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Siegfried Series II Reference Balanced Amplifier

Since its introduction in 2003, VTL's Siegfried Reference monoblock amplifier has been recognized as the leader in the world of high power, high performance amplifiers, both for ease of use and musicality. Known as the first tube amplifier to deploy true Auto Bias and Fault Sensing, as well as precision-regulated power supply technology, the Siegfried amplifiers have won the loyalty and appreciation of serious music lovers around the world.

The new Series II version of the renowned Siegfried platform features a complete re-working of the entire signal path. Upgrades include a fully balanced differential input stage driving a differential phase splitter and a lower impedance push-pull output stage with a dramatically improved, fully balanced and enhanced interleaved and coupled output transformer. VTL's engineering brings the renowned sonic performance of the innovative Siegfried Reference platform to even greater heights.

The new Siegfried Reference monoblocks gain further sonic benefits with a shorter, faster and fully balanced negative feedback loop, with zero global negative feedback. The negative feedback loop completely eliminates ringing and requires no capacitor compensation to maintain critical phase integrity and information. The result is an amplifier that remains stable even under the most demanding loads.

Adjustable precision-regulated plate, screen and bias supplies hold the output tube operating point constant even under AC and main power supply fluctuations, and stabilizes the critical power supplies yielding tonal stability and sonic integrity especially during complex, dynamic signal conditions.

Another new feature is a user adjustable Damping Factor feedback control that allows the user to adjust the amplifier's output impedance by varying the amount of negative feedback. Impedance can now be precisely set to suit the listener's taste, and to improve control of the loudspeaker loads to deliver best performance. The 4 possible settings are:

1. LOW -- Lowest damping factor, good loudspeaker control, most natural sound.
2. MED -- Better loudspeaker control, with some impact on sound quality
3. HI -- Best loudspeaker control, with a little more impact on sound quality, but on speakers that need the control the sonic improvement is clear
4. MAX -- Maximum damping factor, but sonic impact is noticeable

Finally, the amplifier has been substantially re-voiced with premium Mundorf silver oil capacitors, for a sweeter, more extended top end and mid range tonality that sounds more relaxed, with better flow and integration. Input stage capacitors are also bypassed.

Even a brief listen to the new Siegfried Series II monoblock reveals the successful implementation of the new technology. The mid bass has more authority and control while the critical midrange exhibits a new effortlessness in reflecting the natural instrumental colors and timbres. This greater sense of ease and control of the critical mid bass and midrange area enables the top end to sound completely natural and unconstrained.

With its massive power handling capabilities, the Siegfried has always excelled at delivering effortless speed, dynamics and real control in the bottom end, with an almost organic bass quality. With this new version, even at low level listening one can enjoy the nuances and micro-dynamics of music. The Siegfried II scales up from handling the smallest intimate performances to the largest orchestral fanfares with ease. It strikes the perfect balance between seemingly endless weight and authority, and effortless finesse.

Feature List:

1. Fully balanced differential circuit – single-ended signal produces balanced signal at output
2. Re-designed fully balanced differential input and driver stages for increased signal swing, bandwidth and stability
3. Zero global Negative Feedback
4. Shorter, faster feedback loop for greater tonal control without phase shift.
5. Improved handling of loudspeaker loads for greater signal stability.
6. The amplifier is unconditionally stable, without the need for any capacitor compensation.
7. New current source for lower sonic impact in single-ended mode
8. Lower impedance output stage for improved loudspeaker control
9. Dramatically increased interleaving and coupling in the balanced VTL proprietary Reference output transformer, for wider bandwidth and zero ringing
10. Variable user-adjustable DF feedback control to vary output impedance and damping factor for optimal matching to speaker load
11. Software microprocessor controlled
    - Tetrode/Triode Switchable
    - Auto Bias, Fault Sensing
    - Current in-rush limiting
    - Standby Mute function; with reduced tube current for increased tube life
    - Fully bi-directional RS-232 control
12. 650 watts per channel in tetrode; 330 watts per channel in triode
13. Uses twelve 6550 or KT-88 tubes per monoblock
14. Adjustable precision-regulated plate and screen supplies for stable operating point; discrete regulated input and driver supply for greater signal resolution and tonality
15. Adjustable precision-regulated bias supply for greater signal resolution and noise rejection and improved isolation from mains supply variations; output operating point does not change with AC power fluctuations

16. Improved Autobias and fault sensing system to operate in fully balanced differential mode; amplifier is fully protected against output tube failure; no need for precision matching of output tubes
17. All premium Mundorf silver oil caps in signal path
18. Film bypass of power supply caps for greater HF resolution
19. Extruded aluminum front panel with luxurious, modern look – black and silver options available
20. Precision regulated B+ and screen supplies
21. Rigid construction and improved ventilation for lower operating temperature
22. Factory upgradeable from Series I

Specifications

Siegfried Series II Reference Monoblock power amplifier

Vacuum Tube Complement	12 x 6550 or KT-88, 1 x 12AT7, 2 x 12BH7
Output Power	Tetrode = 650 watts Triode = 330 Watts
20Hz - 20kHz <3.5% THD	Into 5 ohms
Input Sensitivity	Variable between 1-2V, depending upon DF setting
Input Impedance	45K Ohms
Load setting	5 ohms
Optimum Load Range	4 - 8 ohms
S/N Ratio	-110dB, 120 Hz
Power Consumption	Idle = 600 W Full Power = 1500 W
Primary Mains Fuse Rating B+	100/120V = 20A Ceramic Slo Blo 220/ 240V = 10A Ceramic Slo Blo
Logic Fuse	100/120V = 1A Ceramic Slo Blo 220/240V = 1A Ceramic Slo Blo
Input Fuse	100/120V = 2A Ceramic Slo Blo 220/240V = 1A Ceramic Slo Blo
Filament Fuse	100/120V = 2A Ceramic Slo Blo 220/240V = 1A Ceramic Slo Blo
Secondary Fuse Rating	Plate Fuse -- 5A fast acting 600V Screen Fuse – 0.75A fast acting 600V
Dimensions W x D x H	11.5 x 24 x 24 inches (29 x 61 x 61 cm)
Weight	200 lbs (90Kg) per monoblock unpacked 325 lbs (147 Kg) packed