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# N<sup>o</sup>326S

DUAL-MONO PREAMPLIFIER

## OVERVIEW

The N°326S Preamplifier is a direct descendant of the critically acclaimed N°32 Reference Preamplifier. The N°326S features audio circuits, controls, architecture and a phono-input option based on the N°32. In fact, some audio circuits, such as the proprietary discrete volume attenuators, are identical to those found in the N°32. These qualities are also shared by our N°320S. But, in addition, the N°326S features a main circuit board made of Nelco® N4000-13 SI. This remarkable material allows for a more open, detailed sonic presentation and an engaging depth of image that audiophiles worldwide have come to revere.



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PREAMPLIFIER  
No 3266

standby





# N°326S

## PREAMPLIFIER

The N°326S's single-chassis design features separation of the audio circuit, control and power-supply sections, a design similar to that of the dual-chassis N°32. Inside the N°326S, these sections are separated by their physical layout, as well as by a steel shield box that protects against electrostatic and magnetic interference. Filtered AC power is routed outside audio circuit sections, providing audio circuits with the quiet, shielded environment essential for superior sound.

Many high-performance audio components rely on clean, noise-free AC power to deliver maximum performance. Unfortunately, most AC power does not meet these standards. Common household appliances such as refrigerators, televisions and computers often contaminate AC power lines with line noise, spikes and other irregularities that make it difficult for high-performance audio circuits to reach their full potential.

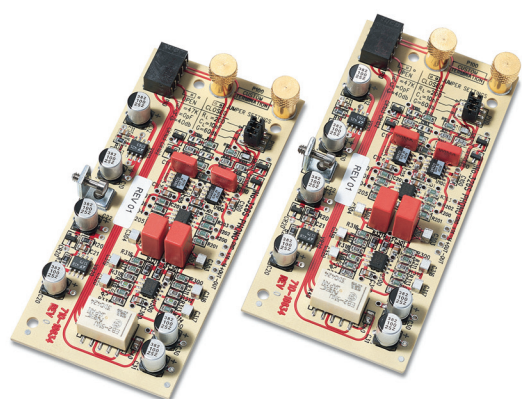
To compensate for this, the N°326S offers a series of highly effective noise-suppression and isolation technologies. AC power is filtered for noise as soon as it enters the chassis. The audio section and control section have completely independent

power supplies, each with its own low-noise toroid transformers. The audio power transformer features a Faraday shield between the AC line and the low-voltage secondaries for improved isolation. The N°326S employs two stages of active voltage regulation for the audio sections. A high-power stage absorbs line voltage and temperature variations, while a second high-performance stage provides local high-speed, low-noise power for the audio section.

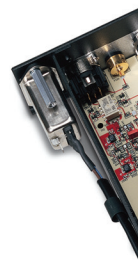
Featuring an advanced dual-mono design, the N°326S is endowed with remarkable channel separation and exceptional sonic imaging. Both audio channels use independent power supplies, communication circuits and audio circuits. In addition, each channel's audio circuits are located in a separate area of the chassis. This innovative design isolates each channel from the other, allowing the N°326S to produce vividly rich three-dimensional sonic images with stunning precision.

For even greater isolation, the N°326S deactivates unused inputs to prevent interference from associated components. When an input is deactivated, the N°326S disconnects the input signal and ground connection, eliminating ground loop noise between the N°326S and the associated component. As a result, input signals pass through the N°326S with exceptional freedom from interference due to other components.

Two Mark Levinson-designed discrete volume attenuator modules control master volume level with unparalleled accuracy and sonic neutrality. Constructed with Arlon 25N circuit boards with local power-supply regulation and bypass capacitors, these modules generate optimal power and isolation for even the most sensitive adjustments. Precision surface-mounted resistors accommodate adjustments in 1.0dB increments up to 23.0dB, and 0.1dB increments above 23.0dB.



N°326S optional phono modules.



Unlike other stereo preamplifiers, the N°326S is designed to integrate with multichannel surround-sound processors – minus the drawback of competing master-volume-level controls. A unique surround-sound-processor mode allows the N°326S to set its master-volume-level control to unity gain, passing complete control to the surround sound processor. With no interference from the N°326S, the surround sound processor can maintain the relative volume level of all channels without distorting its carefully calibrated input and output levels.

A modest connector complement includes three balanced (XLR) and four single-ended (RCA) input connectors. Single-ended input signals are converted to balanced signals upon entering the chassis, and processed as balanced signals thereafter. During this conversion process, meticulously balanced circuits preserve all input signal information, passing it to the power amplifier without the limitations of more asymmetrical single-ended designs.

The phono option, based on the N°32's design, offers two channels of world-class phono preamplification that integrates seamlessly into the N°326S. Upon installation, the N°326S automatically recognizes the phono modules and assigns them to input 7. The modules are highly configurable and customizable. They work in conjunction with N°326S software to offer accurate setup and calibration for virtually any LP source.

The rear panel includes separate main and record output connectors, as well as two Link communication ports that make it possible for the N°326S to be included in Mark Levinson Link systems.



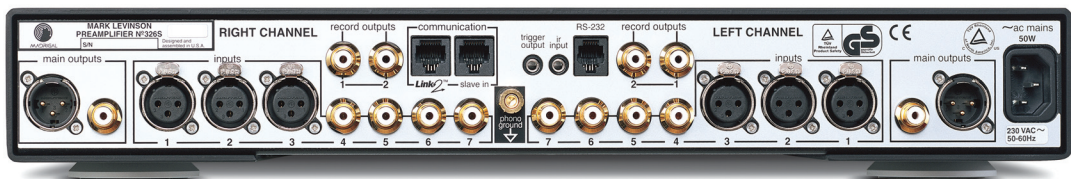
N°326S shown with the steel shield box removed.

A large front-panel “select” knob provides quick selection of the desired input. When an input is selected, just press and hold the front-panel or remote-control-setup button to open the corresponding “Set Inputs” menu, which can be used to select a custom name, optimize gain levels, set a master-volume-level offset, or assign record output connectors to individual inputs.

Following in the footsteps of the N°32, the N°326S exceeds all reasonable expectations for a stereo preamplifier. Its flexible design, which includes seven configurable inputs, separate main and record outputs, and full surround-sound-processor integration, allows it to accommodate a wide range of demands. All this, plus the addition of a Nelco N4000-13 SI main circuit board, creates a preamp that is equally at home in a dedicated two-channel audiophile listening room as in extensive theater installations.

## Highlights

- Nelco N4000-13 SI main circuit board
- Seven configurable inputs
- Separate main and record outputs
- Three balanced (XLR) inputs
- Four single-ended (RCA) inputs
- Complete surround-sound-processor integration
- Advanced dual-mono design
- Maximum channel isolation
- Independent power supplies for audio circuit and control sections, each with its own low-noise toroidal transformer
- Effective noise suppression and isolation technologies
- AC power filtering
- Two active voltage regulation stages
- Faraday shield to separate AC power from low-voltage secondaries
- Independent audio circuits, communication circuits and power supplies for each channel
- Two separate proprietary discrete volume attenuator modules
- Deactivation of unused inputs to eliminate ground loop noise
- Balanced conversion for single-ended input signals
- Intuitive “Set Inputs” menu
- Large front-panel display
- Two Mark Levinson Link communication ports
- RS-232 communication port
- Trigger output connector
- IR input connector
- Phono input option



## N°326S Preamplifier

<b>Gain</b>	0, 6, 12 or 18dB in the line input stage		
<b>Volume control range</b>	80.0dB (maximum)		
<b>Gain resolution</b>	0.1dB steps above 23.0 in display (–57dB) 1.0dB steps below 23.0 in display (–57dB)		
<b>Input overload</b>			
when gain is set to +18dB:	1.6V on XLR, 0.8V on RCA		
when gain is set to +12dB:	3.3V on XLR, 1.6V on RCA		
when gain is set to +6dB:	6.6V on XLR, 3.3V on RCA		
when gain is set to 0dB:	13.2V on XLR, 6.6V on RCA		
<b>Input impedance</b>	100k Ohms		
<b>Output impedance</b>	Less than 50 Ohms		
<b>THD + N</b>	Less than 0.001%		
<b>Crosstalk</b>	<90dB (any input to any output, input terminated)		
<b>Residual noise</b>	≤94dBV (20Hz to 20kHz, input terminated)		
<b>Frequency response</b>	10Hz to 40kHz: ±0.2dB		
<b>Power consumption</b>	50 Watts maximum		
<b>Mains voltage</b>	100V, 120V, 220V or 230V, factory-set for destination country		
<b>Mains frequency</b>	50Hz or 60Hz, factory-set for destination country		
<b>Preamplifier inputs*</b>	(3) Pairs balanced on XLR (4) Pairs single-ended on RCA		
<b>Preamplifier outputs</b>	(1) Pair balanced main output on XLR (1) Pair single-ended main output on RCA (2) Pairs record outputs on RCA		
<b>Other connectors</b>	(2) Link communication (one 8-pin modular RJ-45 connector for “slave-in” and one 8-pin modular RJ-45 connector for “slave-out”)  (1) Phono ground on binding post (1) IR input on 3.5mm miniature phone connector (1) Trigger-programmable output on 3.5mm miniature phone connector (12V level or 5V pulse) (1) RS-232 on 6-pin RJ-11 modular connector (1) AC input on IEC-standard AC mains receptacle		
<b>Overall dimensions</b>	Width:	17.75"	(45.1cm)
	Height:	2.915"	(7.4cm)
	Depth:	14.05"	(35.7cm)
<b>Shipping weight</b>	30 lb (14kg)		
<b>Remote control</b>	Handheld infrared remote control unit; requires 2 AAA batteries (alkaline batteries recommended)		

\* N°326S phono input option is available at additional charge.  
When installed, input 7 becomes the phono input.

Unless otherwise noted, specifications reflect nominal values over 20Hz to 20kHz measured bandwidth on balanced XLR connections.

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