



## Specifications

Rated Power Output	150W+150W (8Ω) 300W+300W (4Ω)
Maximum Power Output	600W+600W (2Ω)
Frequency Response	5Hz to 100kHz (+0dB, -3dB, 8Ω)
Signal-to-Noise Ratio (S/N)	115dB (IHF-A)
Total Harmonic Distortion	0.003% (1kHz, 8Ω, 150W)
Gain	29dB
Damping Factor	1000
Analog Audio Input Jacks	RCA x1 pair XLR x1 pair
Power Supply / Power Consumption	European model: 230V AC, 50Hz / 430W (no signal: 150W) USA/Canada model: 120V AC, 60Hz / 430W (no signal: 150W) S. Korea model: 220V AC, 60Hz
External Dimensions (W x H x D)	445 x 221.5 x 497.8mm (17 5/8" x 8 3/4" x 19 5/8") (including protrusions)
Weight	47kg (103 5/8 lb)
Included Accessories	Power cord x 1 / Felt pads x 4 / Power cord support bracket x 1 Power cord support bracket screw x 2 / Owner's manual x 1 / Warranty card x 1

-This product is made available in three different power supply variations 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.



PROUDLY MADE IN TOKYO

# ESOTERIC

ESOTERIC COMPANY

1-47 Ochiai, Tama-shi, Tokyo 206-8530, Japan  
Fax: (042) 356-9240  
[www.esoteric.jp](http://www.esoteric.jp)

Please note that Esoteric products are only available from approved distributors in overseas territories.  
"ESOTERIC" is a trademark of TEAC Corporation, registered in the U.S. and other countries.  
"Grandioso" is a trademark of TEAC Corporation.

©2015 TEAC Corporation. All Rights Reserved. All text, images, graphics and other materials in this catalog are subject to copyright and other intellectual property rights of TEAC Corporation. These materials may not be directly or indirectly published, reproduced, modified or distributed in any medium. Other company names and product names in this document are the trademarks or registered trademarks of their respective owners. Design and specifications are subject to change without notice.



PRINTED IN JAPAN 1213005•TECD-0207

# ESOTERIC

# Grandioso S1

Stereo Power Amplifier



# MasterSoundWorks

Audio expression, symphonic beauty, artistic passion, a concert hall 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.

# To the Summit

Reaching New Heights of Sound and Beauty

ESOTERIC

# Grandioso S1

*Stereo Power Amplifier*

*The origins of Esoteric's new S1 Stereo Power Amplifier lie in an unbounded respect for the deep emotive powers of music.*

*The Grandioso lineage that gave birth to the M1 Monoblock Amplifier now unveils a new standard bearer.*

*Following in the footsteps of our M1 flagship, the new S1 benefits from its knowledge and technology, allowing it to continue in the pursuit of true perfection.*

*Experience majestic symphonies and infinite silence as sound and spirit call to each other. The very existence of the device between them seems to fade into oblivion, no longer noticed by the listener.*

*Without doubt, the new Esoteric S1 Stereo Amplifier defines the true spirit of fine audio, and the realization of the ultimate in musical enjoyment.*



## Design Philosophy

### Music Overflowing With Energy — A Sense of Space That Only High Power Can Achieve

That moment when the sound from your loudspeakers seems to make the audio system disappear before your very eyes is one of the most exhilarating moments of the listening experience. That indescribable sense of spaciousness, the feeling that the music you're hearing is truly live, can only be generated by an amplifier that offers an abundance of power in order to properly drive the loudspeakers.

Employing the finest components, and massive power supplies, enables Esoteric's amplifiers to achieve that high power output. As our new flagship stereo power amplifier, the S1 faithfully incorporates the design philosophy of our Monoblock M1, setting free every nuance of sound, and imparting to music all the vibrancy and richness of life.

### 600W into 2Ω Power Linearity for Outstanding Dynamics

A loudspeaker's impedance can vary widely depending on the frequencies being reproduced. Continuous low bass and repeated fast transients from percussive instruments can impose a very demanding load on the amplifier that can require not only continuous high power outputs, but also repeated bursts of high power. Unless the amplifier's power supply has the capacity to meet these stringent demands and do so consistently, the dynamics of the music will be compromised.

The finest materials and component parts have been used in the construction of the S1's power supply. This enables the S1, which is nominally rated at 150 watts into 8 ohms, to deliver an impressive 600 watts into 2 ohms. This is a testament to the linearity of the S1's power supply, and permits the full spectrum of sound dynamics to be faithfully reproduced at all volume levels.

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

As one of the most important factors in deciding an amplifier's ultimate sound quality, the S1's robust power supply plays a critical role in its ability to deliver high power in a linear manner. The power supply's large 2,180VA toroidal transformer provides the foundation for the S1's exceptional power output. With the knowledge that an amplifier's sound quality is ultimately determined by the quality of its power transformer, the S1 employs a custom power transformer that demonstrates Esoteric's highly developed expertise in material selection, core size and even mounting technique. To preserve the purity of the sound, separate windings are used for the left and right channels, and the transformer is securely mounted on a rigid, 5mm-thick steel base plate.

The transformer is not fitted with a cover in order to avoid any degradation in sound quality, however slight, that this might cause. Three parallel rows of capacitors totaling 4,700μF per channel shorten charge and discharge times, and provide a tighter and faster sound. The power supply wiring employs heavy-duty cable, and to reduce impedances to the lowest level possible, rather than use conventional connectors, joints are made using crimp terminals that are tightly bolted together.

### Breathtaking Speaker-Driving Power Worthy of a Flagship Stereo Amplifier

An amplifier drives the loudspeakers by converting the musical information into an electric current. While this may sound simple, considering that the output current ranges from very small to very large, it is nearly impossible to accurately drive the loudspeakers in a way that is consistently faithful to the source musical signal.

In order to optimize the amplifier's ability to drive the loudspeakers, ways had to be found to reduce the amplifier's output impedance to an absolute minimum. To achieve this, Esoteric's full range of expertise was devoted to the S1. A total of nine bus bars are used across the design, and the need for an output coil has been eliminated. In addition, exhaustive efforts have been made to simplify the circuit design and widen its range. The result is the achievement of the phenomenal DF (damping factor) of 1,000, which can be considered a guideline for woofer drive capability. Even large-diameter woofers, which are notoriously difficult to drive, are provided with accurate damping, and the sound is precisely reproduced with an expansive feel across a wide range that reaches to even the lowest frequencies.

### Balanced Input Stage Configuration Enables High Clarity Signal Amplification

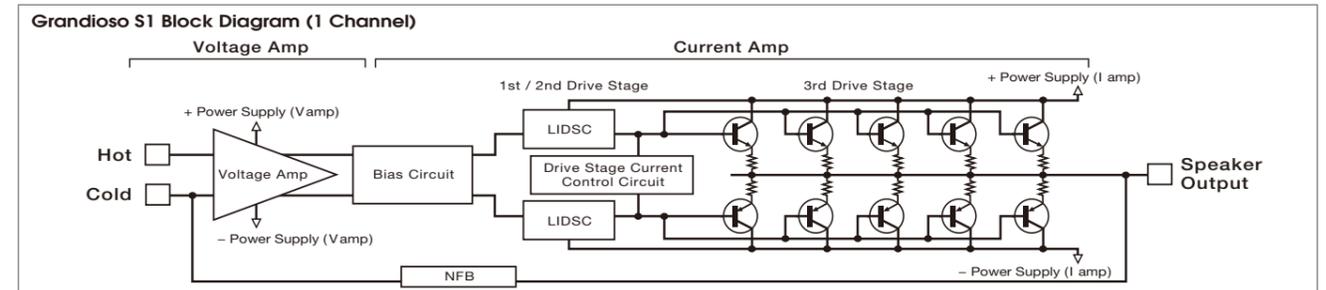
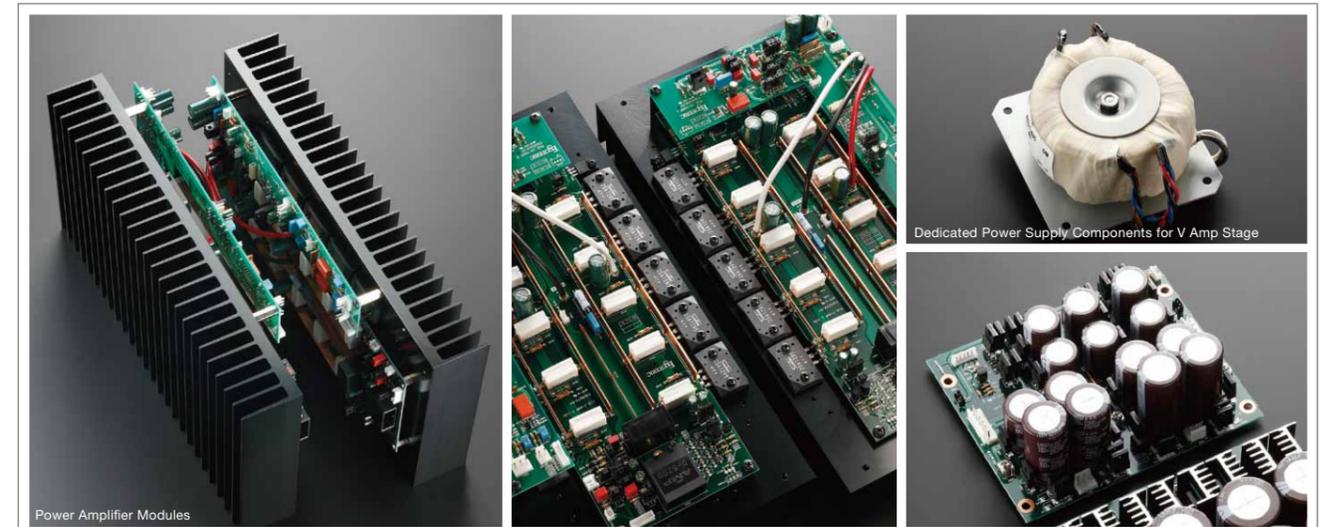
In the design of the S1, careful attention has also been given to noise reduction. Each channel's audio input signal enters through discrete balanced input buffer amplifiers, and is then relayed to the amplification stage by way of a low-impedance signal path. By eliminating common-mode noise and making the signal path resistant to the effects of noise, signal clarity is accurately maintained through to the amplification stage, thereby achieving an extremely high signal-to-noise ratio for an exceptional listening experience.

The outstanding dynamic range made possible by the amplification of a clean, noise-free signal promises the listener a level of excitement that transcends mere numerical specifications. The S1 not only delivers the full dynamic expression of a high-powered amplifier, it also provides the fine sensitivity needed to reproduce the more nuanced gradations that exist between musical crescendos and silence.

# Grandioso S1

Stereo Power Amplifier

## Technical Features



### Large, High-Performance Bipolar LAPT Transistors Deliver 34 Amperes of Instantaneous Output

The S1's large bipolar LAPT\* transistors are twice the size of more commonly used power transistors, and boast an exceptional continuous current capacity of 17 amperes and an instantaneous transient capacity of 34 amperes. In addition to their high output capability, these LAPT components also offer superior high-frequency characteristics that contribute to the S1's exacting 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 parallel elements. Signal path integrity was maintained by minimizing the number of amplifier stage component parts and eliminating the output stage coil, which can give rise to deterioration of high frequency characteristics. Efforts were also concentrated on reducing internal impedance through the use of multiple bus bars.

### LIDSC (Low-Impedance Drive Stage Coupling)

To perfect a stereo amplifier that sacrifices none of the performance of the monoblock M1, the output impedance from the second stage of the drive section to the final stage was reduced, and an LIDSC circuit was employed to enhance current supply capability. This made it possible to obtain the maximum amplitude within the power supply's available voltage while minimizing distortion, and so give the compact S1 Stereo Power Amplifier a loudspeaker drive capability very nearly that of the M1.

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

Negative Feedback (NFB) has been minimized in the S1's design by simplifying its amplifier circuitry and reducing the previous stage's gain, for a more natural and life-like sound.

### Independently Powered Voltage Amplifier Stage For Dramatically Improved Resolution

The electrical current supplied by the drive (current amplification) stage to the loudspeakers varies over an exceedingly wide range. To prevent this from affecting the overall sound quality, the S1's voltage amplification stage, which is positioned just before the drive stage and receives a low level signal from the input stage, derives its power from a dedicated power supply circuit equipped with its own toroidal power transformer. This isolation ensures a stable supply of power to the voltage amplification stage, enabling a dramatic increase in the resolution of fine detail for each instrument, even during the crescendos of a full orchestra. To keep losses to a minimum, both the voltage amplification and drive stages are directly connected without the use of cabling.

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

As one would expect from a flagship model like the S1, only the highest grade of electronic components have been employed in its construction. These include XLR input connectors that provide high reliability and high contact performance, as well as Esoteric's original RCA input connectors. Loudspeaker terminals are of the WBT-0702Cu type produced by WBT of Germany. In addition, the S1 employs many other high-grade components, such as low-impedance electrolytic capacitors, transistors with superior high-frequency characteristics, and high-speed MUSES SIC (silicon carbide) Schottky-barrier diodes, which produce significantly less rectification noise. All were carefully selected after carrying out detailed checks of their characteristics and undertaking extensive listening tests.

### High-Precision Chassis Construction For the Highest Levels of Vibration Suppression

The S1's chassis is constructed using Esoteric's traditional dual-level configuration. Its strong, 2mm-thick sheet steel internal framework segregates circuit blocks into specialized compartments to achieve the shortest possible signal path. Maintaining its discrete dual-mono design, this internal framework is also divided into separate left and right halves, down to the layout of its rear panel, which eliminates the possibility of channel interference due to the effects of vibration.

The S1's elegant front panel is machined from a 35mm-thick block of high-grade aluminum alloy. The top cover employs a 5mm-thick aluminum panel, while the rigid base is made of 5mm-thick steel. Supporting this, Esoteric's original pinpoint feet provide a four-point support system that further ensures the structure's high rigidity and elimination of resonances.

