



Servo-balanced circuitry with hand-selected FETs

Upgraded, full-size power supply with discrete left, right and control feeds

Uses the same Line Stage Gain Module circuit schematic found in the Altair II

Front LCD touchscreen controller with enhanced graphics for better visibility

Machined aluminum remote control for basic functions

Those who heard the original version of our Performance Series Virgo line stage preamplifier were astonished. In fact, one well-known reviewer said of the Virgo and the other Performance Series components, "...these are truly superb electronics, competitive with and in many regards superior to anything I've yet heard at any price, tube or solid-state." But at Constellation Audio, we never settle for mere excellence.

The original Virgo power supply was far better than average, but still, it was a step down from the Altair II's power supply. So we decided to adapt the design of the Altair II power supply to Virgo, to create an even better-sounding preamp: Virgo II.

The original Virgo power supply had

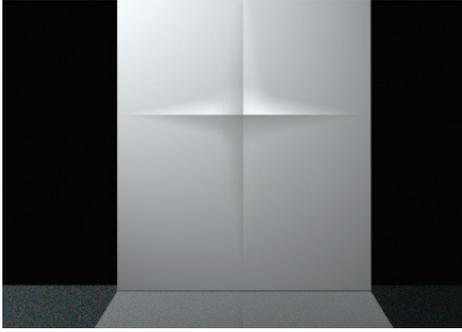
separate feeds for audio circuits and control circuits. The Virgo II adds true dual-mono capability, with three outputs: separate feeds for left and right channels in addition to the control circuit feed. This upgrade makes the channels more independent, so extreme demands in one do not affect the other. It also improves channel separation—and thus improves imaging and soundstaging. Because the new supply is larger, it has room for extra filtration, which produces cleaner DC power. And the new supply now fits conveniently under the Virgo II preamp chassis.

The new power supply, along with other subtle improvements, makes the Virgo II an even better line stage, surpassed in musicality only by our Reference Series Altair II.

### Perfectly balanced signals for impeccable musicality

As in the original Virgo, the core of the Virgo II's analog circuit schematic is Constellation Audio's exclusive Line Stage Gain Module. This is a fully complementary, balanced preamp circuit, using separate mirror-imaged circuits to amplify the positive and negative halves of the audio signal. Through the use of our private stock of extremely low-noise field-effect transistors (FETs) and the innovative application of servo circuits, which adjust automatically to cancel any anomalies, the Line Stage Gain Module maintains essentially perfect positive/negative balance in the audio signal.

If you use Virgo II with a Constellation Audio amplifier, you can use our



Constellation Direct interface. This connection bypasses the amplifier's own Line Stage Gain Module, reducing the complexity of the signal chain and thus increasing fidelity and musicality.

### Isolating and protecting sensitive audio circuits

Analog preamp circuits are extremely sensitive. They can pick up vibration in the air and in the surfaces on which the preamp is placed. This vibration creates spurious audio signals—called “microphonics”—that are passed down to the amplifier and into the speakers. Only through exceptionally careful construction and design can microphonics be avoided. That’s exactly what we’ve done in the Virgo II.

The analog circuitry in the Virgo II preamp is built on a “raft,” a thick metal plate that floats on an elastomeric suspension that damps incoming vibration. Just as a raft floating on a lake is not affected by disturbances on shore, so the Virgo II’s analog audio circuits are isolated from external vibration. The audio circuits ride on top of the raft,

while the control circuits are suspended underneath it.

We further pamper the analog audio circuits by encasing the entire preamp in a heavy aluminium enclosure, with key components machined from solid aluminium to a minimum thickness of 8.2mm. This extremely robust construction helps block electromagnetic interference.

### Practically limitless power

The Virgo II’s upgraded power supply incorporates separate R-core transformers, rectifiers and filter capacitors for the left and right channels, in order to increase channel separation and better isolate the two channels from one another. This arrangement facilitates extraordinarily precise imaging and more dramatic, enveloping soundstaging. A third transformer and other components provide power for the Virgo II’s control circuits.

A thick, aluminium chassis similar to the one used for the preamp helps contain any electromagnetic interference produced by the power supply. Three high-quality Hypertronics cables, originally developed for aerospace applications, provide a clean, high-current connection to the preamp chassis.

The Virgo II configuration is compatible with our new DC filter, which takes the already outstanding dual-mono power supply to a new level of performance. The DC filter also connects with Hypertronics cables, between the power

supply and the preamp, and sits neatly in a perfect stack with the other components.

### Sophisticated and simple operation

The Virgo II is even more of a pleasure to operate than the original Virgo. We received useful feedback from customers and dealers, and incorporated these suggestions—such as larger, easier-to-read fonts on the 432 x 230-pixel LCD touchscreen.

The touchscreen serves as the primary interface, providing quick access to all control functions, and controlling advanced functions such as input gain presetting and home theater bypass setup. A new, simplified remote, machined from solid aluminium, controls the unit from a distance.

With the extraordinary musicality of the original Virgo, enhanced with a bigger, better dual-mono power supply, and refined with subtle improvements driven by feedback from Virgo users, the Virgo II is easily the world’s most extraordinary preamp—with the sole exception of the Performance Series Altair II, of course. It’s radical design meets rational refinement.

the best single-ended tube preamps, combined with the precision of the finest solid-state components, the Virgo truly offers everything any audiophile could want in a preamp. It may be radical, but this revolution is one every audiophile has been eagerly awaiting.

## SPECIFICATIONS

### Virgo II Line Stage

<b>Inputs</b> .....	4 XLR stereo, 4 RCA stereo
<b>Outputs</b> .....	2 XLR stereo, 2 RCA stereo
<b>THD+N (RI &gt;10KΩ)</b> .....	<0.001%, 20 Hz - 20 kHz @ 2V out <0.1%, 20 Hz - 20 kHz @ 10V out
<b>Frequency response</b> .....	10 Hz to 200 kHz, ±0.5 dB
<b>Output noise</b> .....	≤ 20 µV dB, 20 Hz - 20 kHz
<b>Input impedance (balanced)</b> .....	200 KΩ
<b>Input impedance (unbalanced)</b> .....	100 KΩ
<b>Output impedance</b> .....	< 50Ω
<b>Volume control resolution</b> .....	0.5 dB from 0 dB to -90 dBFS
<b>Weight, preamp</b> .....	22 lbs/10 kg
<b>Weight, power supply</b> .....	15.75 lbs/7.1 kg
<b>Dimensions, preamp</b> .....	5.50 x 17.00 x 15.75 in (hwd) 140 x 432 x 400mm (hwd)
<b>Dimensions, power supply</b> .....	5.00 x 6.00 x 14.50 in (hwd) 127 x 152 x 368mm (hwd)

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


**constellation audio**

Simply. Light Years Ahead.

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