

# A&ultima SP3000M

---

Product Overview for Marketing

AK Business Unit

The successor to the SP3000's global, top-notch audio performance

Lightweight and portable, anywhere and at any time

TERATON ALPHA Sound Solution, the essence of AK's audio technology

Complete Separation of Digital and Analog Signals in a HEXA Structure

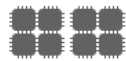
Equipped with proven independent dual audio circuits

High-performance Qualcomm Snapdragon 6125 CPU

Analog Sensitivity VU Meter



AK4499EX  
Quad-DAC



Snapdragon  
Octa-Core



TERATON  
ALPHA



VU METER



LDAC  
aptX™-HD



NATIVE  
DSD 512

항목	SP3000	SP3000M	비고
CPU	Qualcomm 6125 Octa-Core	Qualcomm 6125 Octa-Core	
DAC	AK4191EQ x2 & AK4499 x4	AK4191EQ x2 & AK4499 x4	
Display	5.5" 1080 x 1920	4.1" 720 x 1280	
DAR	Support (384kHz / DSD256)	Support (384kHz / DSD64)	SW DAR for SP3000M
Audio Output	2.5mm, 3.5mm(SPDIF), 4.4mm	3.5mm, 4.4mm	
SNR	130dB	130dB	BAL standards
THD+N	0.0004% @ 1kHz	0.0003% @ 1kHz	BAL standards
Battery	5,050mAh(about 10hrs)	4,200mAh (about 10hrs)	
Material	Stainless Steel 904L	Aluminum 316L	
Weight	493g	237g	
Wheel LED	O	X	

# Stunning Audio Performance with Independent Dual Audio Circuits

In order to create a truly innovative DAP, not just a great DAP, we tried to overcome the limitations of sound by envisioning an independent dual audio circuit that has never been attempted by anyone featuring a HEXA structure with unbalanced and balanced outputs.

Almost all other DAPs, including Astell&Kern, use an internal DAC for both unbalanced and balanced outputs. Since the signal from the DAC is divided into unbalanced and balanced then delivered to the AMP, an Audio Switch is essential. However, when using a switch, there is a limit to the range that can receive the signal sent by the DAC, so most DAPs reduce the signal size first and then when the signal is transmitted back to the amplifier, it is necessary to restore the original signal size. This causes a limitation in improving the audio performance.

To overcome the limitations, our engineers designed a HEXA structure using two AK4191EQs and four AK4499EXs, creating an innovative unbalanced and balanced independent dual audio circuit design. As a result, the SP3000M achieves a SNR of 130dB, the best of any DAP available. You can feel the clean, pure delicacy of sound with the SP3000M that you cannot not experience in any other DAP.

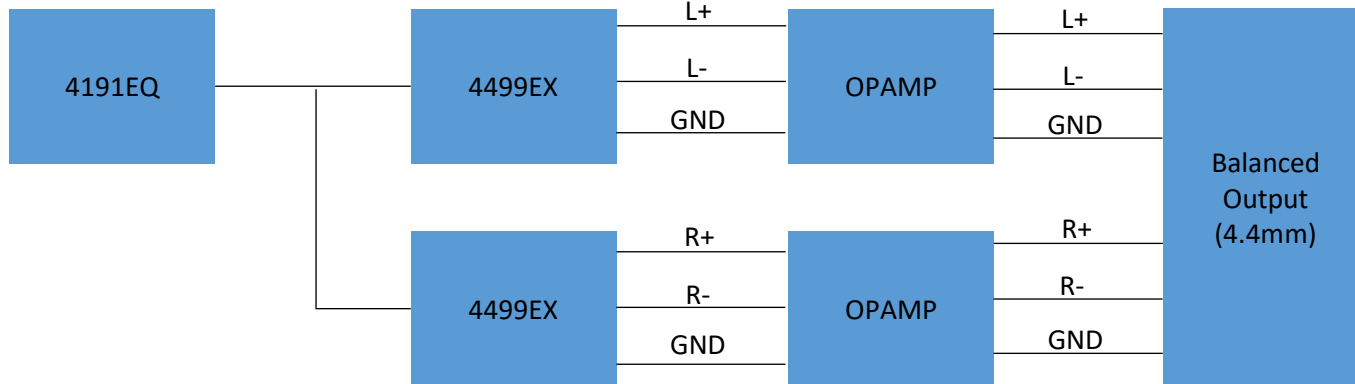
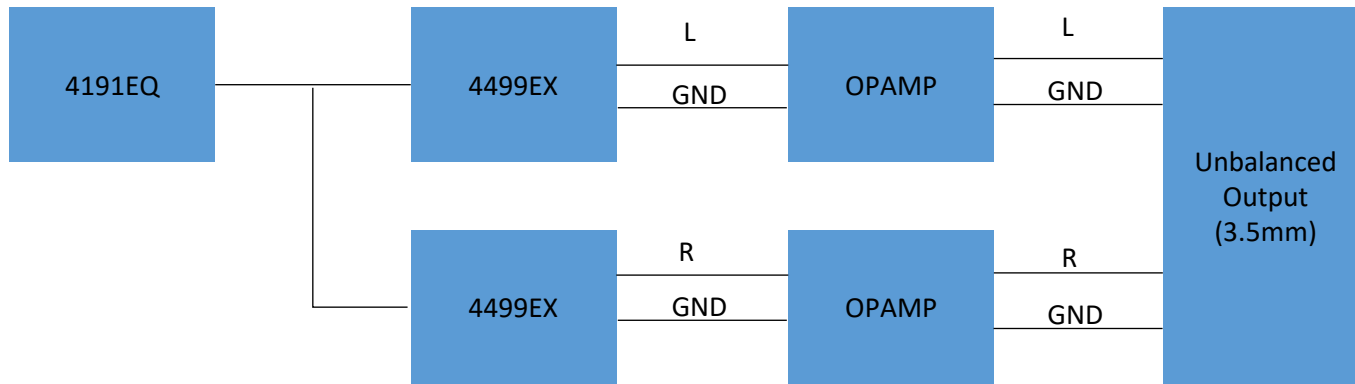
---

Features	SP3000M	SP3000	A model	B model	C model
SNR	130dB	130dB	122dB	128dB	125dB

---

\* SP3000M and SP3000 are based on the condition no-load, Balanced, and there may be differences depending on the measurement method.

\* Third-party models are the specifications listed on the official website



## VU Meter GUI for complete musical immersion

SP3000M comes with a VU Meter GUI, which debuted on the SP3000T and was well-received by consumers for an even more immersive experience.

The VU Meter, an iconic piece of audio equipment with a long-standing history, displays voltage levels of voice signals to aid volume measurement and adjustment.

Beyond its utilitarian function, the VU Meter's unique design and retro charm help to enhance the immersive music-listening experience.

Conveniently accessible via the bottom navigation bar, the VU Meter on the SP3000M allows you to monitor sound levels while viewing album art or streaming via our Open App Service.

### **Supports Native DSD512, 32bit/768kHz**

SP3000M supports Native DSD512 and up to 32bit/768kHz with Astell&Kern's excellent audio technology, allowing you to fully enjoy your favorite music.

### **QC 3.0 Fast Charging Supported**

The SP3000M supports Qualcomm QC 3.0 fast charging, so you can charge your DAP faster and more efficiently than previous models, reaching a full charge in about 3.5 hours.

### **AK File Drop to enjoy wireless transfers**

The new AK File Drop function in the SP3000M makes files transfers easier and more convenient. Using AK File Drop, you can freely transfer files wirelessly through a PC, smartphone, or FTP program located on the same network. Music file management is now possible with a cableless, wireless solution.

### **ReplayGain Automatically and Uniformly Adjusts Playback Volume**

ReplayGain, which adjusts sound sources with different volumes to an identical level, has been applied. Now, enjoy your own playlists seamlessly through the ReplayGain feature on SP3000M.

\* ReplayGain supports up to 24-bit/192 kHz sound sources.

### **Dual-band Wi-Fi (2.4/5 GHz)**

SP3000M offers Dual Band Wi-Fi (2.4/5 Ghz), providing enhanced network performance to enjoy Hi-Fi music through various streaming services.



MQA (Master Quality Authenticated) is an award-winning British technology that delivers the sound of the original master recording. The master MQA file is fully authenticated and is small enough to stream or download. Visit [mqa.co.uk](http://mqa.co.uk) for more information. Astell&Kern SP3000 includes MQA technology, which enables you to play back MQA audio files and streams, delivering the sound of the original master recording.

The MQA logo is a trade mark of MQA Limited. © MQA Limited 2018



LDAC and LDAC logo are trademarks of Sony Corporation.

[Discover more](#) →



Qualcomm aptX is a product of Qualcomm Technologies, Inc. and/or its subsidiaries.

Qualcomm is a trademark of Qualcomm Incorporated, registered in the United States and other countries.

aptX is a trademark of Qualcomm Technologies International, Ltd., registered in the United States and other countries.

[Discover more](#) →



Roon Ready network players from our partners have Roon's high-resolution streaming technology built right in.

They combine simple setup, daily reliability, and support for the highest level of digital audio performance in the industry.

Every Roon Ready player is certified by Roon to guarantee the same stellar experience, regardless of its manufacturer, its price, or its features.



## General Specifications

Model	SP3000M (PPF43)
Body Color	Black
Body Material	Aluminum
Display	4.1inch HD 720 x 1280 touch screen
Supported Audio Formats	WAV, FLAC, WMA, MP3, OGG, APE, AAC, ALAC, AIFF, DFF, DSF
Sample rate	PCM : 8kHz ~ 768kHz (8/16/24/32bits per Sample) DSD : DSD64(1bit 2.8MHz), Stereo / DSD128(1bit 5.6MHz), Stereo / DSD256(1bit 11.2MHz), Stereo DSD512(1bit, 22.4MHz), Stereo
Output Level	Unbalanced 3.3Vrms   Balanced 6.3Vrms (Condition No Load)
CPU	Octa-core
DAC	AKM AK4191EQ x2 & AK4499EX x4
Decoding	Support up to 32bit / 768kHz 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	V5.0 (A2DP, AVRCP, Qualcomm® aptX™ HD, LDAC, LHDC)
Dimensions	2.72" (69.1mm)[W] x 4.70" (119.6mm)[H] x 0.74" (18.8mm)[D]
Weight	Aluminum about 8.36oz (237g)
Feature Enhancements	Firmware upgrade supported (OTA)
Operating Temperature	0°C ~ + 40°C (32°F ~ 104°F)

## Audio Specifications

Frequency Response	±0.020dB (Condition : 20Hz~20kHz) Unbalanced   ±0.025dB (Condition : 20Hz~20kHz) Balanced ±0.032dB (Condition : 20Hz~70kHz) Unbalanced   ±0.025dB (Condition : 20Hz~70kHz) Balanced
S/N	126dB @ 1kHz, Unbalanced   130dB @ 1kHz, Balanced
Crosstalk	-140dB @ 1kHz, Unbalanced   -144dB @ 1kHz, Balanced
THD+N	0.0005% @ 1kHz, Unbalanced   0.0003% @ 1kHz, Balanced
IMD SMPTE	0.0004% 800Hz 10kHz (4:1) Unbalanced   Balanced
Output Impedance	Unbalanced Out 3.5mm (0.6ohm)   Balanced Out 4.4mm(1.2ohm)

## Clock Source

Clock Jitter	25pS (Typ)
Reference Clock Jitter	200 Femto Seconds

## Storage Capacity

Built-in Memory	256GB [NAND]
External Memory	microSD x1 (Max. 1.5TB)

## Battery

Capacity	4,200mAh 3.8V Li-Polymer
Charge Time	about 3.5hours (QC3.0 Charging)
Playback Time	about 10hours (Standard : FLAC, 16bit, 44.1kHz, Vol.80, LCD Off, Low Gain)

## Supported OS

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

---

**THANK YOU**