

[January 21, 2025](#)

[Those Sour Notes May Be Your Hearing Aids](#)

[Resources](#)

Digital hearing aids can, indeed, change some sounds, making them slightly sharp or flat. Here's how to fix it.

By Stephen O. Frazier

With my electronic piano I can play Chopin's "Polonaise" or Beethoven's "Appassionata" with wrong notes, just like Vladimir Horowitz did. He was forgiven those occasional wrong notes because of his astonishing technique and the unparalleled beauty of his sound.

In my case there are also occasional wrong notes, but often they're the right ones that only sound wrong. I also hear

"wrong" notes when attending New Mexico Philharmonic concerts, especially when they perform a piano concerto, which is my favorite musical form. Curious as to what was causing these obviously errant sounds, and suspecting that it might be my hearing aids, I set out to solve this problem.

My research found that digital hearing aids can, indeed, change some sounds, making them slightly sharp or flat. [Musicians Clinics of Canada reports](#) that the hearing aid industry calls this phenomenon "frequency transposition" or "frequency shifting." It is especially common in the higher frequencies. MCC says hearing aids now have a setting called "frequency compression" that can be turned on or off. This is relevant when amplification settings are not optimized for music.

Hearing aids are primarily designed to enhance speech, not music, which has a [much wider range of frequencies](#). When hearing aids compress these sounds, it can alter how music is perceived, making some notes sound "off." [Hearing Review says](#) that such frequency compression can cause high notes to



sound lower and low notes to sound higher. Even amplification across different frequencies can lead to pitch distortions.

Exacerbating the problem, digital hearing aids may not only distort or alter the sound of music but also lower the intensity more than necessary, making some notes inaudible or even unpleasant.

For many hearing aids, this problem can be addressed by a visit to an audiologist, especially if the devices can have an optional “music” setting. [Hearing Tracker reports](#) that some hearing aids, aided with AI (such as Phonak's AutoSense 5.0), “are smart enough to adjust settings based on the environment—even including a music setting.”

The article suggests, though, having a dedicated setting specifically for music. This setting may minimize distorted frequencies and can also amplify frequencies important in music that are above or below those used in speech. In addition, frequency shifting may occur more frequently in recorded music as opposed to live performances because the compression applied to recorded music—already compressed during production—can further [distort the sound](#).

The [University of Iowa published a paper](#) addressing some of the problems encountered when listening to music using hearing aids. Their tips for listening to recorded music are:

- Use an equalizer to increase or decrease the volume of higher and lower frequencies.
- Turn down the volume on the music player and turn up the volume of your hearing aids
- Use Bluetooth and stream music to your hearing aids rather than relying on the hearing aids mics.
- Listen to recorded music without hearing aids, using high-quality headphones instead.

For live music they recommended that listeners:

- Borrow and use an assistive listening device so the volume setting on the hearing aids isn't too high, resulting in distortion.
- Have a remote control for your hearing aids and adjust the volume when the music is too loud, in order to avoid distortion.
- Try a different setting on your hearing aids to see if the music sounds better.

Now with a better understanding of how digital hearing aids can alter music and knowing how to address those issues, you can enhance the listening experience. By optimizing settings and seeking professional advice, we can enjoy the beauty of music with fewer or maybe even no sour notes.