



ESOTERIC

K-03XD SE Super Audio CD/CD Player

253651



VRDS-ATLAS SACD transport mechanism + the Master Sound Discrete DAC The K-03XD has now evolved into the latest SE model with advanced sound quality.

PRODUCT DETAILS

VRDS Technology

VRDS (Vibration-Free Rigid Disc-Clamping System) is a core technology of Esoteric's CD/Super Audio CD transport mechanisms that has been a focus of the brand since its inception. The system firmly clamps the disc to a platter of the same diameter, eliminating both the rotational vibration of the disc itself and the effects of any extraneous mechanical vibration. Any latent disc warpage is also corrected by the turntable to significantly improve the relative optical axis accuracy of the optical pickup and the disc pit surface, while also minimizing servo current. This all combines to significantly reduce disc read errors and further enable breathtaking sound quality.

VRDS-ATLAS

The VRDS mechanism has undergone continuous development and improvement for over 30 years. During its long and illustrious history, one of the most important highlights was the introduction of the VRDS-ATLAS platform, which represents the pinnacle of perfection and sound quality. The K-03XD is equipped with VRDS-ATLAS mechanisms that have been specially adapted for this model, in order to inherit all the qualities of the VRDS-ATLAS reference mechanism used in our flagship models, the Grandioso P1X SE and the K1X SE.

ATLAS 03

The K-03XD SE's new ATLAS 03 disc transport features an 18mm SS400 steel bridge. The mechanism features ultra-high rigidity and a heavy-duty design to dampen any vibrations that could affect sound quality. The transport's duralumin platter also has a well-deserved reputation for excellent sound quality, and its solid steel bridge is larger than that of the VRDS-NEO, and it uses a single-point spindle bearing design that minimizes friction and rotational noise through its point-contact thrust bearing system, the same design as the high-end models.

Wide Design with a Low Center of Gravity

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 to more effectively reduce vibration. The adoption of a wide, low-profile design for the entire transport mechanism helped achieve a lower center of gravity, while the relocation of the turntable motor from its previous position above the bridge to below the turntable dramatically shortened the path for grounding vibration and reduced mechanical noise. Tray cavities have also been minimized for increased rigidity, and special vibration-absorbing

elastomer stoppers cancel out resonance when the tray is in the closed position.

Large-Scale Power Circuitry, the Key to Sound Quality

The key to the sound quality of the K Series, which boasts a powerful, sculpted, three-dimensional sound, lies in its powerful power supply. In the SE model, the power supply section has also been brushed up, adding even more depth to the tone. The K-03XD SE has a total of two large toroidal power transformers that supply power to the digital and analog circuits independently.

Low-Feedback DC Regulator and Super Capacitors

The power supply uses a low-feedback design for a powerful, open sound in a discrete configuration with no integrated circuitry. A total of 26 super capacitors (total capacitance 650,000F0.65F) are installed to improve low-frequency resolution and achieve a remarkable improvement in sound quality.

Chassis Construction and Layout of the Circuit Blocks

The VRDS-ATLAS transport mechanism is centrally located within the chassis. It is mounted on a 5mm thick steel base plate and supported by three proprietary Pinpoint Feet (Patent #4075477 and #3778108). Pinpoint Feet integrate a spike and saucer to provide effective mechanical grounding of vibrations. These feet are not bolted to the baseplate, 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 baseplate, a more open sound is created. The internal structure of the chassis features a double-deck design, with the audio circuit boards on the upper level and the power supply circuits and transformers on the lower level to minimize magnetic flux leakage and vibration, while also shortening the power supply wiring.

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.

Bringing out all the dynamics and energy of music

Our goal was to assemble a carefully selected set of rigorously tested discrete components into a complete circuit that could perfectly reproduce all the dynamics and energy of music – something simply unattainable with 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 – our in-house developed, discrete ladder DAC.

Luxurious Materials for Pure Performance

The Master Sound Discrete DAC was first introduced in the Grandioso D1X as the most innovative DAC in Esoteric's history, and its stunningly realistic sound quality has consistently garnered rave reviews for making listeners feel as if they are actually at a live performance. The version found in the K-03XD SE uses a simpler circuit configuration that captures the essence of the K1X SE to take the 03 Series to new heights. Consisting of 32 elements per channel, each DAC element contains a clock driver, logic circuit, capacitor, resistor, etc., and all 32 elements are kept isolated from each other to maintain maximum processing precision. In keeping with the D1X SE 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 SE's independently developed delta-sigma ($\Delta\Sigma$) 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 has been developed exclusively for the Master Sound Discrete DAC and is fully optimized for superior reproduction of both DSD and PCM digital audio data.

Upgraded with Premium Quality Parts

The analog circuitry on the DAC board is a critical circuit that plays a key role in the final sound quality of a digital player. In the new SE models, the amplification elements, analog filter resistors, and capacitors have been upgraded to premium components with even higher sound quality, resulting in more vivid live sound, improved audible dynamics, and a more organic texture.

Advanced Quality Control

With a discrete DAC, where component tolerances are directly linked to arithmetic precision, advanced quality control is also required for the manufacture of electronic circuit boards. Esoteric's in-house factory incorporates some of the world's leading PCB manufacturing technologies, such as soldering in an oxygen-free oven located in a clean room with the same level of cleanliness as a hospital operating room. Technologies cultivated in the production of electronic circuit boards for the 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

The Esoteric HCLD Output Buffer Amplifier features an astonishingly fast slew rate of 2,000V/μs. Current transfer and speed—the most important factors for an analog output circuit—have been pushed to the limit to reproduce the reality of music with a truly breathtaking dynamics.

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.

External Input, D/D Conversion & USB Input

In addition to the coaxial and optical inputs, the model also features a USB type-B port that is compatible with 22.5MHz DSD asynchronous signal transmission, allowing it to be used as a stand-alone D/A converter. Functions for upsampling a digital PCM signal to 2/4/8/16× (max. 768kHz) and converting PCM to DSD are provided.

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 new SE model 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 new SE model can also be connected to the Esoteric G series external master clock generator to improve sound quality by synchronizing the internal SE clock circuitry to an even more accurate 10 MHz clock.

Included accessories

- Power cord set × 1
- Remote control (RC-1333) × 1
- AA batteries × 2
- Felt pads × 3
- Owner's manual × 1
- Warranty card × 1

Specs

Product Attributes

EAN:	4907034225323
Manufacturer number:	K-03XD SE
Product weight:	34.2 kilograms
Pieces per master carton:	8 Piece

Energy Management

Input voltage:	220-240
Input AC frequency:	50/60
Power consumption:	2-25

Audio Outputs

Coaxial:	1
Output level & impedance coaxial:	0.5Vp-p (75 loaded), Linear PCM (IEC60958) 44.1kHz,16-bit (CD)
RCA:	1
Output level & impedance RCA:	34, 2.5Vrms (1kHz, 10k loaded)
XLR:	1
Output level & impedance XLR:	114, max 5.0Vrms (1kHz, 10k loaded)
ES-link analog:	1
Output level & impedance ESL-A:	114, max 5.0Vrms (1kHz, 10k loaded)
AES/EBU	1
Output level & impedance AES/EBU:	3Vp-p (110 loaded), Linear PCM (AES/EBU) 44.1kHz,16-bit (CD)

Audio Inputs

Coaxial:	1
Optical/Toslink:	1
BNC:	1
Impedance & frequency BNC:	50, 10MHz, 0.5 to 1.0Vrms (Sine wave)
USB-B:	1

Dimensions and Weight

Product height:	16.2
Product width:	44.5
Product length:	43.8
Product weight:	34.2
Packsize height:	39
Packsize width:	66
Packsize length:	66
Packaged weight:	38

Control Methods

Controls:

On Device
Remote Control
RS-232