

ESOTERIC

Network DAC **N-01XD** SE



The N-01XD is equipped with a Master Sound Discrete DAC, developed entirely in-house to achieve the original master sound, and a high quality network module that delivers a three-dimensional sound as if you were listening to a vinyl recording.

The N-01XD is now even more advanced as an SE model with further sound quality updates.



Since its inception in 1987, Esoteric has been at the forefront of innovation as a high-end audio brand from Japan, continually pushing the boundaries of high quality sound reproduction. The Esoteric brand is known for its outstanding acoustic engineering that has sustained its reputation and prestige, its massive investment without regard to cost, its "museum quality" craftsmanship, and its beautiful designs worthy of music reproduction.

The legendary VRDS-ATLAS Super Audio CD transport mechanism, Master Sound Discrete DAC and Master Sound Discrete Clock with proprietary discrete circuits, and the most advanced network audio playback technology utilizing a unique linear power supply system provide Esoteric's hallmark sound that is reminiscent of vinyl sound.

It is no exaggeration to say that Esoteric's history is synonymous with digital playback innovation in high-end audio.

Finally, the SE version of the N-01XD is now available with new discrete clock technology and improved analog circuitry in the DAC. We are proud of our brand and always strive for the best sound.

The SE model we are releasing this time reflects every conceivable technological accumulation from the time the original model was launched to the present. Enjoy the enhanced presence, dynamics, and beautifully organic and musical textures of the new SE model.



Network DAC N-01XD SE



Class A Integrated Amplifier F-01 (30W+30W/8Ω)



Unattainable by integrated chips, our goal was to assemble carefully selected and tested discrete components into a complete circuit that could perfectly reproduce all the dynamics and energy of music.

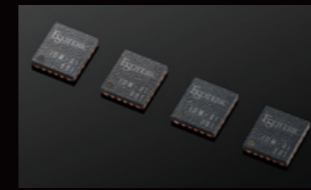
Our top engineering teams put their pride on the line to design and produce a quality of sound that can only be found in the “Master Sound Discrete DAC” discrete D/A converter.

### Luxurious Materials and Powerful Current Output

The N-01XD SE’s Master Sound Discrete DAC is the most revolutionary two-channel stereo DAC circuit in Esoteric’s history, and is based on the original circuit developed for the Grandioso D1X SE Monoblock D/A Converter. As an extension of the D1X SE’s design philosophy, an abundance of luxurious materials have been invested in the construction of N-01XD SE’s Master Sound Discrete DAC, including 32 separate elements for each channel. Each of these 32 elements, including such key components as a clock driver, logic circuitry, capacitors and resistors, are kept independent to ensure the purest output with virtually no loss of musical energy.

### Upgraded with IDM-01 and Other Quality Parts

In the new SE model, the discrete parts of the analog circuitry on the DAC board have been refreshed for even better sound quality. The amplifier element is the original “Integrated Discrete-Amplifier Module IDM-01”. The materials, circuit patterns, and layout have been carefully studied by Esoteric’s engineers as if designing an amplifier with a discrete configuration, and the extremely short signal path that takes advantage of integrated circuits amplifies the vibrancy of music in a dynamic and subtle way. The IDM-01 and other analog parts, such as analog filter resistors and capacitors, have been carefully selected to achieve a more vivid live sound, improved audible dynamics, and a more organic texture.



Integrated Discrete-Amplifier Module IDM-01

### Advanced Digital Processing Capability

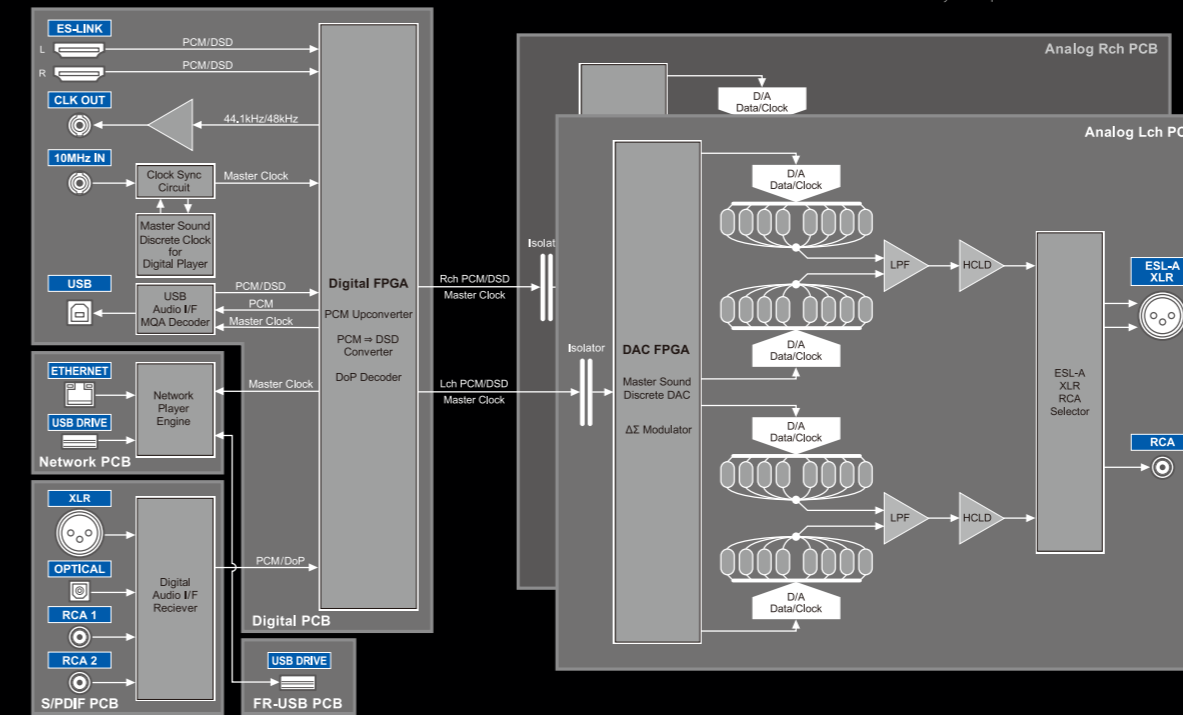
The N-01XD SE incorporates Esoteric’s exclusive Delta-Sigma ( $\Delta\Sigma$ ) modulator supporting 64-bit/512Fs audio frequency sampling. To perform D/A conversion on par with the excellent DSD and PCM format characteristics, separate FPGA\* digital processing algorithms have been developed for each conversion process. This enables the N-01XD SE to extract the optimum sound quality from CDs, Super Audio CDs, and network audio playback.

\* FPGA: Field-Programmable Gate Array

### Unique Esoteric-HCLD\* Output Buffer Circuit with Enhanced Current Transmission

The N-01XD SE’s Esoteric-HCLD output buffer amplifier boasts an astonishing high-speed slew rate (response speed) of 2,000V/ $\mu$ s. Current transfer and speed – the most important factors in the design of any analog output circuit – have been pushed to the limit, while the array of EDLC\*\* supercapacitors used in the buffer circuit’s power supply provides a staggering 250,000  $\mu$ F of capacitance per channel for solid bass support and exceptionally dynamic music reproduction.

\*HCLD: High Current Line Driver  
\*\*EDLC = Electric Double-layer Capacitor



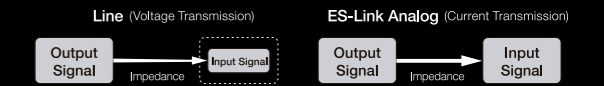
### ES-Link Analog – Esoteric’s Proprietary Current Transmission

In addition to line connections (XLR, RCA), ES-Link Analog, Esoteric’s proprietary current transmission system, is employed for connection to an amplifier. ES-Link Analog is the ideal method for audio signal transmission.

#### ES-Link Analog: Esoteric’s unique current transmission

Compared to the conventional voltage transmission, it transmits approximately 100 times more current, making it less susceptible to noise and sending the full energy of the music to the amplifier.

Also, it is not affected by the impedance of the interconnects running between the source device and amplifier, so it maintains a perfect integrity between the output signal of the source and the input signal to the amplifier.



### Transport Connections for Super Audio CD Playback

The N-01XD SE supports Esoteric’s proprietary ES-Link 5 ultra-wideband digital transmission standard, and you can connect Esoteric’s Super Audio CD Transport models using either two HDMI cables or a single XLR cable.

#### ES-Link

ES-Link is an ultra-wideband digital interface developed exclusively by Esoteric. The ES-Link 5 supports up to 22.5MHz DSD or 768kHz/48-bit PCM using two HDMI cables. The HDMI multi-cable configuration is used for the transmission of fully balanced audio data, LR clock and bit clock signals. Unlike conventional digital transmission, no processing is required for signal modulation at the sending end or for demodulation at the receiving end, thus significantly reducing the digital processing load on the DAC to achieve pure digital transmission.



## Network Audio

From the comfort of your listening chair, you can access an endless list of your favorite songs and play them back with the ultimate in sound quality. All you need is Esoteric's quality audio system, music streaming service and our playback app on your smartphone/tablet.

The 22.5MHz DSD-compliant network module and the linear power supply technology without any switching elements enable network playback with three-dimensional sound quality like vinyl playback.

### Compatible with a Wide Range of Audio Sources

The N-01XD SE is compatible with 22.5MHz DSD, 384kHz/32-bit PCM playback and a host of other formats (DSF, DSDIFF, FLAC, Apple Lossless, WAV, AIFF, MP3, AAC and MQA). Gapless playback capability is also offered in all lossless formats.

### Esoteric Sound Stream

Esoteric Sound Stream is an Apple iOS/Android network playback app for smartphones and tablets designed with an emphasis on both sound quality and intuitive operability. Musical tracks can be easily selected using the smartphone/ tablet to create a customized playlist for later playback. All screens have been intuitively designed for simple operation and access to playlists and libraries, making it easy for anyone to use. Yet it also offers an extensive range of refined features that meet the demands of even the most experienced users.

Key to this achievement is a superb search and retrieval function that fully utilizes tag information. Images can also be stored using the app, enabling the user to instantly scroll through album artwork and libraries according to artist, year of recording, composer or other categories. This use of tag information even allows tracks that have the same name but different formats to be easily identified onscreen.

### Compatible with a Wide Selection of Audio Codecs and Streaming Services



\* Not every service is available in every country.

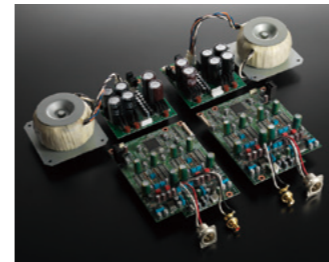
### Music Server Function\*

The N-01XD SE has two USB-A ports, one each on its front and rear panels, that enable connection of up to two large-capacity USB storage devices (USB flash drive, external USB HDD/SDD, etc.) for use as a music server. This allows easy music playback even without a separate NAS (Network Attached Storage).

\* HDD/SDD cannot be installed inside the N-01XD SE unit itself.

### Powerful Power Circuit Essential for Audio Quality

The N-01XD SE's mighty power supply is the key to its powerful and profound three-dimensional sound. The N-01XD SE features a total of four independent toroidal power transformers, one each for the right and left channel DACs, digital circuits, and network module. Furthermore, technologies cultivated in the development of the Grandioso P1X/D1X have also been adopted, including a low-feedback DC power supply regulator featuring a discrete circuit configuration which contributes to its powerful open sound.

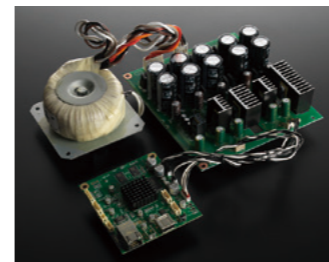


Left and right DAC circuit boards, and individual power supply units

### Network Module Features

#### High-Sound-Quality Linear Power Supply

The N-01XD SE features an ultra-high quality network audio engine that supports DSD 22.5 MHz playback. The key component of this high-quality network engine is its dedicated linear power supply system. Conventional regulated switching power supplies are highly efficient, but can be a source of noise. Instead of using any switching elements, Esoteric designed the power supply in a very traditional audiophile style, using an extra-large toroidal transformer, capacitors, Schottky barrier diodes and EDLC supercapacitors to achieve a noise-free, dynamic and three-dimensional sound reminiscent of vinyl playback.



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## Master Sound Discrete Clock

### for Digital Player

It is no exaggeration to say that the clock circuitry is the biggest key to high sound quality in digital music reproduction. For its flagship master clock generator Grandioso G1X, Esoteric has perfected its own in-house manufactured OCXO clock module, the Master Sound Discrete Clock. The G1X's unique discrete circuitry has been highly acclaimed for its superior musical expressiveness, creating a buzz in the world of high-end audio that has traditionally been described only in terms of technical specifications. The "Master Sound Discrete Clock for Digital Player" used in the N-01XD SE applies the basic design

concept of G1X's in-house manufactured OCXO module to the internal clock of the digital player models. The unique circuit design using carefully selected discrete components, such as a large crystal oscillator, achieves high sound quality that reflects Esoteric's philosophy in every detail, which cannot be achieved with an off-the-shelf clock module. The N-01XD SE can also be connected to the Esoteric G series external master clock generator to improve sound quality by synchronizing the internal circuitry to an even more accurate 10 MHz clock.

## USB Audio Interface Supports 22.5MHz DSD and Asynchronous Transmission

The N-01XD SE is equipped with a USB-B port for connection to a computer. The driver and Esoteric HR Audio Player (music player application) can be downloaded for free from the Esoteric website. The audio interface supports high sample rate playback at 22.5MHz DSD and asynchronous transmission for high fidelity playback. In addition to USB, three types of digital input connectors (XLR x 1, coaxial x 2, optical x 1) are provided for connection to a wide range of digital devices.

## High Rigidity Chassis Design

A high-rigidity double-layer chassis made of thick aluminum and steel is used. The inside of the chassis is double-layered to minimize mutual interference between circuits and to minimize power supply wiring. The entire unit is supported at four points by a 5 mm thick steel base chassis and patented Pinpoint feet, which integrate a spike and saucer to provide effective mechanical grounding of vibrations. These feet are not bolted to the base chassis, but are held in place by the weight of the chassis when installed. By avoiding the stress concentration caused by screwing the Pinpoint foot body into the large surface area of the base chassis, a more open sound is created.



## Semi Floating Top Panel

The top panel of the chassis uses a screwless semi-floating structure, which further contributes to an open and dynamic sound.



## N-01XD SE NetworkDAC



Digital Audio Inputs:	ES-Link ×1, XLR ×1, RCA ×2, Optical ×1, USB ×1, Ethernet ×1, USB Drive ×2 (Front/Rear)
Analog Audio Output:	ES-Link Analog/XLR ×1 pair, XLR ×1 pair
Clock Input:	BNC ×1 (10MHz)
Clock Output:	BNC ×1 (44.1k/48kHz)
Frequency Response:	5Hz to 30kHz (-3dB)
S/B Ratio:	113dB (IHF-A)
THD:	0.007% (1kHz)
Power Supply:	120V AC 60Hz, 220-240V AC 50Hz
Power Consumption:	38W
Overall Dimensions:	445 × 162 × 438mm (W×H×D, including protrusions)
Weight:	26.3kg

Authorized Dealer

- This product is available in two different power supply variations as shown in the chart above. Make sure that the voltage shown on the rear panel matches the AC line voltage in your area.
- The shape of the AC inlet and plug of the supplied power cord depends on the voltage rating and destination country.

Design and specifications subject to change without notice.

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