

PD5

Product Overview

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Astell&Kern Business Team

Compact in Form, Infinite in Sound

Engineered for effortless portability, it delivers music with total freedom and comfort—without ever compromising on performance or sound quality.

Designed to fit comfortably in one hand, the **PD5** combines a compact form factor with all-day battery life. Going far beyond the physical limits of its size, it delivers Astell&Kern's signature deep, detailed, and rich sound.

Achieving the perfect harmony between portability and high performance, the **PD5** brings the ultimate audio experience into your everyday life.

Octa-DAC (Switchable Quad / Octa DAC)

Up to 28 Hours of Continuous Playback

EnviroTune: Analyzes ambient noise to automatically deliver optimal sound

Compact Design that fits perfectly in one hand

Octa-Core	CS43198 Octa-DAC	Switchable DAC Mode	28 hrs Playback	EnviroTune	Full AOS
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Octa-DAC, Uncompromised Sound

Engineered with an Octa-DAC architecture, it delivers extraordinary audio fidelity—without ~~ever~~ sacrificing power or precision.

Powered by eight CS43198 DACs, the **PD5** achieves an expansive dynamic range with exceptional channel separation. Going far beyond conventional signal processing, it unveils the purest sound, capturing even the most subtle musical nuances.

Unlocking up to 8Vrms of output to effortlessly drive any headphone, the **PD5** brings Astell&Kern's true signature sound into complete perfection.

Dual Drive Mode: Tailored to Every Listening Environment

Dual Drive Mode allows users to select the optimal DAC configuration for any listening environment or preference. Discover the ideal balance between performance and power efficiency.

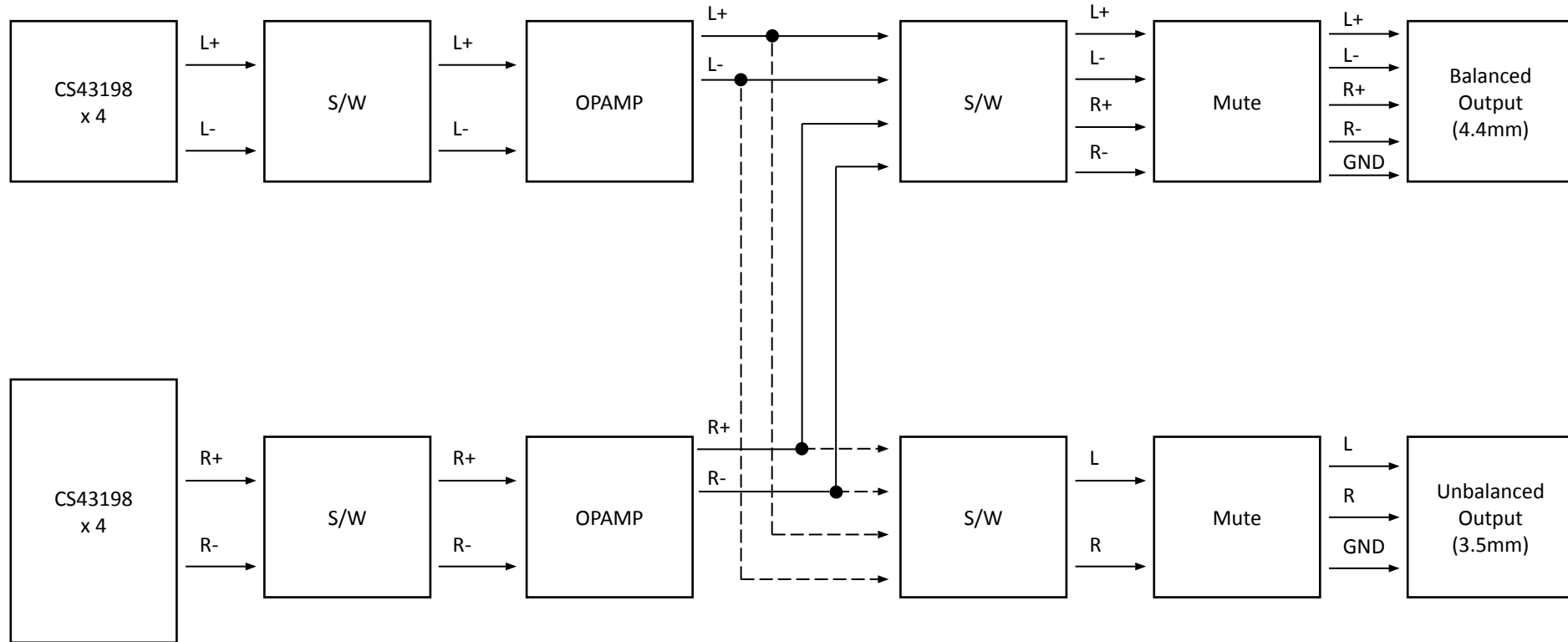
Quad-DAC

Optimized power management maintains ample output and balanced sound, making it ideal for extended listening sessions.

Octa-DAC

Engaging all eight DACs delivers superior resolution and immersive spatial realism. Powerful output reveals every nuance of your music, letting you experience deep, highly dense sound.

Quad-DAC	Octa-DAC
Balanced Sound (Natural & Smooth)	Ultimate Sound (Greater Detail)
Efficient Power	Maximum Performance
6Vrms	8Vrms
28 Hours Playback	15 Hours Playback



Longer, More Convenient **Listening**: Up to 28 Hours of Continuous Playback

Offering up to 28 hours of continuous playback, it allows complete immersion in music without **worrying about** battery **life**. Stay focused purely on your sound with a single charge—from long commutes to travel, and all the way until bedtime.

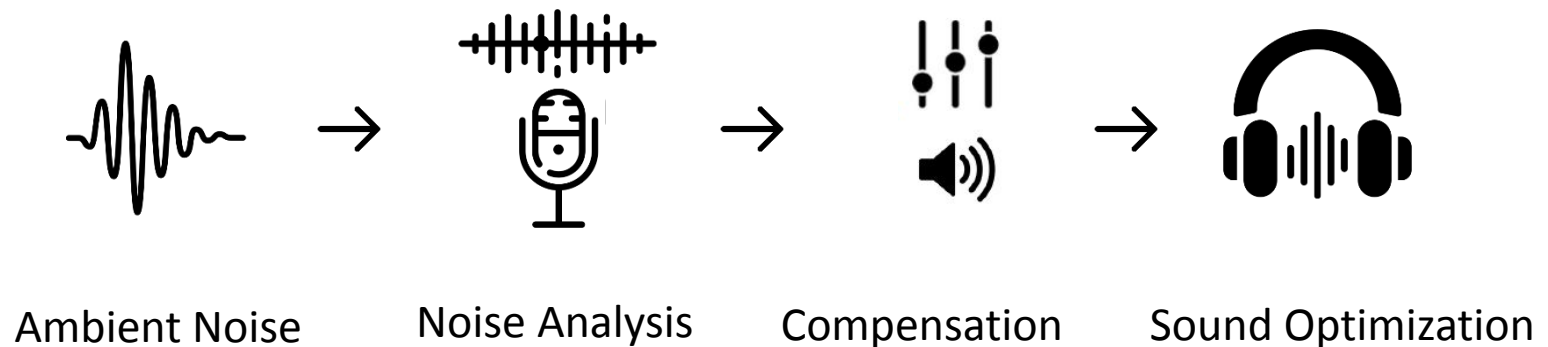
Weighing approximately 200g with a curved 4.1-inch display that fits naturally in the hand, it delivers exceptional portability and a comfortable grip for effortless listening over extended periods.

Smart Sound that Understands Your Environment, EnviroTune

A blend of 'Environment' and 'Tune,' EnviroTune is an intelligent sound-tuning technology that analyzes listening surroundings in real time to restore musical details easily lost to ambient noise.

The built-in microphone detects changes in ambient noise in real time, analyzing input sound by frequency band to automatically compensate for frequencies masked by noise.

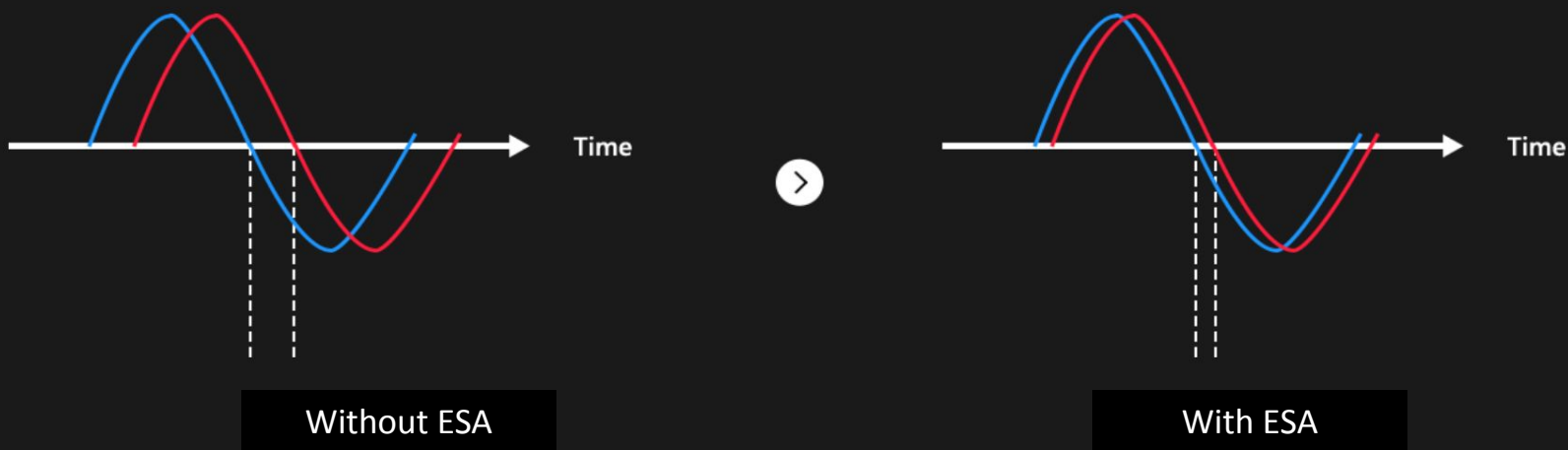
Without unnecessarily raising the volume, the sound continuously adapts to your environment—allowing complete immersion in the original detail of your music, anywhere, anytime.



*EnviroTune is supported on PCM audio up to 24-bit/192kHz.

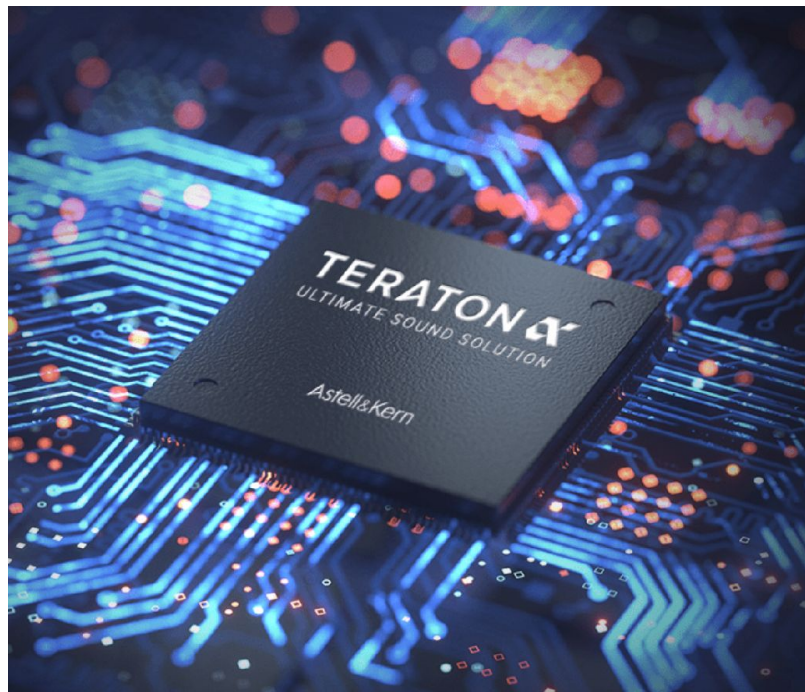
Minimizing Group Delay with Proprietary ESA (Enhanced Signal Alignment) Technology

The ~~SP4000~~ PD5 drastically improves group delay—a chronic issue in audio systems—through proprietary ESA (Enhanced Signal Alignment) technology. By aligning frequency signals to arrive with greater uniformity, ESA minimizes frequency distortion and elevates sound quality to be clearer and more pristine.



*What is Group Delay?

It refers to the time difference required for various frequencies to pass through an audio system, causing sound signals across different frequencies to arrive at slightly different times rather than simultaneously.



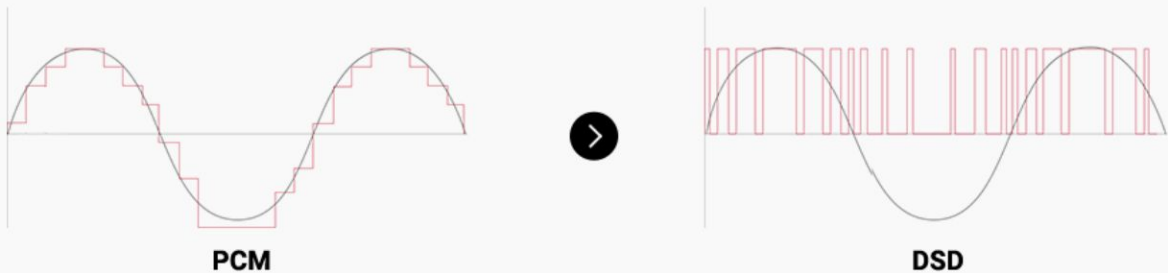
To deliver the ultimate DAP experience like never before, we incorporated the latest DACs and upgraded specifications, while further advancing TERATON ALPHA—Astell&Kern’s Ultimate Sound Solution.

Perfected through relentless research, TERATON ALPHA is Astell&Kern’s proprietary audio technology designed to deliver sound closest to the original source through effective power noise removal, efficient power consumption, unwavering amplification, and a seamlessly converted audio output interface.



Vivid Original Sound: Digital Audio Remaster Technology

The PD5 features Digital Audio Remaster (DAR) technology, developed to deliver the refined sound of higher sample rates. DAR upsamples the sample rate of played audio tracks to transcend the physical limitations of the original source format. Higher sample rates enable more delicate and precise playback, bringing sound closer to true analog expression. It vividly reproduces original recordings, allowing you to experience subtle musical nuances and rich sound at an elevated level.



DAR Option

Maximum Conversion

PCM

- PCM in 44.1kHz family converts to 352.8kHz
- PCM in 48kHz family converts to 384kHz
- DSD tracks play as original without conversion

DSD

- PCM under 192kHz converts to DSD128

- The DAR function can be turned On/Off depending on the playing source and personal preference.
- Supports conversion up to maximum PCM Rate 384kHz / DSD128, automatically adapting to the sample rate of the source audio.

Sound Design Crafted with DAC Filters

Select from four distinct DAC filters to tailor your personal listening preference. Take full control of your sound characteristics with custom signal shaping.

Filter	Description	Impulse Response
Low Latency Fast	Enhanced bass response driven by post-ringing decay.	
Low Latency Slow	Pure original sound preserved with subtle natural reverb.	
Phase Compensated Fast	Powerful, dynamic sound character shaped by balanced pre/post-ringing.	
Phase Compensated Slow	Natural acoustic texture featuring light, gentle reverberation.	

Crossfeed: A Speaker-Like Experience via Headphones

Crossfeed blends a portion of the original signal from one channel and sends it to the opposite channel with a slight time delay, centering the soundstage. This recreates the natural spatial presentation of listening through loudspeakers while reducing ear fatigue during extended listening. Tailor the sound to your preference with detailed settings including Shelf Cutoff, Shelf Gain, and Mixer Level.

Dual-Band Wi-Fi (2.4/5GHz)

Equipped with Dual-Band Wi-Fi (2.4/5GHz), the device provides enhanced network performance for seamless high-resolution music streaming and Roon Ready integration.

Automatic Volume Adjustment with ReplayGain

ReplayGain automatically normalizes track volumes across different music files, ensuring a consistent playback level throughout your playlist without manual adjustments.

* ReplayGain supports audio tracks up to 24-bit/192kHz.

Wireless Hi-Fi Sound via BT Sink

The BT Sink function allows you to connect external devices to the player via Bluetooth—much like linking a smartphone to a wireless speaker—streaming high-fidelity music directly to the device from an external source..

~~Grip~~ Grip Control

The design concept of the PD5 is 'Grip Control.' It embodies lightweight portability to seamlessly accompany you anywhere, alongside the sleek, minimalist design identity defining the PD lineup.

Featuring a perfectly balanced feel in hand and a compact form factor, it delivers exceptional grip. The curved 4.1-inch display optimized for DAP usage offers effortless readability and tactile control, even during long listening sessions.

At the top, the microphone for EnviroTune and the power button are symmetrically arranged to achieve balanced aesthetic harmony—integrating functional elements into a single refined structure.

Effortless to carry and designed for daily enjoyment, the PD5 is lifestyle audio made to bring hi-fi DAP listening seamlessly into your everyday life.

Perfect Fit. Natural Feel.

It may look like an ordinary case at first glance, but no detail was overlooked.

Designed to seamlessly complement the **PD5**, this case is crafted in South Korea using premium TPU raw materials from **Covestro**, Germany.

The soft, flexible material provides a snug, seamless fit with comfortable button feedback and reliable protection. Its high transparency preserves the original beauty of the device's design.

While TPU naturally discolors over time, a special UV stabilizer is applied to slow down discoloration and keep the case looking clear and clean for longer.

The Perfect Match

The standard case for the PD5 is crafted using premium polyurethane fabric from Synt3 in Italy.

Synt3 is an eco-friendly material certified under the Recycled Claim Standard (RCS) Version 2.0, verifying recycled content from raw materials to the final product. It features exceptional durability and strong resistance to contamination.

While it does not age over time like natural leather, its ability to maintain its original quality even after long-term use allows for sustainable enjoyment.

With its soft texture and outstanding durability, the case protects the PD5 from external impacts and stains, while providing a comfortable grip for a truly satisfying user experience.

Synt3 from Italy

The patterns and colors continuously developed and introduced by Synt3 are regarded as new benchmarks in the industry.

Synt3's exceptional design sense consistently leads the market, setting global design standards.

General Specifications

Model	PD5
Body Color	Silver
Body Material	Aluminum
Display	4.1inch 720 x 1280 Touch screen
Supported Audio Formats	WAV, FLAC, WMA, MP3, OGG, APE, AAC, ALAC, AIFF, DFF, DSF
Sample rate	PCM : 8kHz ~ 384kHz (8/16/24/32bits per Sample) DSD Native: DSD64(1bit 2.8MHz), Stereo / DSD128(1bit 5.6MHz), Stereo / DSD256(1bit 11.2MHz), Stereo
Output Level	[Quad] Unbalanced 3Vrms Balanced 6Vrms (Condition No Load) [Octa] Unbalanced 4Vrms Balanced 8Vrms (Condition No Load)
CPU	Octa-Core
DAC	Cirrus Logic CS43198 x8 (Octa-DAC)
Decoding	Support up to 32bit / 384kHz Bit to Bit playback
Input	USB Type-C input (for Charging & PC & MAC)
Outputs	Unbalanced Out (3.5mm), Balanced Out (4.4m, only 5-pole supported)
Wi-Fi	802.11 a/b/g/n/ac (2.4/5GHz)
Bluetooth	V5.3 (A2DP, AVRCP, Qualcomm® aptX™ HD, LDAC, LHDC, SBC, AAC)
Dimensions	2.74” (69.7mm)[W] x 4.71” (119.7mm)[H] x 0.63” (16.1mm)[D]
Weight	about 6.98oz (198g)
Feature Enhancements	Firmware upgrade supported (OTA)
Operating Temperature	0°C ~ + 40°C (32°F~ 104°F)

Audio Specifications	
Frequency Response	±0.011dB (Condition : 20Hz~20kHz) Unbalanced ±0.011dB (Condition : 20Hz~20kHz) Balanced ±0.130dB (Condition : 20Hz~70kHz) Unbalanced ±0.143dB (Condition : 20Hz~70kHz) Balanced
S/N	125dB @ 1kHz, Unbalanced 129dB @ 1kHz, Balanced
Crosstalk	-145dB @ 1kHz, Unbalanced -147dB @ 1kHz, Balanced
THD+N	0.0006% @ 1kHz, Unbalanced 0.0006% @ 1kHz, Balanced
IMD SMPTE	0.0003% 800Hz 10kHz (4:1) Unbalanced 0.0001% 800Hz 10kHz (4:1) Balanced
Output Impedance	Unbalanced Out 3.5mm (0.6ohm) Balanced Out 4.4mm(1.2ohm)

* Audio measurement specifications are based on Octa-DAC mode.

Clock Source	
Clock Jitter	25pS (Typ.)
Reference Clock Jitter	250 Femto Seconds

Storage Capacity	
Built-in Memory	64GB [NAND]
External Memory	microSD x1 (Max. 1.5TB)

Battery	
Capacity	4,000mAh 3.8V Li-Polymer
Charge Time	about 2.5 hours (PD3.0 Charging)
Playback Time	about 28 hours (Standard : FLAC, 16bit, 44.1kHz, Vol.50, Quad-DAC, LCD Off)

Supported OS	
Supported OS	Windows 8,10,11(32/64bit) MAC OS X 10.7

THANK YOU