

The Small And Perfectly Formed Chord Mojo 2 Is A Worthy Upgrade



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The new Mojo2 DAC from Chord Electronics still works with the Poly add-on. The Mojo2 is a high end ... [+] CHORD ELECTRONICS

Some six or so years ago, I remember getting my hands on one of the first Chord Mojo samples. This palm-sized DAC and headphone amplifier looked nothing like I'd ever seen before, except of borrowing a little inspiration from its slightly larger sibling, the Chord Hugo.

The Chord Mojo's styling was slightly eccentric with frosted spherical controls that changed color depending on type of digital source file. This little box of wonders was smaller than a pack of playing cards and set the standard for what a portable DAC and headphone amplifier could achieve. Even the price was a revelation by reducing the price of an audiophile DAC to affordable levels compared with the competition.

Now the UK-based Chord Electronics has revealed the successor to its baby DAC. The Chord Mojo 2 looks very similar to its predecessor. It's beautifully built and now features four spheres and a USB-C port. Apart from those two differences, the new Mojo could easily pass for its parent.

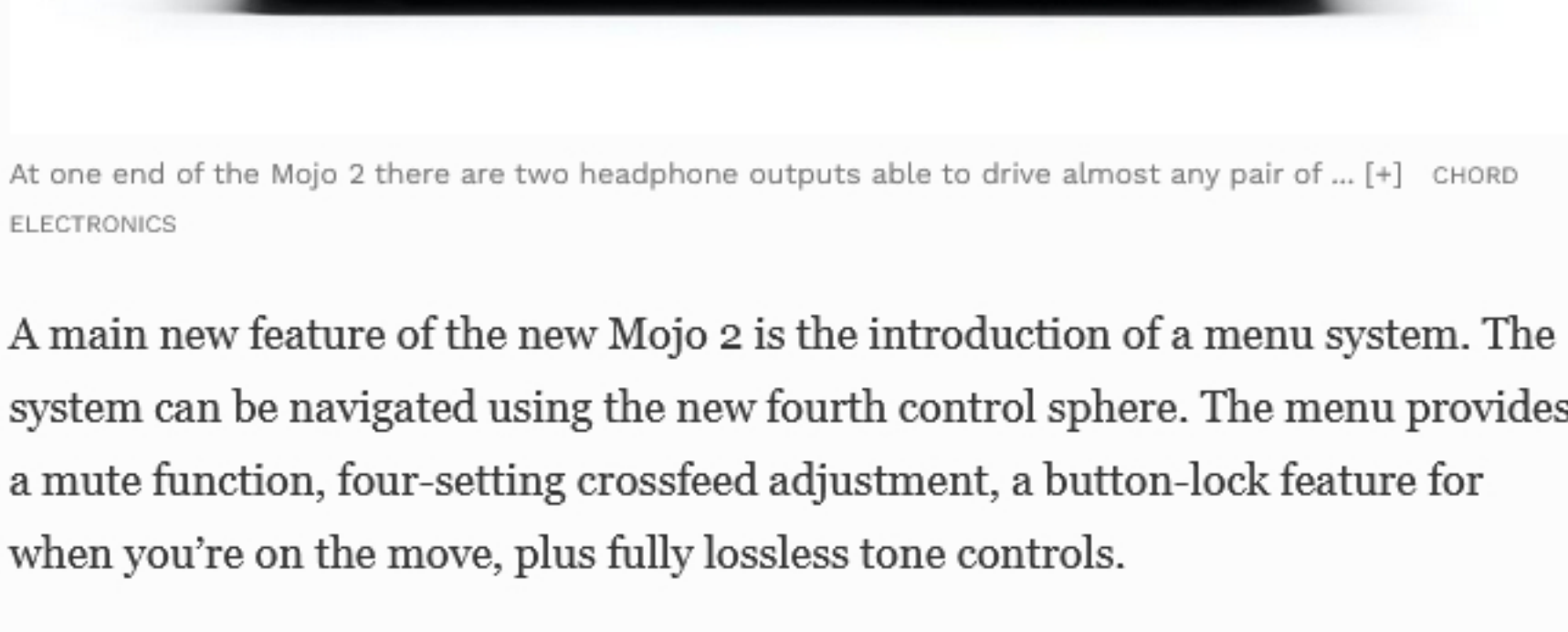


The Mojo2 doesn't look all that different from the original Mojo but it does now have a fourth ... [+] CHORD ELECTRONICS

The four spherical controls light up with different colors which display the type of digital file being decoded as well as the functions and inputs selected. To help with this, Chord supplies a basic reference card, but I'd recommend downloading the full manual to get the full details of what everything does or indicates.

The Mojo 2 is compact enough to be used as a portable DAC and has two 3.5mm headphone jacks. Inside the unit, Chord's design consultant, Rob Watts, has revisited, reimagined and reengineered the original Mojo with some groundbreaking technology. The Mojo 2 benefits from several new features, including a "revolutionary" lossless DSP, billed as the first of its kind in the world. The new 'UHD DSP' is fully transparent, meaning that it can have comprehensive tone adjustments across the frequency range, without any reduction in sound quality.

Chord says that the new technology gives Mojo 2 unrivalled compatibility with today's wide-ranging choice of headphones, no matter what their type and sonic signature. The design also brings flexibility with different source components and digital file types.

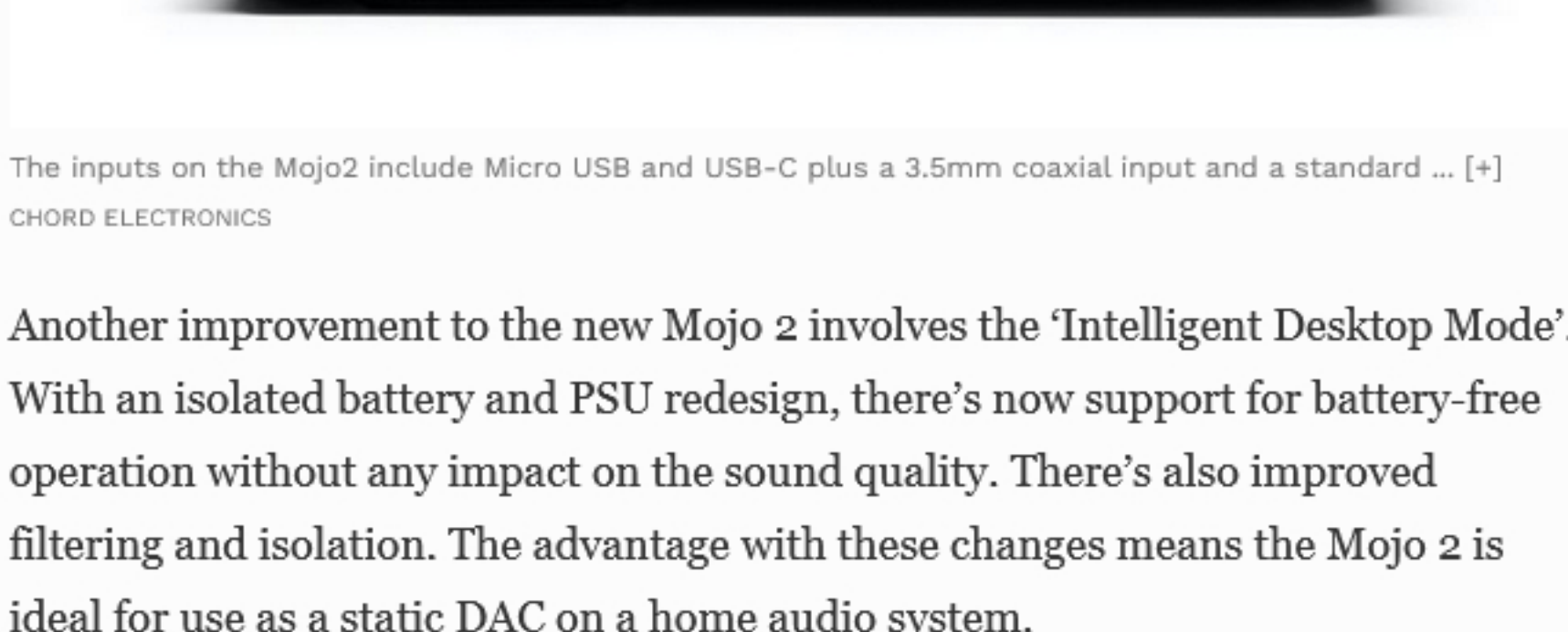


At one end of the Mojo 2 there are two headphone outputs able to drive almost any pair of ... [+] CHORD ELECTRONICS

A main new feature of the new Mojo 2 is the introduction of a menu system. The system can be navigated using the new fourth control sphere. The menu provides a mute function, four-setting crossfeed adjustment, a button-lock feature for when you're on the move, plus fully lossless tone controls.

Digital inputs have increased to four with the addition of a new USB-C data input for greater flexibility. The USB-C features alongside an optical, coaxial (incl. dual-data for the M Scaler) and Micro USB port. There are two 3.5 mm mini-jack headphone outputs so that up to two people can listen at the same time. Finally, there's a second Micro USB port for recharging the Mojo 2's battery for use on the move.

One criticism of the original Mojo was a battery that ran hot when charging and didn't always serve up the full 10 hours on the specifications. The Mojo 2 has greatly improved battery management, largely thanks to a new FPGA-based battery-charging system. The technology brings much faster charging rates, coupled with a huge 75 % reduction in power so that the new Mojo is much cooler when charging. Battery capacity has been increased by 9 %, resulting in better efficiency and improved battery life. Chord confidently asserts that the new model can achieve at least eight hours of playing time.



The inputs on the Mojo2 include Micro USB and USB-C plus a 3.5mm coaxial input and a standard ... [+] CHORD ELECTRONICS

Another improvement to the new Mojo 2 involves the 'Intelligent Desktop Mode'. With an isolated battery and PSU redesign, there's now support for battery-free operation without any impact on the sound quality. There's also improved filtering and isolation. The advantage with these changes means the Mojo 2 is ideal for use as a static DAC on a home audio system.

The Mojo 2 is now DC-coupled with a digital DC servo. It has an improved WTA (Watts Transient Aligned) filter that offers 40,960 taps with 40 DSP cores. This number is a technical indicator of how complex the DAC's interpolation filter is. Chord claims that an improved noise-shaper serves up greater depth and detail perception. Greater neutrality in the sound has been reached by eliminating coupling capacitors from the design

Chord has used some proprietary technology using a 104-bit custom DSP core that runs at 705/768 kHz. The company claims that no other audio DSP offers the same levels of accuracy. By using 104 bits, plus extensive internal noise-shaping, Mojo 2 can deliver complete transparency by preserving the filtering of ultra-small signals. The unique UHD DSP enables fine-tuning across the full frequency range with 18 steps of adjustment per frequency banding: lower bass, mid-bass, lower treble and high treble.



The control spheres on the Mojo2 change color depending on the type of file and function that the ... [+] CHORD ELECTRONICS

The volume control range has also been improved from +18 dB to -108 dB, and now has two distinct operational ranges: low and high volume. A new four-setting crossfeed function – also DSP-controlled – brings a spatial effect that makes listening with headphones sound more like listening through a set of loudspeakers.

Designed, engineered and handmade in the UK, the Mojo 2 has a case that made from high-grade, bead-blasted aluminum and a high-quality black anodized finish. Mojo 2 is also fully compatible with Chord's Poly streamer/server, enabling high-resolution streaming and up to 2 terabytes of solid-state library storage and playback when using the microSD card slot.

So how does this pocket wonder shape up sound wise? To my ears it has a clearer and less dynamic output. That's not a criticism. This is a DAC and headphone amp that feels as if it isn't struggling. It feels as if there's far more power under the Mojo 2's hood. I tried a variety of headphone designs varying from planar-magnetic models to the most intricate of IEMs from Campfire Audio.



If you want the highest quality audio streaming on the move, the Chord Electronics Mojo2 is a good ... [+] KLAUS EULENBACH

The result in my opinion is a sound that's far more detailed but retains an analog character that makes music so much more enjoyable. It manages to do all this without ever sounding labored or harsh. I get the feeling that the better the headphones, the better the Mojo 2 will drive them; this is one piece of kit that can deliver true audiophile performance no matter where you are.

The improvements to the charging and power supply are also considerable and now I'd feel happy about using a Mojo 2 as a DAC for my main audio system. I tried plugging my ageing Arcam CD player into the coaxial input on the Mojo 2 before connecting to my preamplifier. The result was to bring a level of detail from the Arcam that I'd never heard before, the old CD player was working as a basic transport system and the Mojo 2 was doing all the decoding. It made me realise that CDs still deliver a pretty good level of detail no matter that the technology is now around 40 years old.

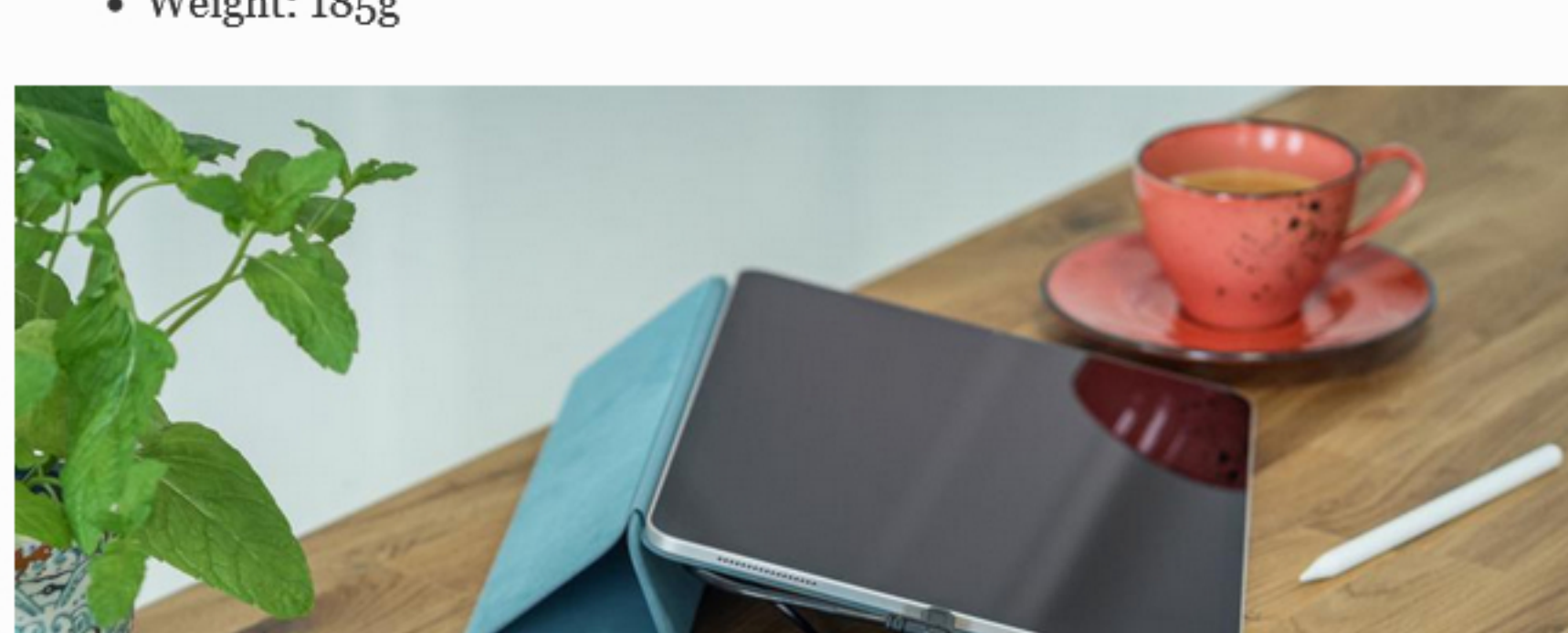
Verdict: The Chord Mojo 2 is a worthwhile upgrade on the original Mojo. It's taken a while to be updated but Chord has done a good job. The charging behaviour and power supply were sorely in need of updating and I like the new fourth sphere for navigating the Mojo 2's menus. The addition of USB-C is most welcome, but I'd wished they had used it for the charging port too. All in all, Chord has managed to achieve a great upgrade with some advanced and innovative features in the DSP. The little Mojo 2 can handle almost any file you care to throw at it and does so with aplomb. This is an audiophile quality DAC that can deliver superb sound on the move. I wish Chord had supplied cables for Android and iOS devices. If you are an iPhone user, you'll need a Lightning to USB adapter to link with the Mojo 2. The one big feature that's missing is a Bluetooth input but that probably would have pushed the price too high. If Bluetooth is important to you then it may be worth considering the iFi SEN Signature DAC that I reported on recently.

Pricing & Availability: The Chord Mojo 2 DAC/Headphone Amp is available now and costs £449 / \$725 / €599 / AUS \$899.

More info: www.chordelectronics.co.uk

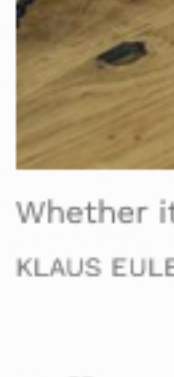
Tech Specs:

- Inputs: Coaxial, optical, Micro USB, USB C
- Outputs: 2 x 3.5mm audio out
- Battery: 8 hours
- Output power: 1kHz/300Ω 90mW
- Output power: 1kHz/30Ω 600mW
- Output impedance: 0.06Ω
- Dynamic range: 125dB
- THD @ 2.5v/300Ω 0.0003%
- Dimensions: 83 x 62 x 22.9mm (LxWxH)
- Weight: 185g



Whether it's tethered to iOS or Android devices, the Mojo2 can handle almost any type of digital ... [+] KLAUS EULENBACH

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