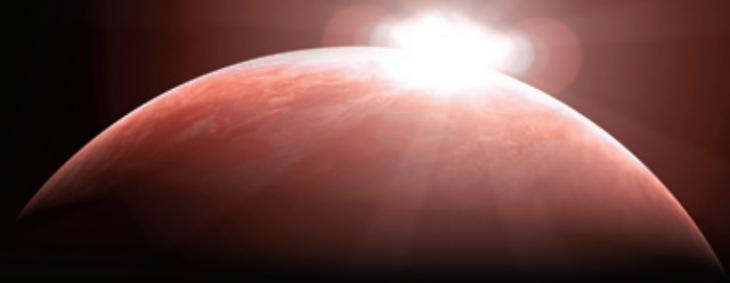


310LP Phono Preamplifier  
320S Power Supply



M O O N



310LP PHONO PREAMPLIFIER



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320S POWER SUPPLY



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Power

Emotion

Soul

The MOON 310LP represents a significant step forward in phono preamplifier design. Like its predecessor, the highly acclaimed MOON LP5.3, particular attention has again been given to noise levels and dynamic range. The result is one of the quietest phono preamplifiers ever, on par and even superior to many models at significantly higher price points. Sonically, it portrays all the Simaudio hallmarks: clean, powerful, fast and extended bass combined with an open midrange and airy extended high frequencies.

A major strength of the MOON 310LP is its highly configurable nature. There are numerous end-user adjustments for resistance loading, capacitance loading and gain level. Going one step further, you can even choose from two different equalization curves - either the RIAA curve with a flat frequency response or the IEC curve which, although identical to the RIAA curve beyond 20Hz, acts like a subsonic filter by removing inaudible infrasonic bass below 20Hz.

Balanced outputs are a standard feature, allowing you to take full advantage of connectivity to a balanced preamplifier or integrated for a significant improvement in noise floor, dynamics and midrange transparency. Finally, the 310LP is housed in a custom-made, rigid chassis with a 3/8" brushed and anodized front panel.

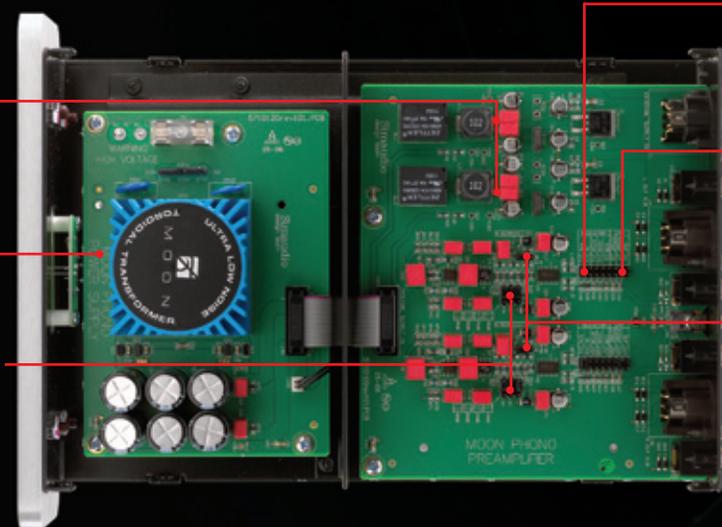


## Significant Design Features

Power supply voltage regulation includes Evolution series I<sup>2</sup>DCf (Independent Inductive DC Filtering): There is one inductor dedicated to each integrated circuit type component (DAC, Op-Amp, etc.) in the audio circuit's signal path - 2 stages in all

Large isolated power supply on a separate circuit with 2 stages of voltage regulation

Adjustable gain settings for moving magnet (40dB) and moving coil cartridges (54, 60 and 66dB)



Adjustable impedance loading (0, 100, 470, 1K and 47k ohms)

Adjustable capacitance loading (0, 100 and 470pF)

Selectable equalization curves for both the RIAA and the IEC standards

- ▲ Extremely short signal path for a faster transient response
- ▲ Accurate matching of the finest high quality electronic components
- ▲ Single-ended RCA and Balanced XLR outputs
- ▲ Four-layer PCB tracings with dedicated ground and power planes using pure copper for low impedance characteristics

Breathtaking analog reproduction combined with astounding flexibility

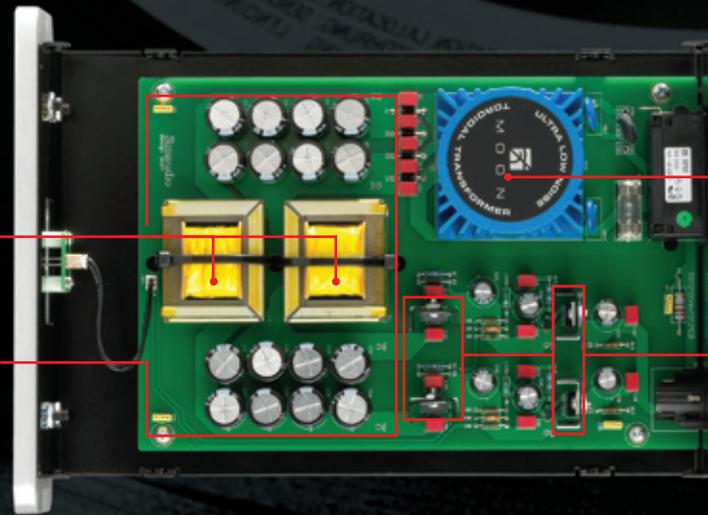


Simaudio Ltd. has been designing and manufacturing innovative, leading-edge audio and video products since 1980. MOON products have been globally recognized for their world-class performance, garnering numerous accolades for this outstanding achievement. Our products are engineered and built in Canada, utilizing advanced, efficient, "green" assembly techniques with strict quality control. Furthermore, our manufacturing processes are part of our philosophy, whereas the high quality and long-life of MOON products are the best way to preserve our environment, avoiding premature obsolescence. MOON products meet or exceed all international requirements for safety, performance and durability. At Simaudio, great music matters. However, great music for a lifetime matters most.

The optional MOON 320S dedicated external power supply for the MOON 310LP Phono preamplifier brings this award winning phono stage to an extraordinary level of performance far beyond the competition and unmatched at this price. Reference level analog LP playback just became even more affordable. The 320S, housed in a chassis identical to the 310LP, features a special "pi-type" filter and a dual voltage regulation system that reduces the 310LP's already very low noise level on the DC signal by a mind-numbing 150dB



Some of the benefits that the MOON 320S brings to the 310LP's already astonishing sonics are an even better signal-to-noise ratio that leaves you with the impression of increased gain; more realistic rhythm and pace; more natural life-like high-frequencies that allow you to better differentiate between various cymbals in a recording; and a deeper blacker background.



Dual choke inductance (2x 200mH)

A special "pi-type" filter after the initial voltage rectification stage to reduce AC transmission noise

High quality toroidal transformer

4 stages of DC voltage regulation in a dual action configuration to further lower noise

- ▲ Total capacitance of 35,200uF
- ▲ DC signal noise is 150dB lower within 310LP circuitry
- ▲ Pure copper circuit board tracings with extremely low impedance characteristics
- ▲ Designed to be powered up at all times for optimal performance

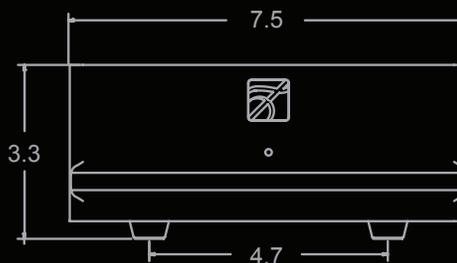
The impression of a more open and natural sound is genuine



# MOON 310LP Specifications

Circuit Layout	Mirror-image symmetrical circuit
Power Supply Transformer	10VA
Power Supply Capacitance	14,000µF
Single-ended inputs	1 pair (RCA)
Input Impedance - Adjustable	47, 100, 470, 1k, and 47kΩ
Input Capacitance - Adjustable	0, 100, and 470 pF
Single-ended output	1 pair (RCA)
Balanced output	1 pair (XLR)
Gain – Adjustable (for single-ended outputs)	40, 54, 60 and 66dB
Gain – Adjustable (for balanced outputs)	46, 60, 66 and 72dB
Input overload @ 40dB gain	58mV RMS
Input overload @ 54dB gain	11mV RMS
Input overload @ 60dB gain	6mV RMS
Input overload @ 66dB gain	3mV RMS
Signal-to-noise Ratio (full scale @ 40dB gain)	110dBr
Signal-to-noise Ratio (full scale @ 40dB gain)	114dB with PSX5.3 Power Supply
Signal-to-noise Ratio (full scale @ 66dB gain)	88dBr
Signal-to-noise Ratio (full scale @ 66dB gain)	92dBr with PSX5.3 Power Supply
Maximum Output (1kHz @ 10KW)	6.0 Volts
Frequency Response – RIAA & IEC Curve	20Hz - 20kHz (± 0.5dB)
IEC Curve Effect	-7dB @ 10Hz
Crosstalk @ 1kHz	-100dB
Intermodulation Distortion	< 0.009%
THD (20Hz - 20kHz)	< 0.001%
Power Consumption	6 Watts
AC Power Requirements	120V or 240V, 60Hz or 50Hz
Shipping Weight	7 lbs / 3 Kgs
Dimensions (W x H x D, inches)	7.5 x 3.3 x 11.1

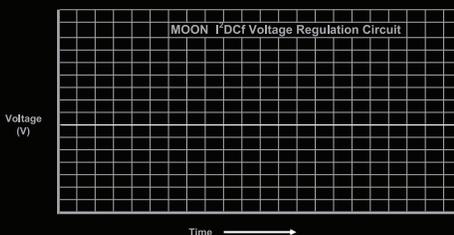
Specifications subject to change without notice



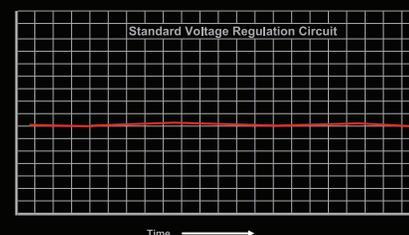
## Technical information

Referred to as **1PDCf**, this unique type of DC voltage regulation was originally developed for the MOON Evolution series of components. One stage of **1PDCf** represents a unique and specialized circuit. It eliminates all the glitches resulting from the DC power feeding the electronic parts found in a component's audio signal path and isolates these parts from each other. The MOON 310LP has a 2 stages of **1PDCf**.

This voltage regulation circuit achieves better noise filtering, substantially lower THD, improved channel separation and lower crosstalk and more consistent DC voltage throughout the entire circuit.



An audio component using **1PDCf** circuitry has a dramatically reduced noise floor, a dead quiet "black" background, a more realistic 3D portrayal of the recording and perfect signal level matching between channels.



Audio components not using **1PDCf** circuitry can suffer from imperfect voltage regulation. This often results in various inefficiencies such as a lower signal-to-noise ratio, increased crosstalk, unnecessary CD jitter and a less realistic sonic landscape.

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Distributed by:



**Simaudio Ltd.:** 95 Chemin du Tremblay, Unit 3, Boucherville, Quebec CANADA J4B 7K4  
**Simaudio Ltd.:** 2002 Ridge Road, Champlain, NY 12919 NY USA

(877) 980-2400

(450) 449-9947

[info@simaudio.com](mailto:info@simaudio.com)

[www.simaudio.com](http://www.simaudio.com)