

Broadcast AM and FM radio stations used to transmit a 15-kHz audio bandwidth signal. But in 1989, the FCC reduced the bandwidth of AM stations to only 10 kHz. Although this bandwidth reduction allowed more radio stations to be squeezed into the same amount of spectrum, this greatly reduced audio fidelity.

More recently, the FCC authorized the use of a digital AM system (IBOC) which further reduced the analog audio bandwidth to only 5 kHz. IBOC stations still use 10 kHz of bandwidth because they split the remaining 5 kHz in half and fill both halves with digital signals on both sides of the 5-kHz analog core. The digital signals cause self-interference, which further degrades the quality of the analog audio signals from stations using IBOC. Although conventional 10 kHz analog broadcast stations are still allowed, the IBOC stations' digital sidebands cause harmful interference to other stations on both sides. People will not listen to broadcast stations with poor quality signals.

Some advocate converting the entire AM broadcast band to IBOC or to fully digital transmission. However, fully digital schemes are not compatible with existing receivers in the U.S., and it is impractical to convert existing analog receivers to digital. Existing radios (including car radios and portable radios) will not be able to receive fully digital broadcasts. Because the digital processing circuitry draws a great deal more power than conventional analog receivers, the battery life of a portable digital receiver would be much less than that of the same-size battery in a conventional portable analog radio receiver.

The FCC could save AM broadcast radio by allowing AM broadcast stations to increase their analog bandwidth to the same 15 kHz they had before 1989. The FCC could also issue recommendations for AM broadcast receivers to automatically adjust to take advantage of the full received audio bandwidth. Restoring the sound quality of AM broadcast radio, by allowing it to use its full original 15-kHz analog bandwidth, is the best way to save it.