



C-03Xs Specifications

Analog Audio Inputs

Connectors	RCA x 3 pairs (RCA 2 can be used as an AV pre-input) / XLR x 2 pairs
Input Impedance	LINE : 10kΩ
Input Sensitivity	510mV (at rated output) / 200mV (at 800mV output)
Maximum Input Level	12V

Analog Audio Outputs

Connectors	RCA x 2 pairs / XLR x 2 pairs
Output Impedance	47Ω (RCA) / 100Ω (XLR)
Total Harmonic Distortion	0.0006% (RCA) / 0.0004% (XLR)
Frequency Response	1Hz - 200kHz (-3dB) / 3Hz - 50kHz (-0.2dB)
Signal-to-Noise Ratio (S/N)	116dB (2V input, A-weighted)
Gain	+12dB
Rated Output	2V
Maximum Output Level	7.5V (RCA output, 1kHz, 0.003%) / 15V (XLR output, 1kHz, 0.003%)

General

Power Supply	230V AC, 50Hz / 120V AC, 60Hz / 220V AC, 60Hz
Power Consumption	19W
External Dimensions (WxHxD) (including protrusions)	445 x 162 x 457mm (17 5/8 x 6 1/2 x 18")
Weight	28 kg (61 3/4 lb)

Included Accessories

Power cord x 1 / Remote control (RC-1301) x 1 / Batteries for remote control (AAA) x 2
Felt pads x 4 / Owner's manual x 1 / Warranty card x 1

Auxiliary Phono Modules

MM/MC-compliant phono module boards are also available.

- Independent L & R boards designed in dual mono configuration.
- Can be configured for remote control operation.
- High-quality 4-layer board design with optimized power rectification.



Main Specifications

• Gain: MM: 52dB, MC: 72dB • Input Sensitivity: MM: 5mV, MC: 0.5mV • S/N Ratio: MM: 91dB, MC: 76dB • Input Impedance: MM: 47kΩ, MC: 20/100/300Ω, selectable • RCA3: Distance between L & R input terminals: 22.5cm

* Installation only available at authorized Esoteric service centers. Please direct enquiries to your nearest Esoteric dealer. Owing to the specialized requirements of the installation procedure, phono module boards cannot be sold separately. Following installation, the RCA3 jacks located on the rear panel of the C-03Xs will be converted to phono-only input terminals, and line inputs limited to 2 pairs of RCA jacks and 2 pairs of XLR jacks.

Upgrade Service

An upgrade service is available to owners of the C-03X Stereo Linestage Preamp which allows the new Xs edition functions and related parts to be retrofitted to the earlier model.

Applicable Model: C-03X

Contents: Addition of EDLC (super capacitor) array and exchange of power supply boards for sound quality upgrade to equivalent of C-03Xs.



S-03 Specifications

Rated Power Output	145W + 145W (8Ω) 290W + 290W (4Ω)
Maximum Power Output	580W + 580W (2Ω)
Frequency Response	5Hz - 100kHz (+0dB, -3dB, 8Ω)
Signal-to-Noise Ratio (S/N)	115dB (HF-A)
Total Harmonic Distortion	0.003% (1kHz, 8Ω, 145W)
Gain	29dB
Damping Factor	1000
Analog Audio Input Jacks	RCA x 1 pair / XLR x 1 pair
Input Impedance	22kΩ (RCA) / 44kΩ (XLR)
General	
Power Supply	230V AC, 50Hz / 120V AC, 60Hz / 220V AC, 60Hz
Power Consumption	440W (no signal: 160W)
External Dimensions (WxHxD) (Including protrusions)	445 x 221.5 x 476mm (17 5/8 x 8 3/4 x 18 3/4")
Weight	48kg (105 7/8 lb)

Included Accessories

Power cord x 1 / Felt pads x 4 / Owner's manual x 1 / Warranty card x 1

- These products are made available in three different power supply variations, as 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.
- Specifications and appearance are subject to change without notice.
- Weight and dimensions are approximate.



ESOTERIC

Stereo Linestage Preamp **C-03Xs**
Stereo Power Amplifier **S-03**



PROUDLY MADE IN TOKYO

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MasterSound Works

Audio expression, symphonic beauty, artistic passion, the concert hall's spatial feel, the excitement of the audience. Esoteric's Master Sound Works is an audio product concept that recreates all of the music information in original master recordings with the most state-of-the-art technology available today.

A Legacy of Consummate Purity and Perfection

Esoteric's new C-03Xs Preamplifier and S-03 Power Amplifier carry on the refinement of the 02 Series' superb qualities of musical reproduction, which stand as a Grandioso legacy.

Their minimalist approach to the consummate purity of sound returns to the very source of audio component design to give birth to a rich new range of musical experience.

Hand-assembled one-by-one in Esoteric's Tokyo factory, each unit combines the most advanced technologies with an unprecedented level of craftsmanship to give life to a preeminent philosophy of sound appreciation, from which a timeless new standard is born.



Stereo Power Amplifier
S-03

Stereo Linestage Preamplifier
C-03Xs

Stereo Linestage Preamp

C-03Xs

At the heart of every fine system, it is the preamplifier that determines one's ideal sound. Applying Esoteric's wealth of knowledge and technology, the C-03Xs carries forward in continuous succession the Grandioso lineage of high fidelity and breathtaking powers of musical expression, drawing on the refined sensitivities of musicians and engineers alike to transcend the boundaries of sound reproduction quality.



Top



Bottom



Independent Dual Mono Design

The C-03Xs' DC power supply features a fully independent dual mono design that completely eliminates inter-channel interference. Its dedicated array of power transformers for each channel also blocks noise from the power line, enabling a pure, naturally amplified sound. Grandioso technology reveals itself in such detailed new design refinements as its independent left and right channel power rectifier circuits and its carefully laid out power supply circuit boards, which further contribute to the C-03Xs' superb sound quality.



Fully-Balanced Configuration Provides Excellent S/N Ratio

The preamplifier's source signal is first received by dedicated buffer amplifiers integrated with each input, from which the circuit configuration is balanced at each stage. Through the elimination of common-mode noise and reductions in circuit impedance, a pure, noise-free signal is fed to the gain amplifiers via the shortest path possible, for an exceptionally high signal-to-noise ratio.

ESOTERIC-QVCS

The C-03Xs' Esoteric-QVCS* volume control employs four precision switched resistor ladder networks, which change in unison as the volume knob is rotated. This arrangement allows the signal paths for the left and right channels and their positive and negative phases to be kept totally independent and as short as possible. Consequently the sound has superb clarity, excellent channel separation and highly accurate phase characteristics. The elimination of audio board wiring to the volume control further contributes to a reduced signal path, while preventing degradation of sound quality and helping to maintain the low distortion one would expect of a reference model.

* QVCS = Quad Volume Control System

Ultra-Low-Noise Logic Control

Built into the front panel, the logic control section is totally isolated, both physically and electronically, from the preamplifier module by way of an optocoupler. To assure low-noise operation, it also shuts completely down when not in actual operation, thus eliminating all possible influence on the C-03Xs' audio circuitry.

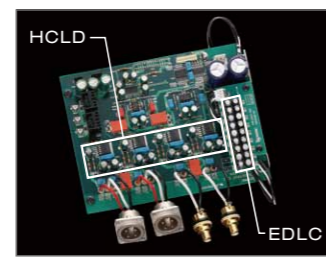
Highly Responsive Low-Noise, Low-Impedance Power Circuit

Three independent high-capacity power transformers, coupled with large banks of reservoir capacitors, provide power supply circuits that have exceptionally low output impedances and very clean and stable outputs. High-speed rectifier circuits further enhance resolution and the signal-to-noise ratio for significant improvements in sound quality.

Esoteric-HCLD* Output Buffer Boosts Current Transmission While EDLC* Power Supply Ensures High Stability

As a line driver, the preamplifier must be able to fully drive the power amplifiers and faithfully convey the music signal's wide dynamic range. The key to achieving this is a circuit that provides both high current drive capability and high speed. The C-03Xs' output buffer circuitry delivers an exceptionally high current drive coupled with a high slew rate of 2,000V/μs for sharp response. Independent buffer circuits for each output and symmetrical circuitry for both the hot and cold phases of the XLR outputs maximize instantaneous output current capability.

Located closest to the output buffer circuitry, the EDLC* Super Capacitor array, originally developed for the Grandioso C1, was adapted as a highly

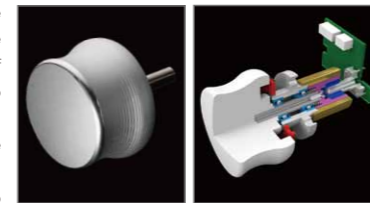


stable power source. Its compact physical size belies the extraordinary 100,000μF (0.1F) capacity it provides each channel, for high levels of instantaneous output power and strong, steady bass reproduction. Integrating these two technologies, the C-03Xs preserves musical dynamics that would otherwise be lost if smaller current transmission levels were employed between the pre and power amplifiers, allowing it to reproduce a breathtaking level of audio reality.

*HCLD = High Current Line Driver *EDLC = Electric Double-Layer Capacitor

High-Precision Ball Bearing Controls

The C-03Xs' elegant volume and input selector knobs are machined from solid blocks of aluminum. Like the Grandioso C1 and the C-02X, their control shafts use a VRDS drive mechanism bearing system for precise rotation with no mechanical play. Rotational torque has also been fine-tuned to provide a luxurious analog control feel in keeping with this high-end preamplifier.

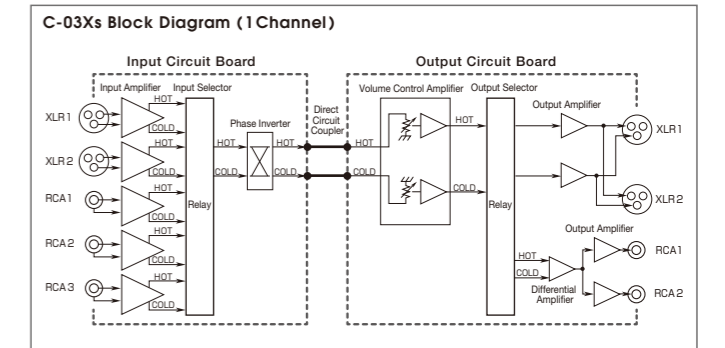


Other Important Features

- Five preset volume curves permit selection of the most comfortable operating feel.
- Individual input gain adjustability helps minimize differences in source volumes. (Range: ±18dB; 0.5dB steps)
- Adjustable left and right channel volume balance control. (Range: ±6dB; 0.5dB steps)
- Selectable phase inversion can be individually set for each source.
- RCA2 terminals permit switching between normal line output and AV-through output for systems operated in both AV surround and pure two-channel modes.
- Remote controller features high-quality aluminum finish. Can also be used to operate any of Esoteric's superb line of SACD players.
- Source component name displays can be programmed using the remote controller.
- Also equipped with dimmer, mute, and auto-display-off functions.

Highly Rigid 5-Cell Chassis Construction Inherited from the C-02X

Chassis construction plays a vital role in quality sound reproduction, and the C-03Xs is built on a 02 Series chassis that is larger and more robust than any 03 Series preamplifier's chassis till now. Its optimized design utilizes a 2-layer 5-cell configuration that houses each circuit block in its own compartment. This provides more space for the layout of components than available in previous 03 Series preamplifiers, realizing a shorter signal path that helps minimize inter-circuit interference. The chassis' 5mm-thick steel bottom plate and thick aluminum exterior panels are supported at 4 points by milled steel isolation feet, which enhance chassis rigidity while effectively suppressing resonant vibration.

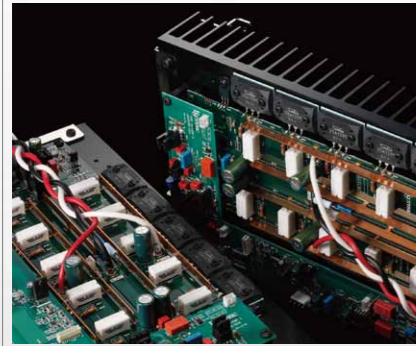


Stereo Power Amplifier

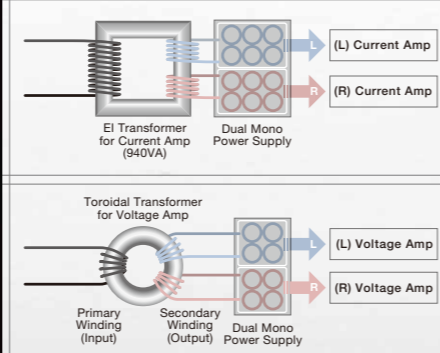
S-03

Concealing the overwhelming potential of Esoteric's premier Monoblock M1, and Stereo S1 and S-02 amplifiers, the S-03 inherits all the knowledge and technology embodied in the core principles of Esoteric power amplifier development, and expands the scope of Grandioso lineage into new realms of listening enjoyment. Offering a range of power and dynamism comparable to the finest high-end components, the S-03 imbues music with ever more vivid sensations of being truly live.

Power Amplifier Modules



2x2 Dual Mono Power Supply



The Sound of Life Unleashed — High Power Creates Spaciousness and Dynamism

The indescribable feeling of spaciousness that comes when sound is unleashed—and the sense that the music you're hearing is truly live—can only be generated by amplifiers that offer abundant power to properly drive the loudspeakers. Esoteric's amplifiers use the finest components and massive power supplies to achieve the high output power this demands. The new S-03 Power Amplifier extends the legacy of Esoteric's premier Grandioso M1, setting free every nuance of sound, and imparting to music all the vibrancy and richness of life.

Exceptional Power Linearity for Outstanding Dynamics

Loudspeaker impedance can vary widely depending on the frequencies being reproduced. The fast attack of deep bass imposes demanding loads on an amplifier, requiring not only continuous high power output, but also repeated bursts of peak power. Unless the amplifier's power supply is capable of consistently meeting these demands, musical dynamics will be compromised. The S-03's generous power supply capacity enables this nominally rated 145W into 8 ohms amplifier to deliver an impressive 580W into 2 ohms—a testament to the linearity of a power supply that faithfully reproduces the full spectrum of sound dynamics at all volume levels.

2x2 Dual Mono Power Supply Provides Stereo Output with Monoblock Thinking

The main feature differentiating Monoblock and stereo amplifiers is the configuration of their power supplies. In conventional stereo amplifier designs, one power supply is shared by both channels, since space and efficiency limitations tend to preclude a dual mono configuration. Starting with our flagship Grandioso models, Esoteric's stereo power amplifiers have consistently featured a unique 2x2 Dual Mono power supply design which separates the left and right channels of the front and drive stages into four independent dual mono sections. By isolating the power supplies for the front (voltage amplification) stage, which handles weaker input signal, from those for the drive (current amplification) stage, which much contend with huge current fluctuations, the

S-03 effectively realizes more clearly focused details and breathtaking dynamics, even when driven to full capacity. Moreover, by optimizing this independent dual mono configuration—from the secondary windings of the transformers to the rectifier circuit—the S-03 is also able to achieve clear channel separation on par with the finest Monoblock amplifiers.

Large-Capacity Custom Power Transformer — The Heart of the Finest Power Amplifiers



Class-leading 2x2 dual mono power supplies are only capable of revealing their true worth by way of the investment of enormous resources. A robust power supply is critical to an amplifier's ability to deliver high power in a linear manner, and this is especially true for the power transformer. Therefore, particular attention was paid to material selection, core

size and even the mounting of the S-03's custom-made EI-type power transformer. Popular among avid audiophiles, this transformer was selected for the full-bodied, high-quality bass it provides. To preserve sound purity, this large-core 940VA transformer features separate windings for left and right channels, and is securely mounted on a rigid, 5mm-thick steel base plate. Three parallel 4,700µF capacitors per channel shorten charge and discharge times, and provide a tighter, faster sound. Power supply wiring uses heavy-duty cables fitted with crimp terminals, which are tightly bolted together to reduce impedance to the lowest levels possible.

Breathtaking Speaker-Driving Power Ensures Accurate Damping for Large Woofers

Optimizing the S-03's loudspeaker drive capability required reducing the output impedance to an absolute minimum. To achieve this, a total of nine bus bars were used for each channel, while the output coil was



eliminated. Strenuous efforts were also made to simplify the circuit design and widen its range, resulting in an exceptional damping factor of 1,000, considered a guideline for woofer drive capability. Even large-diameter woofers are provided with accurate damping for precise sound reproduction, giving an expansive feel across a wide range that reaches to even the lowest frequencies.

Balanced Input Stage Configuration Enables High-Clarity Signal Amplification

The S-03's audio input signal enters through discrete balanced input buffer amplifiers, and is relayed to the amplification stage by way of a balanced low-impedance signal path. An outstanding dynamic range is assured by clean, noise-free signal amplification that provides the fine sensitivity needed to reproduce nuanced gradations between musical crescendos and silence.

Large Bipolar LAPT Transistors Deliver 34 Amperes of Instantaneous Output Current

The S-03's large bipolar LAPT* transistors are twice the size of more commonly used power transistors. They also boast an exceptional continuous current capacity of 17 amps and an instantaneous peak capacity of 34 amps. In addition, they offer superior high-frequency characteristics that contribute to accurate reproduction of subtle tonal qualities.

*LAPT=Linear Amplified Power Transistor

3-Stage Darlington Circuit with 5 Parallel Push-Pull Configuration

The power amplifier module uses bipolar LAPT transistors in a three-stage Darlington configuration with five parallel push-pull sections.

To realize the superior high-frequency characteristics of these devices, a simplified amplifier circuit was developed to reduce the number of components and parallel elements.

LIDSC (Low Impedance Drive Stage Coupling) Provides Loudspeaker Drive Capability Approaching That of the M1

The S-03's unique LIDSC circuit reduces the drive section's second stage to final stage output impedance while enhancing current supply capability. This makes it possible to maximize amplitude within the available power supply voltage while reducing distortion, and so give this compact Stereo Power Amplifier a loudspeaker drive capability approaching that of the Monoblock M1.

Minimized Negative Feedback (NFB) For a More Energetic and Natural Sound

Simplifying the amplifier circuitry and reducing the previous stage's gain results in greatly reduced Negative Feedback (NFB) for a more natural and life-like sound.

High-Precision Chassis Construction Optimizes Vibration Suppression

Maintaining Esoteric's traditional dual-level configuration, the S-03's chassis features a 2mm-thick sheet steel internal framework that segregates circuit blocks into specialized compartments for the shortest signal path possible. This compartmentalized internal construction is built on a rigid base of 5mm-thick steel and enclosed by thick aluminum panels. Esoteric's original milled steel isolation feet provide structural rigidity, while eliminating resonances.

