



ESOTERIC

## S-05 STEREO POWER AMPLIFIER

251812



Witness the birth of an all-new stereo power amplifier, borrowing from the engineering techniques utilized in the Esoteric flagship Grandioso M1X mono block. The new S-05 – a class-A power amplifier thoroughly focused on delivering all of music's unique tonal qualities from a more compact stereo configuration, embracing the philosophy of the Grandioso M1X: "minimal circuitry – maximum output".

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### PRODUCT DETAILS

#### Pure

The S-05 is a Class A stereo power amplifier that is thoroughly focused on the unique tone that can only be expressed by this model. It incorporates many of the development results of the flagship model "Grandioso M1X" to refine its overflowing driving power and pure performance.

#### Vivid

Class A amplifiers are dense with little distortion. This general Class A characteristic alone does not begin to describe the S-05's appeal. Passionate and vivid colors, like a direct-heating tri-tube amplifier. The overwhelmingly high speed sound start-up, backed up by the abundant idling current. Powerful drive capability and open-ended dynamism.... Regardless of the amplification method, the S-05 is a new milestone in Class A amplifiers, a sincere pursuit of what an amplifier should be, and the culmination of ESOTERIC's commitment.

#### Fidelity

With the flagship Grandioso C1X/M1X, ESOTERIC has challenged the limits of fidelity in pre-power transmission and opened up new horizons. ESOTERIC's unique current transmission "ES-LINK Analog" is the ideal method for pre-power transmission, where signal levels are extremely low in actual use.

This Grandioso technology has been carried over to the S-05. Compared to conventional voltage transmission, ES-LINK Analog transmits approximately 100 times more current. Therefore, it is less susceptible to noise, and all the energy of the music is transmitted from the preamplifier to the power supply.

In addition, in principle, the output signal from the preamplifier and the input signal to the power amplifier are not affected by the impedance of the connecting cables, so the output signal from the preamplifier and the input signal to the power amplifier can be kept identical to each other to an extremely high degree.

Dynamics

The power is so overwhelming that its size is unimaginable. The source of this power is ESOTERIC's carefully designed power supply. The power supply is the most important component in realizing a powerful and rich sound stage for the amplifier block, which always requires a large current for Class A operation. Thanks to ESOTERIC's unique power supply design, the S-05 boasts dynamic musical expression that transcends its size.

### **Bare mount over-sized power transformer**

The S-05 uses the maximum capacity that can be installed (940VA EI core transformer). By using a transformer with a much larger capacity than the original product performance, the S-05 is able to follow dynamic changes in current supply extremely well, resulting in a dynamic and open sound. The suppression of transformer vibration also results in the suppression of current flow. For this reason, the transformer is bare-mounted without a case.

### **Power rectification circuit with dual mono configuration**

Unless the sound source is monaural, the left and right music signals are different. The power rectification circuits are not shared by the left and right channels, but are dual mono circuits, which avoid mutual interference between the left and right channels, resulting in clear channel separation and resolution.

### **Multiple block capacitors in parallel**

In the S-05, the rectification system also incorporates the special attention that is unique to this model. The block capacitors are Grandioso grade high quality custom capacitors. Dual mono and parallel configuration of four 10,000F capacitors per channel is used. The rectification operation is time-delayed in parallel to stabilize charge and release, thereby ensuring a large current supply required for Class A operation at all times. Therefore, it can faithfully and agilely follow the dramatic changes in the music signal and fully express its dynamism.

### **Low impedance design**

Critical wiring from the primary side to the power supply section, drive stage, etc., is bolted with extra thick cables. The response of the power supply is maximized by ensuring a low impedance.

### **Less is More**

This may seem a bit surprising considering the weighty appearance of the S-05. However, the signal paths are connected in the shortest possible time, and the circuitry is surprisingly simple. The clear sound quality is supported by the "subtractive aesthetics," so to speak, created by the crystallization of advanced engineering. Class A amplifiers generate a lot of heat, so internal temperature stability is extremely important.

For this reason, we optimized the position and circuitry of the temperature compensation circuit to stabilize the temperature of the entire amplifier block. This contributes to high sound quality because it speeds up the stabilization of the idling current after power-on and allows the amplifier elements to operate at their best characteristics.

The phase compensation circuit is a simple one-pole configuration and the final stage is coil-less, minimizing negative feedback (NFB) and enhancing the dynamism of the music. The minimalist circuit philosophy allows the harmonics (overtones), which are the most important but easily lost in music, to be preserved and rendered in an expressive manner.

### **Depth**

While the circuitry is simple, the S-05 has been thoroughly implemented in a dual monaural configuration from the input stage to the final stage through the use of material resources, eliminating any compromise in the qualitative quality of reproduction.

The components are of the highest class, with a board pattern using 105  $\mu\text{m}$  thick copper foil, and ultra-thick gauge cables with connector connections eliminated as much as possible, all with the boldness and power that is typical of power amplifiers. The eight bass bars in the drive stage are made of luxurious 1.0mm thick high-purity OFC material, and MOS FET switches without mechanical contacts are used in the speaker output section.

With reduced internal impedance, even woofers with large diameters are powerfully gripped, and the drive power effortlessly reaches the limit point of the low frequency range.

## Texture

The S-05 is not only powerful, but also delicately renders the gradations that connect climax and silence. The signal is received by a newly designed balanced amplifier independent of each input system and transmitted in a balanced manner up to the amplification stage to ensure noiselessness and a high degree of amplification stability. FET switches with minimal tonal coloration are used for all switching switches in the audio signal path, including input switching. Selected high-quality components accentuate the tonal texture.

## Versatility

The S-05 offers luxurious functionality befitting a high-end system and can be used in a variety of ways. When paired with the N-05XD network DAC/pre, the S-05 completes a high-end system with only two components in a minimalist style. The ES LINK Analog connection allows you to enjoy a simpler, more refined musical experience without being overwhelmed by the presence of other components. The S-05 can also be linked to the N-05XD for power on/off. The S-05 can be system-up to a mono-block amplifier using two units. Mode switching supports BTL drive for powerful high output, and bi-amp drive for high-quality sound of multi-way speakers with separate HF/LF inputs. Build your dream Class-A amplifier system according to the sound quality and characteristics you seek. The 3.5mm mono mini plug cable for connection is sold separately. Please prepare a separate cable of the length appropriate for your environment.

## BTL mode

When more driving power is required, such as when the efficiency of the speakers to be driven is low, the "BTL mode" deploying two S-05s is recommended. The two built-in amplifier circuits can be bridged to form a high-power 120 W (into 8 ohms) monaural amplifier system, while the balanced drive provides a powerful grip and firm drive for the speaker units.

## Biamp mode

When two S-05 units are deployed and set to "bi-amp mode," the same audio signal is delivered from the output terminals that were L/R in stereo mode. This means that a single unit can be used as a monaural power amplifier with two speaker outputs. The output power is the same as when one S-05 is deployed in normal stereo mode (30W/8), but as shown in the figure, the HF/LF units of the speaker can be driven by separate power amplifier circuits, enabling a more pure sound of a multi-way system speaker. This mode is effective when resolution is more important than driving power.

## Mechanical Perfection

To achieve the one and only design goal of "reproducing the master sound," the S-05 chassis optimally controls all vibrations that affect the sound quality. The S-05's mechanical engineering is like that of a sports car, with the balance between rigidity and flexibility pushed to the limit. The sleek and clean form of the chassis is a testament to its high degree of perfection. For example, the enclosure, which requires rigidity, makes extensive use of aluminum blocks and is thoroughly non-resonant.

On the other hand, the top panel, which needs to be free of vibration for an open sound, has a semi-floating structure, and the isolation feet have a special structure that reduces mechanical stress and enhances sound quality. In addition, the large heat sink of the amplifier block has a special wave shape that disperses the peak resonance of the fins and suppresses resonance.

## Key Features

- Lavish material employment, simple and straight circuit design concept borrowed from the Grandioso M1X
- Finely detailed Class-A sound with super dynamics – an Esoteric's signature tone
- Dual monaural construction in all stages including current smoothing circuit for better channel separation
- Esoteric's proprietary current signal transmission, "ES-Link Analog" delivers music signal with exceptional high power and fidelity.
- High capacity bi-polar 3 parallel push/pull circuit that instantaneously responds to the music signal
- 940VA large EI-core power transformer that responds to dynamic current supply changes with high speed
- Large "Grandioso grade" custom capacitors on each channel (10,000F × 4/ch)
- Balanced input amplifier for stable, noise-free signal transmission
- BTL / Bi-amp mode switch for dual amplifier configuration

- DC Trigger for sequential power ON/OFF with the N-05XD
- Esoteric's unique isolation feet and semi-floating top panel
- Unique shaped heat-sink to minimize its own peak resonance

## Specs

### Product Attributes

EAN:	4907034224265
Manufacturer number:	S-05
Product weight:	34.52 kilograms

### Dimensions and Weight

Product height:	19.1
Product width:	44.5
Product length:	44.4
Product weight:	30.7
Packsize height:	37
Packsize width:	62
Packsize length:	63
Packaged weight:	38.36

### Audio Inputs

RCA:	1
XLR:	1
ES-link analog:	1

### Amplification

Rated output (4):	60 + 60
Rated output (8):	30 + 30
Rated output:	(BTL mode, 8) 120
THD:	0.007
S/N ratio:	102
Speaker impedance:	4-16
Frequency response:	5-100000
Channels:	2
12 volt trigger:	In

### Energy Management

Power consumption:	210-245
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