

hardware review



Chord Electronics Mojo 2

Monday, February 14, 2022 Chris Baillie

I have been looking forward to reviewing this product for some while as its predecessor marked the very beginning of my journey into the realms of hi-res audio. I have fond memories of balancing a Samsung Galaxy S7 smartphone and the original Mojo on my leg whilst watching my children's karate sessions in the school gym hall. The introduction of the Poly add on streamer made things simpler and easier to use. The original Mojo was such a hit amongst audiophiles and music lovers alike that Chord's designers have had a tough job in coming up with a replacement that could improve upon the original without losing what was great about it. From my experience of using the Mojo 2 the improvements are evolutionary rather than revolutionary. The new Mojo brings improvements in sound quality, processing power and battery life, along with some useful new features, including tonal EQ and crossfeed which, I understand is a first on a pocketable unit.

Design, features and build

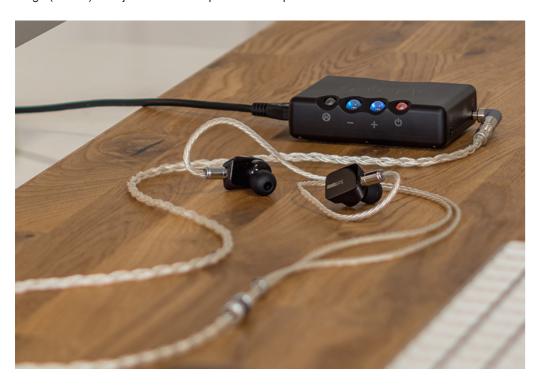
As Mojo 2 is designed to work with Poly, Chord has stuck close to the original formula. We have the same high-quality anodized aluminium casing, which served the original so well; despite heavy use my original example still looks new. The keen-eyed will notice the guides for the rubber bands that many used to attach their mobile phones to the original Mojo have gone. Presumably many of those using Mojo 2 on the move will be combining with a Poly which takes the phone out of the loop.

The main visual difference is that the new unit has four buttons compared to the original's three. The new buttons are of a more solid design and don't rotate or rattle. Mojo's three buttons were all the same size, Mojo 2's central two volume buttons are larger than the two end buttons, which should make it easier to find them by feel. The on-off button is retained and the fourth button, acts as a menu switch, allowing users access to both EQ and crossfeed functions. One press of the Menu button accesses the crossfeed settings that can be adjusted with the volume buttons. For those unfamiliar with crossfeed, it is designed to give a more speaker-like stereo balance when using headphones. Pressing the Menu button twice enables the DSP tone equalization adjustments. You can access the first of these settings by a following press of the volume buttons, a second press selects the next and so on. It sounds complicated,

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but I found it made sense when I experimented whilst following the procedure in the well laid out Mojo 2 manual. The buttons also change colour which helps to keep you on track. Pushing both volume buttons together locks the controls, a great feature if you have it in a pocket.

The equalisation on offer in Mojo 2 is far more capable and sophisticated than in many audio components regardless of size and was created so that users can find a sound that suits their equipment and tastes. Designer Rob Watts has gone to significant lengths to offer an 18dB range (+/-9dB) of adjustment at four points in the spectrum. These start at 20Hz with shelf



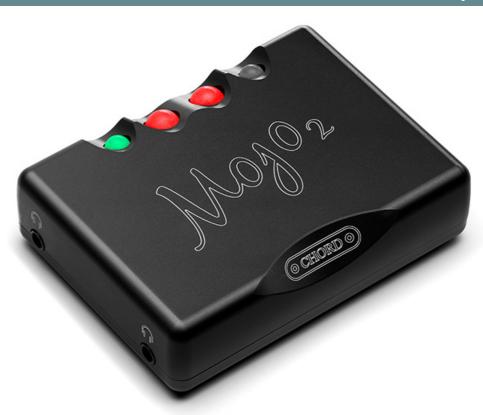
settings at 125Hz and 3kHz and a further 20kHz option. That is a very wide range of adjustment for any EQ system but what Chord have also done is to make it sonically transparent inasmuch as it doesn't have any negative side effects such as blurring timing or hardening treble.

The inputs are essentially unchanged from Mojo, however, Chord have added the much-requested USB C input which is positioned just below the micro USB input. This is because USB C has become the go-to digital output for smartphones and smaller devices. Those who have read about or used Chord DACs will probably be familiar with the term tap lengths. For the record, Mojo 2 has 40,960 'taps'; the original having 38,912 . Improvements to the PSU are said to have resulted in a lower noise floor. As with the previous version, Mojo 2 can decode PCM files up to 32/768 and up to DSD256.

Mojo 2 is slightly longer than the original model, no doubt because of all the additional functionality, so the old Mojo-only and Mojo/Poly cases no longer fit. The original Mojo was used by many in their domestic audio systems and if the battery was left to run down and then it was put on charge and playing at the same time it would get surprisingly hot. If left to fully recharge first, then it wasn't an issue. Thankfully, Chord has fixed this with a circuit that disengages the battery once it reaches full charge.



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The twin 3.5mm headphone outputs are carried over from the original model and some potential buyers will wonder why Chord has not added a balanced headphone output. I will let Chord's Rob Watts answer that one: "Single-ended is innately more transparent than balanced as it's simpler. Secondly, pulse array DACs [as found in the Mojo 2] are single ended, so going balanced would make it sound worse. Conventional DACs are balanced to solve substrate noise, but pulse array is discrete so doesn't have this problem in the first place."

Sound quality

I own both the original Mojo/Poly and Hugo2/2Go, and so I was able to compare Mojo 2 with both. In addition to using Mojo 2 with Poly, I also fed it via the USB output of the Silent Angel Munich M1 streamer. I listened via my Hifiman Sundara over-ear open-back headphones and my Cardas A8 Anniversary IEMs.

I began with the album I had most recently played on my Poly/Mojo, Opeth's *Deliverance*. Whilst this might not be everyone's cup of tea, it is well recorded and produced by none less than Steven Wilson. It was immediately apparent that Mojo 2 has a different balance to its predecessor. Whereas the older model is known to have a slightly warm character, Mojo 2 sounds brighter, cleaner, and more upfront in character. This balance works rather well with my Cardas A8s, which can sound a little recessed with denser, less vivid, sounding recordings, but are nevertheless capable of a highly musical performance. Both bass guitars and kick drums had a little more power, and the bass, in particular, was easier to follow and possessed more texture. Vocals were projected forward a little more and were given a greater sense of space. At the top end the cymbals sounded cleaner and more airy, again with



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a little more sense of texture.

Next up was something more contemporary, Bonobo's *Fragments* streamed via Qobuz in 24/44.1. The same slightly brighter lit, more upfront balance was evident here also. The bass was again a little stronger and better resolved, drum effects harder hitting, and acoustic guitar samples more attention grabbing. I am embarrassed to admit I only got seriously into Frank Zappa's music last year, a benefit of lockdown, I guess. Streaming the recently released 24/192 version of *Hot Rats* via Qobuz, again revealed the additional energy impact that Mojo 2 possesses compared to its predecessor. The lead guitar in Willie The Pimp was presented further forward in the soundstage, with better resolved harmonic detail. The wah-wah guitar towards the track's climax, cutting through with a satisfying bite. The clarinet on the track Mr Green Genes sounding more realistic.



tJethro Tull's latest, *The Zealot Gene* (Qobuz 24/96), is exceptionally well recorded and growing on me; it's a great listen once you get past Ian Anderson's slightly croaky voice. I decided to compare Mojo, Mojo 2 & Hugo 2, all fed via the Silent Angel Munich M1 streamer and with the Hifiman Sundaras strapped to my head. Not surprisingly the comparison confirmed Hugo 2 is still king. My first generation Mojo gave a pleasant balance, delivering a thoroughly enjoyable performance. Mojo 2 opened out the soundstage and sounded a little better resolved. Vocal effects were more evident, bass had more texture the songs seemed to have a little more pace. The Mojo 2 sounds far more detailed and better resolved than the internal DAC in the Silent Angel Munich M1, which itself is enjoyable to listen to.

Conclusion

Chord have improved on the original Mojo's award-winning performance and added some useful features. The DSP and crossfeed effects work well whilst maintaining musical integrity, giving substance to Chord's hi-res DSP claims. I know many users will find the new features very useful.

For the improved sound quality and battery life alone, I feel it is worth the extra £50 over the original model. With the improved battery management system, preventing damage if the unit is connected to the mains for more extended periods, Mojo 2 is a much more viable option for use in a domestic system. Mojo 2 keeps the product relevant and if there is a better sounding option available for similar money, for either portable or domestic systems, I have yet to hear it.

Editor's note

I also tried out the Mojo 2 but mostly through amplifiers and loudspeakers. I found the balance a little bit too eager for my tastes but was able to compensate for this with the equalisation feature, reducing output on the 3kHz shelf by 3dB produced a much more appealing tonal balance. Importantly it was possible to do this without undermining the Mojo 2's superb sense of timing and strong transparency. Those looking to enhance their headphone or speaker listening experience without breaking the bank would do well to give it a try.

