**PRESS RELEASE**

Ferrum **WANDLA GoldenSound** Edition DAC/PREAMP

*The Power of DSP*

Thinking about the potential of WANDLA’s computing power, our Ferrum team thought up of the ultimate experiment. Could we make Digital Signal Processing really work for us? Enter **WANDLA** **GoldenSound** Edition with Spatial Enhancement, Tube Mode, and Impact+, all done in the DSP of our SERCE module. DSP done properly.

We asked ourselves what could be achieved with the use of Digital Signal Processing when done right? WANDLA’s heart, SERCE, had so much more to offer, using its full potential. This is when **WANDLA** **GoldenSound** Edition came into being and the Ferrum team started implementing new features into WANDLA’s software. The fruitful collab between our own talented workforce and Cameron Oatley from GoldenSound gave us some very interesting ideas to develop extra functionalities for WANDLA, aptly dubbed The Converter.

Our team was able to create extra settings to tailor the sound to the need of the individual and created a set of brand-new features in **WANDLA GoldenSound** Edition. Enter Spatial Enhancement, Tube Mode, and Impact+. We chose to omit MQA decoding to get the best performance from the DSP engine for the new features, but we kept our own Dynamic Digital Filtering. Additionally, **WANDLA GoldenSound** Edition has elevated digital headroom, which makes it even more immune to distortion of intersample overs. What is more, **WANDLA GoldenSound** Edition uses the exact same voltage adjustment feature as standard WANDLA for better compatibility with a wider range of amplifiers. To make it even better, in the foreseeable future it will be possible to convert the original WANDLA into **WANDLA GoldenSound** Edition. Because we want to give Ferrum owners the possibility to make the ultimate choice themselves.

**Spatial Enhancement**

A unique spatial enhancement to provide an expanded soundstage and improved clarity of separation between musical elements, whilst avoiding the drawbacks commonly found in other approaches. It has two modes of operation: headphone and speaker mode tailored differently for different use cases.

**Tube Mode**

An intentional increase of the even-order harmonic distortion produced by the DAC, similar to the distortion added by a tube amplifier. This allows the user to enjoy a warmer, richer sound without directly changing the frequency response.

**Impact+**

For those who enjoy a little more low-end in their music listening experience. This feature uses a customized two-band EQ which not only elevates bass but provides additional ‘punch’ and dynamic impact as well.

Ferrum WANDLA **GoldenSound** Edition DAC/PREAMP specifications:

DAC chip: ESS Sabre ES9038PRO

DAC resolution: 768 kHz / 32 bit, DSD 512

Digital inputs:  
  • USB Type-C (up to PCM 768 kHz / 32 bit, DSD 512, DoP 256)  
  • I2S (up to PCM 768 kHz / 32 bit, DSD 512, DoP 256), PS Audio® compatible  
  • ARC (up to PCM 192 kHz / 24 bit), TV input with CEC  
  • AES (up to PCM 192 kHz / 24 bit, DoP 64)  
  • Coaxial S/PDIF (up to PCM 192 kHz / 24 bit, DoP 64)  
  • Optical S/PDIF (up to PCM 96 kHz / 24 bit\*)  
  \*may work up to PCM 192 kHz and DoP 64

Analog inputs: RCA

Analog input Vmax: 9.5 VRMS (2 – 3.5 VRMS recommended)

Analog input impedance: 47 kΩ

Line outputs: balanced XLR, unbalanced RCA

Volume control: analogue with bypass option / digital for DAC operation only

Output level: • PRO: 8 VRMS balanced, 4 VRMS unbalanced

(@ 0 dBFS / 1 kHz sine) • Red Book: 3.5 VRMS balanced, 1.75 VRMS unbalanced

Frequency response: 10 Hz – 200 kHz +/- 0.1 dB analog inputs

DAC THD: -121 dB (0.00009 %), THD+N: -115 dB unweighted

Analog input THD: -123 dB @ 2 VRMS

Dynamic range (A-weight.): 127 dB analog, 119 dB digital

Crosstalk: -120 dB for 1 kHz, better than -100 dB for 20 Hz – 20 kHz

Output impedance: 22 Ω unbalanced, 44 Ω balanced

Power consumption: 10 W idle, 15 W max

Power inputs (22-30 VDC): • 5.5/2.5 mm DC connector, center positive  
  • proprietary Ferrum Power Link (FPL) 4-pin DC connector

Power adapter: 100-240 VAC to 24 VDC

Remote control: included

Dimensions: 21.7 cm x 20.6 cm x 5 cm / 8.6″ x 8.1″ x 2.0″

Weight: 1.8 kg / 3.97 lbs

Price: 3295 EUR/USD*About Ferrum:*

*Looking at the competencies of HEM and the rich local history of quality craftsmanship in the Warsaw region of Poland inspired the idea of creating a new brand of quality hifi products. The Ferrum brand was created in early 2020 and set out to combine sustainability, durability, and quality into compact yet attractive packages, focused on one thing only: delivering the best possible audio experience at an affordable price level. When Ferrum created HYPSOS, it redefined power supply designs. When Ferrum created headphone amp OOR, it raised the bar for intimate, analog listening through your favorite headphones. With headphone DAC/AMP ERCO, Ferrum put one and one together to forever change the way you will enjoy digital and analog audio. With our flagship DAC/PREAMP WANDLA we have made tomorrow’s high-end DAC available today and created yet another addition to our ecosystem of affordable high quality hifi equipment. Now our HYPSOS DUAL OUTPUT carries the audio dream even further. Exciting future products will follow suit in unique, exciting, and new ways.*

*About HEM:*

*Founded more than 20 years ago in Warsaw, Poland by Marcin Hamerla, HEM set out to operate at the forefront of audio technology. Having done several projects for the Polish government, HEM’s focus shifted to industry leading digital technology in collaborating with Mytek Digital. Experimenting with hi-res audio and Master Quality Authenticated files in particular, HEM manufactured the finest Digital to Analogue converters in the world under the Mytek brand. Apart from being responsible for manufacturing Mytek, HEM distributed the brand in European and Far Eastern markets. Another brand in HEM distribution is Clarus Cable. HEM recently introduced a new and completely in-house developed brand of hifi products under the name Ferrum, which HEM will be distributing as well. Because of HEM’s in-house Research & Development and Software Programming Division, fields of expertise also include manufacturing of original electronic equipment (OEM) and electronic designs (ODM).*

***Editorial note:***

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