

New Product Announcement

DRAGONFLY BLACK & DRAGONFLY RED



Hard to believe! It's been almost four years since the original DragonFly (v1.0) changed the world's concept of what a DAC could and should be. At only €249, but with expensive component-quality performance, DragonFly was hailed around the world as the perfect introduction to the pleasures of high-performance audio.

A year and half later, DragonFly rocked the audio world again when we introduced the updated v1.2—for only €149. The sound was simply a little cleaner, a little better controlled, and more relaxed—unequivocally better. And, the new price helped bring better-sounding music to even more people.

Now, AudioQuest is truly pleased to introduce two dramatic steps forward—**two new DragonFlies** with unprecedented audio quality and even higher performance-to-cost ratios—and, *drum roll*, they **work with Apple and Android™ phones!**

Yes, that last point is a biggie. From the day that the original DragonFly came out, we got requests for a DragonFly-quality DAC to use with smartphones. Finally, thanks to newly available parts, power draw is now well within what any phone will authorize.

We've been busy for years making this new generation of DragonFlies possible. AudioQuest worked alongside Microchip Technology to develop a new high-performance, full-speed USB microcontroller (a DAC's input processor) that delivers improved signal-to-noise ratio and significantly lower power consumption. Drawing 77% less current than the DragonFly v1.2's microcontroller, the new Microchip MX microcontroller enables true compatibility with Apple and Android smartphones and tablets. For use with Apple iOS devices, Apple's Lightning-to-USB Camera Adaptor is required; for use with Android devices, a Made for Android (OTG) adaptor, such as our DragonTail USB Adaptor For Android Devices, is required.

We hesitate to brag about specific electronic parts in the DragonFlies because the implementation of those parts is as crucial as their quality. Please don't make the mistake of thinking that DACs with the same microcontroller or primary processor all sound alike! Depending on the circuit design, control of noise, power supply regulation, quality of the many passive parts, etc., a supposedly "lesser" DAC chip can easily outperform a "better" DAC chip in a different DAC.

Also, as with cameras and their previous race to have more pixels than the other guy, playing the numbers game can distract and deceive. While the DAC chips in both the Black and Red DragonFlies have great capability, we have chosen to limit DragonFly Red and Black processing to 24-bit/96kHz. This makes using the DragonFlies as simple as it's always been, fully compatible with PCs, etc., without having to download and install new drivers. Though maybe more importantly, faster processing can mean more noise, so while playing 24/192 files with some of the best component DACs does offer sonic advantages, many DACs actually sound better when the computer down-samples a 24/192 file to 24/96 before sending the data to the DAC. Our point is that AudioQuest plays a music-quality game first and foremost. DragonFlies are designed to be the-best-they-can-be Emotional Transportation for your music, whether Spotify, YouTube videos, Tidal, ripped CDs, or state-of-the-art Hi-Res files.

Back to bragging about our internals: The new DragonFly models also incorporate improved 32-bit ESS Sabre DAC chips—the 9010 in Black and the higher-performance 9016 in Red—both of which employ minimum-phase filtering for naturally detailed, more authentic sound. While DragonFly Black uses the same high-quality headphone amp and analog volume control found in the DragonFly 1.2, DragonFly Red includes the latest ESS headphone amp and a bit-perfect digital volume control that resides on the

9016 DAC chip itself—a sophisticated implementation that ensures maximum fidelity, dynamic contrast, and signal-to-noise ratio.

Those of you who remember how we bragged about the DragonFly v1.0 and v1.2 having an analog volume control might now be going “huh?” Good question! It’s a matter of capabilities. The earlier DragonFlies and the Black feature an analog volume control because that’s a better-sounding approach than most digital volume controls, which cut off bits in order to reduce the volume. However, when a digital volume control, as in the new DragonFly Red, doesn’t compromise the signal, doesn’t reduce finesse and subtlety and low-level detail, then a bit-perfect digital volume control is superior. Once more, it’s not about a particular part or sample rate or buzz word—it’s about honoring the quality of the resulting sound above all else.

DragonFly Black outputs 1.2 volts—enough power to capably drive all preamplifier input circuits and all reasonably efficient headphones. Meanwhile, with its higher 2.1-volt output, DragonFly Red is compatible with an even wider range of headphones, including power-hungry, low-efficiency models. For reference, DragonFly 1.0 and 1.2 featured 1.8-volt output.

The difference in maximum output between DF Black and DF Red is essentially irrelevant with our NightHawk headphones, as they can be easily driven by either model, but Red’s higher output is an important advantage with some of the more inefficient headphones on the market. However, the difference in sound quality between the two new models is *always* meaningful, and is important whether feeding headphones or the Aux input of an audio system. At the same volume, Red has much more “torque,” “grip,” and “muscle” than Black. Red simply sounds cleaner and clearer overall, enabling a larger soundstage with each instrument or voice more nearly in its own space.

And, more good news: The new DragonFlies are software upgradeable through complimentary Windows and OS X desktop applications. As new developments arise in music player applications, streaming protocols, or other associated software, DragonFly users will be able to incorporate those updates into their existing devices.

DragonFly Black for only €99, with better sound than any previous DragonFly for less money than any previous DragonFly, and DragonFly Red with much better sound at only €199—and both compatible with phones—how much good news can you stand?!

DRAGONFLY BLACK & RED

- Play all music files: MP3 to high-res
- Compatible with Apple and Windows PCs, as well as iOS and Android devices (requires Apple Camera Adapter or Made for Android/OTG adaptor)
- Asynchronous Class 1 USB data transfer using the Streamlength™ protocol
- Fixed output feeds preamp or AV receiver

DRAGONFLY BLACK

- Medium output (1.2 volts) drives a wide range of headphones
- 32-bit ESS 9010 DAC with minimum-phase filter
- Analog volume control

DRAGONFLY RED

- High output (2.1 volts) drives almost all headphones, including power-hungry models
- 32-bit ESS 9016 DAC with minimum-phase filter
- Bit-perfect digital volume control

