailers might also package antennas, boxes, and services that will end up costing you more than you planned to spend. Our advice is to skip the bundles and try the basic converter box first.

2 I've been thinking about subscribing to cable service because I want access to hundreds more channels.

If you're just after more variety, the digital television transition might deliver. National broadcasters have already started to provide multiple channels where they previously only delivered one (for example, 13.1, 13.2, etc.). The number of channels you can receive digitally will vary depending on signal strength in your area. **Antennaweb.org** and **DTV.gov** provide more information on stations available in your area.

Cable services provide a signal that your analog set can receive, but only until 2012. Talk to the cable and the telephone company video services available in your area about how they are planning to serve you in the transition. If you are

keeping your analog set, you might still need a converter box if there is a service outage and you are concerned about emergency access. Satellite service is also an option, but it will require an upfront equipment purchase in addition to the monthly fee, which makes this the more costly solution. Some satellite boxes also include an ATSC tuner, giving you the option to receive over-the-air digital programming.

Buying Advice

- Subscription plans start at \$15 to \$20 per television per month; equipment rentals for cable cards or set-top boxes range from \$5 to \$10 per television per month.
- To get the best deal look closely at service bundles and check the company's Web site for special offers.
- If there is competition in your area, it might be worth it to try to negotiate for the level of service you want and no more.

3 I am in the market for a digital video recorder (DVR or DVD recorder).

Many DVRs and DVD recorders have built-in digital tuners that can act as the converter for your television set. (Some recorders have no tuner of any kind.) While this may not be the most cost-effective solution to the transition, if you were in the market anyway it makes sense—you get your digital signal and the ability to record programs for later viewing.

Buying Advice

- Shop around for the best price. Devices with digital tuners range from \$180 to \$300. Note that the converter box coupon can not be applied to this purchase.

4 I have been thinking about buying a new television

You can get a new digital TV and then continue to receive signal—now digital—from an antenna with no extra equipment or ongoing cost. Digital standard-definition TVs, which contain an ATSC digital tuner, cost about \$250 to \$300 or so for a 27-inch picture-tube model. Our previous tests of a number of those sets found that most offered good picture quality. You'll also find some digital LCDs with screens in the 19- to 26-inch range that sell for about \$300 to \$600. Some smaller screens with smaller prices, \$180 to \$250, can be found at discount retailers.

Buying Advice

- Look at the TV's picture on the showroom floor and ask the salesman for the remote control so you can adjust the picture settings to your liking. Make sure the colors are bright, the image is clear and the blacks look black, not grayish or bluish

(a more common problem with LCD TVs). Check the viewing angle on an LCD because the picture can fade as you move off angle, some worse than others. Check before you buy to make sure you can live with it.

- Whichever TV type you choose, make sure you have enough inputs to accommodate your DVD player and maybe video games.
- Shop for the best deal. In addition to holiday sales, large sets usually are on sale from November through the January Super Bowl season.

Be sure you are buying a digital TV. By law, beginning March 1, 2007, all TVs (including VCRs, DVRs, etc.) imported into the U.S. or shipped in interstate commerce must contain a digital tuner. Retailers may continue to sell analog-only devices from existing inventory but must prominently label the TV as having only an analog tuner. You may still decide to buy the analog TV, but you'll need a converter box to receive free over-the-air broadcasts.

Considering throwing away an old set? Reuse or Recycle.

American homes have an average of 2.6 sets and no one is suggesting it makes sense to upgrade them all. Those older sets will continue to be valuable for playing videos and DVDs or hooking up to game systems.

However, if and when you decide to discard your old set there are reasons to do so with care. Electronic products are the largest single source of lead in municipal solid waste. Older monitors can contain four to eight pounds of lead on average, while the plastics used in the housing of many television sets contain flame retardants that are toxic and persist in the environment.

Check whether your municipality offers recycling programs that accept electronic waste. The Electronics Industry Alliance's Web site, at EIAE.org can help you identify a program in your area. Alternatively, look for retailer in-store collection events. In many cases these services are free, but some retailers might charge fees or accept only certain types or brands of equipment.

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At ConsumerReports.org/dtv you can access our extensive buying advice, Ratings, and guidance on the digital- television transition. For more information on how you can fight for better and more affordable telephone, cable, and Internet services or equipment, visit our campaign Web site at HearUsNow.org.

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