



ESOTERIC

N-01XD SE Network Dac

253096



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.

PRODUCT DETAILS

Master Sound Discrete DAC - Bringing Out All the Dynamics and Energy of Music.

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.

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

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.

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/μs. 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 250,000F 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. 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

Esoteric has partnered with a wide array of streaming service and audio codec providers, and preparations are currently underway to provide compatibility with newer services*. Current supported streaming services include TIDAL, Qobuz, Roon Ready and Spotify.

*Information on newly supported services will be released on Esoteric's website.

*Please note that regional restrictions may be applied on some services.

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.

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.

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.

Specs

Product Attributes

EAN:	4907034225187
Manufacturer number:	N-01XD SE
Product weight:	32.922 kilograms

Audio Inputs

Optical/Toslink:	1
Input level optical:	−24.0 to −14.5dBm peak
RCA:	2
Input level & impedance RCA:	0.5Vp-p, 75
XLR:	1
Input level & impedance XLR:	5.0Vp-p, 110
ES-link digital:	1
Music streaming services:	Qobuz Spotify Tidal
BNC:	1
Impedance & frequency BNC:	10MHz (±10ppm), 50
Ethernet:	1
USB 2.0:	2
USB-B:	1

Energy Management

Power consumption:	0.2-38
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Audio Outputs

RCA:	1
XLR:	1
Output level & impedance XLR:	5.0Vrms (1kHz, 10k loaded), 40
ES-link analog:	1

Output level & impedance ESL-A:	5.0Vrms (1kHz, 10k loaded), 40
BNC:	1
Impedance & frequency BNC:	44.1k / 48kHz, TTL level equivalent (75 load), ±0.5ppm

Dimensions and Weight

Product height:	16.2
Product width:	44.5
Product length:	43.8
Product weight:	26.3