

ESOTERIC

Super Audio CD Player K-07



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

The "K-07" 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 "VOSP" Super Audio CD transport mechanism, 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.



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VOSP Mechanism

VOSP (Vertically-aligned Optical Stability Platform), features a specially designed shaft-mounted laser pickup assembly. This pickup design ensures that the laser optical axis is always at the center of the data track for highly accurate data reading. This pickup system is widely used in the ESOTERIC SACD transports and players including the reference level products, the P-02 and the K-01. The VOSP mechanism is rigidly clamped by a steel plate and a large diameter stabilizer made of 8mm-thick steel for superior anti-resonance and anti-vibration properties.

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 32-bit DAC device "AK4392" 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 handles 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 x2 or x4 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-07 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-07 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.

VCXO high-precision clock

A high-precision VCXO (voltage controlled crystal oscillator) 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.

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

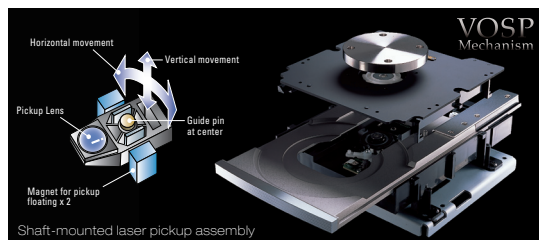
This function allows upgrading to a higher quality sound system by connecting the unit to a high precision master clock generator when playing back Super Audio CD/CD. A 10 MHz clock is supported in addition to WORD clock (44.1kHz to 176.4kHz). When the unit is in D/A converter mode, asynchronous USB 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) x 1, RCA connector (2ch) x 1 **Output impedance** XLR : 100 Ω, RCA : 25 Ω **Maximum output level** (1 kHz, full-scale, into 10 kΩ) RCA: 2.45 Vrms, XLR (set to 0 dB): 2.45 Vrms **Frequency response** 5 Hz to 55 kHz (-3 dB) **S/N ratio** 115dB **Total harmonic distortion** 0.0015% (1 kHz) **Digital audio output** RCA connector x 1 0.5 Vp-p (into 75 Ω) **Optical digital connector** x 1 -24.0 to -14.5dBm peak **Digital audio input** RCA connector x 1 (input impedance 75 Ω) 0.5 Vp-p **Optical digital connector** x 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, 100 kHz / 10, 22.5792 MHz, USB (HS_2) input: 44.1, 48, 88.2, 96, 176.4, 100, 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** 12W **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 x 1, Remote control (RC-1301) x 1, Batteries for remote control (AAA) x 2, Owner's manual x 1, Warranty card x 1

- This product is available in three different power supply variations shown in the specification section 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.



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