



# Red Wine Audio

battery-powered purist hi-fi

## iMod

The iPod needs no formal introduction... music lovers have been enjoying its first-rate user interface and features for years now, and more and more audiophiles are realizing that they can obtain favorable results using it as a source for their high-end headphone amplifiers and high-end stereo systems (ripping their music and playing them back as WAV/lossless files and using a line-out dock cable).

Unlike conventional CD players, the iPod offers many unique features. Here are just a few:

- Battery powered operation (so it can be easily ran "off-the-grid")
- Extremely short digital and analog signal paths
- Hard-drive playback
- A simple-to-use, high-performance interface that displays artist/album info and album artwork, offers the ability to create and use playlists, the ability to search through your music collection by artist, album, song, genre, etc.)
- A vivid color display
- Sleek aesthetics, small size (portable), and simplicity in connecting to your home or portable audio system

What you may not know is that that the 4th and 5th generation iPods use a very high-quality internal Wolfson Microelectronics DAC (Wolfson DACs are used in quite a few high-end home audio CD players).

For the music lover in us, all of these features are worthy of our attention. However for the audiophile in us, sonic performance is our highest priority and what Red Wine Audio has found is that the circuitry that follows the internal DAC (the analog line-out stage) needed to be improved in order to achieve true high-end performance.

We came up with a list of improvements to the sound quality that we believe are required in order to achieve true high-end performance (again, using WAV/Lossless music files):

- Tighter, more articulate bass (not necessarily more bass quantity... but much improved bass control and definition)
- A richer, more seductive midrange
- A less flat and more expansive imaging (the soundstage needs to open up and become more 3D... more wide, more deep, and with a better sense of height in recordings that offer this level of resolution).
- Improved transients/dynamics
- More detail retrieval and overall transparency
- Superior treble extension and sweetness, as well as better decay of long held notes and delicate harmonics



*"Whether you are listening to your headphones (via a headphone amp) or in a full-blown system, the effect is not subtle... The iMod has to be one of the best values in hifi today! I can't remember the last time I spent 200 bucks and got this much of a jump in performance."*

Jeff Dorgay, Tone Audio



### We made it happen!

We are very pleased to announce the first audiophile hardware modification to be offered for both the 4th Generation iPods (monochrome and color screens) **and now the newer 5/5.5 Generation iPods!**

The Red Wine iMod succeeds in achieving all the desired improvements listed above that take the sound quality of the iPod to a level that is very competitive with high-end CD Players costing many times the price and lacking the features and benefits associated with a battery-powered, hard-drive based music source.



### Why iMod?

Even if you use the very best iPod cable with your stock iPod, you are still not avoiding the serious degradation of sound quality that occurs after the internal DAC. This degradation from the cumulative effects of the following stock components that are directly in the line-out signal path and that were NOT optimized for audiophile use:

- The low quality stock SMT coupling caps after the internal Wolfson (before the stock opamp)
- Opamp output stage
- The low quality stock SMT coupling caps after the opamp output stage
- The minuscule circuit board traces that carries the analog line-out signal
- SMD resistors and inductors directly in the signal path
- The signal path inside the stock iPod dock, which contains: the dock connector plug, a very cheap ribbon cable, more minuscule pcb traces, SMD resistors, and finally the line out jack.

### iMod Details

The goal of the Red Wine iMod is to significantly minimize the analog signal path that follows the output of the internal Wolfson Microelectronics DAC chip.

### iMod for 4th Generation iPods (monochrome and color displays)



We take the analog output (line out) signal off of the Wolfson DAC chip and send it directly to the internal 1/8" headphone jack (converting it into a dedicated line-out jack) via high-end Black Gate Non-Polarized NX-Hi-Q coupling capacitors. This completely bypasses all the components listed above that degrade the sound quality of the Wolfson DAC's line-output.

#### **NOTES regarding the 4th Generation iMod**

The Red Wine Audio 4th Gen iMod converts the 1/8" headphone jack into a dedicated line-out jack (constant voltage output direct from the dac chip...no volume control), so the headphone output is disabled. The iMod is intended to be connected to either a high quality headphone amp w/ volume control or home stereo system, NOT directly to headphones (unless they have a built-in volume attenuator in the headphone cable).

While the stock audio line-out signal from the dock connector is also disabled, all other dock connector functionality remains in its stock form.

### iMod for 5th Generation iPods (all 5G/5.5G models)



**NEW!** We take the analog output (line out) signal off of the Wolfson DAC chip and sent it directly to the dock connector pins. This completely bypasses all the components listed above that degrade the sound quality of the line-out of the Wolfson DAC. However, unlike the 4th Generation iMod, we are not able to fit the high-end Black Gate Non-Polarized NX-Hi-Q coupling capacitors inside of the 5G/5.5G models. Luckily, we found a solution!

We have teamed up with ALO Audio, a highly-regarded cable manufacturer, to introduce the iMod Dock Cable. ALO has found a way to install the capacitors in the dock plug of the cable itself, thus it is required for use with the new iMod. You must purchase the cable separately from [ALO Audio's website](#).

#### **NOTES regarding the 5G/5.5G iMod**

The ALO iMod Dock Cable is required for use of the 5/5.5 Gen iMod. They offer several versions, and each premium quality cable has been specifically designed for use on this iMod version.

**Do NOT use any other dock cable with your 5G/5.5G iMod or damage \*may\* occur to your amplifier and/or headphones/speakers. We are NOT responsible for any misuse.**

ALO Audio also plans to release a special version of their iMod Dock Cable that features a dc power jack and power supply to allow the user to use their 5G/5.5G iMod even when its battery is charging. Details will be posted soon...

Unlike the 4th Generation iMod (see above), the 5G/5.5G iMod does NOT in any way alter the stock headphone output... it is not modified or disabled. Its functionality and sound quality of the headphone output remain "stock."

#### **Other iMod information (common to 4G and 5G/5.5G iMods)**

Line out voltage of iMod: ~1.0 Vrms.

For best performance, run the iMod WITHOUT the AC power/charge cable connected. This will isolate the iMod from AC power supply noise, as the iPod will only be running off of battery power.

The Black Gate NX-Hi-Q signal coupling caps that we use for the iMods are notorious for taking 200+ hours of burn-in time to sound their best. To properly burn-in your iMod, you need to have it connected to a load (e.g. your headphone amp or home audio preamp/integrated amp). The load does not need to be turned ON, but to allow for electrical current to flow through the modded audio line output, the iMod MUST be connected AND playing music. For burn-in, we recommend connecting the external power cable (so the internal battery does not discharge) and playing an album (or playlist) on repeat mode.



-- Need a new battery installed? Send it to us with your iPod to be modded, and while we are inside your iPod we'll change it for FREE. We do not stock iPod batteries, but you can purchase them online and have them shipped directly to use for installation during or after your iMod.

## iMod Reviews / Testimonials

**I got my Redwine iMod-ed iPod today,WOW!**

**iMod v stock iPod**

**iMod Arrived Today - First Impressions**

*"Look, listen: If you, whoever you are, want to boost the performance of your iPod — a very fine tool to begin with — you might look into a Red Wine Audio iMod. Why settle for very fine, when you can easily have so much more?"*

Stephen Mejias, Stereophile

*"In fact it was quite smooth, with a pleasantly laid-back quality that was missing from any similarly priced digital player I've heard. After long listening sessions, I wasn't exactly in a rush to go back to my usual number-crunching rig. In terms of price, convenience and portability, I can't think of anything else comparable."*

Paul Candy, 6moons

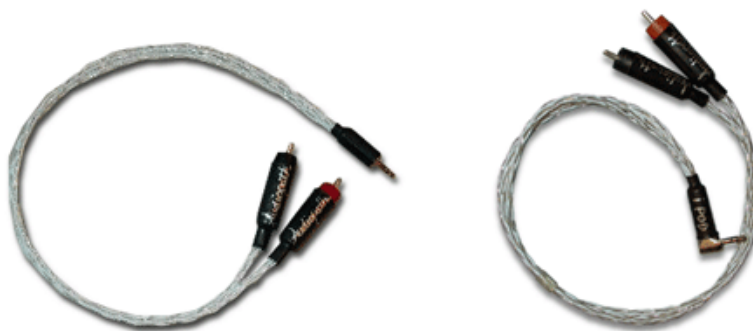


*"Vinnie Rossi has taken a tiny iPod and turned into a giant killer"*

*"There isn't an iPod on the planet that can compare to this one. Let alone some CD players under \$1,500."*

OnHeadphones.com

-- Highly recommended: AudioPath 0.5m Silver iPod cable with Eichman Silver Bullet RCA Plugs or with 1/8" stereo plugs on both ends. This cable is also offered with right angle 1/8" plugs. 1 meter length is also available.



Remember, the 5G/5.5G iMod requires the use of the [ALO Audio iMod Dock Cable](#) (sold separately).

If you need a modded iPod, ALO Audio also sells 80 iMods as well as their iMod Dock Cables!



