

ifi
audio

hip dac

hip-dac

Smartly dressed in petrol blue with a touch of copper, the go-anywhere hip-dac is designed to slip discretely into a pocket and offers an extensive hi-res specification that belies its eminently affordable £149, (€159, \$149) price tag.

The hip-dac replaces the inferior DAC (Digital-to-Analogue Converter) and amp circuitry in smartphones, tablets, PCs and Macs to vastly improve headphone sound.

Its design and performance set it apart from other DAC/headphone amps in its class.-- connect your playback device via USB, plug in your favourite corded headphones or in-ear monitors and the hip-dac delivers a sound brimming with bold dynamism and fluid refinement, effortlessly engaging the listener with all manner of music.

In the home, in the office, on a train or plane – the hip-dac is the music lover's inseparable friend.





ifi

ifi
audio

benefits

- Enjoy mind-blowing music at your fingertips quickly and easily with the user-friendly, compact hip-dac.
- Connect the hip-dac via USB between your smart device, laptop and corded headphones while out and about.
- Hook it up to your PC or Mac at home or in the office.
- The hip-dac delivers hi-res, 'bit perfect' PCM and DXD up to 384kHz and up to DSD256 DSD256 as well as MQA.
- Make the most of your balanced headphones wherever you are with the hip-dac's 4.4mm sockets.
- Reap the benefits of balanced even with normal headphones as the 3.5mm single-ended socket uses our unique S-Balanced technology to cut crosstalk and distortion in half.
- The analogue output stage of the hip-dac is a balanced (differential) design which means less interference and crosstalk.
- Tailor the sound of the hip-dac to your playback priorities with additional, exclusive iFi firmware.
- Benefit from PowerMatch – switchable gain – to cater for headphone sensitivity.
- Turn on XBass to add missing base to open backed headphones or IEMs



ifi
audio



ifi
audio

technologies

Burr-Brown MultiBit



True Native

The DAC section of the hip-dac is based around a Burr-Brown DAC chip that we use extensively in our products, selected for its fluid, highly 'musical' sound quality and True Native architecture.

MQA

The Burr-Brown chip, combined with our custom iFi circuitry, enables the hip-dac to deliver excellent sound quality across all manner of digital audio formats, including bit-perfect PCM, native DSD and MQA -- the hi-res streaming codec, as used by Tidal's 'Masters' tier.



Hi-res audio

Hi-res PCM and DXD audio data is supported at sampling rates up to 384kHz, alongside DSD from 2.8MHz to 12.4MHz (DSD64, 128 and 256). Either side of the rotary volume control reside a pair of LEDs that change colour to indicate the format and sampling rate of the digital audio being played.

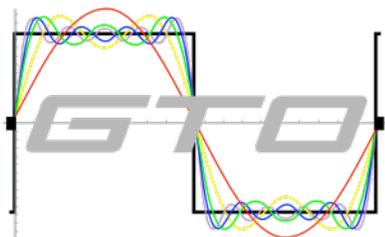


technologies



Jitter-free

Extensive clock-locking eradicates jitter (digital distortion), using our GMT femto-precision clocking system to maintain the integrity of the digital signal until conversion to analogue. The hip-dac's USB input handles audio data up to 32-bit/384kHz and supports the 'SuperSpeed' USB 3.0 standard, as well as USB 2.0 for backwards compatibility. It is asynchronous, meaning that the data rate is regulated solely by the hip-dac's specialised audio clock circuitry for accurate, jitter-free data transfer from the source device.

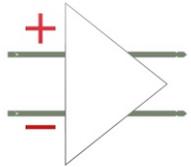


Exclusive firmware

The XMOS chip used in the hip-dac, which processes audio data received at the USB input, is programmed in-house. Off-the-shelf firmware is not typically optimised for audiophile-grade sound, so we program our own bespoke firmware to enhance audio processing. The hip-dac can also be tailored to your playback priorities by download and installing different versions of iFi exclusive firmware. Experiment with different digital filters including the GTO filter from our high-end Pro iDSD.

technologies

Balanced



Balanced circuitry

The hip-dac's amp circuitry is of balanced (differential) design.

The circuitry incorporates a range of high-quality components, carefully selected for their performance in an audio context, including a custom iFi OV op-amp, TDK C0G class 1 ceramic capacitors, a precision low-noise power supply IC from Texas Instruments and a high-quality analogue volume pot.

The headphone amp delivers 660mW of power from the balanced output (520mW from the single-ended output) into a 32-ohm load – impressive when compared to the hip-dac's peers, ensuring compatibility with a wide range of headphone and earphone types. With a rating of 200mW from the balanced output into a 300-ohm load, it drives most power-hungry headphones with ease.



technologies



Balanced performance

The amp stage features switchable gain, which we call PowerMatch. This matches the level of drive to the load presented by the headphones, by adjusting input sensitivity and thereby signal strength. With high-sensitivity headphone types such as in-ear monitors, leave PowerMatch at its lower setting for ultra-low-noise performance. But if your headphones require more drive – most on/over-ear types, for example – press the PowerMatch button on the front panel to increase gain.

Two outputs are provided – a 3.5mm socket for headphones with a single-ended cable/connector and a 4.4mm output enabling headphones equipped with balanced connectivity to take full advantage of the hip-dac's differential amp design.

In addition, the 3.5mm output benefits from our proprietary S-Balanced circuitry, cutting crosstalk and related distortion in half when used with regular, single-ended headphone connections – this is especially beneficial with high-sensitivity in-ear monitors.

technologies



XBass

This optional 'bass boost' enhances low frequencies without muddying the midrange, and is particularly useful with earphones and open-back headphones that may lack deep bass. It operates entirely in the analogue domain rather than messing with the digital signal via DSP.



USB ports

There are two USB ports – Type A for audio data and USB-C for charging. The Type A input features a 'male' connector, rather than a typical 'female' port. This provides greater mechanical integrity than USB/Micro USB ports.. This is an advantage for iPhone and iPad users, because it accepts Apple's Lightning to USB Camera Adaptor directly without requiring an additional female-to-male USB adaptor. (The Camera Adapter is required to connect Apple iOS devices to third-party USB devices.)



Battery

The hip-dac's 2200mAh battery lasts for around eight to 12 hours of playing time. This depends on volume level and how power-hungry the connected headphones are.



ifi
audio

what's in the box

hip-dac

Male USB A > Female USB A cable
(PC>hip-dac)

OTG cable type C
(Android > hip-dac)

Male USB A > USB C
(charging cable)

Manual card

Warranty card

Silicone pads x 4



specifications

Formats supported:	DSD256/128/64, Octa/Quad/Double/Single-Speed DSD DXD(384/352.8kHz), PCM(384/352.8/192/176.4/96/88.2/48/44.1kHz) MQA
Digital Inputs:	USB 3.0 type 'A' High-Speed Asynchronous USB 2.0, (32bit/384kHz)
Headphone Outputs:	Balanced 4.4mm Single-Ended S-Balanced 3.5mm
Power Output:	2.0V/400 mW @ 16 Ohm
Battery:	Lithium-polymer 2200mAh
Power System:	Charging via USB-C, BC V1.2 compliant up to 1000mA charging current
Power (max):	<2W idle, 4W max
Dimensions:	102(l) x 70(w) x 14(h) mm
Weight:	125g (0.28 lbs)



ifi
audio

hip dac

ifi-audio.com/products/hip-dac
media.ifi-audio.com/portfolio/hip-dac