

Sirius Satellite Radio overview

Contributed by Lou Fogelson
Tuesday, 20 June 2006
Last Updated Wednesday, 26 July 2006

Together with XM Radio, Sirius Satellite Radio is one of the two main providers of digital radio broadcasting in the United States. Sirius Satellite Radio currently broadcasts on over 120 channels with a variety of broadcasts including music, talk shows, news broadcasts and different other forms of audio entertainment. Sirius Satellite Radio covers the entire US territory. The high quality of the broadcasting signal produced by using the most advanced digital encoding technology makes the transmission clear and accurate where ever you are and if possible whether you maybe on a mexico vacations a lovers paradise. The fidelity of the sound transmitted digitally is much better than any analog radio provider can offer. The noise disturbances often associated to FM and AM broadcasts are now eliminated and the transmission is clear and almost identical in quality with the original track. Sirius Satellite Radio holds one of the two FCC approved licenses for delivering digital radio in the United States. The digital radio broadcaster only shares the field of Satellite Digital Audio Radio Services (SDARS) with Sirius XM Satellite Radio Inc. Here is some more information on the Sirius company:

Corporate headquarters: New York City, New York

Date of launch: July 1, 2002

Satellites in service: 3

Available satellite radio channels:120

Monthly subscription cost:\$12.95

Sirius Satellite Radio is truly an impressive corporation. Located in the heart of New York City with a huge recording studio situated in the Rockefeller Center, Sirius Satellite Radio has a huge library of over 2 million music tracks. The quality of the transmission is very high as it is in the 128kb/sec format – which is similar to CD audio quality. The company uses digitized signals through the PAC encoding technology, providing high fidelity broadcasts all over the United States. The Sirius satelliteThe three Loral SS/L-1300 commercial satellites used by Sirius deliver constant digital radio broadcasting to Sirius’ subscribers. As with most commercial satellites, the Loral SS/L-1300s orbit above the Earth at 22 300 miles. Very similar to XMs satellites, the Loral SS/L-1300 commercial satellites have a more inclined orbit which allows them to cover an even more extended area. The elevation angle of 60 degrees is more generous than the regular 45 degrees used by geostationary satellites. Since one of the most problematic aspects of satellite radio broadcasting is the line of sight – which can be easily interrupted by landscape or buildings – the Loral SS/L-1300 commercial satellites have a slight advantage over their competitors, since they have a clearer line of sight. The three satellites used for broadcasting slowly orbit around the Earth and only two of them are functional at any time. This is because Sirius only has two transmission frequencies and by alternating satellite transmission they can eliminate interferences while also having a spare satellite to put to use in case something goes wrong with one of the others. The 3 satellites take turns broadcasting – when one of them leaves the footprint of the continental U.S. another picks up the broadcasting transmission. Since the more inclined orbit provides better coverage, Canada and Mexico are also well covered by the digital broadcasting. This is an interesting feature of the Sirius satellite radio, as it enhances the benefit of not having to switch radio stations during long trips or while traveling outside US borders. Sirius has also announced a collaboration with the Canadian Broadcasting Corporation and Standard Radio Inc. This would allow anyone in Canada to benefit from Sirius’ services while using any of the Canadian English and French channels. Sirius broadcastingBecause the broadcast signal used in satellite radio transmission is so strong, you only need a small receiver in order to be able to listen to it. By using small omni-directional antennas you can take your digital radio programs wherever you are – either on the road or at home. The technology used is similar to GPS devices and the receivers don’t require pointing. Some of the new features of satellite radio refer to the extended broadcast information abilities, and the transmission can supply information on artist, music title or genre. One of the developments Sirius is working on is streaming video broadcasting – something that will probably become available to the general public soon after the technology and broadcasting methods become secure enough.