

AN ART'S EXCELLENCE REVIEW

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# AudioQuest DragonFly Cobalt

*Groundbreaking portable high-end*



MAX DELISSEN

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*The AudioQuest DragonFly Cobalt USB da-converter and headphone amp was announced quite unexpectedly just before the summer. Over the past two years, the Californian manufacturer had mainly focused on power products, power cords and speaker cables. And there was so much to report about those products that one could easily forget that the AudioQuest DragonFly Black and Red - that are still available and successful - already date from 2016. In the extremely competitive market segment of portable hifi - called Head-Fi these days - two and a half years is a long time to stay on top of the market. So even though the DragonFly concept is fairly unique it really was time for something new. Allow me to introduce the cobalt-blue automotive metallic paint-clad DragonFly Cobalt, that got a make-over on a number of essential points, which assured it once again of a lot of attention and of the top position in the market. But don't let me get ahead of myself...*





# Design



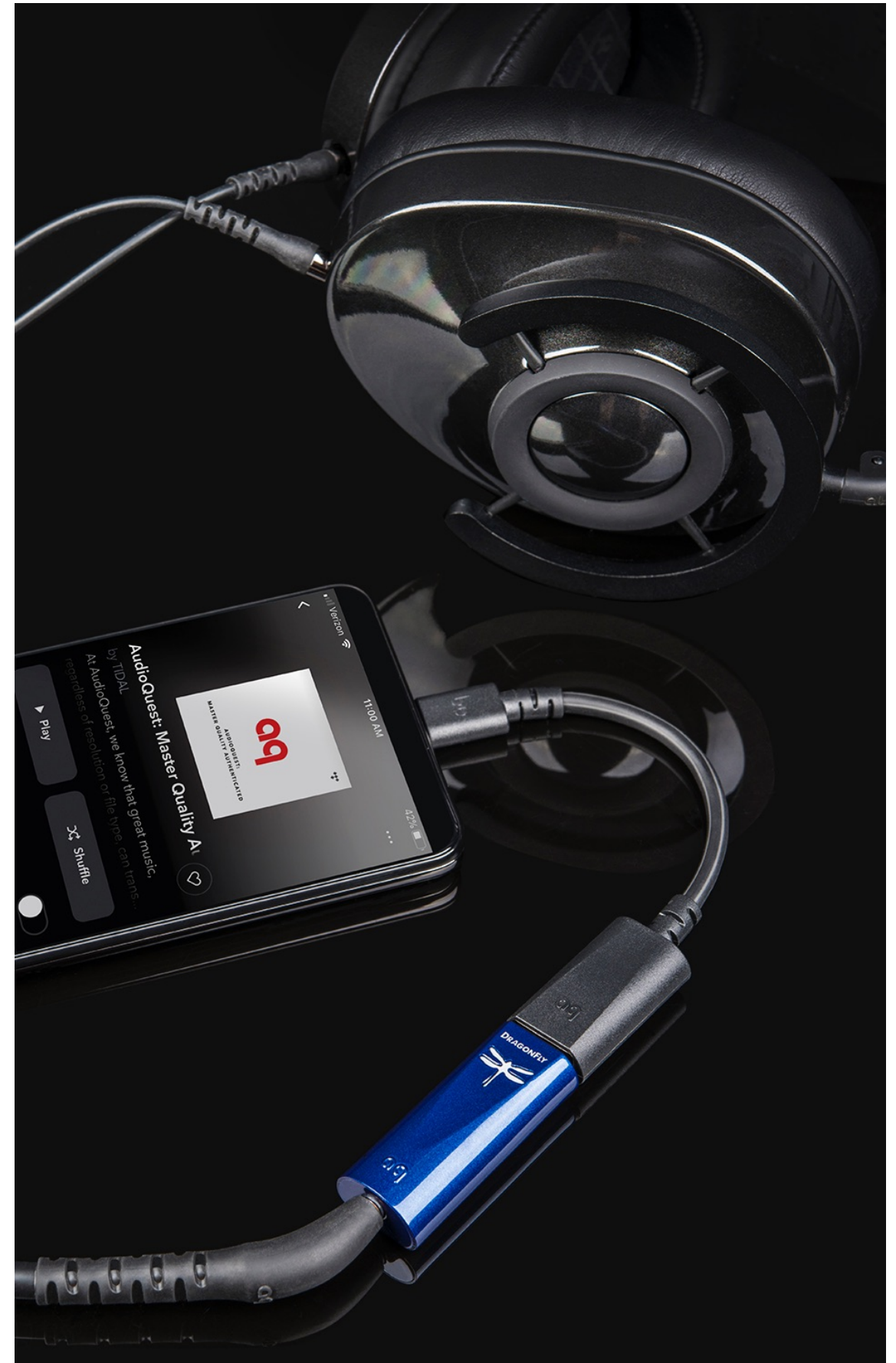
The AudioQuest DragonFly Cobalt is an addition to the line-up, so it's not the successor to the DragonFly Red. It is partly based on the topology of its red brother, but a lot has changed under the - also new - bonnet. Normally, at this point in the review, I would just link to the AudioQuest website for (technical) details, but the list is not very long and of importance to the rest of this story. But I feel a little rebellious, so let's start with the design. The DragonFly Cobalt is 10% smaller than its Black and Red brethren and it has a rounded body. Superficially that may look like mere cosmetics, but it really does make a difference when you slide it in your pocket along with your smartphone. The ease of use has improved, something that seemed hardly possible.

## Technology

Just like the Black and the Red, the DragonFly Cobalt will work with the USB power from the connector of a smartphone or tablet, but the new PIC32MX274 microcontroller by Microchip has a 30% lower current draw than the microcontroller in the DragonFly Black and Red. Therefore, a day's worth of listening to music with the DragonFly Cobalt will cost you little more than 5% of your battery power. Another improvement is the new ESS ES9038Q2M converter-chip. And more specifically its digital filter. The Cobalt is the first DragonFly to implement a minimum-phase slow roll-off filter. I will get back to you later on how that works out for the sound quality. Besides that, the DragonFly Cobalt is fitted with a powerline filter that focusses on noise from WiFi, Bluetooth and Cellular sources, and it also has Gordon Rankin's (of Wavelength Audio) monoClock® technology, that - as the name says - uses only one clock to synchronise all parts of the circuit. That results in a significant reduction of Jitter. What was kept - because AudioQuest's owner and visionair Bill Low prefers a broad applicability to pioneering with cutting edge connectivity - is the DragonFly's USB 1.1 compatibility. That is why the DragonFly Cobalt has a 'limited' resolution of 24bit/96kHz. It will also not play DSD, but it will do MQA. Audiophiles will probably find that beneath their dignity but let's be fair; how much resolution do you really need for portable use? And how many DSD files and albums with storage space gobbling sampling frequencies north of 192kHz does an average music lover have? Exactly...

# In practice

That the AudioQuest DragonFly Cobalt is the flagship of the series becomes even more clear when you look at the provided accessories. In the box you will find - besides the DragonFly - a small but convenient protein leather pouch to keep it in, and a DragonTail, which is a USB-A to USB-C adapter. For AudioQuest aficionados: it's a 'Carbon' level cable. For non-insiders: it's a very nice cable. Those who own an iPhone or a normal iPad are at a slight disadvantage here, because they have to use the Lightning to USB (camera) adapter that is provided only by Apple. Only the big and costly iPad Pro has a USB-C port.





# Listening part 1

I thought it would be both interesting and logical to compare the DragonFly Cobalt to the DragonFly Red. To make this review even more exciting I decided to throw in the iFi nano iDSD Black Label as well, because it's only a few tenners more expensive than the DragonFly Red. As far as usability and features are concerned, the iFi is in a different league. It offers more functionality, like a higher PCM resolution and DSD, but it is also a lot bulkier and for portable use it depends on an internal battery for power. But sound wise it's a great performer too. To make this part of the review as fair as possible I connected all three converters to my iPad Air2 using the Apple Lightning to USB adapter, providing an equal playing field. Qobuz Studio (hi-res) was used as the music source, and I used my unsurpassed AudioQuest NightHawk Classis headphones. The track that I chose was Yajna, from the new album The Quanta Series (24/44.1) by the Syrian/American singer and producer Káryyn. Her music contains lots of space, detail, thunderous bass and a mix of acoustic and electronic instruments. The DragonFly Red got to go first and performed in a very familiar way. Lots of tonal colour, dynamics and detail. Once again I was surprised that such a

small device can pack so much musical punch. Compared to the DragonFly Red, the iFi nano iDSD BL had a slightly darker sound, with more bass, although that was also slightly less defined. Spaciousness and detail were marginally better, but I still think it is too big for mobile use. For use with a laptop it is a great alternative, especially because it has a physical volume knob. However, the bit perfect 64-bit digital volume control of the DragonFly 'sounds' better. After the iFi it was time to connect the fully burned-in DragonFly Cobalt, and it was clear from the first note: the Cobalt wipes the floor with both the DragonFly Red and the iFi nano iDSD BL. Sure, it costs more, but the difference in price repaid itself with a more powerful bass with lots of detail, more space, more neutrality and transparency in the midrange and hugely detailed but silky smooth highs that were instantly addictive. Tonal balance and texture had more coherence, realism and vibrancy and the rhythmic structure and timing were better, making the music sound more catchy and supple. In my experience these are typical properties of a minimum-phase slow roll-off filter, so there you have it.



## Listening part 2



The second part of the listening test took place outside, using my iPhone and the Ultimate Ears Triple Fi 10 IEM's. I listened to a lot of different music using the Qobuz app, but I focussed on the album *Dwaal*, by the Swedish producer boerd (yes, with a lower case b) that I had to put on my phone with the iTunes app because Qobuz doesn't have this gorgeous chill-out album from 2016. But I will provide the Tidal link below. With the Triple Fi 10 the DragonFly Cobalt clearly proved that it is on another level than the DragonFly Red. I noticed the bigger spaciousness, the increased clarity in the midrange and the better defined bass, but the super refined high frequencies proved to be its biggest trump once again. As far as I'm concerned, this is how better da-converters set themselves apart from the lesser ones. The total lack of stress provides a very realistic character. Of course the tonal colour of the connected headphones is a factor that's not to be underestimated, but in a direct comparison, the AudioQuest DragonFly Cobalt simple sounds more lifelike than its Red brother. And that is the best compliment I can give this small blue miracle-stick.



# After all is said and done...

AudioQuest pulls it off again, with the DragonFly Cobalt. Where the original DragonFly V1 from 2012 set the standard for ultra compact better portable sound as first one of its kind, and where the third generation DragonFlies - the Black and the Red - extended that improvement towards mobile use, I am prepared to call the new flagship DragonFly Cobalt, with its true high end sound, groundbreaking. Honesty demands my admission that I didn't think that the DragonFly concept had another surprise in it. As far as I'm concerned, AudioQuest did a cracking job of keeping that a secret over the past few years, giving the competition a run for their money yet again.



# Music and Information

More information and prices about the AudioQuest DragonFly Cobalt can be found in our webshop:

[AudioQuest DragonFly Cobalt](#)

## Spotify

[boerd - Dwaal](#)

[Káryyn - The Quanta Series](#)

## Tidal

[boerd - Dwaal](#)

[Káryyn - The Quanta Series](#)

## Qobuz

[Káryyn - The Quanta Series](#)







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