

N-01XE Product Overview



Authentic. Emotional.

Exquisite mechanical construction. A unique discrete circuit design that faithfully reproduces the texture of music. A powerful power supply forms the foundation for three-dimensional sound. The exceptionally substantial chassis built without regard for cost. The elegant finish achieved through a combination of various machining techniques.

The Esoteric “01” Series is the premium line that embodies all these hallmarks of Esoteric. Continuously advancing audio engineering while refining every technology to its purest expression, the “01” Series has become the iconic expression of Esoteric’s heritage of innovation and tradition. With its authentic, emotionally engaging sound and uncompromising musical performance, the “01” Series has consistently set new standards in premium audio reproduction.

Crafted with the pride of Japanese artisanship, Esoteric’s commitment to quality and attention to detail demonstrates our deep respect for all music lovers.

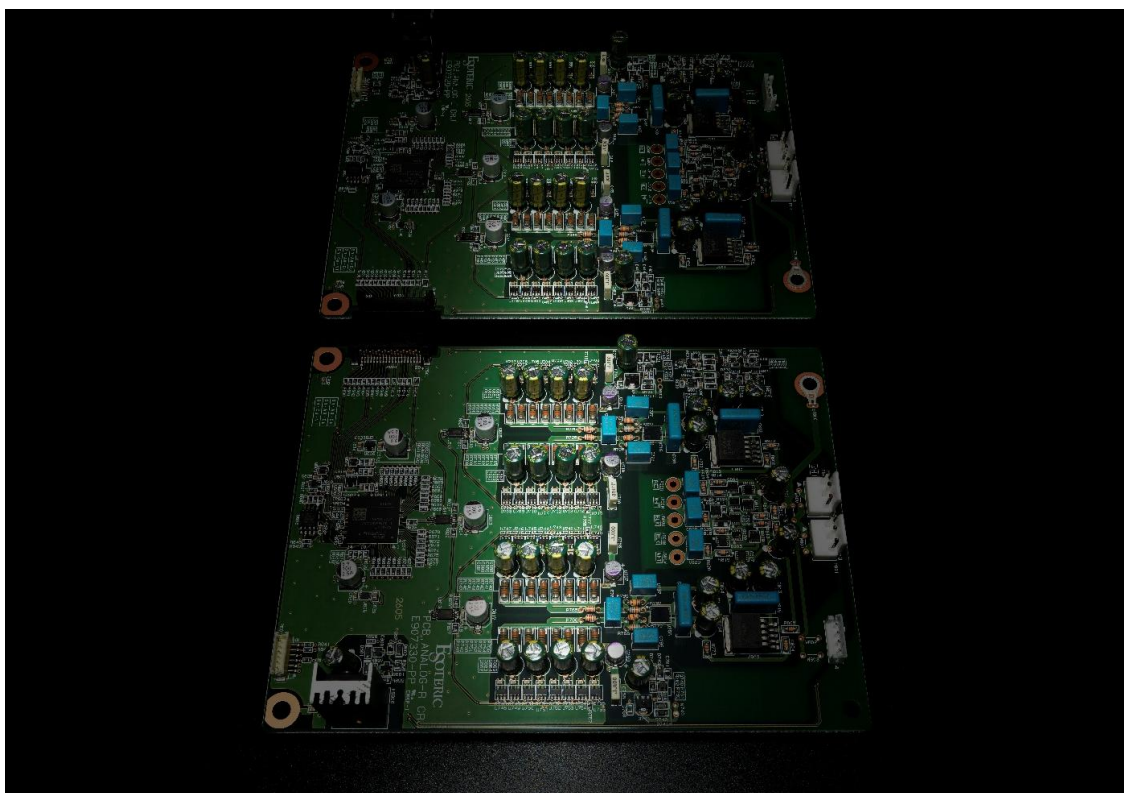




Featuring a Next-Generation Discrete DAC and Network Engine

The N-01XE is more than the successor to the acclaimed N-01XD SE. By incorporating the Master Sound Discrete DAC G2 and Esoteric Network Engine G4, both derived directly from the flagship Grandioso N1, it brings Esoteric's latest digital playback technologies to the prestigious 01 Series. Esoteric's proprietary "Master Sound Discrete DAC" has evolved into its second-generation G2 architecture, achieving even higher performance while preserving its signature musicality. The next-generation "Esoteric Network Engine G4" enables even purer streaming via optical network connections.

Although the N-01XE is a stereo unit, its built-in DAC employs a fully dual-mono configuration with independent power transformers for the left and right channels. It features a large-scale design incorporating a total of five independent power transformers: one each for the left and right DACs, the network engine, digital circuits and the microcontroller. Supplying each circuit with its own robust linear power source contributes to a smooth, natural, and remarkably analog-like sound.



Master Sound Discrete DAC G2

Bringing Out All the Dynamics and Energy of Music

Esoteric Master Sound Discrete DAC G2 is a fully in-house-designed, FPGA-based, multi-level $\Delta\Sigma$ (delta-sigma) D/A converter built with meticulously selected discrete components. The ultimate goal is to effortlessly reproduce the true dynamics and power of music, far surpassing the limitations of conventional DAC IC chips. Its large-scale circuit design comprises 32 elements per channel and features completely independent key components. Breathtakingly powerful, dynamic, and musical, this architecture delivers the ultimate pure listening experience, without compromise.

Esoteric Master Sound Discrete DAC G2 supports the latest high-resolution digital formats, including 22.5 MHz DSD and 768 kHz PCM signals. To achieve D/A conversion that fully matches the unique characteristics of both DSD and PCM, dedicated FPGA digital processing algorithms have been independently developed for each format.

The DAC employs ultra-high-precision MELF resistors and IDM-01 amplification elements. By integrating these selected discrete components, the N-01XE achieves sound quality marked by vivid live presence, superb dynamics, and an organic, natural texture.

Esoteric's advanced board-mounting technologies cultivated through the production of circuit boards for the audio, medical, aerospace, and defense industries ensure the exceptional manufacturing quality of the Master Sound Discrete DAC G2.

Evolution to G2 (Generation 2)

The second-generation Master Sound Discrete DAC G2 is the result of our commitment to achieving new heights in sound quality.

Newly Designed High-Power, Low-Noise Flip-Flop Circuit

In the upstream digital domain (the circuit that converts digital signals from the CPU into analog signals by passing them through resistor elements), the Flip-Flop IC controlling the on/off state of these resistor elements has been redesigned for optimized performance. Additional capacitors positioned close to the resistor elements further improve current delivery while reducing noise.

Even Purer Separate Power Supply Lines

A new approach was adopted that involved separating the power supply lines for the FPGA and the other digital domain circuits, as well as the hot and cold power supplies for the analog domains. Each section is powered by its own power regulator. Reconstructing the power lines further improved sound purity.





Esoteric Network Engine G4 (left) and its dedicated linear power supply system

ESOTERIC Network Engine G4

The N-01XE is equipped with the 4th generation Esoteric Network Engine G4, a top-of-the-line engine with the processing power worthy of a premium grade network streamer / DAC. The G4 engine features large-capacity RAM, a powerful CPU, and an SFP port for optical network connections.

The Esoteric Network Engine G4 is a concentrated embodiment of the design philosophy unique to high-end products. It boasts a dedicated linear power supply that is completely independent of the audio power supply, ensuring signal purity. Each component of the engine is independently powered through separate transformer windings. Moving beyond conventional switching power supplies, Esoteric incorporates premium components such as a large toroidal transformer, custom capacitors, Schottky barrier diodes, and other oversized parts. This meticulous engineering results in a sound that is smooth, vinyl-like, and richly detailed.

The Esoteric Network Engine G4 is equipped with a built-in network switch function and has two network interfaces: an Ethernet RJ45 connector and an SFP port.

By connecting the N-01XE to an external network switch using an SFP module and fiber optic cable, you can isolate the signal from network noise, achieving unparalleled purity in playback. Alternatively, a metal cable connection using a Direct Attach Cable (DAC) can simplify the network signal path by reducing the number of circuits involved. For maximum flexibility, both the RJ45 and SFP ports can be used simultaneously, tailoring the setup to your preferences and requirements.