**Stereo Linestage Preamplifier**

**C-03Xs Specifications**

**Analog Audio Inputs**
- RCA x 3 pairs (RCA 2 can be used as an AV pre-input)
- RCA + XLR x 3 pairs
- Input Impedance: 10kΩ (at rated output) / 100kΩ (at 2V output)
- Input Sensitivity: 510mV (at rated output)
- Maximum Input Level: 12V

**Analog Audio Outputs**
- 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 − 20kHz (+0dB, -3dB)
- Gain +12dB
  - Rated Output: 2V
  - Maximum Output Level: 7.5V (RCA output, 1kHz, 0.003%)
  - Maximum Power Output: 580W + 580W (2/8Ω)
  - Frequency Response: 5Hz − 100kHz (+0dB, -3dB, 8/8Ω)
  - Signal-to-Noise Ratio (S/N): 115dB (IHF-A)
  - Total Harmonic Distortion: 0.003% (1kHz, 8/8Ω, 145W)
  - Gain 29dB
  - Damping Factor: 1000

**Upgradable Models**
- C-03Xs: Upgrade service is available for owners of the C-03X Stereo Linestage Preamplifier which allows the new Xs edition functions and related parts to be retrofitted to the earlier model.
- S-03: A new power output module board is available for the S-03 Stereo Power Amplifier.

**Main Specifications**
- Power Supply: 230V AC, 50Hz
- Power Consumption: 19W
- External Dimensions: 445 × 162 × 457mm (including protrusions)
- Weight: 28 kg (61 3/4 lb)

**Included Accessories**
- Power cord × 1
- Remote control (RC-1301) × 1
- Batteries for remote control (AAA) × 2
- Felt pads × 4
- Owner’s manual × 1
- Warranty card × 1

**Note:** These products are made available in three different power supply variations, as shown in the chart above. Please ensure that the voltage shown on the rear panel matches the AC line voltage in your area.

**Specifications and appearance are subject to change without notice.**

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**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, selectable
- RCA3: Distance between L & R input terminals: 22.5cm

**Upgrade Service**

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

**Applicable Model:** C-03Xs

**S-03 Specifications**

**Rated Power Output**
- 145W + 145W (8Ω)
- 290W + 290W (4Ω)

**Maximum Power Output**
- 580W + 580W (2Ω)
- 1160W + 1160W (8Ω)

**Frequency Response**
- 5Hz − 20kHz (8Ω, 0dB, -3dB)

**Signal-to-Noise Ratio (S/N)**
- 115dB (IHF-A)

**Total Harmonic Distortion**
- 0.003% (8Ω, 0dB, 145W)

**Gain**
- 29dB

**Damping Factor**
- 1000

**Analog Audio Inputs**
- RCA × 1 pair / XLR × 1 pair
- Input Impedance: 22kΩ (RCA) / 44kΩ (XLR)

**General**
- Power Supply: 230V AC, 50Hz
- Power Consumption: 440W (no signal: 160W)
- External Dimensions: 445 × 221.5 × 476mm (including protrusions)
- Weight: 48kg (105 7/8 lb)

**Included Accessories**
- Power cord × 1
- Felt pads × 4
- Owner’s manual × 1
- Warranty card × 1

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**Note:** These products are made available in three different power supply variations, as shown in the chart above. Please ensure that the voltage shown on the rear panel matches the AC line voltage in your area.

**Specifications and appearance are subject to change without notice.**

**Weight and dimensions are approximate.**
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 Linestage Preamplifier

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 sensibilities of musicians and engineers alike to transcend the boundaries of sound reproduction quality.

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
This 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 noise 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.

Ultra-Low-Noise Logic Control
Built into the front panel, the logic control section is totally isolated, both physically and electrically, 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 influences on the C-03Xs’ audio circuitry.

Highly Responsive Low-Noise, Low-impedance Power Circuit
These 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.

High-Precision Ball Bearing Controls
The C-03Xs’ elegant volume and Font Selector knobs are machined from solid blocks of aluminum. Like the Grandioso C1 and the C-02X, their control shafts use a VQ5 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 level.
- Individual input gain adjustability helps minimize differences in source volumes.
- Selectable phase inversion can be individually set for each source.
- Remote controller features high-quality aluminum finish. Can also be used to operate any of Esoteric’s Super-Casino SACD players.

Highly Rigid 5-Cell Chassis Construction Inherited from the C-02X
Chassis construction plays as vital a role in quality reproduction, and the C-03Xs is built on a 0.2 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.

Inherited from the C-02X
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EDLC

HCLD

Ultra–Low-Noise Logic Control

Source component name displays can be programmed using the remote controller.

Also equipped with dimmer, muting, and auto-display-off functions.

C-03Xs Block Diagram (1 Channel)
S-03

Stereo Power Amplifier

Concealing the overwhelming potential of Esoteric’s premier Monoblock M1, and Stereo S1 and S-02 amplifiers, the S-03 inheres 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.

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 improves 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 — Power Amplifier Modules

The power amplifier module uses 2+2 Dual Mono Power Supply 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. 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.

Simplifying the amplifier circuitry and reducing the previous stage’s gain and life-like sound. 3-Stage Darlington Circuit with 5 Parallel Push-Pull Configuration

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.

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 molded steel isolation feet provide structural rigidity, while eliminating resonances.

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 2×2 dual mono power supplies are only capable of meeting this requirement 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 audiophiles, this transformer was selected for the full-bodied, high-quality bass it provides. To preserve sound purity, this large-core S40VA transformer features separate windings for left and right channels, and is securely mounted on a rigid, 5mm-thick steel base plate. Three parallel 4,700/uni03BCF 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.

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

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