

Questyle
Audio Engineering



SIGMA Pro

Flagship portable DAC with Headphone Amplifier

www.questyle.com

Latest Flagship SIGMA Pro – Portable DAC with Headphone Amplifier

SIGMA Pro is our flagship portable DAC/amp, built on Questyle's pursuit of audio perfection. It is a technological benchmark that proves performance and portability can coexist, delivering a truly "Portable Professional audio equipment" experience.

SIGMA Pro delivers desktop-class specs and sound quality. It houses four sets of Questyle-patented, fully discrete current-mode analog amplifier stages, a dual-mono ESS ES9069 DAC array, and an XMOS XU316 USB interface that supports master-grade PCM 768 kHz/DSD512 decoding and full MQA unfolding.

Connectivity has been comprehensively upgraded, featuring multi-machine recording monitoring, 3.5 mm single-ended, and 4.4 mm balanced analog inputs. The durable exterior is crafted from sand-blasted aerospace aluminum and Kunlun glass. Independent dual USB-C ports support charging while listening, with an intelligent battery system ensuring stable, long-lasting power.





SIGMA Pro



iPhone 16 Pro Max

Portability Maximized

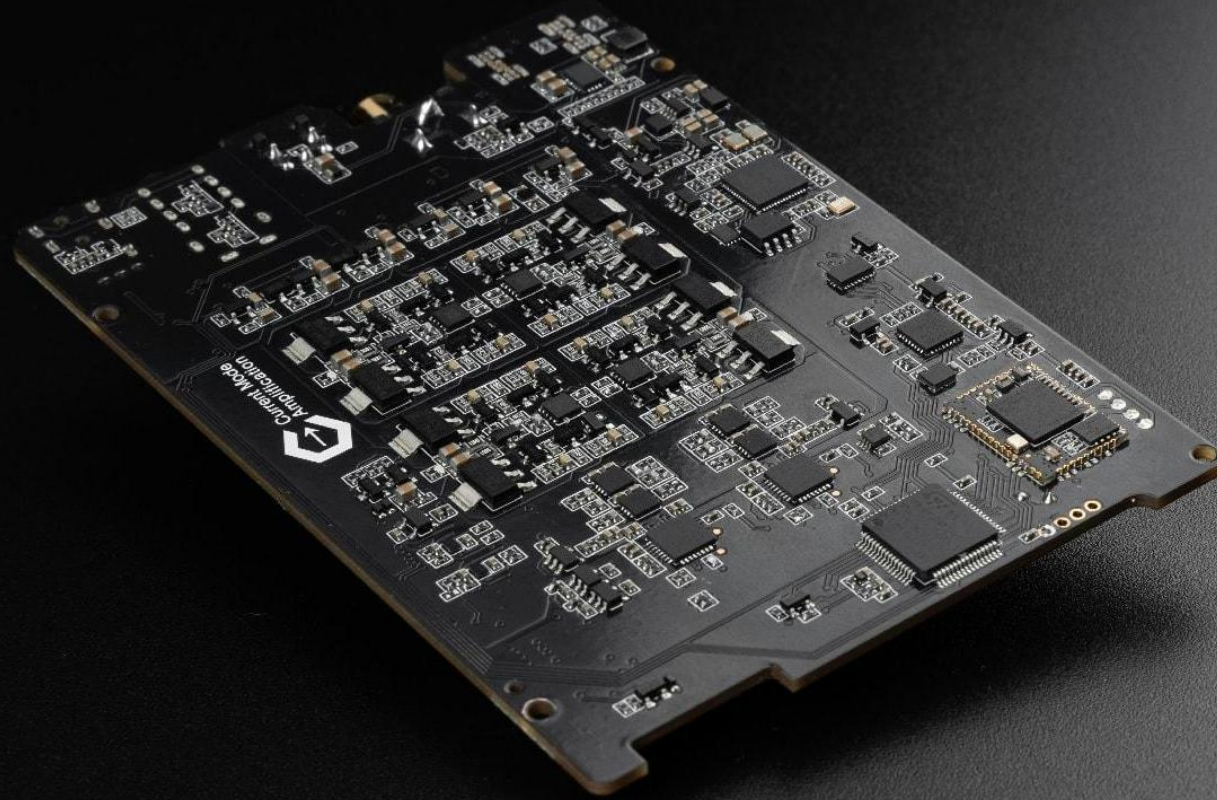
Built for professional, multi-scenario use, the SIGMA Pro is about the same size as an iPhone 16 Pro Max (155.7 × 85 mm) yet weighs only 330.8 g, delivering desktop-grade performance in a feather-light package.

Designed to impress Fusing Bauhaus principles with A retro-tech vibe

Guided by the Bauhaus philosophy of "less is more," SIGMA Pro is a testament to classic industrial design. Its clean lines and pure geometric form remove all unnecessary ornamentation, ensuring every detail serves a precise functional purpose.

Inside, the beautiful components are on full display. The meticulously arranged circuits and gleaming chips create a mechanical work of art, fusing vintage charm with modern tech. More than just a device, SIGMA Pro is a statement piece that instantly commands attention wherever it's placed.





Hardcore Performance Patented Current Mode Amplifier plus TTA Architecture Powerful engine of Robust Sound

SIGMA Pro features a more powerful, fully discrete and balanced current mode amplifier, delivering significantly increased output power and current.

This allows it to effortlessly drive demanding high-impedance headphones for a full, dynamic sound, while also precisely controlling low-impedance IEMs for pure, detailed audio. The four sets of patented amplifiers elegantly resolve the conflict between size, power, and audio performance.



Current Mode
Amplification

Current-Mode Amplifier Patent
Global PCT Patent No.: US 9,614,483 B2

Peak Output Voltage

25Vp-p

Peak Output Current

5A

Peak Output Power

>8W

THD

0.0002%

ESS Flagship Stereo DAC ES9069 Dual Mono Configuration + TTA (Three-Tier Architecture) Decoding Framework

To achieve decoding performance beyond customer expectations, the SIGMA Pro utilizes ESS's flagship stereo DAC chips, two ES9069 in a dual mono configuration, combined with the TTA three-level decoding architecture developed by Questyle engineers, delivering performance fully on par with desktop devices.

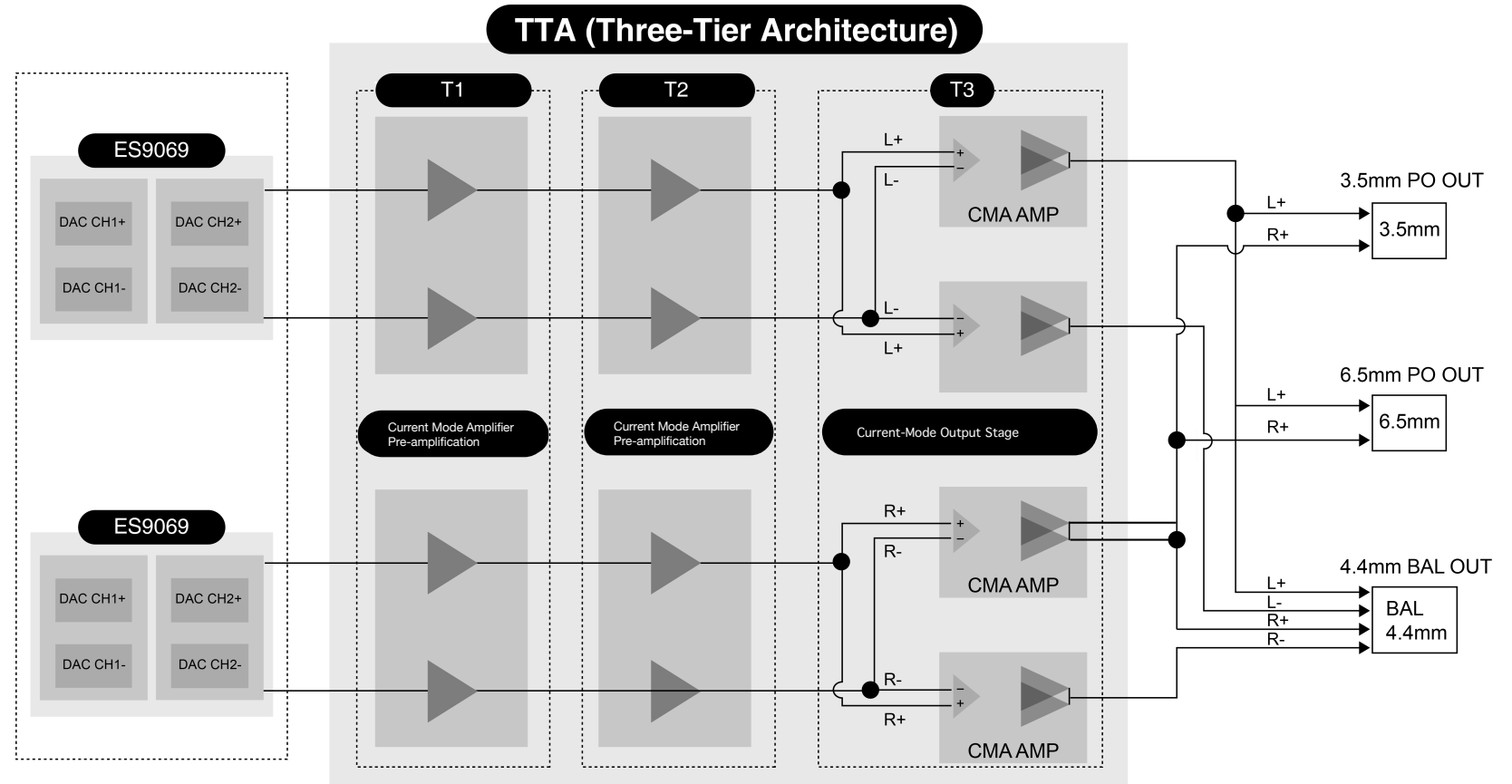


ESS Flagship Stereo DAC

ES9069 Dual Mono Configuration

Max Decoding Capability:

PCM768 | DSD512

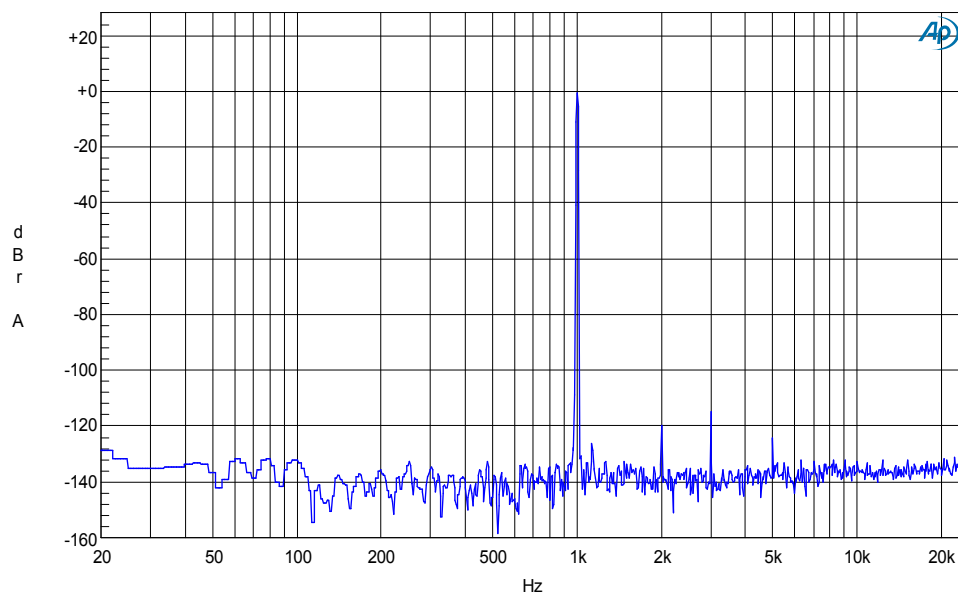


Ultra-low loaded distortion and exceptional noise-floor control place you in a world-class recording studio.

SIGMA Pro delivers detailed and pure sound with loaded distortion so low it's almost imperceptible, and noise floor control that is astonishing, creating a "pure black background" for music, making you feel like in a top recording studio.

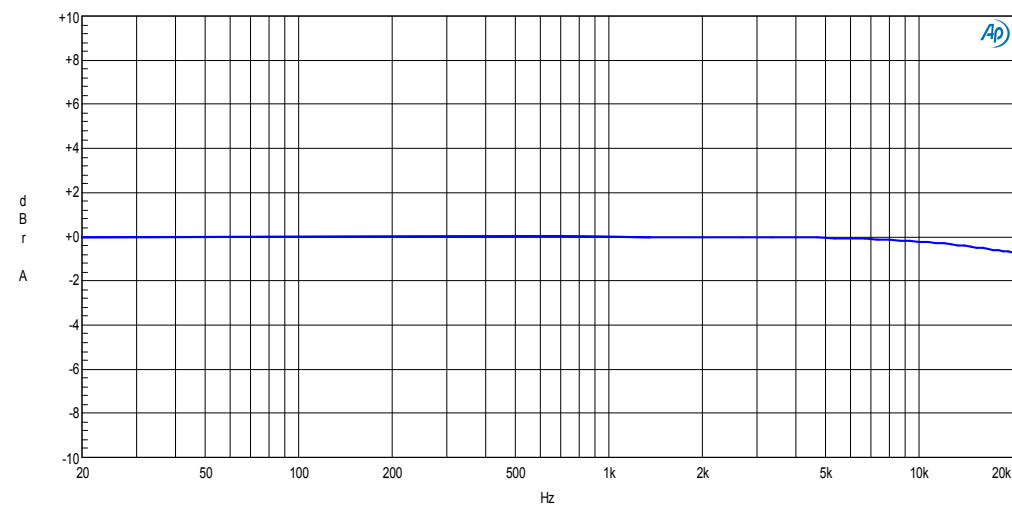
FFT @1kHz@48kHz(SR)24bit, @4.4mm Po=35.8mW, RL=300Ω

Based on Audio Precision AP2722 test data from Questyle Lab.



192kHz 24bit (Sine) 4.4mm@RL=300Ω

Based on Audio Precision AP2722 test data from Questyle Lab.





Questyle Signature Tuning A refined, analog-inflected listening experience

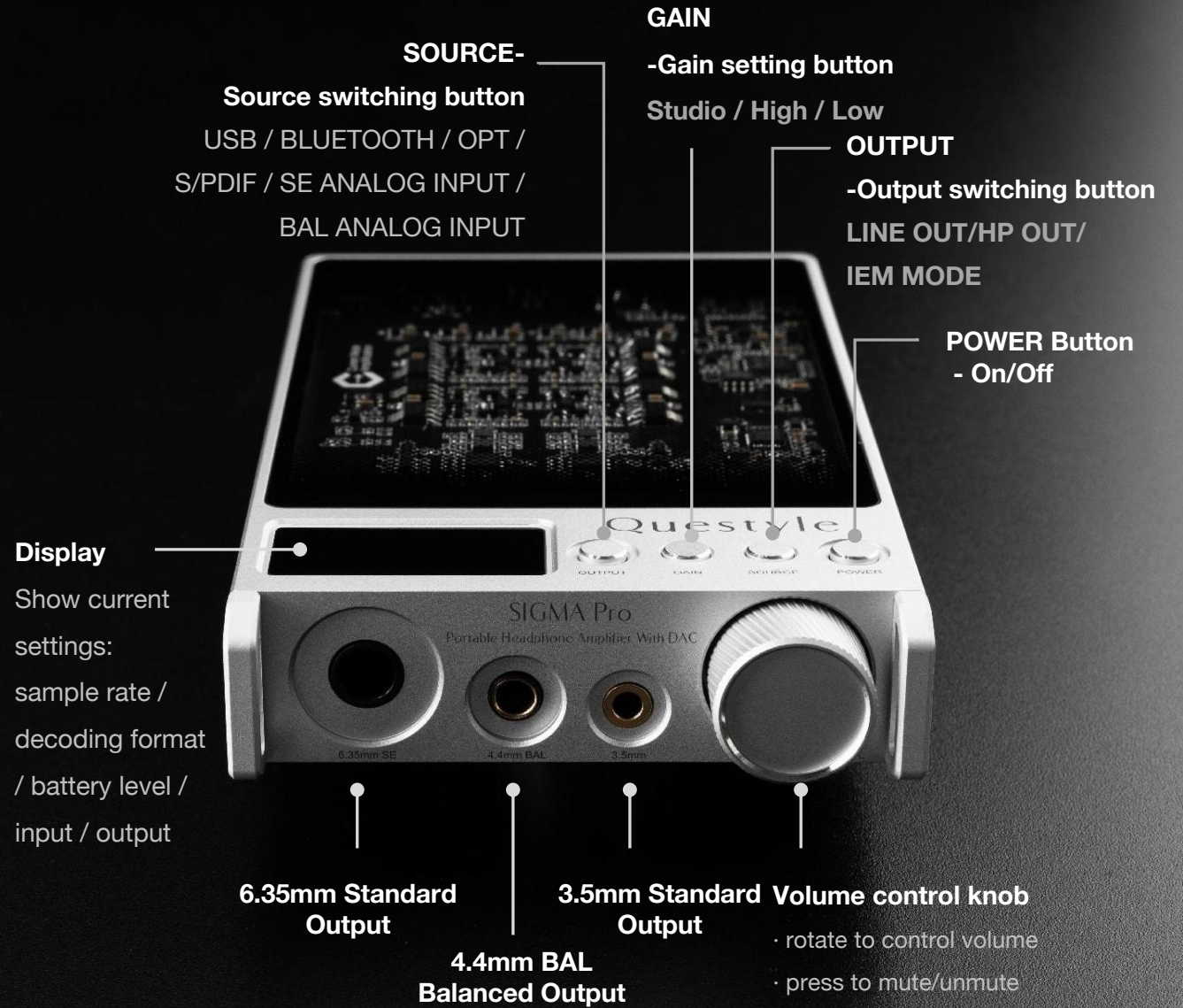
Meticulously tuned by Questyle, the SIGMA Pro reveals the authentic essence of music.

SIGMA Pro delivers an uncolored, natural tone, revealing every detail as it was recorded. It presents a smooth analog warmth, with clear, bright highs and rich, full mids. The bass is deep and controlled, adding a strong sense of atmosphere and rhythm. From the grand scale of symphonies to the intimate dialogue of chamber music, and from the emotional richness of pop to the casual freedom of jazz.

SIGMA Pro vividly interprets every genre, satisfying all your listening needs.

3.5mm & 4.4mm & 6.35mm Three Headphone Outputs + Manual Gain Easily Switch Your Exclusive Listening Mode

SIGMA Pro features 3.5mm, 4.4mm, and 6.35mm headphone output interfaces, combined with manual gain adjustment function, allowing you to easily switch between work modes and personalized settings according to different headphones and listening scenarios without complicated operations, meeting diverse listening needs.



Type-C USB UAC 2.0 digital audio
input/output interface

Supports USB recording in analog input mode



Type-C charging port
5V/2A input

supports charging while listening

4.4mm BAL balanced analog
stereo input

3.5mm SE analog stereo input

Mode Settings & full interface lineup Master Versatile Listening Systems

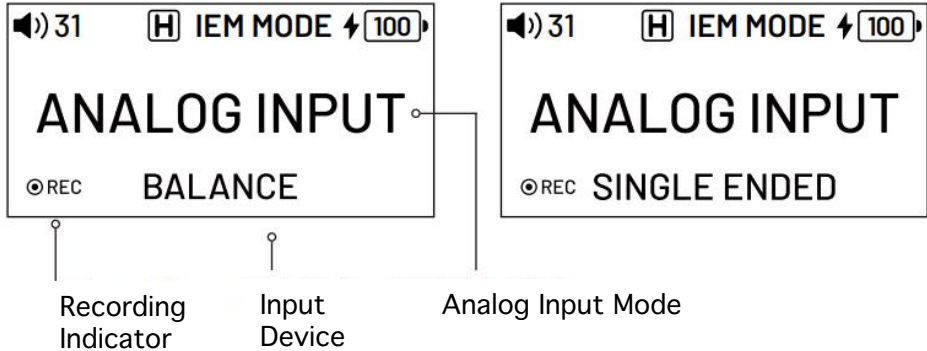
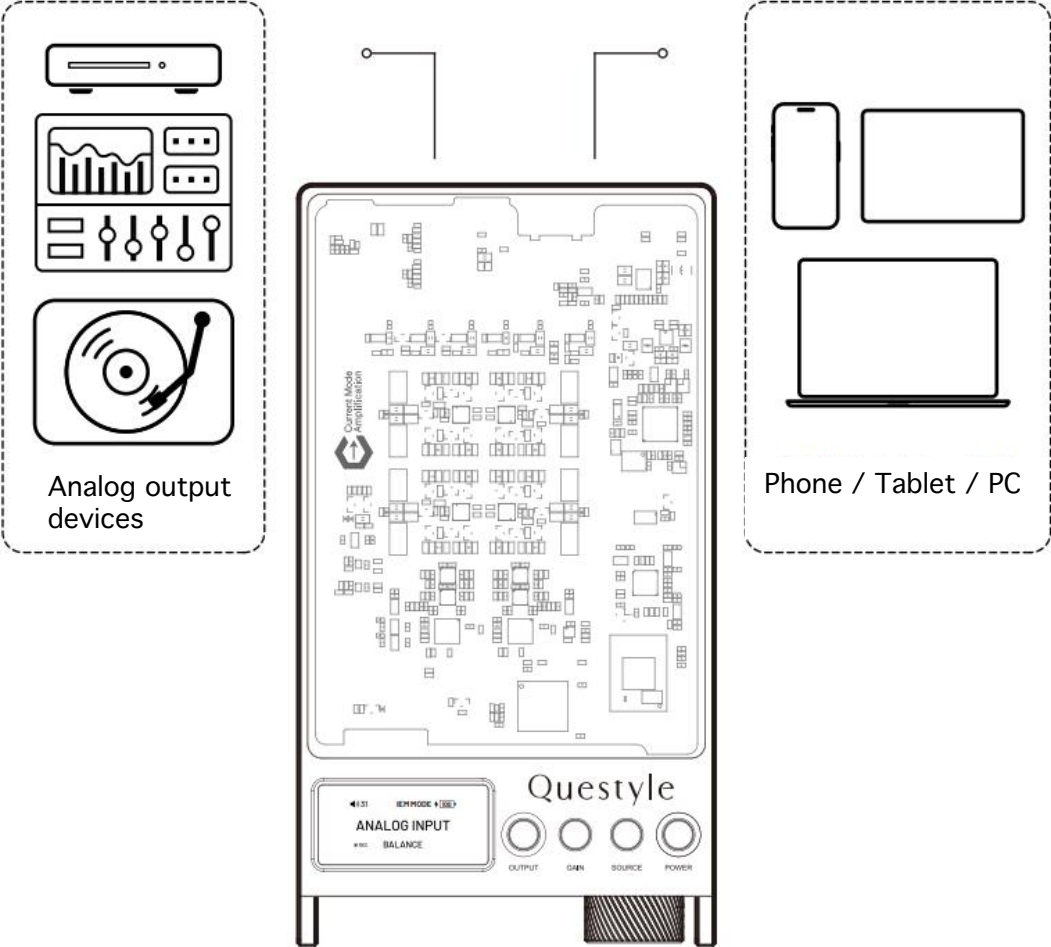
Whether it's optical/coaxial for lossless transmission, USB for convenient connection, or analog input/output for classic equipment, the SIGMA Pro, with its complete interface lineup, fully covers different source connection needs.

Without additional conversion, it can easily adapt to players, computers, audio equipment, etc., supporting flexible status switching and mode adjustment. Whether building a desktop Hi-Fi system, connecting professional work equipment, or matching home audio sets, it can accurately match different input sources and system configurations, realizing every listening idea and creating an unrestricted diverse listening experience for you.

Supports stereo recording

SIGMA Pro features 3.5mm (AUX IN) and 4.4mm (BAL IN) analog inputs, allowing it to connect to audio equipment like turntables and mixers. It can then convert the analog signal to a digital file for external storage, with synchronous monitoring during the process.

Note: In AUX IN/BAL IN mode, after successfully connecting to a USB host device (phone/tablet/PC, etc.) via USB, the USB host device can choose to use the SIGMA Pro to start recording the analog input content. There are no special requirements for recording software that supports USB audio (any audio/video recording software, when the SIGMA Pro's USB is inserted into the phone/PC, the SIGMA Pro and the external device will replace the phone and computer's built-in microphone as an external high-performance stereo lossless recording solution).



Up to 12 hours of battery life on a single charge

Dual USB-C ports, support charging while listening

Achieve unlimited battery life

The SIGMA Pro supports dual USB-C ports, separating data transmission and charging.

The audio USB-C port only transmits data, and the SIGMA Pro uses its own battery for power. Bluetooth mode only uses battery power, avoiding draining the phone's power.

The Power USB-C port is solely responsible for powering the SIGMA Pro system, solving the anxiety of battery life during long-term use in fixed settings.

Dual USB-C ports, charge while listening

Single charge battery life

Unlimited battery life

12 hour





Professional Hi-Fi Equipment for Audiophiles Reference-Grade Monitoring for Music Professionals

Beyond mobile and headphone scenarios, in an era where phones and PCs can easily play high-resolution lossless streaming media, we have also fully considered home Hi-Fi users, recording, and production professionals.

The rich interfaces and powerful performance of the SIGMA Pro, combined with the 3.5mm-RCA and 4.4mm-XLR cables released by Questyle, allow the SIGMA Pro to connect to traditional Hi-Fi equipment, instantly reviving classic devices that have become isolated islands, filling your home with wonderful lossless music. It also allows recording and production professionals to connect to monitoring speakers and mixers anytime to start monitoring work on the spot.

Wireless audio quality guaranteed with Qualcomm Snapdragon Sound and Sony LDAC Certified



Questyle became a Sony LDAC ecosystem partner 6 years ago; and started in-depth pre-research technical cooperation with Qualcomm 3 years ago. The SIGMA Pro is equipped with Qualcomm's latest generation Snapdragon Sound™ technology, Bluetooth version 5.4, and has been fully certified by Qualcomm Snapdragon Sound and Sony LDAC. Snapdragon Sound uses leading Qualcomm aptX Adaptive technology and supports aptX HD lossless audio, providing CD-quality 16-bit 44.1kHz lossless audio, 24-bit 48kHz and 24-bit 96kHz high-definition audio for wireless earbuds and headphones via Bluetooth wireless connection.

Bluetooth 5.4



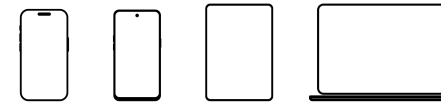
LE Audio



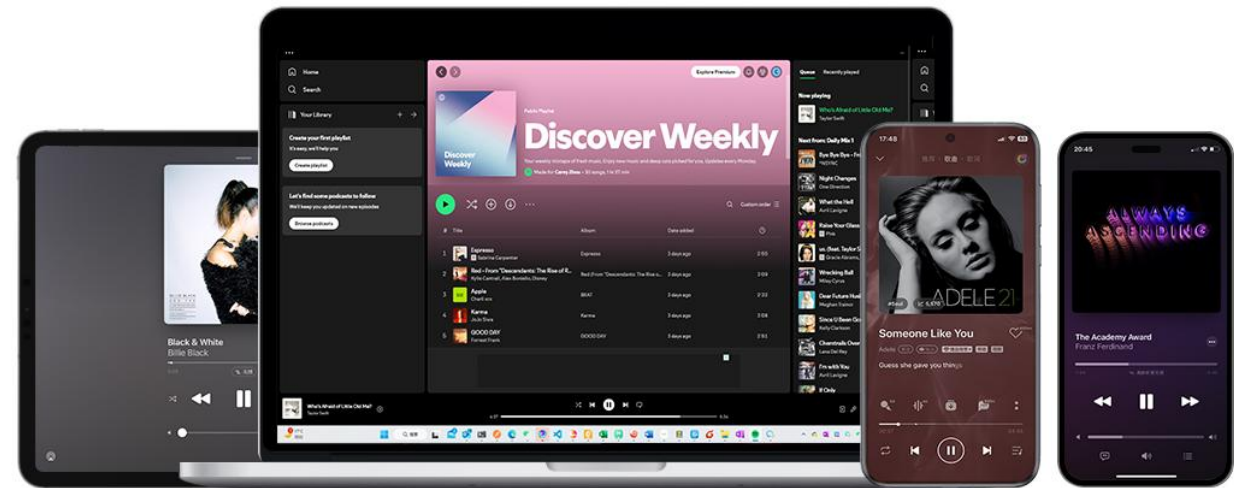
Comprehensive Compatibility with Phones and PCs

SIGMA Pro supports connections to phones, tablets, and computers, featuring ultra-fast USB-C (UAC 2.0, driver-free) and lossless Bluetooth (LDAC/aptX Adaptive). It offers flexible output mode switching: it can act as a headphone amplifier to drive premium Hi-Fi headphones, or use fixed-level line-out to connect to professional monitoring equipment or Hi-Fi desktop rigs—ideal as a professional on-stage PC sound upgrade for live shows.

During development, Questyle Lab carried out extensive compatibility testing and targeted optimization to ensure that the SIGMA Pro works plug-and-play with iOS, HarmonyOS and Android 5.1 and later versions. For desktop use, it is driver-free on Windows 10 Version 1803 or later and fully supports macOS.



Apple iOS HarmonyOS android macOS Windows





Apple MFi Certified , iPhone Compatibility Guaranteed

SIGMA Pro is officially Apple MFi – certified. MFi certification ensures seamless support for iPhone/iPad and the wider Apple ecosystem, meeting Apple’ s strict requirements for power consumption and accessory compatibility, while preventing potential damage or instability caused by uncertified USB accessories.

Made for
 iPhone | iPad

Specifications

| | |
|-------------------------|---|
| Digital Input | USB Input: PCM: 44.1kHz~768kHz/32Bit DSD Native: DSD64,DSD128,DSD256,DSD512, DSD DoP: DSD64,DSD128,DSD256 MQA: MQA Rendering and Full MQA Decoding Support UAC 2.0; Support Win XP/Vista/Win7/Win8/Win10/Win11/ Linux/Android/HarmonyOS/macOS and iOS Optical Input: Support PCM 44.1kHz~192kHz/24Bit Coaxial Input: Support PCM 44.1kHz~192kHz/24Bit Bluetooth Input: Bluetooth 5.4 Support SBC/LE Audio/aptX/aptX HD/LDAC decoding |
| Analog Input | 3.5mm SE IN: Standard level1Vrms 4.4mm BAL IN: Standard level2Vrms |
| Output Interface | 6.35mm/3.5mm standard output 4.4mm balanced output |

| | |
|---------------------------|---|
| Recording Function | ANALOG INPUT recording and simultaneous monitoring 48kHz/24bit fixed sampling |
| Gain Control | Three gain settings for Line and Headphone outputs: L (Low), H (High), and S (Studio) Two gain settings for IEM output: L (Low) and H (High) |
| Output Power | 40mW @300Ω SE 160mW @300Ω BAL 1200mW @32Ω BAL |
| THD+N | 0.0002% @48kHz 24bit 1kHz sine |
| SNR | 120dB |
| Frequency Response | ±0.8dB 20Hz~20kHz |
| Battery Capacity | 4300mAh 3.7V |
| Battery Life | Up to 12 hours |
| Charging | Approximately 3 hours to full charge, Supports 5V/2A charging Dedicated USB-C charging port with support for simultaneous charging and listening |
| USB Chip | XMOS XU316 |
| DAC Decoding | Dual ESS9069Q decoding chip |
| Amplifier Circuit | Four sets of fully discrete current mode amplifier design |
| Volume Control | 360-degree rotary encoder with Mute button |

Packaging & Accessories



SIGMA Pro
Portable DAC with Headphone Amplifier



Type-A to Type-C
adapter



Type-C to Type-C
cable (120cm)



Warranty Card &
User Manual

Optional Case (sold separately)



Standard Edition



Alcantara Special Edition

Questyle

A u d i o E n g i n e e r i n g

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