



ESOTERIC

## S-02 Power Amplifier

156966



Proudly taking its place as a new reference boasting Grandioso lineage, the S-02 utilizes the know-how and technology employed in Esoteric's premier monoblock M1 and stereo S1 power amplifiers to offer generous power and exceptional dynamics that propel musical crescendos to breathtaking heights. The S-02's outstanding performance and unsurpassed clarity allow the listener not only to hear the music, but also to feel the music, by helping to reproduce the emotion that is the essence of an involving musical experience.

### PRODUCT DETAILS

#### **The Sound of Life Unleashed – High Power Creates Spaciousness and Dynamism**

The indescribable feeling of spaciousness that comes when sound is truly 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. Faithfully incorporating the design philosophy of our Monoblock M1 amplifier, the new S-02 sets free every nuance of sound, and imparts 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-02'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.

#### **Large-Capacity Custom Power Transformer – The Heart of the Finest Power Amplifiers**

A robust power supply is critical to an amplifier's ability to deliver high power in a linear manner. This is especially true for the power transformer, so great attention was paid to the material selection, core size and even mounting of the S-02'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-02'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-02'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-02'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-02'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.

### **Independently Powered Voltage Amplifier Stage for Dramatically Improved Resolution**

To prevent large fluctuations in the drive (current amplification) stage from affecting overall sound quality, the preceding voltage amplification stage receives a low level signal from the input stage, and derives its power from a dedicated power supply equipped with its own toroidal power transformer. This isolation ensures a stable supply of power to the voltage amplification stage for greatly enhanced resolution of fine instrument details, even when reproducing full orchestral crescendos.

### **High-Quality Components Selected For Outstanding Characteristics and Sensitivity**

The S-02 employs highly reliable XLR and RCA input connectors, and loudspeaker terminals produced by WBT of Germany. Other high-grade components include low-impedance electrolytic capacitors and transistors featuring superior high-frequency characteristics.

### **High-Precision Chassis Construction Optimizes Vibration Suppression**

Maintaining Esoteric's traditional dual-level configuration, the S-02'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 5mm-thick steel base and enclosed by thick aluminum panels. Esoteric's original pinpoint feet provide a four-point support system that further ensures high structural rigidity, while eliminating resonances.

## **Specifications**

### **Product attributes**

EAN: 4907034219285

Fabrieksnummer:	S-02
Productgewicht:	28.8 kilograms
Pieces per master carton:	1 Piece