

iFi xDSD

TECHNICAL SPECIFICATIONS

DIGITAL SECTION

Resolution: 32-bit

Sample Rate: 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.2 kHz, 192 kHz, 352.4 kHz, 384 kHz

DSD Support: DSD64 and DSD128

Inputs: USB 2.0 asynchronous, Bluetooth

ANALOG SECTION

Frequency Response: 20Hz–20kHz +/-0.5dB

Output Impedance: 0.4 ohm

Output Power, 32 ohms: 500mW

(total) @ 32 ohms, drives 600 ohms headphones.

Supported Headphones: 16–600 ohms

Max Output Level, 1kHz: 2.9V rms/+11.3dBu

Battery Specs: Rechargeable Li-Polymer, 20 hours play time (Bluetooth input)

Format Support: SBC codec, APTX, MP3, AAC, and Faststreamcodecs

Price: \$399.99

MANUFACTURER INFORMATION

CEntrance

Morton Grove, IL 60053 USA

URL: www.entrance.com



Summary

Voicing: Neutral



(All ratings relative to comparably priced Digital Audio Players.)

Resolution/Focus:



Dynamics/Expression:



Pros

- Extended battery-life.
- Ease of use.
- Neutral and Resolute sound.
- Versatility.

Cons

- Supports Bluetooth source connections, but headphones (of course) still require signal wires.
- Gain switch is small and recessed into chassis.
- Brushed plastic chassis slides on surfaces easily.

Soundstaging/Imaging:



Value:



Few manufacturers have made as strong a commitment to building high performance personal audio electronics as has the UK-based firm iFi Audio, and fewer still can bring to bear as much high-end audio design know-how as iFi does (iFi is a spin-off from the high-end manufacturer Abbingdon Music Research or AMR). But despite their sophistication, iFi's products are traditionally very reasonably priced (a little like getting a Ferrari for the price of a Fiat). A perfect case in point would be iFi's new xDSD portable headphone amp/DAC with Bluetooth connectivity, which sells for \$399.

The xDSD is the first offering in iFi's all-new x-series product family. In terms of performance, technologies, and features the xDSD falls between iFi's critically acclaimed micro iDSD Black Label portable headphone amp/DAC (\$599) and its smaller sibling, the nano iDSD Black Label (\$199). The xDSD, however, introduces a new industrial design motif and some distinctive features of its own.

The xDSD's mostly metal chassis is loosely rectangular in shape but sports rounded edges and gently scalloped top and bottom surfaces, with polished casework treated to a mirror-like titanium grey finish. The xDSD faceplate sports a 3.5mm headphone jack; pilot lights to indicate file sample rates and the input selected, plus the on/off status of available Xbass+ and 3D+ processing functions; a processing function/input selector; and a cool-looking rear-illuminated volume control whose colors change to show the volume levels chosen. The heel of the unit is made of molded black thermoplastic (scalloped to match the main

\$200-\$499

chassis) that encloses an internal Bluetooth antenna, and provides a mini USB charging port, a digital filter control, and both USB and coax/optical S/PDIF input ports. Overall, the handsome xDSD creates a striking first impression.

The DAC section of the xDSD uses the same Burr-Brown DSD1793 DAC device found in the Micro iDSD Black Label, here supported by an AMR-designed, low-jitter, Global Master Timing circuit. The DAC can handle high-res PCM and DSD files, and is fully MQA compatible. Available inputs include USB, coax/optical S/PDIF, and an aptX/AAC Bluetooth interface. This means the xDSD can be fed via wired connections to PCs, music servers, etc., but is equally happy to make wireless Bluetooth connections with portable devices—a feature that greatly enhances its flexibility for use on the go.

The amplifier section features the same basic S-balanced circuit topology that debuted in the nano iDSD Black Label; the circuit is a single-ended design, but one said to mimic the noise and crosstalk reduction benefits of traditional balanced circuits. In the xDSD, a distinctive Cyberdrive circuit places “all parameters of the fully analogue system under digital control”, further reducing noise and distortion. The xDSD amplifier delivers 500 mW/channel (about twice the output of the nano iDSD).

Sonically, the xDSD combines the sophisticated digital refinement of the larger micro iDSD Black Label amp/DAC with the low-noise performance of the compact nano iDSD Black Label. But the xDSD also gives users the freedom of Bluetooth connectivity, plus an amp section that produces a gutsy and dynamically authoritative sound.

To appreciate what I mean, try a track such as “Right Off” from Miles Davis’ *A Tribute to Jack Johnson* [Columbia/DSD 64], which is a well-recorded 1970s-era fusion jazz classic. As expected, Davis’ trumpet eventually becomes the centerpiece of the cut, but the horn seems to surf upon an incredibly funky and hard-grooving wave of sound created by the ensemble’s drum kit, electric bass, and guitar. Lesser amp/DACs can make the track sound bright, thin, and splashy, but through the xDSD it sounded wonderful, owing to the xDSD’s combination of suave resolution and dynamic muscle.

iFi’s xDSD is a gem. When you hold one in your hand, you can’t help but marvel at just how much functionality and performance iFi has packed within such a compact and reasonably-priced component. Above all, the xDSD reminds us that personal audio should be accessible, emotionally engaging, and fun. **Chris Martens**

TECHNICAL SPECIFICATIONS

Type: High-resolution portable headphone amp/DAC with Bluetooth connectivity

Inputs: Bluetooth aptX/AAC, S/PDIF (coaxial and optical), USB

Outputs: 3.5mm headphone output jack

Supported file formats:

USB: In standard form, supports up to 32-bit/384kHz and DSD to DSD256

USB: Can be expanded to support 32-bit/764kHz and DSD512

via an optional firmware upgrade, but at the expense of losing MQA compatibility

S/PDIF (coax and optical): Up to 24-bit/192kHz

Bluetooth: Up to 16-bit/48kHz

DAC section is MQA compatible

Output power: 500mW per channel

Battery: 2,200mAH/3.8V Lithium/Polymer battery with Fast Charge support

Accessories: Velvet drawstring carry bag, Apple Lightning-to-USB Type A cable, Android OTG-to-USB Type A cable, USB-to-USB Type A cable, 5V iPower AC power supply with adapter for the xDSD’s mini-USB charging port

Dimensions (H×W×D): 19 × 66.5 × 95mm

Weight: 127g

Price: \$399 US; £399

MANUFACTURER INFORMATION

iFi Audio

URL: www.ifi-audio.com

UK DISTRIBUTOR

Select Audio

URL: www.selectaudio.co.uk

Tel.: +44(0)1900 601954

US DISTRIBUTOR

iFi Audio USA

URL: www.ifi-audio.com/sales

Summary

Sonic character: Fundamentally neutral with a hint of natural, organic warmth.



(All ratings relative to comparably priced Digital Audio Players.)

Resolution/Focus:



Freedom from Noise:



Dynamics/Expression:



Features and Versatility:



Soundstaging/Imaging:



Pros

- Terrific industrial design inspires pride of ownership.
- Sophisticated, smooth, and energetic sound is a gift that keeps on giving.
- Xbass+ and 3D+ functions are useful and enjoyable, but can also be switched off.
- Rich features and functions plus a big sound in a compact enclosure—and it's wireless, to boot.

Cons

- Accessories should include a high-quality 6.35mm to 3.5mm adapter plug.
- More detailed set-up instructions would be welcome.