



# hip dac 3

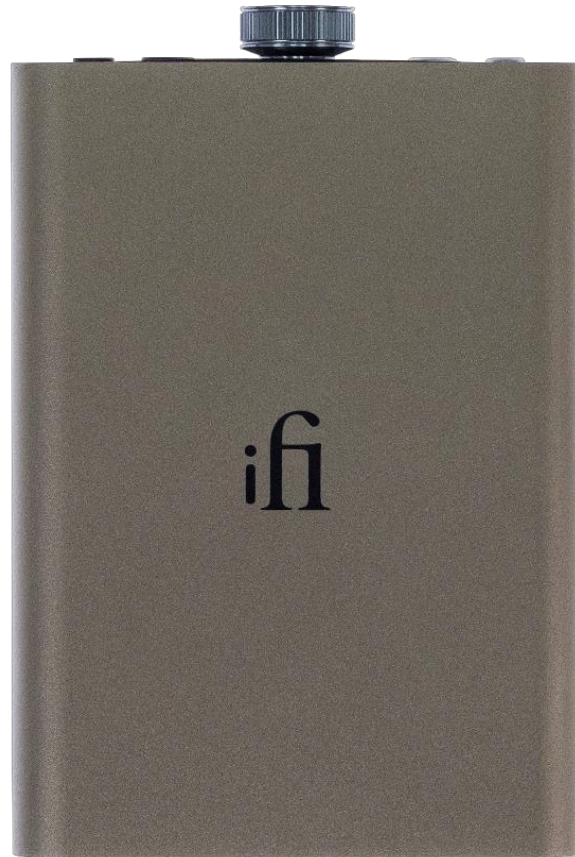
The Legacy Continues.

# Titanium Shadow. Trendsetting Innovations.

The hip-dac series is one of our most popular portable DAC/Amps.

It replaces the subpar DAC and Amp in smartphones, PCs, and Macs to enhance headphone sound.

hip dac 3







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## Hip Flask Size. Magnum Performance.

**Compact** as a hip flask, measuring 102 x 70 x 14 mm and weighing 135g.

Delivering **10 times** more power than your notebook or smartphone.

Supports PCM up to **384kHz**, DSD up to **DSD256**, and full **MQA** decoding.

**PCM**  
Pulse Code Modulation

**DSD**  
Direct Stream Digital



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# Key features

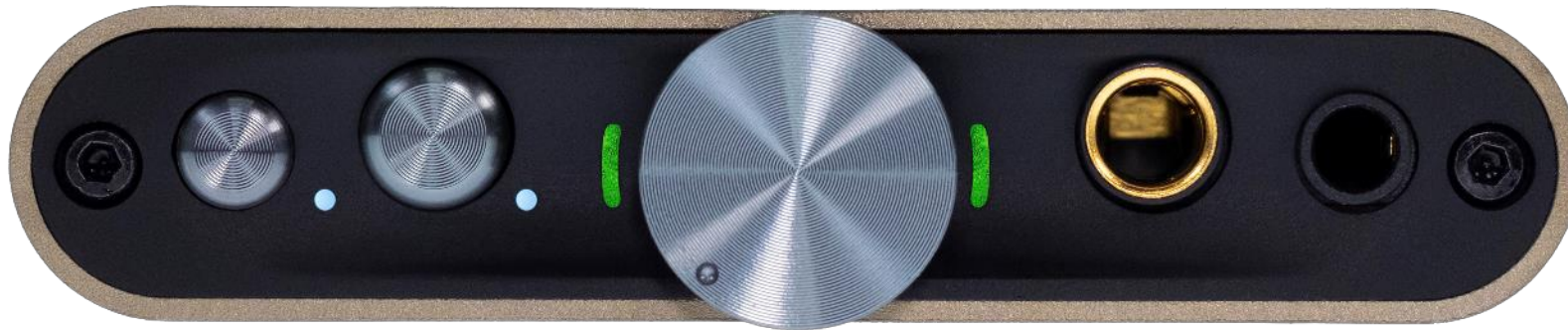
Delivers up to **400mW** for 32Ω headphones, ensuring wide compatibility.

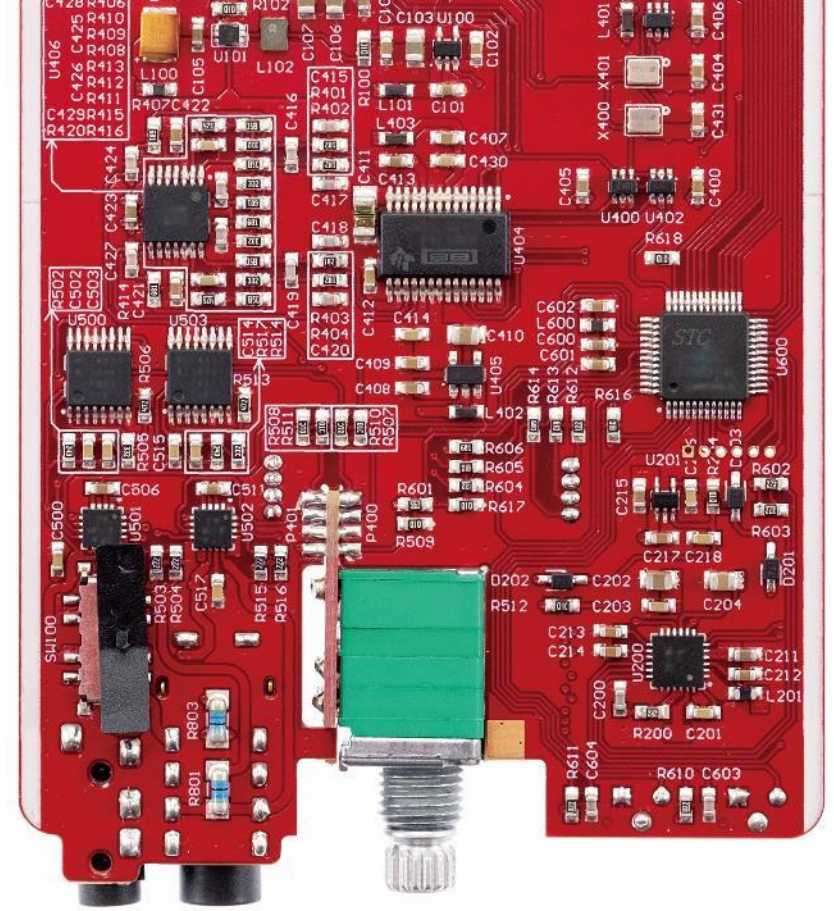
Supports high-impedance headphones up to 600Ω.

**PowerMatch** optimises power for your headphones.

**iEMatch** enhances output for high-sensitivity headphones, ideal for IEMs.

**XBass** boosts bass while preserving midrange clarity.





# Upgraded Features and Functionality

# New Colour and Added iEMatch

hip dac 3



New Titanium Shadow colour.

hip dac2



New underside switch activates **iEMatch** for IEMs, reducing hiss and enhancing detail.

# Two USB-C ports

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Two USB-C ports simplify cable management: one for audio and the other for charging.

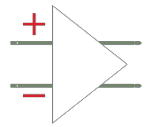
hip dac2





# True Balanced Circuit Design and Circuitry Upgrades

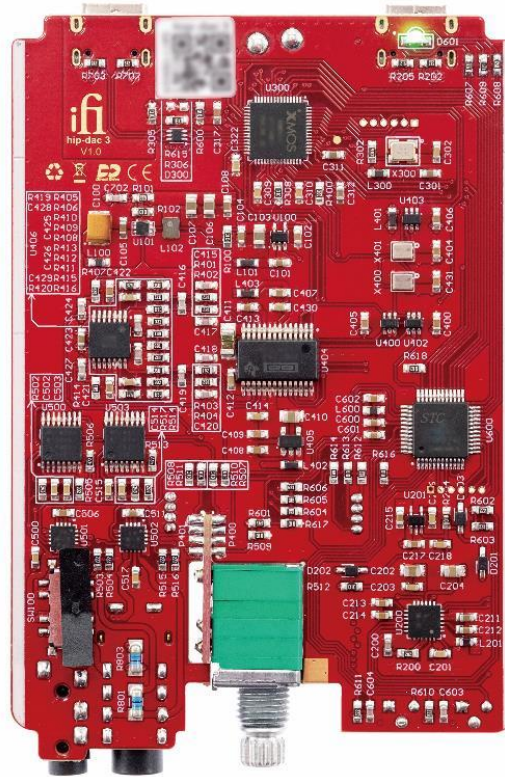
Balanced



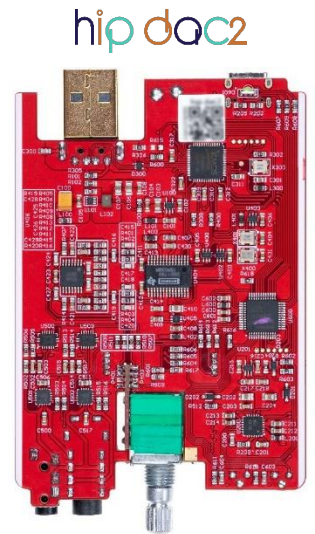
The hip-dac 3 features a **True Balanced** circuit design, a rarity in its price range, that minimises signal distortion and delivers a purer sound for your headphones.

Features **circuit upgrades** with **new capacitors** for enhanced frequency response.

hip dac 3



**Updated GMT circuitry** with a new oscillator reduces phase noise for purer sound.





# hip-dac Series Comparison



	hip-dac 3	hip-dac 2 Gold Edition	hip-dac 2
<b>Colour</b>	Titanium Shadow	Gold	Sunset Orange
<b>Input</b>	USB-C	USB type A	USB type A
<b>Formats supported</b>	DSD256, PCM 384kHz, MQA Decoder	DSD256, PCM 384kHz, MQA Decoder	DSD256, PCM 384kHz, MQA Decoder
<b>iEMatch</b>	Yes	N/A	N/A
<b>Headphone Outputs</b>			
Balanced	4.4mm	4.4mm	4.4mm
S-BAL	3.5mm	3.5mm	3.5mm
<b>Power Output</b>			
Balanced	400mW @ 32Ω; 6.3V @ 600Ω	400mW @ 32Ω; 6.3V @ 600Ω	400mW @ 32Ω; 6.3V @ 600Ω
S-BAL	280mW @ 32Ω; 3.2V @ 600Ω	280mW @ 32Ω; 3.2V @ 600Ω	280mW @ 32Ω; 3.2V @ 600Ω
<b>Additional Improvements</b>	<ul style="list-style-type: none"><li>- Circuit refinements</li><li>- New metal film capacitors for improved frequency response</li><li>- Updated GMT circuitry with a new crystal oscillator to reduce phase noise.</li></ul>		

## Other Features

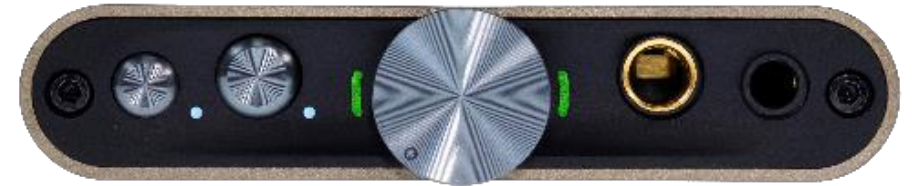


# Explanation of PowerMatch and iEMatch

**PowerMatch** optimizes the hip-dac 3 to match headphones' impedance and sensitivity, ensuring peak performance.

*Tip: Turn off for IEMs (in-ear monitors / earbuds);*

*Turn on for headphones to boost gain by 10dB.*



Use **iEMatch** for the most sensitive IEMs. It fine-tunes the output level, ensuring a perfect match with the hip-dac 3.

# Explanation of Xbass as well as Output

The hip-dac 3 provides two outputs:

A **3.5mm** socket for single-ended headphones, it utilises iFi's **S-Balanced** circuitry, minimising crosstalk and distortion for single-ended connections.

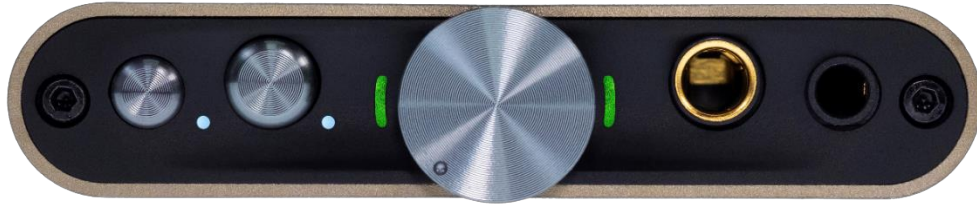
A **4.4mm balanced** output for those with balanced connectivity, leveraging the device's differential amp design.










Many headphones lack the correct bass response. **XBass** is an analogue circuit designed to 'restore' the lost bass response, achieving a more accurate reproduction of the original music.



# Status LEDs



Audio Format & kHz LED

-  Yellow PCM 44.1/48kHz
-  White PCM 88.2/96/176.4/192/352.8/384kHz
-  Cyan DSD 64/128
-  Red DSD 256
-  Green MQA
-  Blue MQA Studio
-  Magenta Original Sample Rate (MQB)



Battery status LED

-  76% - 100%
-  26% - 75%
-  11% - 25%
-  0% - 10%

# Battery Life



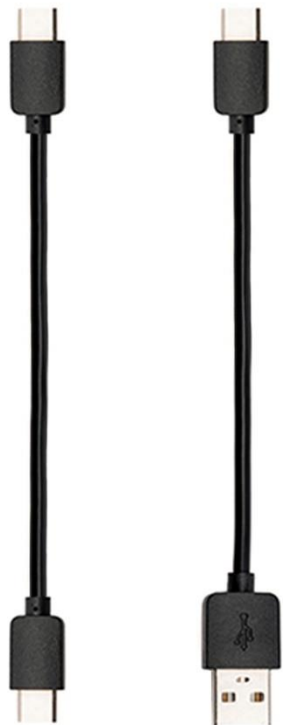
The 2200mAh battery offers up to 12 hours playing time.

# Appendix





# Box contents



# Connections



S-BAL 3.5mm

BAL 4.4mm



USB-C Data



USB-C Charging ( 5V only)



# Specifications

SPECIFICATIONS	
<b>Input</b>	USB-C
<b>Formats supported</b>	DSD256, PCM 384kHz, MQA Decoder
<b>DAC</b>	Bit-Perfect DSD & DXD DAC by Burr Brown
<b>Headphone Outputs</b>	
Balanced	4.4mm
S-BAL	3.5mm
<b>Power Output</b>	
Balanced	400mW @ 32Ω; 6.3V @ 600Ω
S-BAL	280mW @ 32Ω; 3.2V @ 600Ω
<b>Output Impedance</b>	
Balanced	≤1Ω , With iEMatch engaged: ≤4.5Ω
S-BAL	≤1Ω , With iEMatch engaged: ≤4.5Ω
<b>SNR</b>	
Balanced	<109dB(A) @ 0dBFS
S-BAL	<103dB(A) @ 0dBFS
<b>DNR</b>	
Balanced	<109dB(A)
S-BAL	<103dB(A)
<b>THD + N</b>	
Balanced	<0.006X% (360mW/2.0V @ 600Ω)
S-BAL	<0.01% (100mW/1.27V @ 16Ω)
<b>Frequency Response</b>	20Hz - 45kHz (-3dB)
<b>Power Consumption</b>	<2W idle, 4W max
<b>Battery</b>	Lithium-polymer 2200mAh approx. 8 hours
<b>Power System</b>	Charging via USB-C, BC V1.2 compliant up to 1000mA charging current
<b>Dimensions</b>	102 x 70 x 14 mm (4.0" x 2.8" x 0.6")
<b>Net weight</b>	135 g (0.30 lbs)
<b>Limited Warranty</b>	12 months*
*12 months typical or as permitted/required by local reseller laws	
**Specifications are subject to change without notice.	

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