



# MARK LEVINSON N°5206



Mark Levinson N°5206 preamplifier with PurePath fully discrete, direct-coupled, dual-monaural line-level class A preamp circuitry, MM/MC phono stage, and MainDrive headphone output.

## EVOLUTION

Derived from the same Pure Path design philosophy as the distinguished Mark Levinson N°500 series products, the N°5206 preamplifier was created to deliver all the performance and quality expected from Mark Levinson with new affordability and exceptional value.

## ARCHITECTURE

The foundation of the N°5206 is its fully discrete, direct-coupled, dual-monaural line-level preamp circuitry, for which the Shelton design team has been awarded one patent with another patent pending. A unique single gain stage mated to a digitally controlled resistor network for volume adjustment maintains maximum signal integrity and widest possible bandwidth. Each of its four stereo line-level inputs—two balanced XLR and two single-ended, using custom Mark Levinson RCA connectors—has its own individual high-reliability signal switching relays. Like the N°500 series components, the MainDrive headphone output employs a preamp output stage specifically designed with the current and power capacity to drive headphones directly, without a separate headphone amp.

A newly designed phono stage features a hybrid gain topology, mating key discrete components from the acclaimed N°500 series Pure Phono stage with low-noise pre circuits for high performance at a lower cost. Also, like the N°500 series, a hybrid active/passive RIAA equalizer employs precision resistors and polypropylene capacitors for exceptional accuracy and sonic clarity. The user can select MM/MC gain and optional infrasonic filter from the setup menu, while capacitive and resistive loading settings are easily accessed from the rear panel. Variable line-level RCA outputs allow system expansion and flexibility.

## DIGITAL AUDIO

The N°5206 delivers outstanding digital audio capability through the Mark Levinson Precision-Link II™ DAC. The class-leading ESS Sabre Pro series 32-bit D/A converter with jitter elimination circuitry and a fully balanced, discrete current-to-voltage converter form the heart of the digital audio processing stage. Six digital audio inputs are provided: One AES, two coaxial and two optical S/PDIF, and one asynchronous USB for playback of high-resolution PCM (up to 32 bit/384kHz) and DSD (up to 11.2MHz) files. The N°5206 includes MQA (Master Quality Authenticated) technology, which enables playback of MQA audio files and streams. A Bluetooth receiver equipped with aptX-HD enables the high-quality Bluetooth playback.

## CONTROL

System integration and communication ports include Ethernet, USB, RS-232, IR input, and 12V trigger input and output. A newly designed, solid aluminum IR remote is included with the N°5206. Finally, an internal webpage allows setup, import and export of configurations, and software updates using a PC and standard web browser.

## INDUSTRIAL DESIGN

Robust materials, lavish finishes, and bold geometry are hallmark attributes of Mark Levinson designs. The one-inch-thick, bead-blasted, black-anodized, solid aluminum front panels are machined and contoured to flow seamlessly into the sleek glass display, which itself is recessed into a bead-blasted, clear-anodized aluminum bezel.

The iconic hourglass knobs redefined with a gently curved profile softly transitioning into a rounded front. With meticulous details, including, debossed top cover vents, screen-printed logo and legends behind the glass panel, and custom machined aluminum Standby and Menu buttons, and matching feet, the N°5206 exudes elegance and style.

The N°5206 is proudly designed, engineered, and precision-crafted in the USA.

# Performance Specifications

## MARK LEVINSON N°5206

All production N°5206 units will undergo 100% functional testing prior to shipment, and the following features and electrical measurements will be verified on all units. All production units will meet or exceed all specifications listed below.

### ANALOG LINE STAGE

#### Gain:

8dB maximum, single-ended outputs  
14dB maximum, balanced outputs

#### Output overload:

>7.5V RMS, single-ended outputs  
>15V RMS, balanced outputs

#### Frequency response:

20Hz to 20kHz,  $\pm 0.03$ dB  
<2Hz to 250kHz, +0.1/-3dB  
[At unity gain volume setting]

#### Total harmonic distortion:

<0.003%, 20Hz to 20kHz  
[At unity gain volume setting,  
2V RMS single-ended/4V RMS balanced out]

#### Signal-to-noise ratio:

>93dB, 20Hz to 20kHz, wideband, unweighted  
[At unity gain volume setting, referred to 2V RMS  
single-ended/4V RMS balanced out]

#### Subwoofer high-pass filter:

Selectable; 80Hz, 2nd order (12dB/octave)

### PHONO STAGE

#### RIAA frequency response:

20Hz to 20kHz,  $\pm 0.3$ dB

#### Infrasonic filter:

Selectable; 20Hz, 1st order  
(6dB/octave)

#### Moving-magnet mode

##### Input resistance:

47k $\Omega$

##### Input capacitance:

Selectable; 20, 70, 120, or 170pF

##### Gain:

39dB at 1kHz

##### Total harmonic distortion:

<0.01%, 1kHz, 2V RMS output  
<0.05%, 20Hz to 20kHz, 2V RMS output

##### Signal-to-noise ratio:

>80dB, 20Hz to 20kHz, wideband, unweighted,  
referred to 2V RMS output

##### Maximum input level:

>190mV at 1kHz  
>1.6V at 20kHz

##### Moving-coil mode

##### Input resistance:

Selectable; 37 $\Omega$  to 1000 $\Omega$

##### Gain:

69dB at 1kHz

##### Total harmonic distortion:

<0.01%, 1kHz, 2V RMS output  
<0.05%, 20Hz to 20kHz, 2V RMS output

##### Signal-to-noise ratio:

>68dB, 20Hz to 20kHz, wideband, unweighted,  
referred to 2V RMS output

##### Maximum input level:

>6.5mV at 1kHz  
>19mV at 20kHz

### DIGITAL-TO-ANALOG CONVERTER STAGE

#### Output voltage:

5.6V RMS at 0dBFS, maximum volume,  
single-ended outputs  
11.2V RMS at 0dBFS, maximum volume,  
balanced outputs

#### Frequency response:

20Hz to 20kHz, +0/-0.05dB  
[with 44.1kHz/16 bit signal]  
20Hz to 20kHz, +0/-0.02dB  
[with 192kHz/24 bit signal]

#### Total harmonic distortion:

<0.0025%, 20Hz to 20kHz, 3V RMS single-  
ended output [with 44.1kHz/16 bit signal]

<0.002%, 20Hz to 20kHz, 6V RMS balanced  
output [with 44.1kHz/16 bit signal]

<0.002%, 20Hz to 20kHz, 3V RMS single-ended  
output [with 192kHz/24 bit signal]

<0.0017%, 20Hz to 20kHz, 6V RMS balanced  
output [with 192kHz/24 bit signal]

<0.004%, 90kHz, 3V RMS single-ended output  
[with 192kHz/24 bit signal]

<0.003%, 90kHz, 6V RMS balanced output  
[with 192kHz/24 bit signal]

#### Signal-to-noise ratio:

>92dB, 20Hz to 20kHz, wideband, unweighted,  
with 44.1kHz/16 bit signal [referred to 3V RMS  
single-ended or 6V RMS balanced output]

>98dB, 20Hz to 20kHz, wideband, unweighted,  
with 192kHz/24 bit signal [referred to 3V RMS  
single-ended or 6V RMS balanced output]

#### Sample rates/bit depth:

PCM: 32, 44.1, 48, 88.2, 96, 176.4, 192, 352.8,  
or 384kHz; up to 32 bits

DSD: Native or DoP; single, double, or quad  
speed (2.8, 5.6, or 11.2MHz)

### HEADPHONE OUTPUT

#### Total harmonic distortion:

<0.04%, 20Hz and 1kHz, 2V RMS output,  
30 $\Omega$  load

<0.1%, 20kHz, 2V RMS output, 30 $\Omega$  load

#### Output overload:

>3.3V RMS, 30 $\Omega$  load

#### Signal-to-noise ratio:

>88dB, 20Hz to 20kHz, wideband, unweighted,  
referred to 2V RMS output

### GENERAL

#### Analog input connectors:

2 pairs balanced line-level inputs (XLR)  
2 pairs single-ended line-level inputs (RCA)  
1 pair single-ended moving-coil phono  
inputs (RCA)  
1 pair single-ended moving-magnet phono  
inputs (RCA)

#### Digital audio connectors (N°5206 only):

2 coaxial S/PDIF inputs (RCA)  
2 optical S/PDIF inputs (Toslink)  
1 balanced AES/EBU input (XLR)  
1 asynchronous USB input (USB-B)

#### Output connectors:

1 pair single-ended line-level outputs (RCA)  
1 pair balanced line-level outputs (XLR)

#### Control connectors:

1 RS-232 port (DB-9)  
1 Ethernet port (RJ-45)  
1 USB port for firmware updates (USB-A)  
1 baseband IR input (1/8"/3.5mm phone jack)  
1 programmable 12V DC trigger output,  
100mA maximum (1/8"/3.5mm phone jack)  
1 programmable 12V DC trigger input  
(1/8"/3.5mm phone jack)

#### Power consumption:

Power on: 70W  
Power on (headphones connected): 85W  
Normal standby: 65W  
Power Save standby: 4W  
Green standby: <0.4W

#### Dimensions/Weight

##### Unit only:

Height: 4.96"/126mm  
Height without feet: 4.50"/114mm  
Width: 17.25"/438mm  
Depth, enclosure only: 18.00"/457mm  
Depth, with knobs and rear connectors:  
19.25"/489mm  
Weight: 34 lbs/15.4kg

##### With packaging:

Height: 13.63"/346mm  
Width: 24.25"/616mm  
Depth: 29.00"/737mm  
Weight: 48 lbs/21.7kg



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