



PARASOUND

Halo JC 3+ Phono Preamplifier

A new improved version of our award-winning JC 3



Six years ago we asked legendary audio designer John Curl if he would create a reasonably priced Parasound Halo phono preamplifier in the spirit of his masterpiece, the Vendetta. Three years later we introduced the remarkable Parasound Halo JC 3 which has earned rave reviews from the audiophile press and a legion of vinyl enthusiasts. During the design phase of the original JC 3, Curl had rejected variable load adjustment because potentiometers generally have higher thermal self-noise, which is an anathema to the creation of an ultra low noise phono stage. Our decision to bring the JC 3 to market with limited switched input load impedance choices disappointed some vinyl enthusiasts who consider input load fine-tuning to be essential for certain cartridges.

Curl and circuit board designer Carl Thompson eventually consented to a redesign with variable load impedance adjustments, but with these caveats for the potentiometers: 1) They must comply with stringent performance requirements. 2) They must be manufactured by Vishay, a highly-regarded manufacturer of low-noise component parts.

We took this opportunity to make additional performance improvements. Curl has narrowed the spectrum of Johnson/Nyquist noise in the resistor that loads the input stage. Circuit-board designer Carl Thompson tweaked the phono module board layouts to further optimize every performance parameter. The phono modules copper circuit board traces now have 24 karat gold-plating where each part is soldered to provide exceptional transparency and musical detail.

As a result of these changes, the MC signal to noise ratio is improved to 87dB, A-weighted. MM gain has been increased slightly to 48dB, while MC gain has been lowered from 68dB to 64dB so that extra-high output MC cartridges won't cause the JC 3+ to overload the inputs of some line stage preamps or integrated amps.

The JC 3+ power supply has also been significantly upgraded with 47 percent larger low-ESD power supply filter capacitors and an 82 percent larger R-core power transformer. This provides much greater current reserves for head-snapping dynamics. Finally, we added an on/off switch for the front P logo illumination.



How the JC 3+ improves on the JC 3

- Variable MC load adjust independent for each channel from 50-550 ohms with dual gang potentiometers specially made for Parasound by Vishay.
- Curl-Thompson tweaked circuits to further reduce the JC 3 silent background noise.
- 24k gold plated copper traces on phono module boards for utmost conductivity and most transparency/detail in the music.
- 47% larger low ESD power supply filter caps greater reserve for head-snapping dynamics.
- 82% larger R-core power transformer greater reserve for more low end impact.
- Ability to turn off illumination of the front panel P logo.
- Now Available in Silver or Black.

Specifications

Frequency Response

20Hz – 20kHz, +/- 0.2dB

Total Harmonic Distortion

< 0.01% at 1kHz

Signal to Noise Ratio, MM

> 87dB, input shorted, IHF A-weighted
> 78dB, input shorted, unweighted

Signal to Noise Ratio, MC

> 87dB, input shorted, IHF A-weighted
> 67dB, input shorted, unweighted

Interchannel Crosstalk

72dB at 1kHz

Input Impedance

MM: 47kΩ
MC: 50 – 550Ω variable, 47kΩ fixed

Output Impedance

Unbalanced: < 100Ω
Balanced: < 100Ω per leg

Input Sensitivity at 1 kHz

MM: 4mV for 1V output
MC: 600μV for 1V output

Total Gain

MM: 48dB
MC: 64dB

AC Power Requirement

Standby: 1 watt
Power On: 12 watts
115 or 230 VAC 50 - 60 Hz
(Selected on Chassis Bottom)

Dimensions

Width: 17-1/4" (437mm)
Depth: 13-3/4" (350mm)
Height, with feet: 4-1/8" (105mm)
Height, without feet: 3-1/2" (89mm)

Weight

Net: 19 lbs. (8.6 Kg)
Shipping: 26 lbs. (11.8 Kg)

Rack Mount Accessory

HRA 2 (may be purchased separately)

Please note, an original JC 3 cannot be updated to become a JC 3+.

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For more photos, features, specifications and product manuals, visit us at www.parasound.com