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iFi audio xDSD review: The best portable DAC on the market

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9-12 minutes

The xDSD is an incredibly impressive DAC and drastically improves your smartphone audio

Pros

Incredibly easy to set up

Supports MQA and Bluetooth aptX/AAC

Comparatively cheap versus the Mojo+Poly

Cons

Design attracts fingerprints

Doesn't sound as good as the Mojo+Poly

In late-2017, I reviewed the [Chord Poly](#), a wireless module that turns the vastly popular Mojo DAC into a wireless streamer. My biggest complaint about it, aside from its high price tag, was the painful setup process that had to be done to get it running with a smartphone. Even for a geek like myself, it was frustratingly long and long-winded.

iFi Audio, a subsidiary to Abingdon Music Research (AMR), which is one of the largest UK manufacturers for audio systems, has a

device that manages to squeeze in everything into one neat box, around the size of a pack of playing cards.

READ NEXT: [Chord Poly review: Turn your Mojo into a wireless streamer](#)

iFi audio xDSD review: What you need to know

The iFi audio xDSD is a portable amplifier DAC (digital to analogue converter) that connects to your smartphone or laptop via Bluetooth.

It's designed to be used by owners of high-end, wired headphones who want better sound quality from their smartphone on the move, but can also be used to decode an optical or USB digital signal from any digital source, including a PC or Mac.

The xDSD is not only feature-rich but it's also compact, lightweight and looks great. The icing on the cake? It's almost half the price of the Mojo+Poly when bought together.

READ NEXT: [Chord Mojo review: Make your smartphone sound amazing](#)

iFi audio xDSD review: Price and competition

The [xDSD will set you back £400](#). That might seem like a lot of money, but put into perspective, the closest thing is the Chord Mojo+Poly, which will [set you back around £890](#).

Another alternative is to look for a dedicated all-in-one player, such as [Astell&Kern's Kann](#) or [FiiO X7 Mark II](#), but audio players with sound quality that can rival that of the xDSD tend to cost a hell of a lot more.

iFi audio xDSD review: Connectivity and design

iFi clearly knows a thing or two about industrial design. The xDSD is housed in a magnesium-aluminium alloy case, finished in polished “dark titanium” and it looks fantastic. It picks up fingerprints rather too easily – so you’ll need to clean it pretty regularly or simply carry it around in the carrying pouch included in the box.

When it comes to portability, the xDSD is lighter and smaller than the Mojo Poly combo. The iFi weighs 127g and measures 95mm in length, 67mm across, and 19mm thick. The Mojo and Poly combine to form a block that weighs 265g and measures 132 x 62 x 22mm. In a nutshell, the xDSD is a far more portable and pocketable device.

As well as including the wireless connectivity and DAC circuitry all in one box, the xDSD is incredibly simple to setup and start using, much easier than the rather fiddly Mojo, which primarily connects via Wi-Fi. It took me a matter of seconds to get it paired with my OnePlus 5T and my Apple MacBook Pro (2015), and my Windows 10 PC took less than ten seconds to download and install the drivers. It’s all incredibly simple.

The xDSD supports both the aptX and AAC codecs, which delivers better-sounding phone to DAC streaming than you’d get with the regular SBC codec. That’s something that the Mojo and Poly doesn’t have. The Mojo and Poly is tougher to set up, too, but counterbalances that by offering connection via Wi-Fi for even better quality streaming.

For the best quality audio, however, you need a cabled connection, and the iFi is fully equipped in this regard. There’s USB so you can

connect it directly to a PC or Mac plus coaxial and optical S/PDIF for hooking up to a CD/DVD player or TV output. The one catch here is that the USB port is a Type-A male connector so you'll need to purchase special cables from iFi – the only cable in the box is a stubby male to female Type-A cable, useful for laptop connection but not much else. You do get a TOSLINK to 3.5mm mini jack optical adapter, though.

Finally, charging of the xDSD's internal 2,200mAh battery takes place via the you'll need to use its Micro-USB port and you can keep listening while it's charging. The xDSD takes a few hours to charge from empty to full, but once fully topped up, it'll last up to 10 hours of audio playback. That's just about enough for a transatlantic flight from London to LA.

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iFi audio xDSD review: Features and supported audio formats

Moving onto the DAC's features, it's nothing short of excellent. First, there's a small switch around the back that allows you to toggle between a couple of digital filters: "measure" (linear-phase, optimised for accuracy) and "listen" (minimum-phase, optimised for musicality). iFi advises setting it to the latter option permanently; I couldn't hear any difference between the two.

Around the front, there's a balanced 3.5mm auxiliary jack, which iFi calls an 'S-Balanced output'. Here, you can plug in your balanced headphones and reap in the benefits. To the right side of the jack are two LED indicators: one is used to let you know what's connected: White for USB, Green for S/PDIF, and Blue for Bluetooth; the other is used to show what audio format (in kHz) the

device is decoding. The table below will give you a break down of what to expect.

<u>LED</u>	<u>Mode</u>
Green	PCM 44/48/88/96kHz
Yellow	PCM 176/384kHz
White	PCM 768kHz
Cyan	DSD64/DSD128
Blue	DSD256
Red	DSD512
Magenta	MQA
Off	No valid Signal

Staying at the front, there's also a Bluetooth button for pairing that doubles as a toggle for switching between the XBass+ and 3D+ Matrix circuits. These modes do exactly what they say on the tin: X-Bass+ increases the bass quantity without impacting the quality, while the 3D+ option somewhat artificially improves the soundstage. Both can be used simultaneously or can be disabled altogether.

With in-game audio the 3D+ setting delivered some improvement of positional cues and, with my custom earphones plugged in, I preferred using the xDSD with both options enabled. However, when listening to music with my modded Denon AH-D2000 headphones, I found the modes were best left disabled. Nevertheless, the option is there for you to play around with.

Then there's the central volume knob, which also happens to serve as the power button, source switcher and mute control. Press and hold to turn on the device, it then lights up green

(USB/optical) or blue (Bluetooth) to indicate the source and you can then switch between these by continuing to hold the knob and rotating it.

That's not all, though. Once you're connected, the knob's LED then changes colour to indicate the volume level and, if you want to quickly mute your music (but not pause it), give it a short-press. It even works nicely as a volume control, too, giving a tactile click as you turn the volume up or down.

Finally, to round off this section let's get into the nitty-gritty of file format support, which is extensive. The xDSD supports [MQA \(Master Quality Authenticated\)](#) files, PCM up to 32-bit/768kHz, DSD up to DSD512 (24.6/22.6MHz), and 2xDXD (705/352kHz) via USB. If you're using its S/PDIF coaxial/optical input, it's limited to 192kHz/24bit.

Out-the-box the xDSD supports MQA and handles up to PCM384/DSD256, but if you want to enjoy the highest grade of PCM768/DSD512, you'll need to downgrade to firmware v5.20, down from v5.30.

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iFi audio xDSD review: Sound quality versus the Mojo+Poly

What, however, does all this mean for sound quality. In my tests, I used a variety of sources, songs, bit-rates, earphones (custom and universal) and headphones to get broad feel of the amp's capabilities.

Housed inside the xDSD is a Burr-Brown DAC, which delivers impressive results, although I found it didn't sound as full or as forward in the mids as the Chord Mojo+Poly. I found myself wanting

a little bit more from the xDSD, particularly in the soundstage department.

In songs such as [Tuxedo - 2nd Time Around](#), the vocals are somewhat jumbled with the instruments. That's not to say the soundstage is closed-sounding, far from it, but the Chord is a tad more engaging and enjoyable. Even with the 3D+ option enabled on the xDSD, Chord's device comes out on top.

The bass reproduction on the xDSD presents itself well, too, and there's plenty of low-end extension and detail. If you want to add an even deeper, more prolonged response, the 3D+ button will cater for all of your bassy needs. As for the mid-bass, there's plenty of that here but it's slightly uncontrolled and does take away some of the fun.

The lower mids (250Hz-500Hz), on the other hand better, with plenty of detail, though some might find the sound a tad pushed back and recessed. Again, the Mojo and Poly is a little more detailed in this region. The midrange, upper mids and highs are all really impressive on both devices, although here I preferred the slightly warmer rendition of the iFi DAC.

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iFi audio xDSD review: Verdict

On the whole, if I had to pick between the two DACs purely based on their sonic capabilities, I'd pick the Mojo and Poly. That's not to say the xDSD is bad, far from it. In fact, it's very close between the two when it comes to outright sound quality. It'll certainly drastically improve the sound quality coming from your smartphone, laptop or

desktop computer, as long as you have a pair of headphones that can do it justice.

Raw sound quality aside, which DAC would I choose? If I was at home, purely using the device while plugged into my PC, I'd still go with the Mojo for its sonic capabilities.

On the road, however, the iFi xDSD is king. Not only does it cost half the price of the Mojo and Poly combo, but it's far slimmer, lighter, better looking and easier to set up and use. If you're looking for a high-quality DAC you can carry around with you, while also having the ability to plug it into a computer, buy the xDSD: it's the best DAC on the market.