

GO Bar Kensei Tech Lowdown



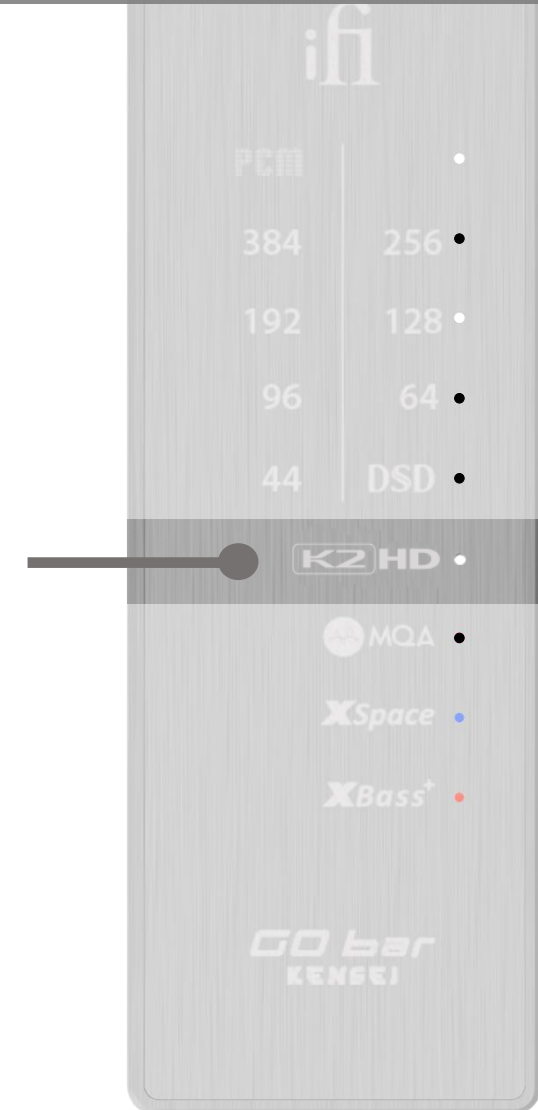
World's first Ultraportable DAC with K2HD

K2HD Technology

We worked with JVCKENWOOD for 18 months to bring their K2HD technology to our most premium dongle DAC yet.

Shaping waveforms and restoring harmonics

K2HD restores music data lost during digitalisation, bringing your audio closer to the analogue master recording quality.



Story of K2 Technology

Despite their pristine clarity, digital recordings sometimes seem **emotionally flat** and **lifeless**.

Engineers at the prestigious Victor Studio, troubled by the discernible lack of emotion between their original masters and digital sub-masters, embarked on a quest for a solution.

They meticulously compared countless finished recordings with the copy recordings by ear, relying on their instinctive feel and their human expertise.

Their solution; **K2 Technology**.

The **K2 Technology** process **revives rich, natural harmonics** into the sterile, detached digital sound, adding an organic quality unlike any other.

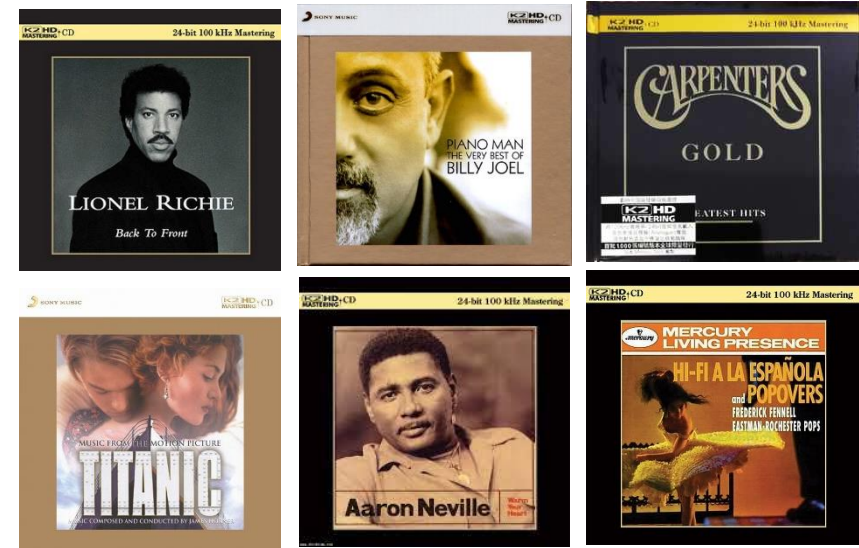
K2 Technology processing revitalises the studio recording sound, infusing it with life once again.



Control room 401 inside Victor Studio, Japan, where K2 was created.

Devices and CDs with K2

K2 Technology is not only used in studios; JVCケンウッド has implemented it into music playback devices, including wireless earphones, DACs, mini-Hi-Fi, CD players and CDs.



K2HD CDs are held in the highest regard by music lovers.



"K2" CD players are popular with collectors.

K2HD Processing

The latest version of K2 Technology is known as K2HD.

When mastering to match CD specifications, all data above 22kHz is cut off, and resolution is diminished by 256 times.

This isn't even limited to CDs specifically – Spotify's entire library is compressed to 44.1kHz/16-bit.

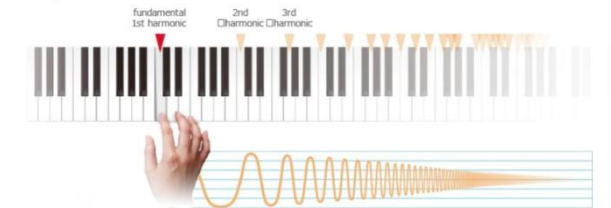
K2HD gets back your lost data.

This advanced processing optionally upscales a file to 192kHz/24-bit and applies their hand-selected K2 parameters for waveform correction – which processes the time-domain, **not** the frequency domain.

The unparalleled originality of K2HD lies in its advanced high-frequency extension, enabling the restoration of natural harmonics and overtones beyond 22kHz, delivering audio quality that is close to the original master.

Restoring harmonics of high frequency range

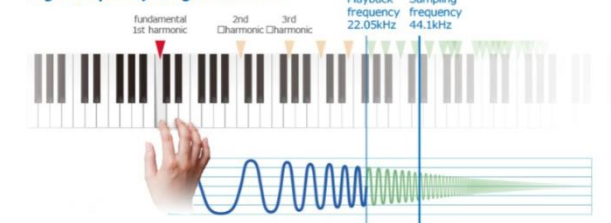
Original master source



CD sound source



High-frequency range extension



Visual explanation of K2HD Processing. Source: JVCKENWOOD website.

Key Features

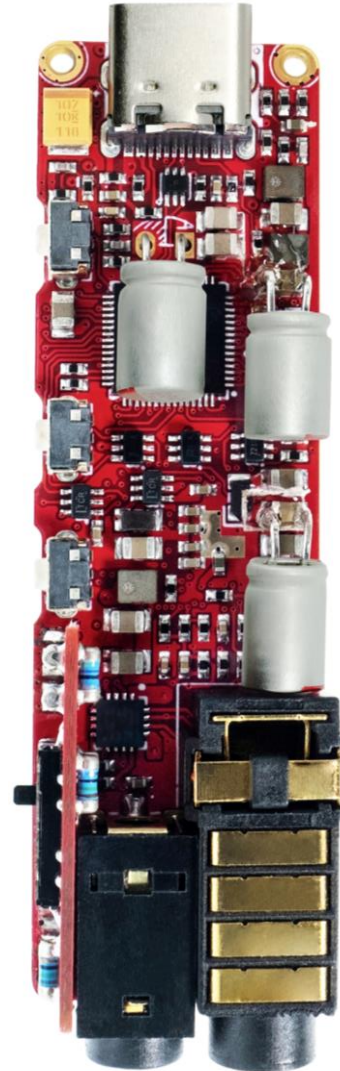
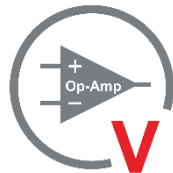
Enhances audio to near master quality with JVCKENWOOD's 'K2HD Technology'

K2 HD

Four digital filter options, and XBass+ and XSpace analogue processing modes

XBass+
XSpace

Delivers up to **477mW** of continuous power



Enhanced clock and power supply circuitry

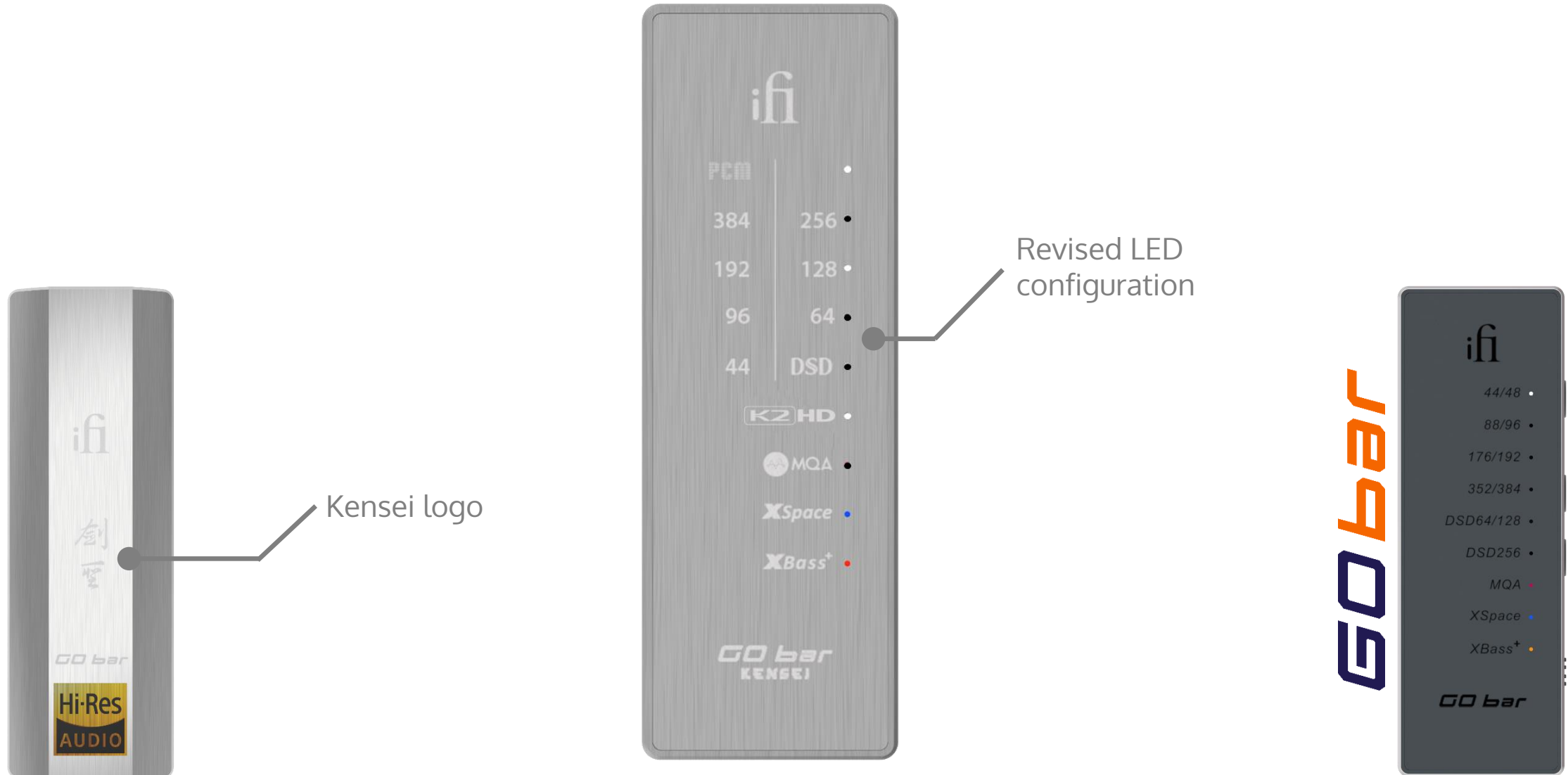
iEMatch

Optimising output for high-sensitivity headphones/IEMs

Balanced Performance

Symmetrical, twin mono output stage

Kensei vs. GO bar Looks



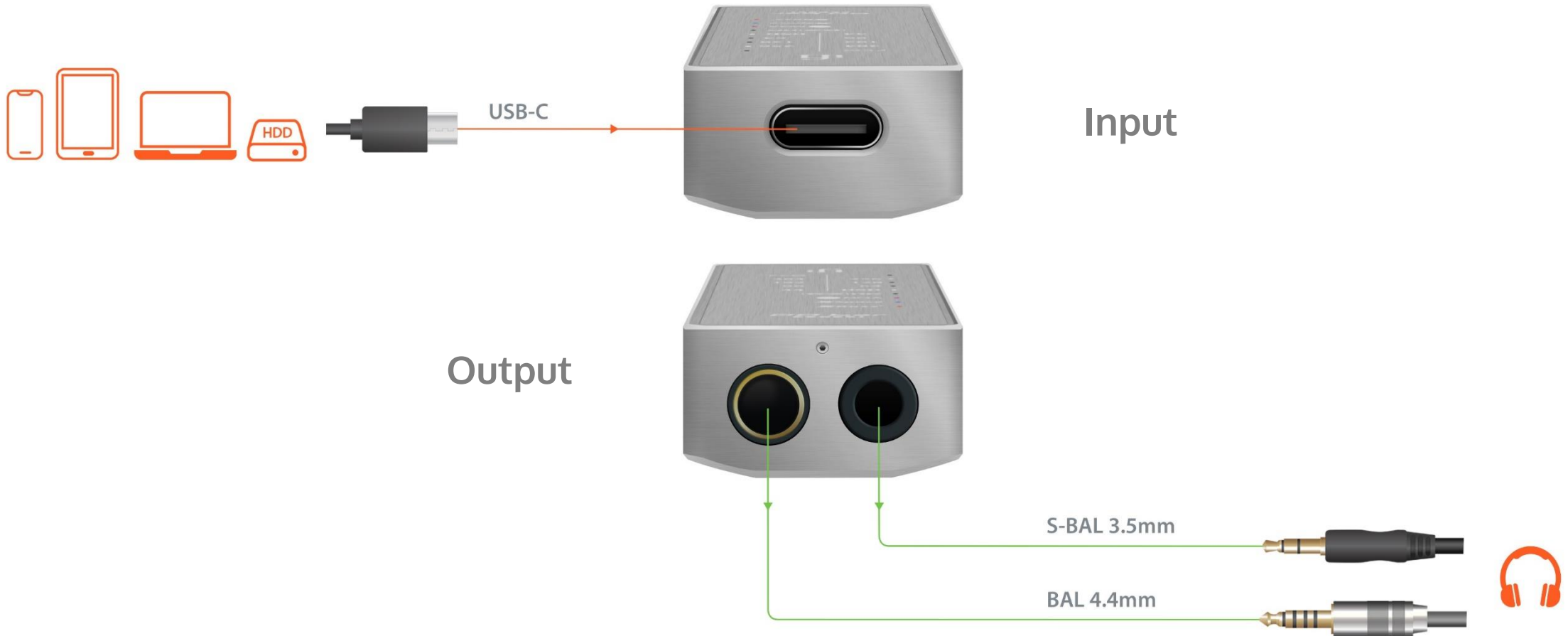
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Kensei vs. GO bar Comparison

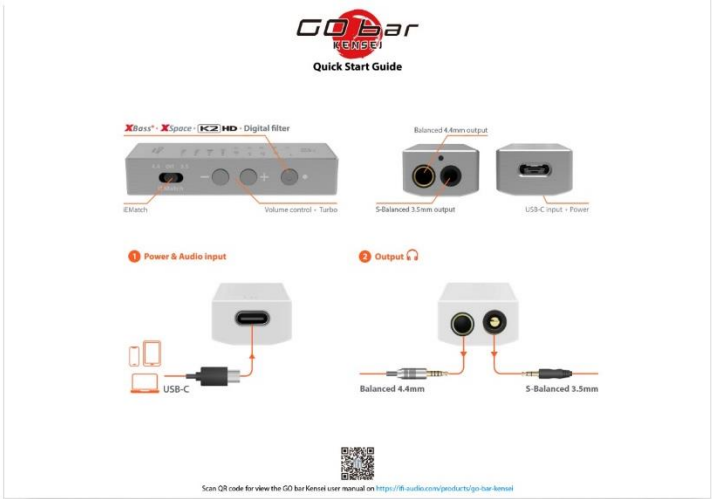


	GO bar Kensei	Gold bar – 10 th Anniversary	GO bar
Material	Japanese Stainless Steel for maximum rigidity	Copper	Aluminium Alloy
K2HD	Yes	No	No
Clock	Ultra-Low Jitter	Standard Low Jitter	Standard Low Jitter
Power supply	Enhanced	Enhanced	Standard
Presentation	Engraved Wooden Box	Eco-Packaging	Eco-Packaging
XBass+ & XSpace	Yes	Yes	Yes
Digital filters	Yes	Yes	Yes
iEMatch	Yes	Yes	Yes
Turbo mode	Yes	Yes	Yes
Headphone outputs	4.4mm Balanced, 3.5mm S-Bal		
Power (4.4mm)	477mW @ 32Ω; 7.2V @ 600Ω	475mW @ 32Ω; 7.2V @ 600Ω	475mW @ 32Ω; 7.2V @ 600Ω
Power (3.5mm)	300mW @ 32Ω; 3.8V @ 600Ω		
Formats supported	DSD256, PCM 384kHz, MQA Decoder		
Input	USB-C		

Connection Guide



Box Contents



Specifications

GO bar Kensei

Digital

Formats supported	384kHz; DSD256 (12.3MHz); full MQA
Digital filters	Standard, Bit-Perfect, GTO, Minimum Phase
K2HD Processing	Yes

Output power (RMS)

Headphone outputs	4.4mm, 3.5mm
4.4mm	477mW@32Ω; 7.2V@600Ω
3.5mm	300mW@32Ω; 3.8V@600Ω

Headphone output (4.4mm)

Output impedance	<0.62Ω
SNR	132dBA (with software mute)
DNR	109dBA
THD+N	<0.002% (6.5mW/2.0V @ 600Ω)

General

Power consumption	<4W max.
Dimensions	65 x 22 x 13.2 mm
Net weight	65.5g

Connectivity

Digital inputs	1x USB-C
Headphone outputs	1x Balanced 4.4mm; 1x S-Bal 3.5mm



Explanation of Analogue Processing Modes

XSpace

The XSpace Matrix on/off recreates a holographic sound field using purely analog signal processing, designed for headphones **as if one was listening to speakers.**

It addresses the 'music inside the head' sensation that can be uncomfortable.

XBass⁺

XBass is an analogue circuit designed to 'add back' **the lost bass response for more accurate reproduction** of the original music.

Cycle through to select:

Off > **XBass⁺** > **XSpace** > **XBass⁺**
XSpace

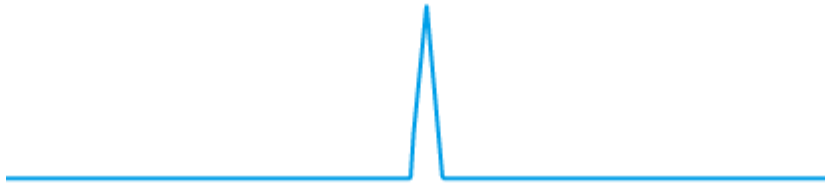
Note: Research into headphone frequency response showed that a purely flat response may not be correct. Our long present XBass fits the profile of the low-frequency correction required.

Note: Sonically-hindering DSP is NOT used for XBass+ nor XSpace matrix systems. They use the highest-quality discrete components and operate purely in the analogue domain. Hence all the clarity and resolution of the original music is retained.

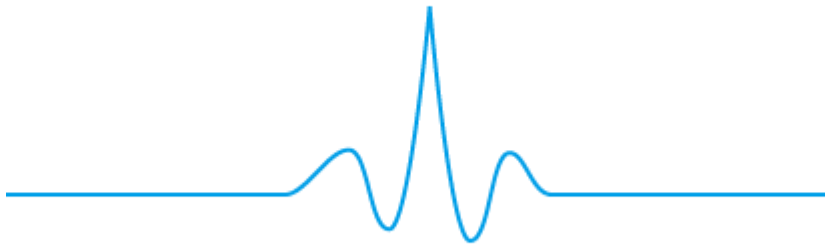
Explanation of Digital Filters

There's no one-size-fits-all solution; it's about finding what suits you best. The following four digital filters are available:

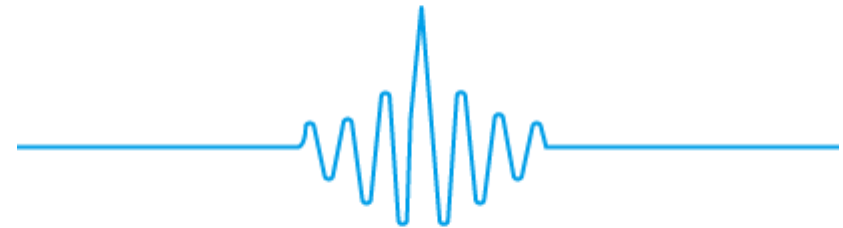
'BP' **Bit-Perfect**, with no digital filtering or pre/post ringing. Delivers crisp, robust sound, sharp natural tones, and a fuller midrange.



'MIN' **Minimum Phase** offers slow roll-off with minimal pre and post ringing, slight reverberation, and a warmer sound. It balances data metrics and listening experience, between STD and BP.



'STD' **Standard** provides balanced filtering with modest pre and post ringing. With its fast roll-off and subtle post-reverb, delivering a powerful sound. It reduces high-frequency noise, resulting in a tighter sound with controlled highs.



'GTO' **Gibbs Transient-Optimised**, up-sampled to 352.8/384kHz, offers minimal filtering with no pre-ringing and minimal post-ringing. With its precision characteristic, it enhances sound details and density.



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