AK HC2

Product Overview

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AK Business Unit

Dreamus

Connected to be Hi-Fi

High-resolution sound on streaming services allows you to fully appreciate the rich tones and emotional nuance of your music.
However, as headphone ports disappear on smartphones, it makes it increasingly difficult to use wired earphones that de liver high quality sound, and people experience the limitations of wireless transmission and slow response speeds. Music lovers who wish to enjoy true high-quality Hi-Fi sound rather than what is currently being delivered by smartphone wirel ess standards and computers' built-in sound cards are becoming deeply concerned.

Hi-Fi Dual DAC Cable – AK HC2

Developed to solve this problem, AK HC2 is Astell&Kern's second model with a specialized USB DAC function.
While retaining the strengths of HC1 (PEE51), the first model, its functions have been supplemented to allow more peopl e to enjoy true Hi-Fi sound.

Introducing HC2, where you can experience and enjoy Astell&Kern's sincerity and philosophy for music.
No matter what device you use, the moment you connect the HC2, the Hi-Fi experience will begin.

- Supports 4.4mm Balanced Output
- Powerful 4Vrms Output
- Equipped With CS43198 Dual DAC for True Hi-Fi Sound
- Dual Shielded Cable
- Full Aluminum Refined Material
- Compatible With iOS and Android Devices
- Optional Android APP (For Detailed Volume Control)

The Choice for Hi-Fi Sound — Ultra High-Resolution Sound From Dual DACs

The Astell&Kern AK HC2 USB-C Dual DAC Cable features two Cirrus Logic CS43198 MasterHIFI™ DACs, a MasterHIFI™-level DAC that graces only a select few products, including the A&norma series, that are proven and celebrated by music lovers.

The AK HC2 provides Native DSD256 and 32-bit/384kHz support that enables it to play back high-qualit y sound files so you can enjoy the luxury and premium sound quality of Astell&Kern.

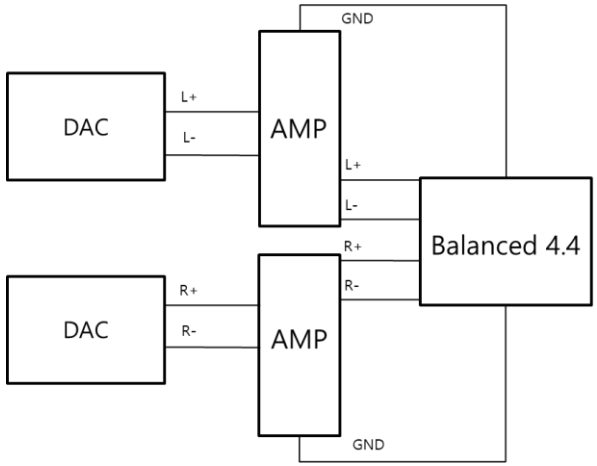


The Result of AK’s Ultra-Fine Audio Design Technology

With its compact size and uncompromising performance, the AK HC2 makes it easy to enjoy real Hi-Fi s ound anytime, anywhere.

Astell&Kern is adored by countless music lovers thanks to our dedication and meticulous delivery of the original sound with our signature DAPs, or portable high resolution audio players.
We included the Astell&Kern technology and know-how that has been accumulated from our DAPs over t he years in this small device, measuring just 14x53mm.

We used micro resistors and capacitor parts to achieve the small dimensions without compromising perf ormance. Tailored ultra-small tantalum capacitors, which are used in AK player products to create a stab le system and audio performance by controlling the power fluctuations, are also included to create the o ptimal audio circuit.
In addition, the output and audio performance are enhanced with Astell&Kern's unique technology while minimizing current consumption in consideration of the connected device.
This enables you to enjoy the original sound without any distortion even when using high-impedance headphones or sensitive earphones.



High Output Noise-Free Sound With 4.4mm Output

AK HC2 uses a 4.4mm balanced output—unlike the previous model that uses a 3.5mm unbalanced output—allo wing a greater variety of headphones and earphones that are made for Hi-Fi sound to be used optimally with a small USB DAC.

With the use of the 4.4mm balanced output, a higher output can be achieved with clearer channel separation w hile minimizing noise that may occur with an unbalanced output.

With HC2 you can enjoy high-quality sound via a balanced output that brings out the best performance in your headphones or earphones.



Easy and Convenient — Plug & Play

Connect directly to a Windows PC, Mac, smartphone or tablet with a USB-C port that supports plug & play, without needing a separate conversion adapter, and enjoy high-quality sound.
The HC2 utilizes power from the connected playback device so it does not need to be charged or be conne cted to a separate external sound card, AMP or DAC. Just connect HC2 to experience high-fidelity sound fr om a computer or mobile device.

The HC2 is also compatible with iOS devices using the included USB-C to Lightning adapter.

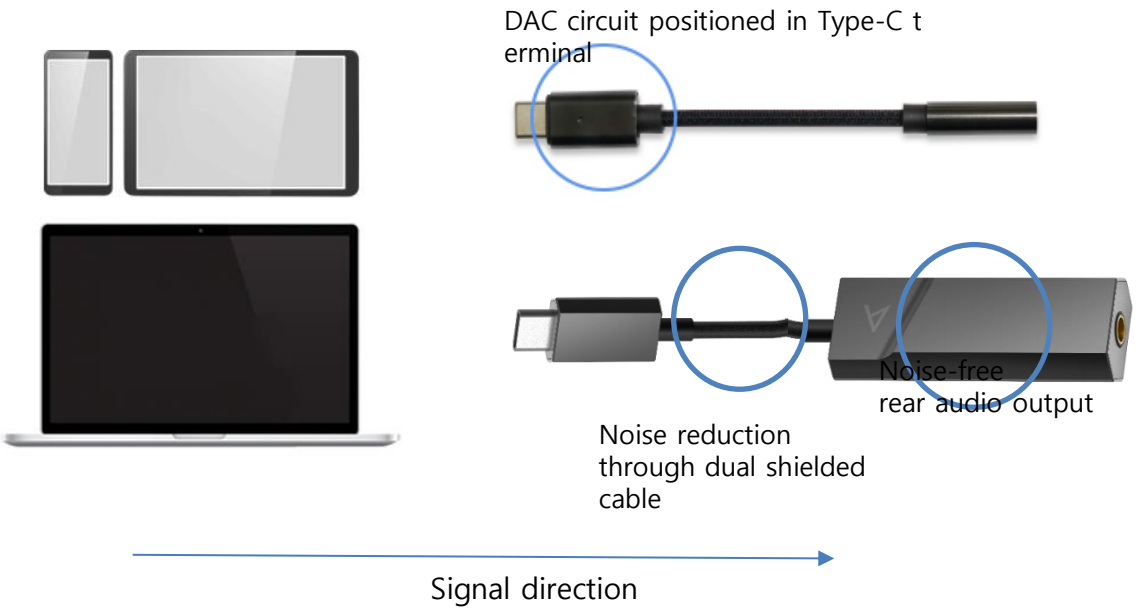


TRS and TRRS 4.4mm earphones and headphones can all be used, but note that the in-line controller and micr ophone features of TRRS earphones and headphones are not supported.

Noise-Free Rear Output Structure

AK HC2 has a rear audio output design to minimize noise.
Most USB DAC products have the DAC positioned in the USB terminal that is connected directly to the device to process and output audio.

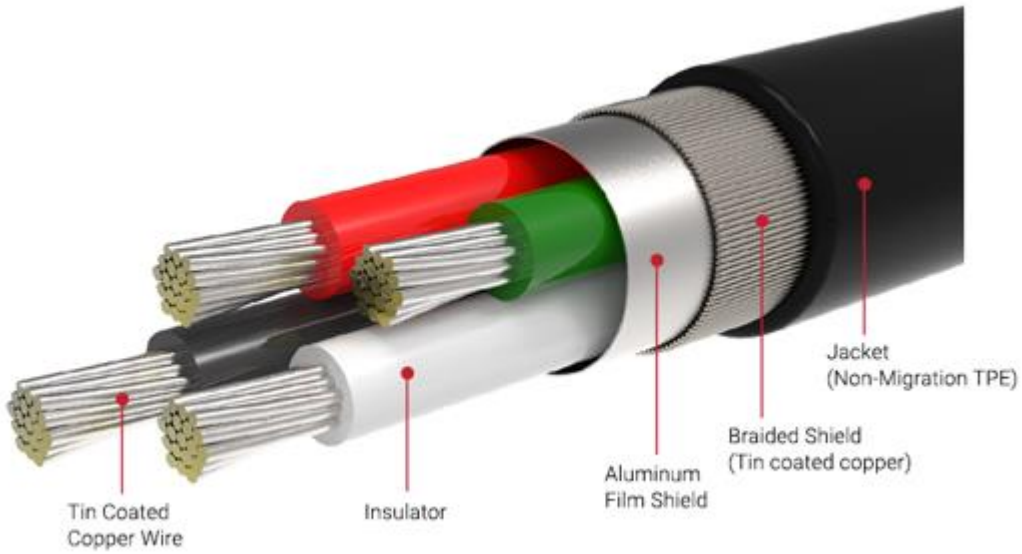
However, with the HC2, digital signals from the device go through the dual shielded cable to the audio circuit before being converted to an analog signal by the DAC. By processing the digital signal after, t he result is superior, noise-free sound compared to other USB DAC products.



Dual Noise Shielded Cable

The HC2 features a dual shielded cable to minimize noise and deliver more vivid, original sound.
The copper core wire is coated with tin to prevent corrosion and strengthen tensile force for enhanced du rability.

In addition, the entire cable is wrapped in an aluminum film to block noise, the biggest issue in audio, th en the tin-coated copper wire is woven to minimize noise interference to sound.



Roon Tested Devices

Roon plays on thousands of USB, Airplay and Chromecast devices; however, R oon Tested devices guarantee simple setup and easy daily use.

If you have a Roon Tested device or plan to purchase one, you will be guarant eed the best experience.

**Suggestion-This is Roon's official marketing Partner Program statement copy from their Brand & Partner Guidelines PPT:
Roon's fundamental goal is to provide a consistently stellar user experience. This goal doesn't stop at the software... the exp erience extends all the way down to the audio playback hardware, regardless of manufacturer.

As a *Roon Tested* partner, Astell&Kern has provided equipment to Roon for testing with a variety of different operating syst ems and computers, and shared information about its design and capabilities.

We have a direct relationship with Roon and in many cases, the Roon support team has our devices on hand, so you can c onfidently choose to use Astell&Kern hardware with Roon.

Learn more about [Roon partner programs].

*[Roon partner programs link to: https://help.roonlabs.com/portal/en/kb/articles/roon-partner-programs#Roon_Ready_netwo rk_players]

Volume Control Through A Dedicated Android APP

As is common with USB DACs, compatibility issues can arise such as different connected devices being s et automatically to maximum volume output or playback at too low volume.

To resolve such issues and offer more greater control over volume and function of the HC2, we have dev eloped a companion app for Android OS devices.



Precautions When Using the Product

This product is compatible with most Android and iOS smartphones and tablets, Windows 10/11 and macOS products.
In some cases, it may not be compatible or may be restricted depending on the hardware, software and/or system of the device that you connect.
When connecting to a Windows PC, the driver will automatically be recognized and installed. For high-quality sound files, you are required to install a separate USB DAC driver which can be downloaded from the Support — Download section on the website.

To play DSD and high-quality PCM sound files on a smartphone, you must install a separate free/paid player program tha t supports high-resolution audio playback. (When using the default player app on a mobile device, the file will be downsa mpled. Please make sure to play it with a different player app.)

Make sure check the volume on your connected player device before using headphones or earphones. Some devices may automatically set the output level to maximum volume when the cable is connected. Listening to headphones or earphon es at maximum volume may damage your hearing. Please verify the volume level before each use.

Do not connect the USB-C Dual DAC Cable to an Astell&Kern player. When connecting the cable to a player and using it a s an external DAC, the output volume will be fixed at the maximum volume setting. It is not possible to adjust the volum e through the Astell&Kern player. Listening at maximum or a high-volume setting may cause serious damage to your hea ring. Astell&Kern, its affiliates and agencies, cannot be held liable for any damage or injuries from negligent or inappropri ate use.
Firmware updates may be released periodically for stability improvements. For more information on firmware updates an d to check if a firmware update is available, please visit the Support — Download section on the website.

Design Concept

The design concept of AK HC2 is "Slope."

Considering that it is a portable accessory that can be
connected to mobile devices, we incorporated the design philosophy of Astell&Kern’s
balanced design as well as its usability.

The easy-to-grip design and the sloping side that runs diagonally on the hexagonal
prism-shaped aluminum body that symbolizes the powerful performance of the 4.4mm dual D
AC cable are the key features of the design.

The sharp-cut slope embodies the design identity of Astell&Kern's surfaces and lines
and is designed to offer an easy connection to the headphone port.
It allows the users to focus on the flow of the "AK Life" experience
that unfolds as you connect your earphones.

The front is designed to be subtle, other than
the parting lines and a small logo, not allowing for distraction, and is perfected with a tough,
yet refined finish.

This is intended so the user can focus on the shape and sculpting
and make them feel like they are holding something that is more than a product.



Specification

Category	Part	Specification
General	DAC	CS43198 Dual
	Bit / Sample Rate	PCM 32bit/384kHz, Native DSD256
	Output Level	4Vrms
	Audio Output	4.4mm Balanced
	USB Type	Type-C
	LED	Power On/Off Indicator
	Material	Aluminum
	Weight	About 29g
	Dimensions (WxHxD)	USB Plug: 12 x 21 x 6.5mm 4.4mm Headphone: 22.8 x 60 x 12.1mm
Audio	Frequency Response	±0.011dB (Condition: 20Hz~20kHz) Balanced ±0.145dB (Condition: 20Hz~70kHz) Balanced
	Signal to Noise Ratio	122dB @ 1kHz, Balanced
	Crosstalk	-146dB @ 1kHz, Balanced
	THD+N	0.0004% @ 1kHz, Balanced
	IMD SMPTE	0.0003%, 800Hz 10kHz (4:1), Balanced
	Output Impedance	4.4mm (1.5ohm)