

# Consumer Guide

# **Digital Radio**

U.S. radio broadcasters are now simultaneously broadcasting both traditional analog signals and digital signals that can be picked up with a digital radio receiver. The digital signals offer better sound quality than analog and, unlike satellite radio services, are free-of-charge.

# What is digital radio?

Digital radio is the transmission and reception of sound processed into patterns of numbers, or "digits" – hence the term "digital radio." In contrast, traditional analog radios process sounds into patterns of electrical signals that resemble sound waves.

Digital radio reception is more resistant to interference and eliminates many imperfections of analog radio transmission and reception. However, there may be some interference to digital radio signals in areas that are far away from a station's transmitter. FM digital radio can provide clear sound comparable in quality to CDs, and AM digital radio can provide sound quality equivalent to that of standard analog FM. FM digital radio also allows broadcasters to offer additional audio channels to the public, using their existing FM frequency.

#### **Data services**

In addition to audio broadcasts, digital radio offers simultaneous data services to listeners. For example, information about music may be displayed on the receiver's screen when the music is playing. You also can program your digital radio receiver to display weather updates, traffic reports and other news.

## Do I need a new radio to receive digital signals?

Yes, a digital receiver is required in order to get digital radio. However, all digital radios can also receive analog radio signals.

#### Where can I get a digital radio receiver?

Many electronics retailers sell digital radio receivers, and many automakers offer digital radio receivers in their new cars and trucks. Some models come with digital radio as a standard feature.

## How do I find digital radio stations?

In the United States, digital radio is broadcast using in-band on-channel technology. This enables radio stations to broadcast their regular FM or AM signal and their digital signal at the same frequency. In other words, a station at 88.7 FM would have a digital signal at 88.7 FM on a digital radio.

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