



ZEN DAC

GBP £229
USD \$229

Summary

“Plug-In. World Out.”

Home-based DAC/Amp for those seeking a product to electrify casual and critical listening.

USPs:

4.4mm balanced line and headphone outputs
Switchable AIO or preamp functionality

Features and Functionality:

PCM 768kHz, DSD512 and MQA decoding
USB-C connectivity
XBass+ analogue processing
PowerMatch mode
Improved DC offset
USB Input overvoltage protection



Section 1: Marketing

Messaging & Tagline

In a world full of noise, welcome to ZEN.

"Plug-In. World Out."



Story

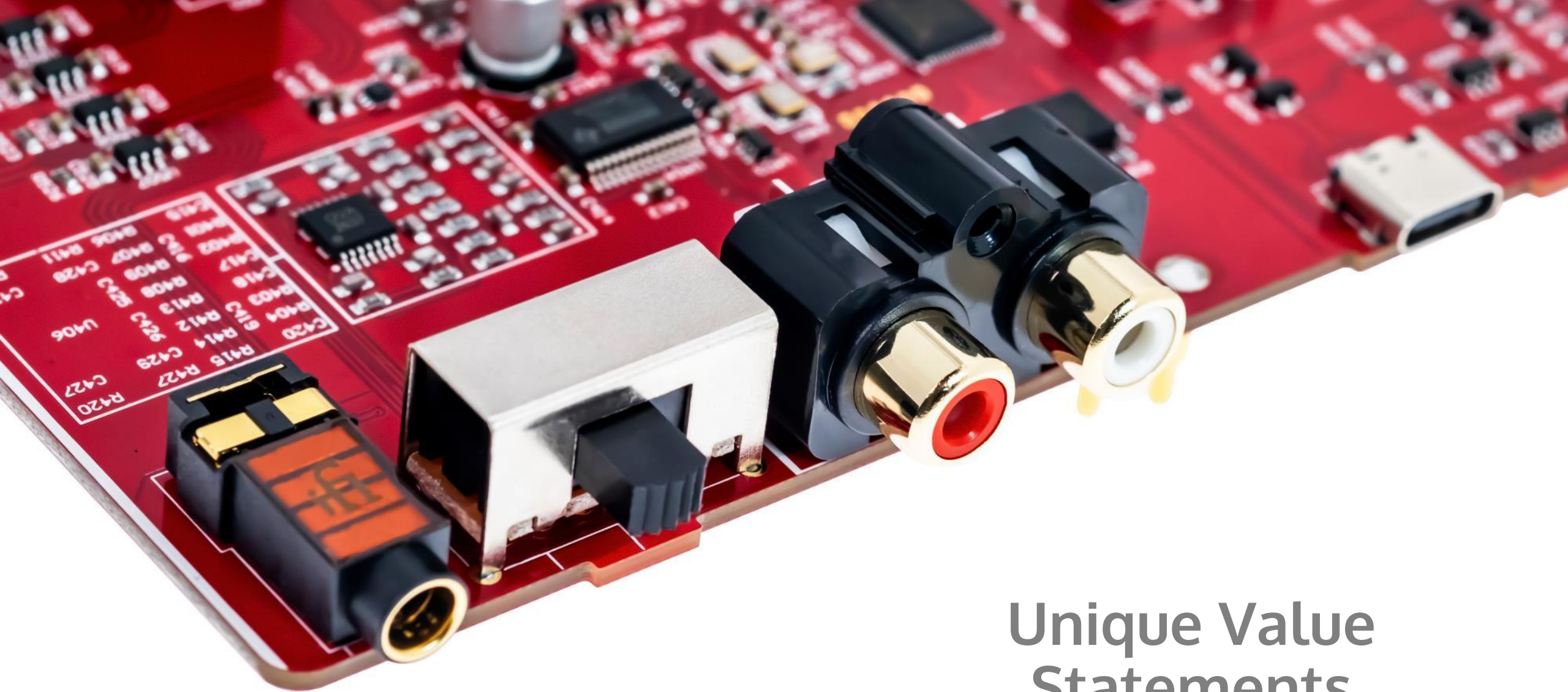
Today the world is busy; fast and full of noise.

We know the power of music, and how it's capable of taking you out of this world and someplace new. Somewhere tranquil, where melodies can uplift, and vocals can move you to tears.

Our new DAC, with its sleek design and unparalleled performance, immerses you in a world of pure harmony.

Rediscover your music, and be transported to purity, with the ZEN DAC 3.





Unique Value Statements

Hi-Res Heaven

ZEN DAC 3 supports all PCM formats up to **768kHz**, DSD natively supports up to **DSD 512**, and even offers full **MQA decoding**.

DSD 8X
4X
2X
Direct Stream Digital 1X

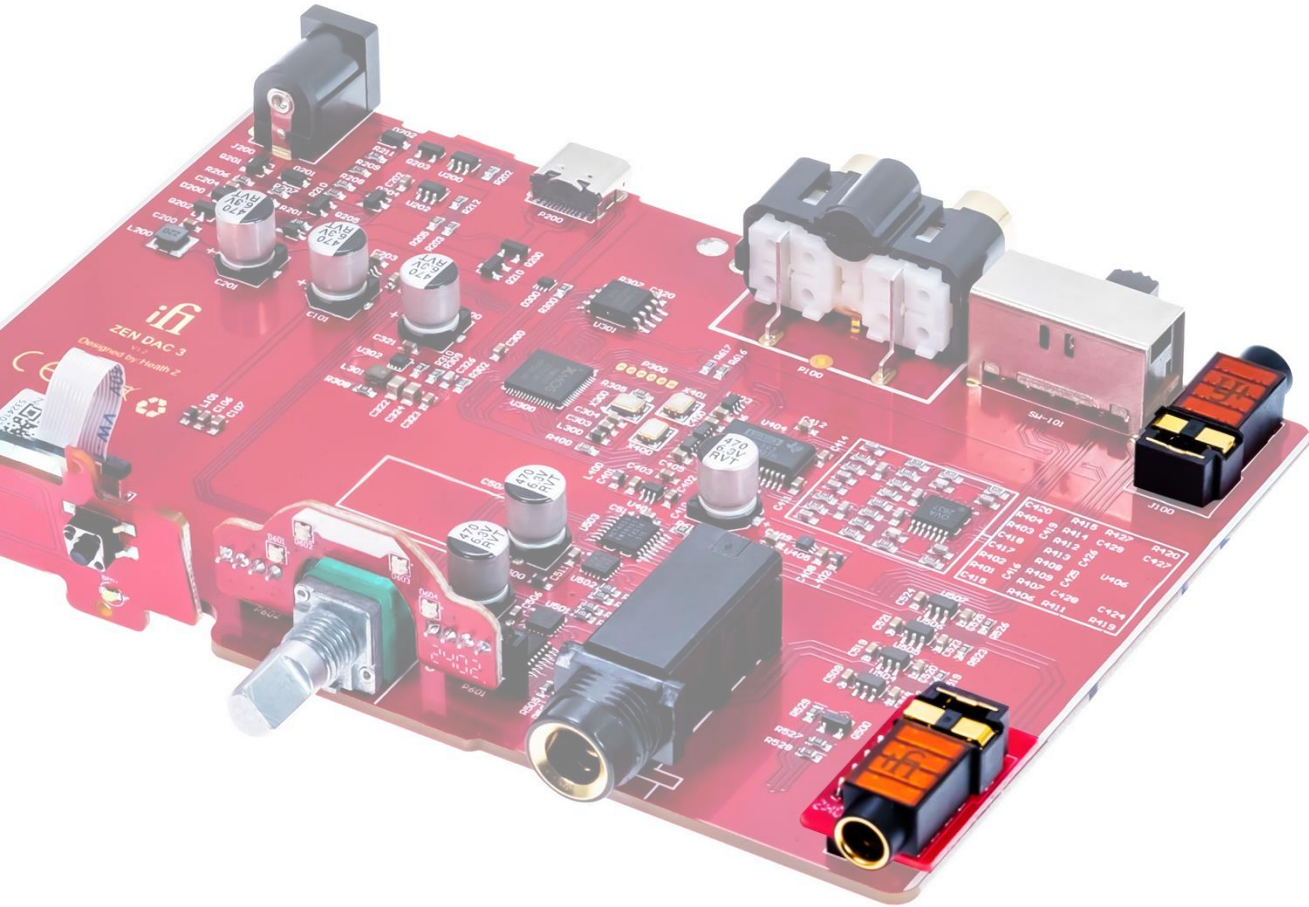
PCM 768
705
384
Pulse Code Modulation 352

Your Way or the Hi-Way

Offering **both** fixed and variable output gain options, ZEN DAC 3 can seamlessly connect to headphones, an amplifier or active speakers.



Beautifully Balanced



ZEN DAC 3 features **two** 4.4mm balanced outputs, one for headphones and one for other amplifiers, effectively **minimising distortion and crosstalk.**



Unique Selling Points

Key Features

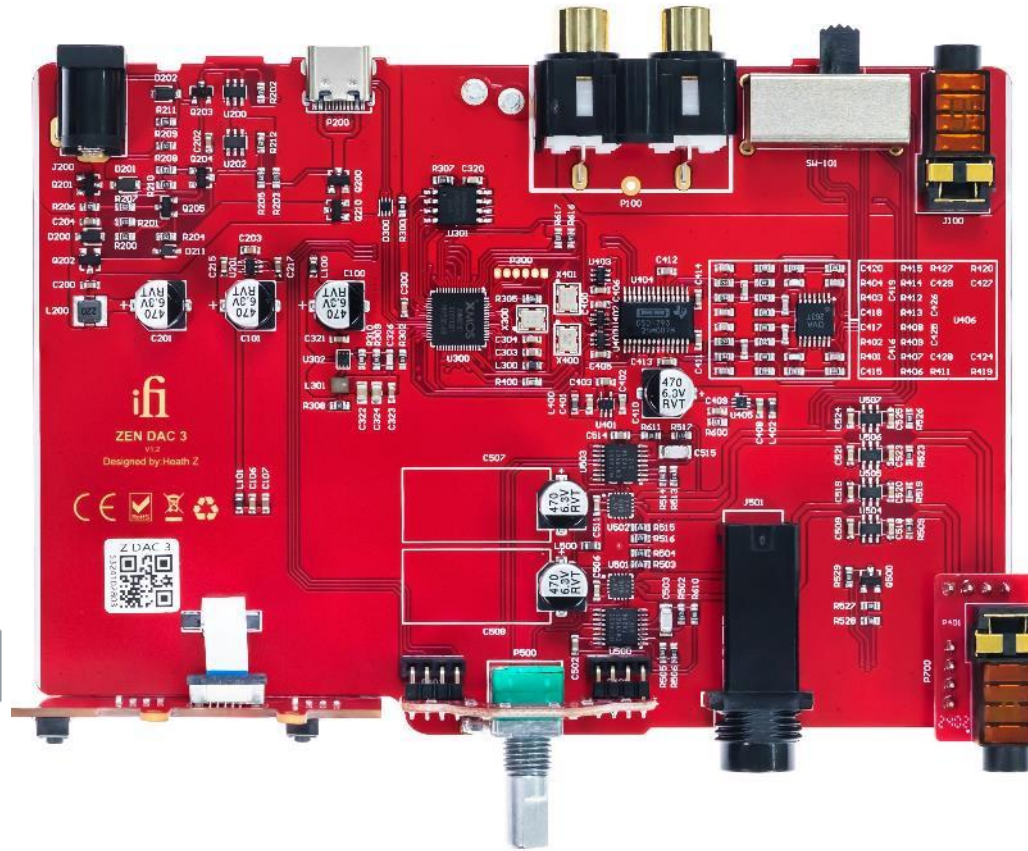
Ultra-res audio: PCM 768kHz, DSD 512 and Full MQA Decoding



USB-C input for plug-and-play connectivity

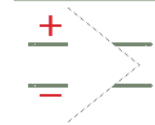


Fixed or variable output gain for optional preamp functionality



Improved DC offset and USB-C input overvoltage protection

Balanced



4.4mm balanced headphone and line outputs

XBass+

XBass+ and PowerMatch analogue processing modes

DActivate your Speakers



Variable or Fixed output switch, which **enables/bypasses the volume knob.**

Use **Variable** mode when plugging ZEN DAC 3 directly to active speakers.

Use **Fixed** mode when running line outputs to a receiver or main amplifier.



Target
Audience



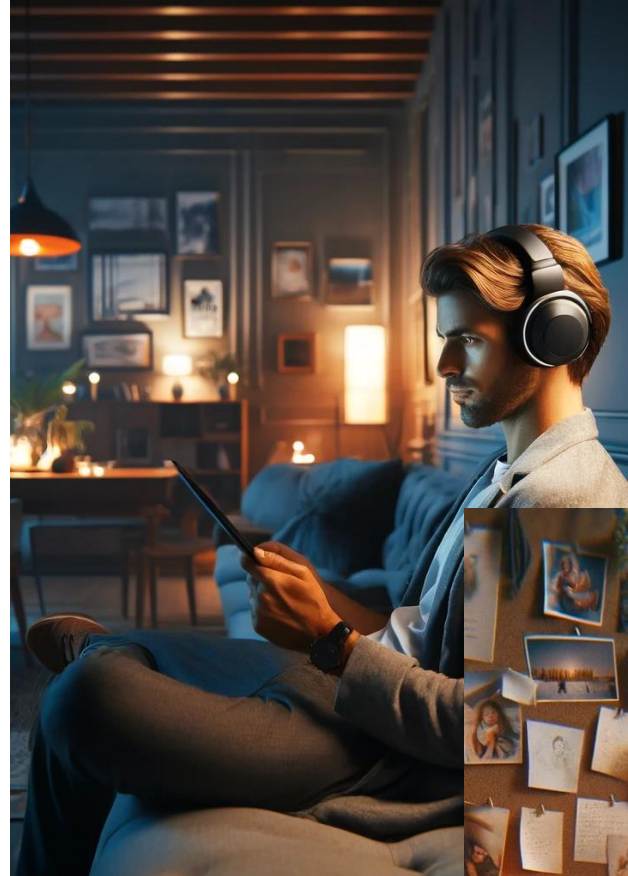
Audience Groups

Characteristics:

- **Demographics:** Individuals aged 16-40.
- **Income:** Earning between USD 2,000-4,000 Monthly.
- **Need for DAC/Amp:** Seek a home-based DAC/Amp to amplify casual and critical listening.

Categories:

- Audio Enthusiasts, Tech Enthusiasts, Gamers

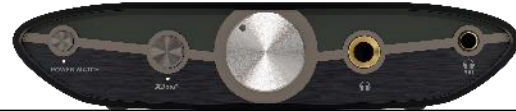


Section 2: Tech



Features and Functionality

Evolution of ZEN DAC



ZEN DAC 3



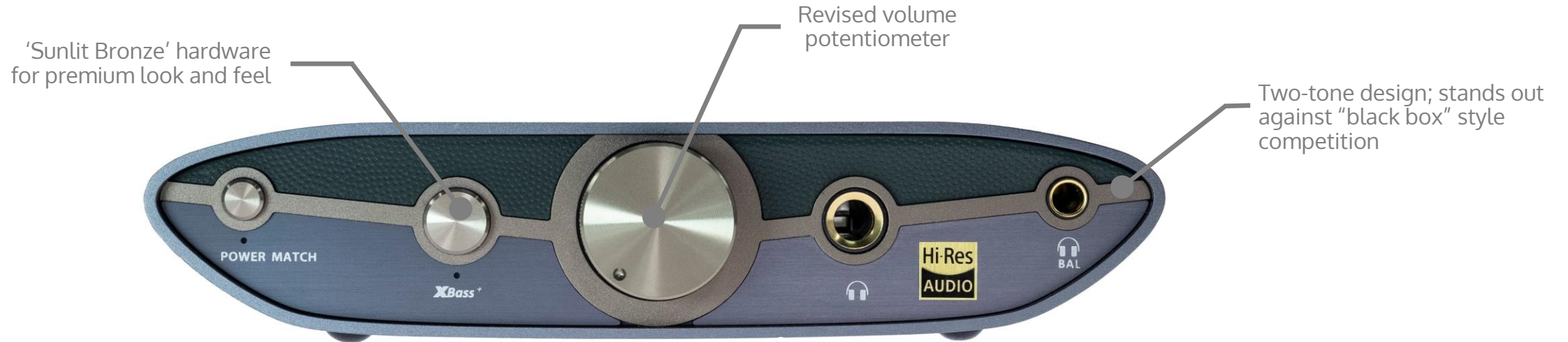
ZEN DAC V2



ZEN DAC

Retail Price	\$229	\$199	\$129
Hi-Res Support	PCM 768 kHz DSD 512 MQA Decoding	PCM 384 kHz DSD 256 MQA Decoding	PCM 384 kHz DSD 256 MQA Rendering
Headphone Outputs	4.4mm Balanced, 6.3mm SE		
Line Outputs	4.4mm Balanced, RCA SE		
Inputs	USB-C	USB-B 3.0	USB-B 3.0
USB Input Overvoltage Protection	Yes	No	No
Clocking	Upgraded GMT	Upgraded GMT	Standard Clock
Output DC offset	Improved	Standard	Standard
XMOS Chip	16-Core	16-Core	8-Core
Other Features	XBass+, PowerMatch, Fixed/Variable output	TrueBass, PowerMatch, Fixed/Variable output	TrueBass, PowerMatch, Fixed/Variable output
6.3mm HP (RMS)	>210mW @ 32Ω	>210mW @ 32Ω	>210mW @ 32Ω
4.4mm HP (RMS)	>390mW @ 64Ω	>390mW @ 64Ω	>390mW @ 64Ω
SNR (Headphone Section)	>109 dBA (6.2V Bal/3.3V SE)	>109 dBA (6.2V Bal/3.3V SE)	>109 dBA (6.2V Bal/3.3V SE)
THD+N (Headphone Section)	≤0.005% (2V @ 600Ω)	<0.005% (125mW @ 32Ω)	<0.005% (125mW @ 32Ω)

ZEN DAC 3 Vs. DAC V2 Looks



PowerMatch and XBass+

ZEN DAC 3 adopts **XBass+**, the newest iteration of iFi's signature analogue EQ.

XBass+ Add back the loss bass frequencies
from open headphones

Power Match is a gain boost for hungrier headphones



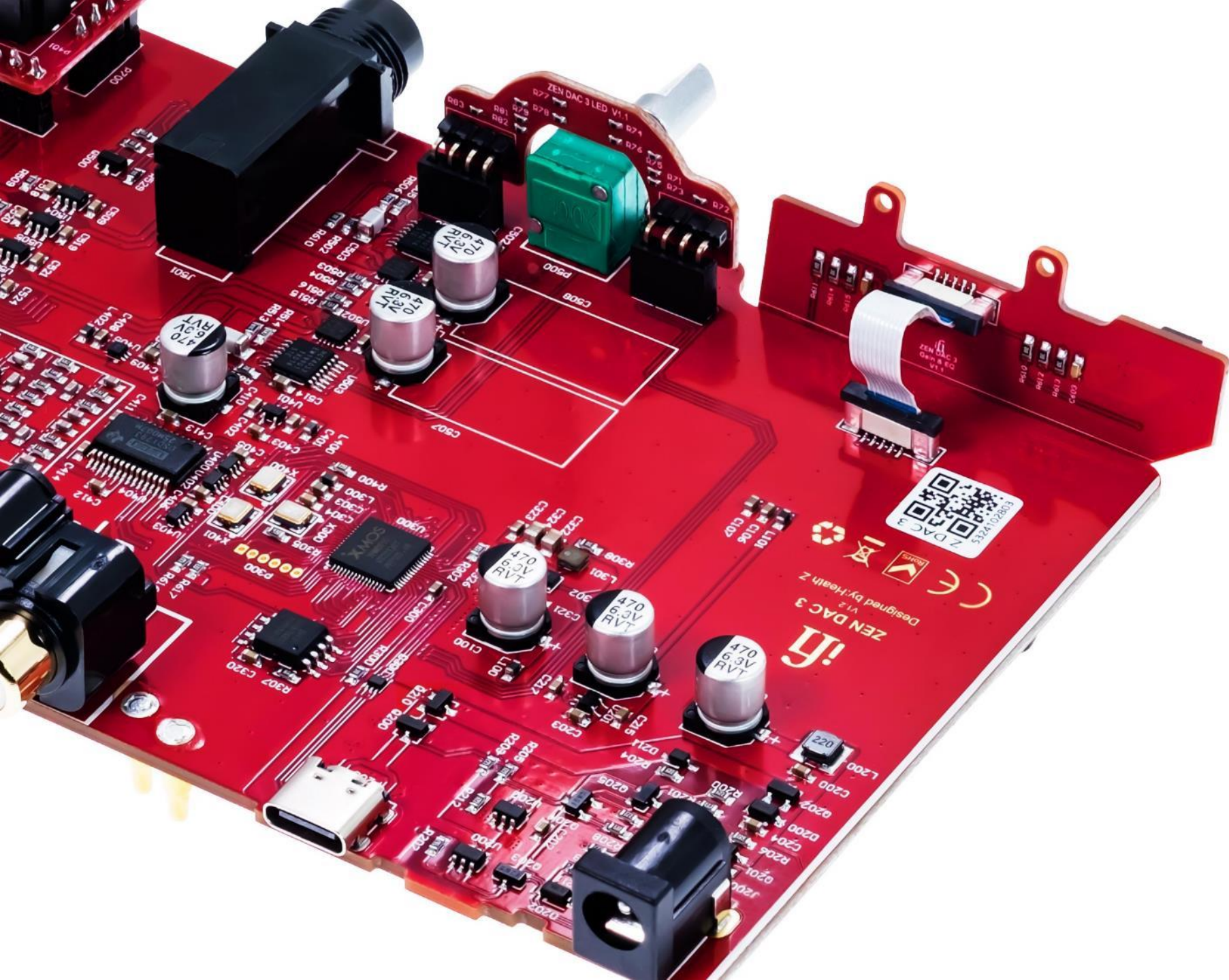


Power Up, Protect On!

DC offset output voltage has been improved in the ZEN DAC 3.

This means less audible clicks while switching functions.

ZEN DAC 3 also benefits from input **overvoltage protection** via the all-new **USB-C** port.



Appendix

Specifications

Input		USB-C
Formats	PCM DSD MQA	768kHz 512 Full Decoder
DAC		Bit-Perfect DSD & DXD DAC by Burr Brown
Headphone Output		BAL 4.4mm/UnBAL 6.3mm
Output Power (RMS)	Balanced UnBAL	390mW@32Ω; 7.2V@600Ω 210mW@32Ω; 3.8V@600Ω
Output Impedance		<1Ω (BAL/UnBAL)
SNR		109dB(A) (BAL/UnBAL)
DNR		109dB(A) (BAL/UnBAL)
THD + N	Balanced UnBAL	<0.006% (2.0V @ 600Ω) <0.006% (1.27V @ 32Ω)
Line Output		BAL 4.4mm/UnBAL RCA
Output Power	Balanced UnBAL	2V-6.2V max. (variable); 4.2V fixed 1V-3.3V max. (variable); 2.1V fixed
Output Impedance		<200Ω BAL; <100Ω UnBAL
Frequency Response		5Hz - 90kHz (+/-3dB)
Power Consumption		~2.5W Max Signal
Dimensions		158x115x35mm (6.2" x 4.6" x 1.4")
Weight		456g (1.0 lbs)
Warranty period		12 months

Contents

ZEN DAC

1. PowerMatch (high/low)
PowerMatch setting should be set to Low for USB and on High for all other headphones.

2. TrueBass (high/low)
Many headphones lack the correct bass response. TrueBass is an analogue DC cut designed to add back the lost bass response. It is not used on active headphones.

3. Analogue Volume control
The analogue volume control (ZEN DAC) is superior to any digital volume control. It can be used to control the bandwidth and the gain of the analogue volume control. The output of the DAC is set to 'True' if the analogue volume is bypassed.

4. Audio Format LED (M/A)
The LED volume control allows the audio format and sampling frequency to be selected by ZEN DAC. From the most common:

LED	Mode
Yellow	PCM 44.1/48kHz
White	PCM 88.2/96/176.4/192kHz 24bit/32bit
Cyan	DSD 64/128
Red	DSD 256
Green	MQA
Blue	MQA Studio
Magenta	Original Sample Rate

5. Single-ended 3.5mm output
Connect single-ended 3.5mm headphones. Will output an unbalanced 3.5mm headphone, connect with a 3.5mm to 3.5mm adapter.

6. Balanced 4.4mm analogue output
Connect balanced 4.4mm headphones.

7. Balanced 4.4mm analogue output
This is an analogue output with a balanced 4.4mm connector. It is not balanced if the DAC is not set to 'True'.

8. Variable Head switch
When the variable head switch is used, this switch will allow you to select between the two DAC analogue outputs.

9. RCA analogue output

10. USB audio and power input
This is a USB input for computers. ZEN DAC has a computer audio socket and provides the power supply.

11. DC 5V power
ZEN DAC is powered by 5V DC, either via the included USB cable. It is not recommended to use a 5V DC power supply that is not included.

Specifications

Input	USB, USB-C, 3.5mm, 4.4mm
Output	4.4mm, 3.5mm, 2x RCA, 2x 3.5mm, 2x 3.5mm, 2x 3.5mm, 2x 3.5mm
Power	200mW (100mW per channel)
THD	< 0.001%
SNR	> 110dB (A-weighted)
IMD	> 110dB (A-weighted)
Frequency Response	20Hz to 20kHz
Input Impedance	> 100kΩ
Output Impedance	< 1Ω
Power Consumption	< 1W
Dimensions	100mm x 30mm x 15mm
Weight	100g
Warranty period	2 years

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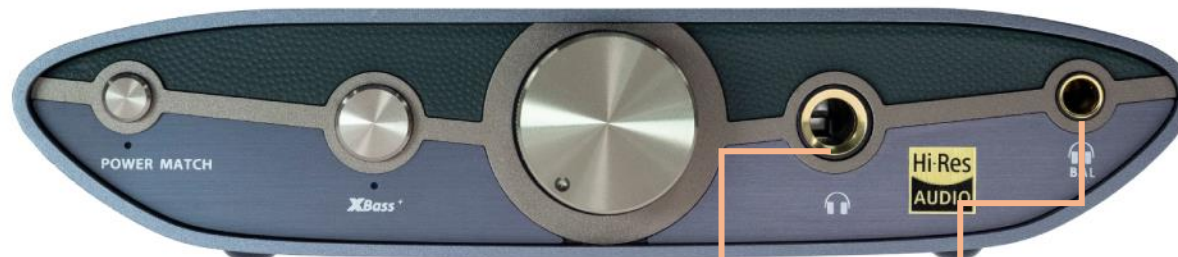
In order to activate the warranty for this iFi product, you must register with the iFi website.

Component:

Serial no:



Connections



**6.3mm Single Ended
Headphone Output**

**4.4mm Balanced
Headphone Output**



**4.4mm Balanced
Line Output**

**RCA Single Ended
Line Output**

**USB-C Input
Phone/PC**

**Power Input
5V DC Centre +ve**

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