

## VCXO high-precision clock

A high-precision VCXO (voltage controlled crystal oscillator) of +/- 3 ppm (\*) is used for the internal clock circuit. A dedicated stabilized power supply circuit improves the stability of the clock. The high precision audio clock signal generated by the VCXO is directly delivered to the dual mono D/A converter. This enables higher quality reproduction, substantially reducing jitter.

\* Factory setting

## Clock sync function supporting 10 MHz to synchronize with an external device

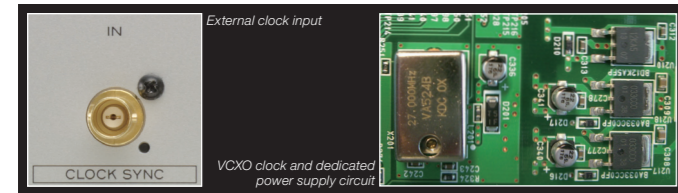
This function allows upgrading to a higher quality sound system by connecting the unit to a high precision master clock generator when playing back Super Audio CD/CD. A 10 MHz clock is supported in addition to WORD clock (44.1kHz to 176.4kHz). When the unit is in D/A converter mode, asynchronous USB connection supports clock sync function.

## Supports "Direct Master Clock Link" with an external clock generator

"Direct Master Clock Link" is our new technology originally developed for the P-02/D-02 combo for more precise, direct clocking. With this technology, the D/A converter simply uses ultra high precision "master clock (22.5792MHz)" supplied from external master clock, without a need of "sync" its operation to the master. This system enables shorter-path clocking by bypassing internal PLL circuit, and delivers more precise, focused imaging

## Excellent usability

- 32-bit precision digital attenuator function
- User selectable output level adjustment of the XLR audio output (0 dB/+6 dB)
- XLR pin assignment can be changed to match external devices (Pin 2 Hot or Pin 3 Hot)



## Specifications

### Compatible disc types (playback)

Super Audio CD, CD (including CD-R and CD-RW)

### Analog audio outputs

Connectors	XLR connector (2ch) × 1, RCA connector (2ch) × 1
Output impedance	XLR : 100 Ω, RCA : 25 Ω
Maximum output level (1kHz, full-scale, into 10 kΩ)	RCA : 2.45 Vrms, XLR (set to 0dB) : 2.45 Vrms
Frequency response	5Hz to 55kHz (-3dB)
S/N ratio	115 dB
Total harmonic distortion	0.0015% (1kHz)

### Digital audio output

RCA connector ×1	0.5 Vp-p (into 75 Ω)
Optical digital connector ×1	-15 to -21 dBm

### Digital audio input

RCA connector × 1 (input impedance 75 Ω)	0.5 Vp-p
Optical digital connector ×1	-24.0 to -14.5 dBm peak
USB-B connector	USB2.0 standard

### Clock sync input format

Connector	BNC
Supported input frequencies (±15 ppm)	CD/SACD : 44.1, 88.2, 176.4 kHz, 10/22.5792 MHz USB (HS_2) input : 44.1, 48, 88.2, 96, 176.4, 192 kHz, 10, 22.5792, 24.576 MHz
Input impedance	75 Ω
Input level	Rectangle wave : equivalent to TTL levels, Sine wave : 0.5 to 1.0 Vrms (50 to 75 Ω)

### General

Power supply	AC 230 V, 50 Hz AC 120 V, 60 Hz AC 220 V, 60 Hz
Power consumption	13 W
External dimensions(W x H x D, including protrusions)	445 mm x 131 mm x 358 mm (17 1/2" x 5 1/8" x 14 1/8")
Weight	approx. 14 kg (30 7/8 lb)
Included accessories	Power cord set × 1 Remote control (RC-1251) × 1 Batteries for remote control (AA) × 2 Owner's manual × 1 Warranty card × 1

- This product is available in three different power supply variations shown in the chart above. Make sure that the voltage shown on the rear panel matches the AC line voltage in your area.
- The shape of the AC inlet and plug of the supplied power cord depends on the voltage rating and destination country.



The unit is supplied with remote controller, main housing machined from solid aluminum



# ESOTERIC

# Super Audio CD Player K-05



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Please note that Esoteric products are available at limited distributors in respective countries.  
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International Audio Society of JAPAN

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ES  
K

*“Conveying emotive expression of music to listeners as it was produced without exaggeration”.*

*The “K-05” is built with the philosophy that an integrated Super Audio CD player of the ESOTERIC’s K series will satisfy the highest criteria of music lovers. These features include VRDS-NEO “VMK-5” Super Audio CD transport mechanism with ESOTERIC’s established reputation, a 32-bit dual mono D/A converter combining multiple DAC circuits, high sampling rate digital inputs and USB input supporting asynchronous transmission at 24 bits/192 kHz as well as a cutting edge high-precision clock circuit.*



VRDS-NEO VMK-5J

# Super Audio CD/CD Player **K-05**



## VRDS-NEO VMK-5

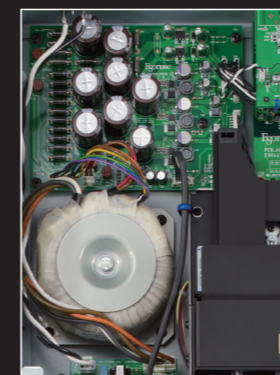
ESOTERIC’s proprietary VRDS-NEO transport mechanism VMK-5, incorporated in this new model, improves the accuracy of data acquisition by using a high-precision turntable that corrects disc surface shake during disc rotation.

This hybrid turntable is made from high-precision aluminum and polycarbonate material helping to minimize rotational inertia. A hybrid structure, combining high rigidity BMC (Bulk Molding Compound) and steel is used for the turntable bridge which significantly attenuates rotational vibration. The spindle motor improves the accuracy of reading signals through advanced servo control using motor speed feedback loop circuit.

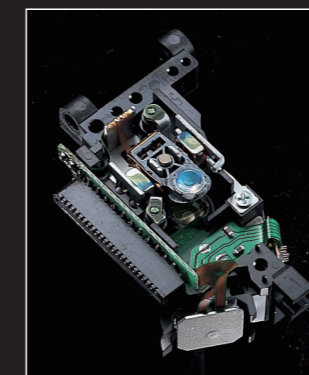
ESOTERIC’s proprietary technology, the differential gear system is used for mechanical operations from tray opening and closing to disc clamping. This gear system provides exceptionally smooth disc loading operation (Patent No.2861798 owned by TEAC Corporation.).

## Axial sliding pick-up designed to prevent optical axis tilting

The same axial sliding pick-up assembly, used in the flagship “K” series model K-01, is incorporated in the heart of the data acquisition section. As the lens moves, the laser optical axis is always positioned in a vertical direction, ensuring a highly accurate reading of the recorded material.



Power supply circuits



Axial sliding pick-up assembly



24 bit / 192kHz digital inputs x3

## Dual mono D/A converters based on the concept of the K-01

The analog output circuit of the D/A converter has both high end resolution as well as natural and musical texture. Asahi Kasei’s top-end 32-bit DAC device “AK4399” is used. This component provides the heart that drives the expressive power of ESOTERIC’s “K” series products. A parallel/differential output where two circuits combine per channel provides high linearity and low noise. The converters and analog output circuits, which make up a fully dual mono configuration, are located on the left and right hand sides of the board, completely separated from the digital signal processing circuit. This layout allows an excellent channel separation and high-quality playback with rich localization and sonic depth.

## High quality buffer circuits

For the final stage of analog audio output (buffer amplifier), New JRC’s high end audio operational amplifier MUSES is used. These buffer circuits are laid out symmetrically for each of the hot/cold signal lines to construct a fully balanced configuration. When the RCA audio output is selected, the buffer amplifier is switched to parallel configuration. These enhancements provide the best sound quality for each of the balanced and unbalanced audio signal outputs.

## Large capacity toroidal transformer that handle high speed transients with ease

Large toroidal transformer features low noise, low distortion, and high current with very high efficiency. The strong power circuits, combined with very large power capacitors, supply stable and clean power to all circuits.

## Multiple D/D functions to suit multiple sources

In addition to playback at the original sample rate and word length, extensive D/D conversion modes for PCM formats include PCM up conversion to x 2 or x 4 from the original sampling frequency, using the “RDOT” algorithm, as well as PCM > DSD conversion to convert the PCM audio signal to DSD format similar to Super Audio CD. Super Audio CD is directly converted into analog signals and played back.

## Digital filter “Off” mode and four types of digital filters

The K-05 features Digital Filter Off mode recommended by ESOTERIC, which is characterized by a smooth and subtle sound quality. The model also features four types of digital filters for PCM signal processing. In addition to two types of FIR (Finite Impulse Response) digital filters, two types of short delay digital filters (Referred to as “apodizing” filters) are installed. These filters eliminate the pre-echo in the impulse waveform to

reproduce audio signal as a more natural and precise sound.

## Three systems of high sampling rate digital inputs

The K-05 features three systems of digital inputs (USB, coaxial and optical), and these digital inputs support high-sampling-rate sources up to 24 bit / 192kHz.

## USB input supports asynchronous transmission up to 24 bit / 192kHz

The USB input supports asynchronous transmission up to 24 bit / 192kHz using the ESOTERIC’s original driver software for PC or MAC. Additionally, a USB isolator, which prevents noise from entering from external sources such as PC or MAC, allows high quality reproduction of studio master quality sources.