

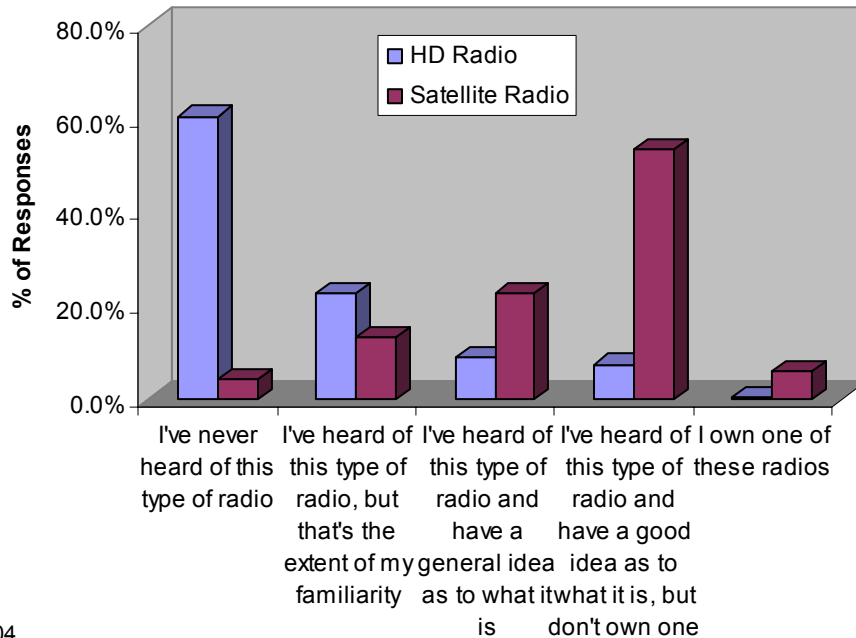
## Tuning In to Digital Radio

The conversion of radio from analog to digital is underway. Not only do consumers in the US have the choice of two digital satellite radio providers, but there are over ten radio stations broadcasting digitally in three markets in the US, with more turning on digital broadcasts every week. About 150 terrestrial radio stations are on the air today in digital format with over 400 having licensed HD Radio technology from iBiquity.

Some of the largest radio station group owners have made their plans on digital radio known. Clear Channel plans to install digital broadcasting equipment in 95% of its top 100 markets before July 2007. Cox Radio and Entercom Communications plan to upgrade 80% of its stations by the end of 2008. Most consumers listen to between 2 and 6 radio stations regularly. If several of their regular stations offer digital broadcasting, consumers will be willing to buy new HD radios.

HD radio is a few years behind satellite radio in consumer awareness and shipments. In a web-based survey we conducted in August 2004, over 60% of respondents had never heard of HD radio. On the other hand, 54% of respondents had not only heard of satellite radio, but also felt they had a good idea as to what it is.

**How Familiar Are You with HD and Satellite Radio?**



Source: In-Stat, 8/04

n = 1,385

When we asked all respondents which features of digital radio appealed most the top selections from over 50% of respondents were on demand traffic, news, and weather

information and more programming choices. Viewing song title, artist, and album data and better sound quality were important to 38% of respondents.

Offering these features is one of the reasons the satellite radio services have been so successful in adding subscribers. Satellite radio has offered more programming choices and song title, artist, and album information from inception. Information services became available in 2004. The latest generation of satellite radios from Delphi and XM offer a personal stock and sports ticker, as well as the ability to pause and replay the last 30 minutes of the audio broadcast.

Consumers have certainly picked up on satellite radio's value. 1.3 million satellite radios shipped to retailers in the first nine months of 2004 according to the CEA. This does not include the radios that are dealer or factory-installed in a new car. Over 150 2005 car models in the US offer satellite radio as a factory or dealer-installed option. At the end of 2004, there were four million satellite radio subscribers in the US.

Satellite radio has also been lining up content deals. XM signed Major League Baseball to an eleven year deal to broadcast games beginning in the 2005 season. Sirius has the rights to broadcast NFL, NHL, and NBA games. Beginning in 2006, Howard Stern will deliver his show on Sirius satellite radio.

At some point consumers will want a radio that receives both HD radio and satellite radio. While technologically there is no reason that radio cannot be built today, economic reasons will continue to delay its arrival. Neither XM nor Sirius has any interest in subsidizing a radio that receives radio broadcasts other than their own. A satellite/HD radio combination product will not emerge until consumers demand it.

Market forces are moving in the right direction for digital radio. In-Stat/MDR expects that 12 million digital radios, satellite and HD, will ship in 2008, three times as many as shipped in 2004.