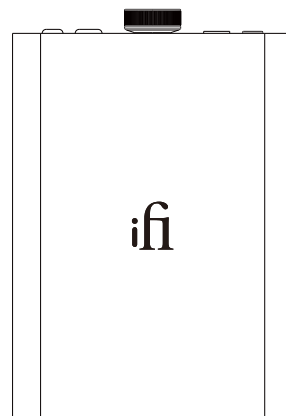


ifi

hip dac 3 black



User Manual

OUTLINED

Thank you for purchasing the Black from the HIP series. The **hip-dac 3 Black** is a portable balanced USB DAC + headphone amplifier.

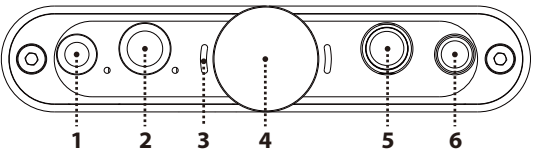
Introducing the **hip-dac 3 Black**, a limited edition of our iconic **hip-dac 3**, cloaked in a sophisticated matte black finish, this sleek design conceals new and improved technology for whisper quiet operation.

Many people use headphones with smartphones, tablets or computers to indulge in music, movies and podcasts but the audio technology in these devices restricts sound quality. The **hip-dac 3 Black** unlocks the potential of your headphones by upgrading the DAC (Digital-to-Analogue Converter) and headphone amplifier for breathtaking clarity. This limited edition goes even further; packing all the cutting-edge features of the **hip-dac 3** whilst improving the power supply to reduce noise and elevate sound quality.

With the **hip-dac 3 Black** in hand, we invite you to slip into your favourite music and discover every detail hidden within: the subtlety, the nuance, the light, and the shadows.

FEATURES

- Crafted from solid aluminium and finished in Obsidian Black
- Paired with metallic black hardware
- Revised internal power supply components for quieter operation
- True Native DAC – bit-perfect performance with every digital format
- State of the art hi-res audio – 32-bit/384kHz PCM, DSD256 and full MQA decoding
- Separate USB-C inputs for audio data and charging
- Fully balanced 4.4mm and S-Balanced* 3.5mm headphone outputs
- PowerMatch – adjust gain to satisfy power-hungry headphones
- iEMatch – optimise output to suit super-sensitive in-ear monitors
- XBass – tune bass response to match headphone type
- Perfectly portable – slips easily into a pocket with up to 8-12 hours play time



1. PowerMatch (on/off)

PowerMatch enables **hip dac 3 Black** to match headphones' impedance and sensitivity in order to generate their highest operational efficiency.

Tip: For in-ear-monitors (earbuds) try PowerMatch off. For headphones try PowerMatch on. When on, the gain increases by 10dB. If your iEMs are very sensitive, try using the iEMatch feature (item 7).

2. XBass (on/off)

Many headphones lack the correct bass response. XBass is an analogue circuit designed to 'add back' the lost bass response for a more accurate reproduction of the original music.

3. Audio Format LED (kHz)

The LED colour scheme indicates the audio format and sampling frequency received by **hip dac 3 Black** from the music source.

LED	Mode
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)

Warning: Installing GTO enabled firmware may result in the LED's on this device no longer changing in accordance with the above table

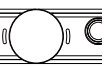
4. ON/OFF and Analogue Volume Control

The analogue volume control in **hip dac 3** is superior to any digital volume control.

Warning: Due to the high power of **hip dac 3**, always start off at a low volume level so that there is no risk of damage to your headphones and your hearing. iFi audio is not responsible for any hearing or equipment damage from misuse.

Power ON.

Step 1 ON



Tip: The **hip dac 3 Black** will continue to run from battery power even if the USB cable is connected afterwards.

Tip: For connection to older Apple devices, an Apple Lightning to USB Camera Adapter is required. For connection to Android devices, a USB On-The-Go (OTG) cable and appropriate OS support are required.

For more information, please refer to www.ifi-audio.com

5. Balanced 4.4mm headphone output

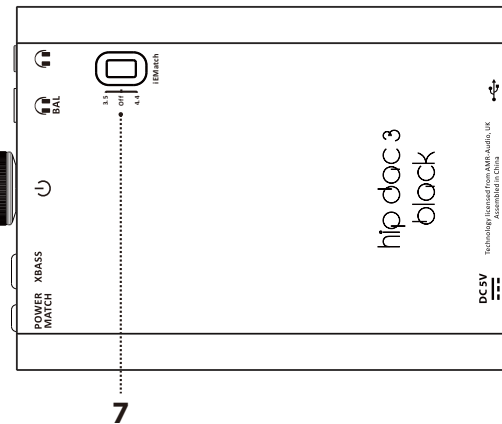
Connection for 4.4mm balanced headphones.

Tip: As **hip dac 3 Black** is balanced (reduces noise and crosstalk in the signal path by fully separating the left and right channels.), we recommend the 4.4mm output.

6. S-Balanced 3.5mm headphone output

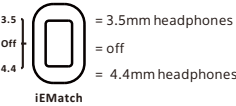
Connection for 3.5mm Single-Ended or Balanced headphones.

Tip: iFi's exclusive S-Balanced circuit delivers maximum performance from single-ended and balanced headphones alike.

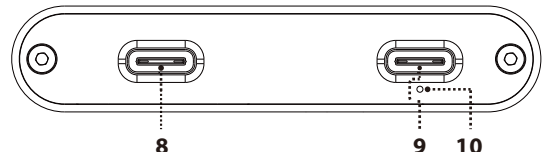


7. iEMatch switch

iEMatch reduces the output level, so that even the most sensitive In-Ear-Monitors (iEMs) can be matched to the **hip dac 3 Black**.



Tip: The **hip dac 3 Black** or the headphone will not be damaged if the iEMatch switch is adjusted incorrectly, but the attenuation level will not be correct.



8. USB-C data input port

Connect your phone to the **hip dac 3 Black** with a Lightning to USB-C (Apple) or USB-C to USB-C cable (Android). When using other audio sources, please connect with a USB cable. This USB-C port is intended for data transfer only.

Note: For use with PC it is necessary to download drivers.

Tip: For the required driver and all the latest firmware updates please refer to our website: www.ifi-audio.com/download-hub/

9. USB-C (5V) battery charge input

For charging only. It will take ~3 hours for a high-powered USB charger to fully charge **hip dac 3 Black**. Use the enclosed USB 'Type A' to 'Type C' cable, smart charger or a regular charger up to 6.3V.

10. LED for Battery Status

LED	Status
White*	> 75%
Green*	> 25%
Red*	> 10%
Red (flashing)	≤ 10%

*Battery LED will flash when it is charging

SPECIFICATIONS

Input: USB-C
Hi-res support: DSD256 (11.3MHz); PCM 384kHz; MQA Decoder
DAC: Bit-Perfect DSD & DXD DAC by Burr Brown
Headphone Output: Balanced 4.4mm; S-Balanced* 3.5mm

Output Power:
Balanced ≥400mW @ 32Ω; ≥6.3V @ 600Ω
S-Balanced* ≥280mW @ 32Ω; ≥3.2V @ 600Ω

Output Impedance:
Balanced ≤1Ω, With iEMatch engaged: ≤4.5Ω
S-Balanced* ≤1Ω, With iEMatch engaged: ≤4.5Ω

SNR:
Balanced 109dB(A) @ 0dBs
S-Balanced* 103dB(A) (600Ω @ 20-20KHz)

DNR:
Balanced 109dB(A) (600Ω @ 20-20KHz)
S-Balanced* 1103dB(A) (600Ω @ 20-20KHz)

THD+N:
Balanced ≤0.006% (360mW/2V @ 600Ω)
S-Balanced* ≤0.01% (100mW/1.27V @ 600Ω)

Frequency response: 20-45kHz(-3dB)
Power consumption: <2W idle, 4W max

Battery: Lithium-polymer 2200mAh approx. 8 hours
Power System: Charging via USB-C, BC V1.2 compliant up to 1000mA charging current

Dimensions: 102 x 70 x 14 mm (4.0" x 2.8" x 0.6")

Net weight: 135 g (0.3 lbs)

Limited Warranty: 12 months**

*Single-Ended Compatible Balanced.
**12 months typical or as permitted/required by local reseller laws.
Specifications are subject to change without notice.

Cautions

1. Avoid extreme heat, cold and humidity.
2. Avoid dropping or crushing the **hip dac 3 Black**.

Prolonged Heat Exposure

During normal use, your **hip dac 3 Black** may become quite warm. This is normal and not a cause for concern. However, it is crucial to ensure good ventilation while using this device.