



ESOTERIC

## K-05XD Super Audio CD/CD Player Black

252129

Uncompromising quality refined with flagship technology. Beautiful styling. High-quality sound worthy of the term “high-end”.

Colour



### PRODUCT DETAILS

#### VRDS Atlas

VRDS (Vibration-Free Rigid Disc-Clamping System) is the core technology of the CD/Super Audio CD transport mechanism that Esoteric has been focusing on since the establishment of the brand. The disc is securely clamped to a turntable of the same diameter for rotation, thoroughly eliminating unwanted vibrations from the disc itself and the mechanism. Servo current is minimized by correcting disc warpage with the turntable and greatly improving the relative optical axis accuracy between the optical pickup and the disc pit surface. With these features, disc read errors are significantly reduced and achieves superior sound quality.

#### New VRDS-ATLAS “ATLAS 05”

The VRDS mechanism continues to evolve. The biggest highlight in its illustrious history is the new VRDS-ATLAS platform, which boasts the highest level of perfection and sound quality. The K-05XD edition is equipped with the newly designed VRDS-ATLAS “ATLAS 05”. The ATLAS 05 is based on the same design architecture of the “VRDS-Reference” mechanism employed in Grandioso models, but exclusively customized for the K-05XD.

#### ATLAS 05 – Mechanical construction

The core of the ATLAS 05 transport mechanism is a hybrid turntable made of high-precision aluminum and polycarbonate materials. This beautiful design, inspired by a master tape reel, and its superior vibration control capability, embody the identity of the 05 Series Super Audio CD Players, which have a history of dating back more than 15 years, to the birth of the P-05.

Polycarbonate, the same material as the disc, contributes to natural sound quality with little coloration, and the hybridization with spoke-shaped aluminum effectively disperses vibration modes associated with high-speed rotation, successfully minimizing rotation noise and rotation inertia, while the bridge section supporting the turntable is larger and wider than that of the VRDS-NEO, and is made of a machined aluminum block 10 mm thick with a beautiful hairline finish, while its high rigidity and heavy weight construction effectively eliminate vibrations that affect sound quality.

#### Wide and low center of gravity design

Key to the VRDS-ATLAS design concept is mechanical grounding technology, which dampens vibrations more efficiently. The entire mechanism is designed with a wide and low profile design to achieve a low center of gravity. At the same time, by mounting the turntable drive motor on the underside of the turntable, the path for vibration to be grounded is greatly shortened and mechanical noise is reduced. The tray is minimally hollowed out to increase rigidity, and a rubber stopper prevents resonance when

the tray is stored.

### **Chassis Construction and Component Layout**

With the complete renewal of the 05 series, the chassis has undergone the most significant evolution in terms of appearance. To accommodate a larger ATLAS mechanism than the VRDS-NEO and to further enhance the scale of the circuitry, a dual layer large chassis is employed instead of the previous slim, single-layer chassis, while maintaining the same depth. The VRDS-ATLAS transport mechanism is center-placed and rigidly fixed to a 5mm-thick steel bottom chassis via a 2mm-thick steel base plate, while the entire chassis is then supported at three points by a unique pin-point foot (Japan Patent No. 4075477 and 3778108).

Like upper class models, the bottom chassis has been laser cut with slits to effectively disperse and suppress vibrations from the rotating mechanism. Inside the dual layer chassis, audio circuit boards are mainly placed on the upper layer and power supply circuits and transformers on the lower layer to prevent magnetic flux leakage and vibration, and to minimize power supply wiring to refine the pure tone quality.

### **Semi-floating top panel**

The semi-floating structure of the top panel, which is not tightened with screws, brings out extensive and open sound.

### **Master Sound Discrete DAC**

By assembling circuits with discrete components that have been carefully examined, we aim to perfectly reproduce the “vibrancy” and “energy” of music, which cannot be achieved with integrated chips. The pride of Esoteric’s top engineering team has been put to the test in the Master Sound Discrete DAC, a discrete D/A converter designed completely in-house.

### **Luxurious material input and massive current output capability**

The Master Sound Discrete DAC was first installed in the Grandioso D1X and was highly acclaimed for its live sound. On the K-05XD, it condenses the essence of the Grandioso K1X version, but with a simplified circuit configuration that takes the 05 series to a new horizon. The DAC consists of 16 elements per channel, and each element consists of components such as clock drivers, logic circuits, capacitors, and resistors, while each key component is independent of each other, and the luxurious configuration is a direct extension of the philosophy of the high-end models, so that all the energy of the music is output in its purest form.

### **High performance digital processing**

Employing a proprietary Delta-Sigma modulator supporting 64bit/512Fs, the K-05XD supports the latest formats including DSD 22.5MHz playback. The FPGA digital processing algorithms for optimal playback of DSD and PCM, respectively, are dedicated algorithms developed for the Master Sound Discrete DAC.

### **Sound quality corroborated by advanced quality control**

In discrete DACs, where component tolerances directly affect calculation accuracy, a high level of expertise and quality control is required in the manufacturing of electronic boards. Esoteric's own factory boasts world-class board mounting technology, including soldering in an oxygen-free furnace in a clean room with medical quality. The high quality of Master Sound Discrete DACs is supported by technology cultivated in the manufacturing experience of electronic circuit boards for audio, medical, aerospace, and defense applications.

### **Esoteric-HCLD, a unique output buffer circuit**

The Esoteric-HCLD (High Current Line Driver) output buffer amplifier employs a device that boasts an astonishingly high-speed slew rate of 2,000V/s, which represents the response speed. The most important current transmission capability and speed for analog output circuits are pursued to the limit, reproducing the reality of music with breathtaking dynamic range.

### **ES-Link Analog, a high-quality sound current transmission**

In addition to line connections (XLR, RCA), ES-Link Analog, Esoteric's original current transmission

method, is employed for connection to an amplifier. By taking advantage of the powerful current supply capability of the HCLD buffer circuit, the signal is less affected by the impedance of the signal path and can be transmitted powerfully, maximizing the potential of the compatible equipment.

#### **ES-Link Analog – Esoteric’s unique current transmission**

Esoteric’s unique current transmission system “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.

#### **Powerful power supply, a key to sound quality**

With the all-new design platform, the power supply section is enhanced to more than twice the circuit scale of the previous model, adding even more punch and depth to the tone. A total of two high-capacity toroidal transformers are installed to provide independent digital and analog power supplies. In addition, a separate EI core power transformer dedicated to the control section provides lower noise and purer reproduction capability.

#### **New low feedback DC regulator/supercapacitor**

The power supply regulator is a discrete configuration that does not use integrated circuits in key parts, and employs a "Low-feedback DC regulator" that minimizes the amount of feedback to achieve a powerful and open sound. In addition, the K-05XD is equipped with a total of 16 supercapacitors (total capacitance: 250,000F = 0.25F). By increasing the capacitance of the power supply, the resolution of the low range has been greatly improved.

#### **USB Audio and MQA processing**

Equipped with various digital input terminals including USB for DSD 22.5MHz and asynchronous transmission, the K-05XD behaves as a D/A converter unit. This Player includes MQA technology, which enables you to play back MQA-CD and MQA audio files and streams, delivering the sound of the original master recording.

#### **Master Sound Discrete Clock - for Digital Player**

It is no exaggeration to say that the clock circuit is the biggest key to high sound quality in digital playback. Esoteric focused on crystal oscillator circuits, which had been previously packaged as general-purpose modules in ICs, and completed a unique manufactured clock module, the “Master Sound Discrete Clock” for the Grandioso G1X, our flagship master clock generator.

The G1X’s unique discrete circuitry has earned high acclaim for its superior musical expressiveness and has caused a stir in the world of clocks, which have traditionally been described only in terms of accuracy.

The “Master Sound Discrete Clock for Digital Player” first employed here in the K-05XD, applies this discrete circuit design concept to the internal clock of a digital player, exclusively. 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 a general-purpose clock IC. The K-05XD also works with an external master clock generator to upgrade the sound quality by synchronizing the internal circuits to an even higher precision 10MHz clock.

## **Specs**

### **Product Attributes**

EAN: 4907034224289

Manufacturer number: K-05XD B

Product weight: 34.2 kilograms

Dimensions and Weight

Product height: 16.1  
Product width: 44.5  
Product length: 35.7  
Product weight: 20.7

Audio Outputs

Optical/Toslink: 1  
BNC: 1  
USB-B: 1

Audio Inputs

Optical/Toslink: 1  
BNC: 1  
USB-B: 1

Control Methods

Controls: RS-232  
Remote Control  
On Device