

# WARWICK<sup>TM</sup>

ACOUSTICS

This is what exceptional audio looks like;  
imagine what it sounds like.



Introducing the **BRAVURA**  
For those who seek audio perfection



[www.warwickacoustics.com/bravura](http://www.warwickacoustics.com/bravura)



The **BRAVURA** - from the Italian meaning:  
*...Great technical skill and brilliance shown in a performance...*

### High-Precision Electrostatic Laminate Transducer

The Sonoma was the world's first headphone system to use the High-Precision Electrostatic Laminate (HPEL) audio transducer developed by Warwick Acoustics Ltd. To date it has won 25 industry awards and received testimonials from audiophiles and recording professionals from around the world.



With the BRAVURA we have invested 3 years of HPEL development to refine our core patented technology to further improve upon all the benefits for which electrostatics are famous. The latest evolution of the single-ended HPEL uses a new stator design and more advanced materials resulting in ultra low distortion, increased SPL and a wider bandwidth. Each HPEL is handmade and individually matched resulting in a listening experience with unrivalled transparency and musicality.

### Injected Magnesium Ear-Cups

With excellent strength-to-weight ratio, high stiffness, superior acoustical damping and outstanding RFI/EMI shielding, magnesium is the ideal material in which to house the HPEL to ensure optimal performance. It's low weight also contributes to outstanding headphone comfort and reduced user fatigue.

### Handmade Hair Sheep Ear Pads

Ensuring comfort during long listening sessions, the BRAVURA ear-pads are handmade from top-grain, Cabretta hair sheep leather, known for its light weight, durability and softness.

### Luxury Headband

The BRAVURA uses a version of the headband designed for our flagship APERIO headphone. Its hand stitched finish delivers the ultimate in comfort and luxury.

### Custom Low-Capacitance Cable

We developed a bespoke ultra-low capacitance cable to guarantee optimal signal transfer between amplifier and headphone. Manufactured in collaboration with ATLAS and LEMO, the cable is strengthened with Kevlar between the inner cores, and uses high-precision self-latching LEMO connectors. A high quality woven Moplen outer braiding with soft feel and ultra-wear resistance ensures a luxury user experience.

### Class-A Energizing Amplifier

Like all electrostatics, the HPEL requires a high-voltage drive amplifier in order to function. The supplied drive comes from an optimally matched, high-performance, discrete FET Class-A amplifier with very low distortion and wide bandwidth. The amplifier is encased in a completely shielded, machined aluminum enclosure to ensure isolation from all interference sources, and provides USB and coax S/PDIF digital as well as RCA analog inputs. The USB input accepts all Hi-Res Audio formats up to 32-bit/384 kHz PCM and DSD via DoP (DSD64 and DSD128), while the S/PDIF input accepts all PCM formats up to 24-bit/192 kHz.



### ESS SABRE Reference DAC

ESS is universally recognized as the world's premium DAC chip manufacturer, and we have opted for their 32-bit Reference DAC. Each stereo DAC chip is operated in mono mode to provide a measured 129 dB signal-to-noise ratio.

### Custom 64-Bit Double-Precision Fixed-Point DSP

In order to obtain the desired response at the output of the headphones, we digitally process all signals using custom 64-bit double-precision fixed-point arithmetic. Fixed-point is known to be superior in the world of audio processing, and our 64-bit arithmetic exceeds even the performance of professional audio workstations.

### AKM Premium ADC

All incoming analog signals must be converted to digital ahead of the DSP, and for this we use a multi-channel 32-bit/384 kHz AKM Premium ADC to deliver a measured signal-to-noise ratio in excess of 120 dB.

### Superior USB Data Cable

With gold-plated connectors and a silver-plated data path, the supplied USB cable, co-developed with Straight Wire, is the perfect connection between your digital music source and the Sonoma M1 system.

### Custom Universal Voltage PSU

Our custom-designed, universal voltage switch-mode power supply utilizes a fixed frequency design optimized for low noise within the audio bandwidth. To ensure a good connection with the amplifier unit, we use high-performance, locking DC power connectors. All audio circuitry within the amplifier is supplied by a secondary stage of ultra-low noise, high current linear regulation.

The BRAVURA Headphone has been designed to work with the multi-award-winning Sonoma M1 Amplifier, and is available in two colour options; Silver or a special Black Edition



**BRAVURA**  
WARWICK ACOUSTICS

For further details:

[sales@warwickacoustics.com](mailto:sales@warwickacoustics.com)

[www.warwickacoustics.com/bravura](http://www.warwickacoustics.com/bravura)



Sonoma™ and its logo are trademarks of Super Audio Center, LLC, Colorado, USA and are used under license.  
HPEL is a patented technology developed and licensed by Warwick Acoustics Ltd, UK.