













# ESOTERIC

# N-01XD Network DAC -Discontinued, see new "SE" model

248092

An all unique circuit design called "Master Sound Discrete DAC", together with a further refined sound quality Network Module as core technology result in the ultimate Network Audio Player/DAC, the N-01XD. The outcome of ESOTERIC's passion that strives for the original master sound.

## PRODUCT DETAILS

#### **Master Sound Discrete DAC**

Our goal was to assemble a careful selection of rigorously tested discrete components into a complete circuit that could perfectly reproduce all the dynamics and energy of music, which is simply unattainable using ordinary integrated chips. Our top engineering teams put their pride on the line to design and produce a quality of sound that can only be found in our Master Sound Discrete DAC discrete D/A converter.

# **Luxurious Materials and Powerful Current Output**

The N-01XD'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 Monoblock D/A Converter. As an extension of the D1X's design philosophy, an abundance of luxurious materials have been invested in the construction of N-01XD'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 includes ESOTERIC's exclusive Delta-Sigma () modulator supporting 64-bit/512Fs audio frequency sampling. To perform D/A conversion on par with its excellent DSD and PCM characteristics, separate FPGA\* digital processing algorithms were developed for each conversion process. This enables the N-01XD to extract the optimum sound quality from CDs, Super Audio CDs, and networks.

\* FPGA: Field-Programmable Gate Array

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

The N-01XD's ESOTERIC-HCLD output buffer amplifier boasts an astonishing high-speed slew rate (response speed) of 2,000V/µs. Current transmission and speed—the most important factors in the design of any analog output circuit—have been pushed to the limits, while the array of EDLC\*\* super capacitors used in the buffer circuit's power supply provide a staggering capacitance of 250,000F per channel for solid bass support and exceptional reproduction of all the dynamism of music coupled with a sense of realism that is truly breathtaking.

\*HCLD: High Current Line Driver

\*\*EDLC = Electric Double-layer Capacitor

# **High-Quality ES-LINK Analog Current Transmission**

In addition to its standard XLR and RCA line connections, the N-01XD is also equipped with Esoteric's own ES-LINK Analog current transmission system. Taking full advantage of the robust stream of current supplied by its HCLD buffer circuitry makes the N-01XD less susceptible to the detrimental effects of signal path impedance, ensuring more pure and powerful signal transmission that maximizes system potential to deliver outstanding analogue audio output transmission when connected to comparable components.

# **Transport Connections for Super Audio CD playback**

The N-01XD supports Esoteric's proprietary ES-LINK digital wideband transmission standard. An Esoteric transport can also be connected using either two HDMI cables or a single XLR cable to enable playback of Super Audio CDs. \*ES-LINK is an ultra-wideband digital interface developed exclusively by Esoteric. Like our flagship Grandioso D1X Monoblock D/A Converter, the N-01XD's ES-LINK has also been upgraded to Version 5 to support wide-range transmission using two HDMI cables (Max: 22.5MHz DSD or 768kHz/48-bit PCM). The HDMI multi-cable configuration is used for fully balanced audio data, LR clock, and bit clock signal transmission. In contrast to regular digital transmission, no processing is required for signal modulation at the sending side or for demodulation at the receiving side, thus allowing a significant reduction in the DAC's digital processing load to help realize pure digital signal transmission with near perfect optimization.

## **Full MQA Support**

The N-01XD is also capable of MQA decoding for digital input sources(\*). In addition to conventional network input, MQA-CD playback is also possible when used in combination with a CD transport.
\*Only Grandioso P1X supports ES-LINK connection. (As of June 2020)

# **Network Audio**

With network audio, you can realize the opulent dream of full access to all your music with superior sound quality from the comfort of your listening position. All that is required besides the audio system is a regular home LAN (such as a Wi-Fi router), tablet or smartphone, and a NAS (Network Attached Storage) device for storing your music library. With these components, you can easily begin a life of relaxing music enjoyment with uncompromising quality. The N-01XD features noticeable improvements in network playback quality, including the latest developments in network modules that supports 22.5MHz DSD and linear power supply technology without any switching elements.

#### Compatible with a Wide Range of Audio Sources

The N-01XD 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.\*

\*Infor mation on newly supported services will be released on ESOTERIC's website. Please not, however, that regional restrictions may be applied on some services.

#### **TIDAL**

Begin your encounters with new music through TIDAL, a high-end music streaming service that has officially partnered with ESOTERIC. TIDAL's lossless music distribution service operates on a fixed rate basis. Offering instant access to its enormous sound library, TIDAL enables users to enjoy their favorite

music online with excellent sound quality.

#### Qobuz

ESOTERIC is an official partner of Qobuz, the leading Hi-Res music streaming and download service in Europe.

#### Roon Ready

Roon is the most engaging, enjoyable way to browse your music. Being Roon Ready means that ESOTERIC network players transparently discover and connect to Roon, with no network configuration, with bitperfect delivery of audio to your dac. Together, Roon and ESOTERIC deliver the power, flexibility, and performance benefits of networked audio, with the easiest setup and highest reliability available.

#### **Spotify**

Spotify is an on-line music streaming service delivering over 40 million music. Two types of services are provided, a basic service called "Spotify Free" for free, and on-demand and high-quality sound subscription serive called "Spotify Premium" at flat rate.

#### **MQA**

MQA is an award-winning technology that delivers master quality audio in a file that's small enough to stream or download. Using pioneering scientific research into how people hear, MQA captures and authenticates the sound of the original studio performance.

### Music Server Function(\*)

The N-01XD 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 for people who find NAS configuration to be too complicated and troublesom.

(\*) HDD/SDD cannot be installe inside the N-01XD unit itself.

# **Equipped with Four Powerful Independent Power Supplies**

The key to the powerful and deep, rich sound provided by the N-01 and D-02X lies in their high-performance power supplies. The N-01XD features significant enhancements to its power supply to ensure it delivers even more robust, lifelike sound.

Its built-in D/A converter features a total of four independent toroidal power transformers, one each for the right and left channels, digital circuits, and network module. The DAC's regulator utilizes a low-feedback DC regulator for minimizing feedback in a discrete configuration that uses no integrated circuits, but instea adopts technology obtained in the development of the Grandioso P1X Super Audio CD Transport and D1X Monoblock D/A Converter. The result is a powerful, expansive sound.

# **Network Module Features High-Sound-Quality Linear Power Supply**

Thanks to recent breakthroughs in the development of our network transports, the network module uses a new power supply designed with linear elements customized for audio use instead of a regulated switching power supply. Combined with its high-capacitance filter capacitors, Schottky barrier diodes, EDLC (Electric Double-Layer Capacitor) super capacitors boasting a capacitance of 2,333,333F, and other high-end components, this enables the N-01XD to deliver dramatically improved sound quality.

# **Grandioso Custom VCXO\* II**

The N-01XD also includes the same Grandioso Custom VCXO II high-presicion clock developed for the P1X and D1X, which features extremely low levels of phase noise and excellent centering accuracy (±0.5ppm). The N-01XD's clock output enables high-precision clock synchronization using the Grandioso Custom VCXO II as a master unit by simply connecting it to a transport with a clock input port. An external Grandioso G1 or G-01X Master Clock Generator can also be connected to synchronize interna circuits with a 10MHz clock that rivals atomic clocks in its precision, thus realizing even higher levels of sound quality. USB input and network playback can also be synchronized with the external clock.

\*VCXO: Voltage-controlled crystal oscillator

# USB Audio Interface Supports 22.5MHz DSD and Asynchronous Transmission

The N-01XD is further equipped with USB-B port for connecting 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 sampling playback at 22.5MHz DSD and asynchronous transmission for enabling high-fidelity playback from even studio master quality sources. In addition to its USB ports,

three types of digital input ports(XLR x 1, coaxial x 2, optical x 1) have also been provided for connection to a wide range of digital devices.

# **Highly-Rigid Chassis Design**

The N-01XD features a highly rigid chassis design incorporating thick, dual layer aluminum and steel panels and a double-deck interior structure that both suppresses interfence between circuits and drastically shortens power supply wiring to achieve the ultimate in sound quality. Additionally, every slot and groove in the chassis has been precisely laser-machined to effectively reducd vibration. The chassis' entire 5mm-thick steel bottom panel is supported by our own ESOTERIC pinpoint feet (patent No;JP4075477,JP3778108) to ensure complete mechanical grounding that further protects the unit against the effects of vibration.

#### **Semi Floating Top Panel**

The enclosure's top panel utilizes a screwless semi-floating structure that further contributes to the N-01XD's open and expansive sound.

# **Specs**

# **Product Attributes**

EAN: 4907034223107

Manufacturer number: N-01XD

Product weight: 32.922 kilograms

Pieces per master carton: 4 Piece