

## APPLE MUSIC SOUNDS GREAT IN PRINCIPLE, BUT COULD THE QUALITY BE BETTER?

*Asks Richard Ellis McCallum of A&E IT*

About three months ago, Apple introduced Apple Music, its new music streaming and radio service. It promised convenience and all your music available on all your devices, all for a small monthly subscription. The first three months were free and delivered via an iTunes update, so anyone who subscribed back then will need to act fast to deactivate auto renewal...

Sadly the hype has a hidden underbelly. Google 'Apple Music review' to learn more.

Aside from all the bugs, those that tried it will know that the sound quality isn't as good as it could be. Apple Music streams at 256kbps. Without getting too technical, that means it is delivering less than a fifth of the digital information contained in the equivalent CD track. It achieves this partially by compression, but also by filtering out low and high frequencies in the music itself. The equivalent CD track will sound better because the audio file is uncompressed and delivers a closer representation of what the artist originally intended.

But we can do better than that. Just like Full HD and 4K Ultra Resolution for TV, audio is now available in resolution standards four times as great as that of a CD and sometimes more. Companies like HDTracks.co.uk have available the best-sounding audio files for download (at a price). But you can 'rip' your own CDs in 'lossless' mode using iTunes for free and put all your music on your Mac (or PC if you must). Using Sonos or a similar wireless system, you can stream your own library all over your house from any device. But whilst it'll sound good, you can do better.



With some creative thought, organisation and some investment in quality componentry, it is possible to utilize your existing hifi and computer to deliver bit-perfect, high-resolution sound in every room. All controlled by your iPad or iPhone for a fraction of the cost (and foibles) of a hi-res network streamer.

A&E IT has built an iTunes system based around an upgraded Mac Mini. Adding a portable DAC (digital to analogue converter) and some third-party audio software, we have enabled the music to by-pass the internal, sound-degrading circuitry of the Mac to deliver a whole 20,000 track library in pure, high-resolution, better-than-CD quality sound through a traditional hifi and onward through any AirPlay enabled device. The clarity is a revelation and delivers the music just as the artist intended. It all resides on a single hard drive in the Mac Mini. So no streaming, no subscription and no more space-hogging CDs required.

Interested? Then learn more by emailing [gethelp@aande.it](mailto:gethelp@aande.it) for information any time. You'll never want to suffer poor quality, compressed music for the sake of convenience again. [www.aande.it](http://www.aande.it)

High-Res audio stored in one compact place.  
Music to your ears delivered all over the place.

Our Apple-based, custom-built system, delivers all the flexibility you're used to, but with the clarity you crave.

Better than CD quality sound\* using iTunes. All through your existing hifi - as well as any Airplay enabled device.

All of your music available all of the time. Anywhere around the home or office. Zero clutter. Zero hassle.

Contact A&E IT for more information. Hear your music how the artist intended it to be heard.

[www.aande.it](http://www.aande.it)

\*CD quality 16bit 44.1kHz as standard. Up to 24bit 192kHz high resolution audio available.

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