



ESOTERIC

Esoteric K-03XD Super Audio CD/CD Player

248163



Since the first debut of the ESOTERIC K-01 and K-03 Super Audio CD Players, Esoteric's integrated digital players have captivated listeners with their unrivaled playback of musical sources. They have also gone on to win numerous awards as they have come to be regarded as the gold standard of digital players around the world. This new "XD" edition boasts even more advanced features, combining two innovative technologies originally developed for Esoteric's flagship Grandioso K-1X model: VRDS-ATLAS, the superlative Super Audio CD transport mechanism, and Master Sound Discrete DAC, designed completely in-house by ESOTERIC to provide even more enhanced playback from digital musical sources.

Colour



PRODUCT DETAILS

Adding VRDS-ATLAS to the K-03 series

The VRDS mechanism has undergone continuous development and improvements for over 30 years. Throughout its long, illustrious history, one prominent highlight has been the debut of the VRDS-ATLAS platform, which offers the pinnacle of perfection and sound quality. The K-01XD is equipped with VRDS-ATLAS mechanisms that have been specifically customized for each model in order to carry on the full qualities of the VRDS-ATLAS reference mechanism used in our flagship models, the Grandioso P1X and K1X.

New Version of VRDS-ATLAS: ATLAS 03

The K-03XD's ATLAS 03 system employs a simpler 18mm-thick bridge that requires far less machining. The mechanism boasts ultra-high rigidity and a weighty design to damp out any vibration that could affect sound quality. The transport's duralumin turntable also has a well-earned reputation for excellent sound quality, and its solid steel bridge is larger than that for the VRDS-NEO, using a one-point spindle bearing design that minimizes friction and rotational noise through its point-contact thrust bearing, which utilizes the same steel ball featured in the high-end models.

Wide, Low Center-of-Gravity Design

As the quietest and most elegant transport in VRDS history, ESOTERIC's impressive VRDS-ATLAS epitomizes the company's resolute focus on mechanical grounding technology in order to more effectively reduce vibration. Adopting a wide, low-profile design for the entire transport mechanism helped achieve a lower center-of-gravity, while the relocation of the turntable motor to below the turntable from its previous position above the bridge dramatically shortened the route for grounding vibration and reducing mechanical noise. Tray hollowing has also been minimized for increased rigidity, and special stoppers made from vibration-absorbing elastomer cancel out resonance when the tray is in its closed position.

High-Performance Power Supply – The Key to Sound Quality

The key to the powerful and deeply luxurious sound quality of the K series has always been their high-performance power supplies. This new XD edition features a significantly enhanced power supply design that delivers even richer, more lifelike sound. The K-03XD features a total of two high-capacity toroidal power transformers with independent power supplies for the digital and analog circuitry.

New Low-Feedback DC Regulator and Super Capacitors

The higher capacity design of the K-01XD and K-03XD power supplies enables remarkable improvements in sound quality with enhanced resolution in the lower ranges. Their low-feedback DC power regulators minimize feedback in a discrete configuration that does away with integrated circuits by utilizing technology originally developed for the Grandioso P1X/D1X, resulting in a powerful, expansive sound. The K-03XD uses 26 super capacitors (total capacitance: 650,000F).

Chassis Construction and Parts Layout

The VRDS-ATLAS transport mechanism is centrally located within the chassis, where it is fixed to a 5mm-thick steel bottom plate and supported by three proprietary pinpoint feet (patent no. 4075477 and 3778108). This effectively isolates the rotational mechanism from vibration. The internal structure of the chassis features a double deck design, with the audio boards on the upper level and power supply circuits and transformers on the lower level to minimize magnetic flux leakage and vibration, while also shortening power supply wiring.

Semi-Floating Top Panel

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

Bringing out all the dynamics and energy of music

Our goal was to assemble a carefully chosen selection of rigorously tested discrete components into a complete circuit that could perfectly reproduce all the dynamics and energy of music – something 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 for Powerful Electrical Current Output

The Master Sound Discrete DAC was first introduced in the Grandioso D1X as the most innovative DAC in Esoteric history, and its astoundingly realistic sound quality has consistently drawn rave reviews for causing listeners to feel as if they were at an actual live performance. The version featured in the K-03XD uses a simpler circuit configuration that incorporates the very essence of that found in the K1X to carry the 03 series models to new heights. Consisting of 32 elements per channel, each DAC element includes clock drivers, logic circuits, capacitors, resistors, and other component parts, while each group of 32 elements is kept isolated from the main parts. In keeping with D1X design philosophy, these DACs are packed with a luxurious selection of state-of-the-art components to ensure the pure, effortless output of boundless musical energy.

Advanced Digital Processing

The K-03XD's independently developed Delta-Sigma () modulator supports 64-bit/512Fs and the latest high-end digital formats, including 22.5MHz DSD and 768kHz PCM signals. The FPGA's dedicated digital processing algorithm was developed exclusively for the Master Sound Discrete DAC, and has been fully optimized for outstanding playback of both DSD and PCM digital audio data.

Advanced Quality Control

With a discrete DAC, where component tolerances are directly linked to arithmetic precision, highly advanced quality control is also required for the manufacture of electronic circuit boards. ESOTERIC's own in-house factory boasts some of the world's leading board mounting technologies, such as soldering performed in an oxygen-free furnace, which is located in a clean room featuring the same level of cleanliness found in a hospital operating room. Technologies cultivated in the production of electronic circuit boards for audio, medical, aerospace, and defense industries support the high production quality of the Master Sound Discrete DAC.

Unique ESOTERIC-HCLD Output Buffer Circuit with Enhanced Current Transmission

he 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 to reproduce the reality of music with a dynamic range that is truly breathtaking.

* HCLD: High Current Line Drive

High-Quality ES-LINK Analog Current Transmission

In addition to their XLR and RCA amplifier line connections, the K-03XD also features ESOTERIC's ES-LINK Analog method of current transmission. Taking full advantage of the HCLD buffer circuit's powerful current supply ensures that the K-03XD is less susceptible to the detrimental effects of impedance on the signal route. It also enables a more powerful signal transmission, fully driving connected compatible devices.

Grandioso Custom VCXO II

A high-accuracy clock circuit is the key to achieving superlative sound quality in digital audio playback, making it truly the heart of any high-end digital player. The K-03XD features the superb Grandioso Custom VCXO II clock originally developed for the Grandioso P1X/D1X. This clock was developed with carefully considered modifications made to the internal circuitry and components of other earlier models to more vividly emphasize each player's ultimate audio quality while further boasting remarkably low phase noise and excellent center precision ($\pm 0.5\text{ppm}$). The K-03XD can also be connected to a Master Clock Generator (G-01X or G-02X) for playback, with internal circuits synchronized to a 10MHz clock that features the same high precision as an atomic clock, enabling further pursuit of the highest sound quality.

* VCXO: Voltage Control-type Crystal Oscillato

External Input D/A Conversion, USB Ports, Multiple D/D Conversion Options, MQA Support

The K-03XD offers a wide range of digital inputs, including USB ports that support 22.5MHz DSD and asynchronous transmission, enabling use as a D/A converter. Functions to upconvert a PCM digital signal to 2, 4, 8, and 16 times higher bitrates (Max. 768kHz) and to convert PCM to DSD are also included. The K-03XD is also compatible with MQA-CD decode playback and full MQA decoding for playback of various digital inputs including USB.

Specs

Product Attributes

EAN:	4907034223176
Manufacturer number:	K-03XD
Product weight:	34.2 kilograms
Pieces per master carton:	1 Piece