# Nº585.5 INTEGRATED AMPLIFIER

mark levinson®

## №585.5 INTEGRATED AMPLIFIER WITH PURE PHONO STAGE

Introducing the Mark Levinson® №585.5 Integrated Amplifier. With unsurpassed analog performance, advanced digital audio capability and discrete Class A Pure Phono stage, the Mark Levinson №585.5 pushes the reproduction of any source material to new heights of realism.


## THE EVOLUTION OF INTEGRATED AMPLIFIERS

The Mark Levinson Nº 585 has swept up best in class awards and countless accolades around the world, and is now widely regarded as perhaps the finest integrated amplifier ever made.

Now Mark Levinson redefines the playback quality of a classic medium; by adding a discrete Class A Pure Phono stage to the Nº 585 architecture, in order to create the new Nº 585.5 integrated amplifier. The Nº 585.5 enlists unsurpassed analog performance, advanced digital audio capability, robust amplification, flexible control and the same Pure Phono stage found in the award winning Nº 523 and Nº 526 preamplifiers.

## ARCHITECTURE

The foundation of the №585.5 is its fully discrete, mirror-imaged, dual-monaural analog circuitry featuring individual signal switching relays for each of its five stereo inputs: one XLR and three RCA plus a stereo Pure Phono stage. The volume control uses a discrete R2R ladder design and low-noise analog switches for the widest possible bandwidth and maximum signal integrity. The fully-differential Class AB power stage includes an oversized 900VA toroidal transformer with individual secondary windings for the left and right channels.

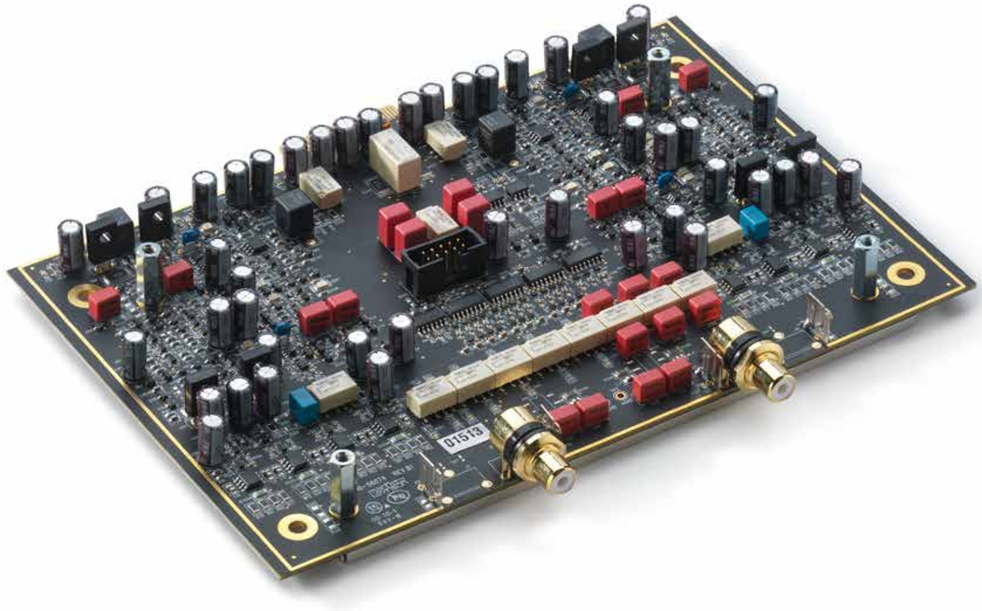

## AMPLIFICATION

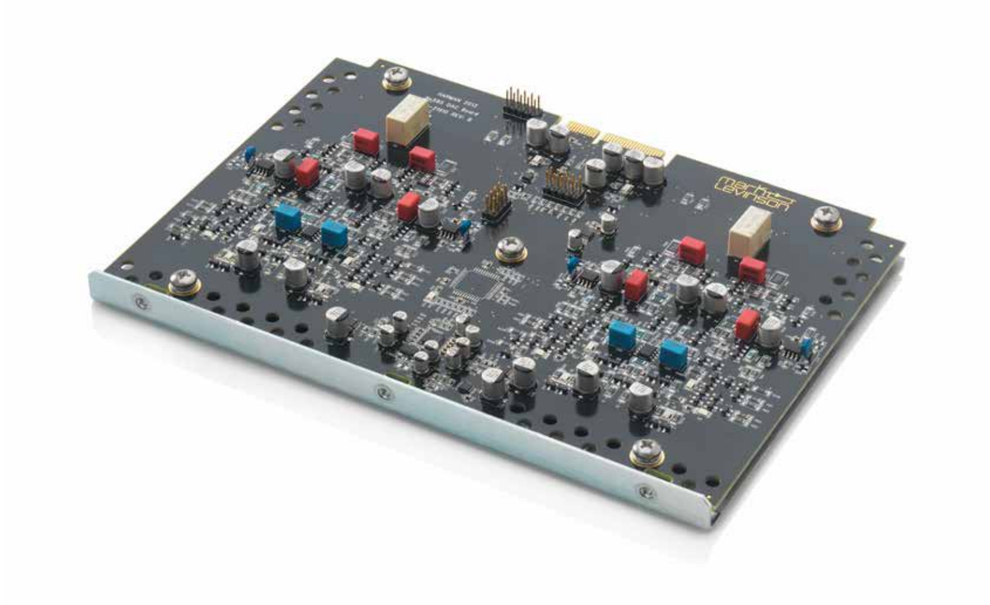
Each elegantly simple amplifier channel utilizes twelve output transistors and multiple smaller local capacitors that allow them to be placed physically closer to the amplifiers for greater transient response when power is needed immediately. This robust architecture results in a conservative power rating of 200W per channel. System integration and expansion are possible using the stereo RCA pre-outs which can operate full-range or with an included switchable, second-order, 80Hz crossover filter allowing for seamless integration into 2.1-channel systems with powered subwoofers.

## PURE PHONO: CLASS A FOR A CLASSIC MEDIUM

The award winning №526 and №523 preamplifiers introduced a new Mark Levinson phono stage – Pure Phono, the same phono stage found in the №585.5. The Pure Phono stage is a discrete design with no op-amps and operates exclusively in Class A throughout, employing tantalum nitride thin-film resistors and polypropylene capacitors with exceptionally low tolerances.

A fixed-gain moving magnet (MM) section with five capacitive cartridge-loading settings, and a moving coil (MC) section with three gain settings and 10 resistive cartridge-loading settings ensures optimization for any cartridge. And an ultrasonic filter intelligently compensates for rumble and warping. The Pure Phono stage also contains physically separated channels and balanced inputs for sonic purity.





## PRECISION LINK DAC

Building upon a superb analog platform, the №585.5 adds equally outstanding digital audio capability with the inclusion of the proprietary Mark Levinson Precision Link high-resolution DAC. An ESS Sabre 32-bit D/A convertor with proprietary jitter elimination circuitry and fully balanced, discrete I/V circuitry forms the heart of the digital audio processing stage. Five power supplies are dedicated to this digital processing stage while a further four power supplies are dedicated to the left and right analog output circuits.

Six digital audio inputs are provided including one AES/EBU, two coaxial and two optical plus a USB audio processor capable of asynchronous data transfer of high resolution DSD and PCM files at up to 192kHz/32 bits resolution. For low-resolution audio formats, proprietary Clari-Fi™ signal processing reconstructs information and bandwidth lost in compressed file formats restoring them to higher fidelity.

## CONTROL

System integration and communication ports include Ethernet, USB, RS-232, IR input, and 12V trigger input and output. An iconic Mark Levinson custom cast aluminum system IR remote is included with the №585.5.



## CONSTRUCTION

The chassis of the №585.5 utilizes card-cage architecture to isolate critical low-level analog and digital circuitry from the power supplies and amplifier modules. The steel and aluminum construction features internal amplifier heatsinks and Mark Levinson's iconic black and silver anodized aluminum front panel with its intuitive twin-knob control system and unique red display. A newly designed 3-piece anodized brushed aluminum top cover exudes durability, elegance and quality.

## HIGHLIGHTS

- Pure Path Phono pre amp operates exclusively in Class A throughout
- Fixed gain moving magnet (MM) section with five capacitive cartridge-loading settings
- Moving coil (MC) section with three gain settings and ten resistive cartridge-loading settings
- Ultrasonic filter intelligently compensates for rumble and warping
- Class AB amplifier rated at 200Wpc into 8 ohms and 350Wpc into 4 ohms
- Discrete analog circuitry throughout
- 5 analog inputs: XLR, 3 x RCA, Phono
- 6 digital inputs: Asynchronous USB (B), AES/EBU, 2 x optical S/PDIF, 2 x coaxial S/PDIF
- 32-bit/192kHz performance, including DSD over PCM via USB
- 80Hz high-pass option allows proper operation of a 2.1-channel system
- Ethernet, RS-232, IR and 12V trigger ports
- Mark Levinson IR remote control
- Designed and handcrafted in the USA

# SPECIFICATIONS

**PHONO STAGE**

- RIAA FREQUENCY RESPONSE: 20Hz to 20kHz, ±0.3dB
- INFRASONIC FILTER DEFEATABLE, 15Hz, 2nd order (12dB/octave)
- MOVING MAGNET MODE
  - INPUT RESISTANCE: 47kΩ
  - INPUT CAPACITANCE: selectable; 50, 100, 150, 200, or 680pF
  - GAIN: 40dB @ 1kHz
  - THD+N, 20Hz to 20kHz, $2V_{RMS}$ output: <0.03%
- MOVING COIL MODE
  - INPUT RESISTANCE: selectable; 20, 33, 50, 66, 100, 200, 330, 500, 1000, or 47k
  - INPUT CAPACITANCE: 50pF
  - GAIN: selectable; 50, 60, or 70dB @ 1kHz
  - THD+N, 20Hz to 20kHz, $2V_{RMS}$ output: <0.02%, 50 or 60dB settings, <0.04%, 70dB setting

**AMPLIFIER SECTION**

- OUTPUT POWER: 200W RMS per channel @ 8Ω, 20Hz – 20kHz
- DAMPING FACTOR: >400 @ 20Hz, referred to 8Ω
- FREQUENCY RESPONSE: 20Hz – 20kHz, ±0.13dB; 2Hz – 250kHz, +0.2dB/–3dB
- SIGNAL-TO-NOISE RATIO: >98dB (20Hz – 20kHz, unweighted); >103dB (20Hz – 20kHz, A-wtd), referred to full output – maximum volume setting
- VOLTAGE GAIN: 40.7dB (maximum volume setting)
- TOTAL HARMONIC DISTORTION: <0.01% @ 1kHz, 200W, 8Ω; <0.1% @ 20kHz, 200W, 8Ω

**PREAMPLIFIER SECTION: ANALOG**

- INPUT IMPEDANCE: >45kΩ (RCA & XLR)
- INPUT OVERLOAD: $>5.5V_{RMS}$ (RCA & XLR)

**PREAMPLIFIER SECTION: DIGITAL**

- DAC OUTPUT VOLTAGE @ FULL SCALE (0dBFS): $3.7V_{RMS}$
- DAC FREQUENCY RESPONSE: 20Hz to 20kHz, +0 / ¬–0.2dB
- DAC THD, FULL SCALE (0dBFS): <0.0001% @ 1kHz, <0.0003% @ 20kHz
- DAC SNR (referred to $3.7V_{RMS}$ / 0dBFS output): >120dB (A-weighted)
- PCM SAMPLE RATES/BIT DEPTH: 32, 44.1, 48, 88.2, 96, 176.4, or 192kHz; up to 32 bits
- DSD: Native or DoP (DSD over PCM), single- and double-speed (2.8 and 5.6MHz)

**DIMENSIONS**

7.6" x 17.1" x 19.9" (193mm x 434mm x 506mm)

**WEIGHT**

74 lb (34kg)

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