



250 watts per channel into 8 ohms, 800 into 2 ohms

Perfectly balanced bridged design for extraordinary fidelity

The power of a large amplifier with the delicacy of single-ended designs

Large heat sink and ample ventilation for efficient cooling and reliability

Fully discrete circuitry with high-quality components and no analog audio ICs

The Centaur brings the revolutionary amplification concepts pioneered in the Hercules amplifier to a more modest and practical form factor. Unlike any other stereo amplifier ever created, it produces immense power yet can also reproduce the same sonic delicacy and detail for which small single-ended amplifiers are revered.

Why does the Centaur sound like a single-ended amplifier? Because it is a single-ended amplifier. Most high-powered amps are built by bulking up smaller designs with more transistors. Many audiophiles feel that with these amps, finesse is lost as muscle is added. This is why Constellation Audio's "dream team" of engineers built the Centaur in a modular fashion from multiple smaller

amplifiers. We built the best-sounding 125-watt single-ended amplifier module we could, then combined several of them to create a 250-watt-per-channel stereo design.

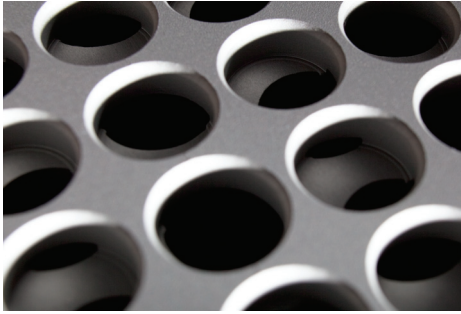
Perfectly balanced circuitry

The Centaur uses the same balanced bridged circuit topology found in the Hercules, our top-of-the-line Reference series monoblock amplifier. The fully complementary design uses separate amplifiers for the positive and negative halves of the signal, thus ensuring the lowest possible noise and the best possible frequency response and slew rate.

However, other complementary designs use different types of transistors to

amplify the positive and negative halves of the incoming audio, resulting in an imbalanced signal. The Centaur instead uses only N-type output transistors. Along with other circuit refinements, the all-N-type design results in an essentially perfect signal balance—and the highest fidelity ever achieved in a stereo amplifier.

Such perfect balance in an amplifier benefits the listener only if the incoming signal is itself perfectly balanced. To this end, the Centaur's input stage is the same Line Stage Gain Module found in the Virgo preamp. Like the Centaur's power stage, the Line Stage Gain Module is fully complementary, with separate circuit halves for the positive and negative halves of the signal.



By using hand-selected, low-noise FETs and servo circuits, the Line Stage Gain Module brings any incoming signal into essentially perfect positive/negative balance.

Thus, even if you use the Centaur with another brand of preamp, the audio will be perfectly balanced. Customers who own Constellation Audio preamps may use the Constellation Link interface to bypass the Centaur's gain module.

Seemingly endless power

Even the Centaur's incomparable amplification circuitry would achieve little without a clean, abundant source of power. This is why we have equipped the Centaur with a 1,600-watt, custom-wound toroidal transformer that has separate windings for the left and right channels. Each channel effectively has its own source of power, so high demands on one do not affect the other. Massive storage capacitors and fully regulated supplies for all line-level

circuits assure that any interference or influence from outside sources is removed.

The high current this powerful source delivers allows the Centaur to drive any speaker, even the world's finest and most exotic full-range models. The 250-watt-per-channel rating at 8 ohms doubles to 500 watts at 4 ohms. At 2 ohms, an impedance few speakers present because so few amplifiers can handle it, the Centaur delivers a staggering 800 watts per channel.

Even when the amplifier is pushed to its limits, it remains stable and reliable. The modular amplifier design is inherently stable; unlike many amplifiers, it does not need a Zobel network at the output to damp high frequencies.

Thanks to the high thermal mass of the Centaur's large aluminium heat sinks, and to the free air flow provided by the hundreds of large ventilation holes in the sides of the chassis, the Centaur runs cool, placing minimum stress on its output transistors and driver circuits. Push it as hard as you like and it answers with impeccable fidelity no matter how demanding the speakers, the program material or the volume.

Simply the world's most capable stereo amp

By building the revolutionary technology from the massive Reference Series Hercules monoblock into a practically sized stereo amplifier, we have created something truly extraordinary. The Centaur is the first stereo amplifier to meet the needs of any and every audiophile. It has the delicacy of a single-ended tube amp. It has the power of a state-of-the-art transistor amp. No speaker, no music, no volume level can challenge it. When you power it up, it will always deliver more than you expect—no matter what you expect.

Constellation reserves the right to change designs, and / or specifications

SPECIFICATIONS

Centaur Power Amplifier

Inputs	2 XLR (1 for Constellation Link), 1 RCA
Outputs	metal binding posts
Power output per channel, 8Ω (1 kHz @ 1% THD+N)	250 watts
Power output per channel, 4Ω (1 kHz @ 1% THD+N)	500 watts
Power output per channel, 2Ω (1 kHz @ 1% THD+N)	800 watts
Frequency response	10 Hz to 100 kHz, +/-0.5dB
Gain	14 dB (Constellation Direct) 26dB (balanced & RCA)
THD+N (1 kHz @ rated power)	<0.05%
Output impedance	0.05 ohm
Damping factor (re 8 ohm)	160
Input impedance	100K Ω unbalanced, 200K Ω balanced
Output noise	<70 μV, 500 kHz BW, -116 dB @ 250 watts
Weight	50 lbs / 22.7kg
Dimensions	11 x 17 x 20 in (hwd) 280 x 432 x 508 mm (hwd)

constellation audio

Simply, Light Years Ahead.

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