



MAGNUM DYNALAB
PURE SOURCE AUDIO

MD 309

2-Channel Hybrid Integrated Amplifier
Featuring Hybrid Acoustic Technology

HYBRID-ACOUSTIC™ CIRCUITRY

POWERFUL (225w - 8ohms)

FLEXIBLE INPUTS/OUTPUTS

ON BOARD DAC

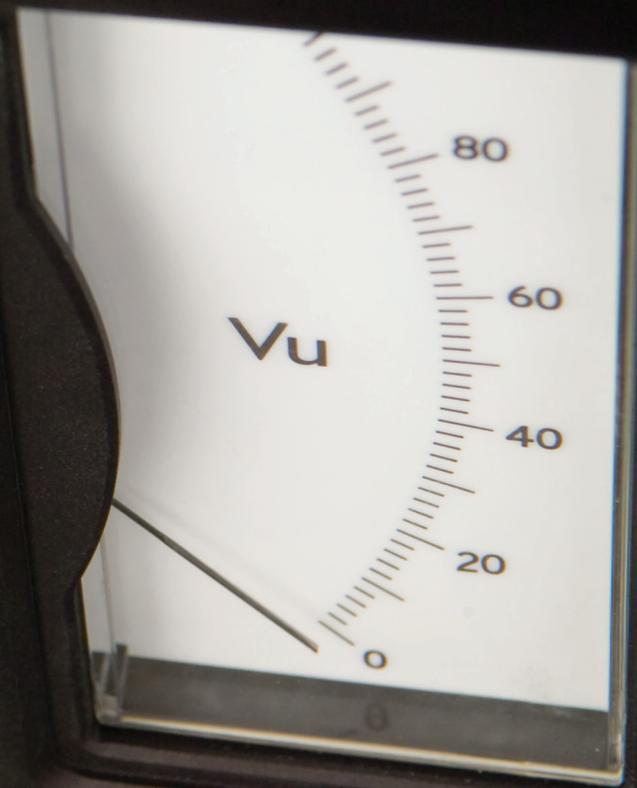
AUDIO PROTECTION BOARD

INTUITIVE TOUCHSCREEN OPERATION

WORLD LEADING COMPONENTS

FEATURES

MAGNUM
DYNALAB



MD 309 2-Channel Hybrid Integrated Amplifier

MD 309

HIGHLIGHTS

INTRODUCING OUR HYBRID-ACOUSTIC™ CIRCUITRY

This unique and proprietary circuitry combines the musicality, soundstaging and audio realism of our JJ 6922 CryoTubes with the crisp detail, harmonics and long-life of a solid state device.

POWERFUL and FLEXIBLE

Equipped with 40 Sanken output transistors to boost current after the tube gain stage, the MD-309 Hybrid Integrated Amplifier is rated at 225 watts into 8 ohms (450 watts into 4 ohms), adequate output to drive the most demanding of speakers.

FUNCTIONAL AND STATELY

With a 5" LCD touchscreen, symmetrical knobs and meters, soft blue LED lighting, a 1" thick faceplate and intuitive remote, the MD-309 is as attractive as it is easy-to-operate.

INTEGRATE ANY DIGITAL SOURCE COMPONENT

The MD-309 Hybrid Integrated Amplifier is equipped with our most advanced Digital-to-Analog converter, featuring full-time upconverting and oversampling to 24-bit/192kHz, 3 digital inputs (including USB), and seamless operation through the remote or faceplate.

FLEXIBLE INPUTS

With 1 line-level pre-amp output, 2 Balanced (XLR) inputs and 3 single-ended analog inputs (including a Surround Sound Processor input for integration with multi-channel applications), PLUS 3 digital inputs (including USB), the MD-309 Integrated Amplifier acts as the backbone for any home audio/video system.

MD REFERENCE CRYOVALVE TUBES

Specially designed and manufactured 6922 vacuum tubes are used in the pre-amp section of the MD-309. A unique cryofreezing process provides decreased microphonic effects and eliminating any stresses in the tube generated during the manufacturing process.

AUDIO PROTECTION BOARD

The MD 309 Hybrid Integrated Amplifier comes equipped with a proprietary circuit to run regular diagnostics on the device, ensuring safe and efficient operation of the unit at all times.

WORLD LEADING COMPONENTS

The collection of components come from only world recognized and leading suppliers: Mundorf, Kimber, WBT, Dale-Vishay and Burr Brown.

MAGNUM DYNALAB BUILDS QUALITY

Solid aluminum feet with Vibrapods Isolators, 24K gold plated .093" thick circuit boards, hefty internal heat-sinks and a burly chassis are all characteristics of our unrelenting commitment to quality.



EVOLUTION

An Integrated Amplifier For The Evolution Of The Home Audio System

From our pedigree in pure analog circuitry, we're proud to introduce our most uncompromising 2-channel Integrated Amplifier. Using the same Hybrid-Acoustic™ Circuitry found in our MD-209 Audio Receiver, JJ 6922 Cryovalve tubes, and stocked with Magnum Dynalab's unrelenting build quality and audio engineering, the new MD 309 Hybrid Integrated Amplifier is a future-ready anchor for your high-performance home audio system.

In addition to the world leading analog circuitry found in the MD-309, this flexible device comes equipped with a variety of features to ensure flexible use. For starters, our on-board Digital-Analog converter, developed over an arduous testing process in our labs, ensures that any digital source device can be seamlessly integrated into your home audio system. Further, the ability to integrate the MD-309 into a multi-channel setup via our Surround Sound Processor input enables the MD-309 to operate in a variety of listening environments.

And not to be overlooked is the sound. As Alan Sircom from HiFi Plus writes, 'There's depth, intellect and subtlety behind the power and very tidy, deep, powerful bass. This, coupled with plenty of detail, excellent dynamic shading and stereo separation and good stereo soundstaging, makes for an amplifier that can cope with pretty much anything you care to throw at it...'

EVOLVING TECHNOLOGY

Hybrid Acoustic Circuitry

The simple and efficient treatment of the analog signal throughout the MD-309 Integrated Amplifier is, without a doubt, the hallmark of this musical device. Our Director of Design Zdenko Zivkovic has worked tirelessly to develop the Hybrid-Acoustic design platform, the backbone of this Hybrid Integrated Amplifier. This distinctive circuit path delivers the unique combination of long tube life (expected to be greater than 6 years under normal use before tube replacement), with high-current output (225 watts into 8 ohms and 450 watts into 4 ohms) in a design that generates half of its gain from the triode stage in a zero feedback design. The result is reference-quality audio realism and soundstaging of a full triode design.

This unique combination of long tube-life and high current output is achieved NOT by the use of output transformers, which add weight, limit frequency response, and ultimately, harm the harmonics of the resultant signal.

Rather, the MD-309 Integrated Amplifier is equipped with an output stage that generates power through the use of 40 Sanken output transistors (10 per phase), which amplify current, NOT voltage, eliminating the need for traditional output tubes that are typical of tube amplifiers. This allows the tubes to operate efficiently, and when combined with a collection of world-leading components, including Mundorf Gold capacitors in the tube gain stage, Kimber Hyper Pure wiring throughout, and a unique audio stage that delivers the signal fully balanced before the output stage, the ultimate result is a perfect reproduction of the original dynamic signal.

FUNCTION

Incredibly intuitive LCD touchscreen and a functional remote, the MD-309 Integrated Amplifier is as easy to operate as it is attractive. The large knobs on the front panel offer the operator the option of manual volume control and input select, and if desired, users can pre-select listening levels for each input.

The 5 analog inputs (2 Balanced XLR, 3 single-ended) provide plenty of source options, and include a SSP (Surround Sound Processor) input, which disengages the pre-amp section to allow the MD-309 to act as the amplifier for the 2 mains in multi-channel applications. Finally, in addition to the 5 analog inputs, the DAC board enables the integration of any digital source into your home audio system, via a USB or coaxial connection.

POWER

The Power Supply

Not to be overlooked, we've also equipped the MD-309 Hybrid Integrated Amplifier with a power plant that is more than capable of delivering current to all critical components. A shielded toroidal transformer and 8 Mundorf M-Lytic capacitors delivering 22,000uF each (total of 176,000uF of filtration) both help to ensure that the MD-309 Integrated Amplifier is free of ripple at 60Hz, 120Hz and 180Hz. Finally, each channel has its own axis bridge from the transformer, ensuring an ample reserve of current, making certain current supply is never an issue.

DIGITAL

The Digital-Analog Converter

The highly competent analog design of the MD-309 Integrated Amplifier necessitates a digital interface board that provides the same high level of performance. And our design team has made no compromises. Recognizing the variety of digital information fed through most DACs, our design philosophy ensures that all incoming signals are upconverted through a proprietary mathematical calculation, matching input signals with that of the world's best digital sources. This means



that no matter the digital source used with the MD-309, the resultant signal is boosted to 24bit/192kHz, ensuring the maximum information is available for the conversion process.

And of course, only world-leading components are used in this proprietary circuit, featuring a Digital Audio Receiver and Digital Signal Processor from CIRRUS Logic and Texas Instruments, respectively. This design, when combined with the inclusion of a master clock that is positioned alongside the DSP (versus at the input section of the circuit), creates a resultant signal that is perfectly clocked, incredibly accurate and virtually jitter-free. The sonic result of this elimination of jitter is immediately recognizable, transforming any digital input into a focused, clear and accurate signal in the analog domain. This creates a product that is hugely scalable, allowing the MD-309 Hybrid Integrated Amplifier to be a true anchor in your home entertainment system.





MAGNUM
DYNALAB

SPECIFICATIONS

Power Output:

225 Watts into 8 Ohms, 450 Watts into 4 Ohms

Signal to Noise Ratio: -110dB, A Weighted

Audio Frequency Response: 2Hz - 100KHz

Class of Operation - Class A/B, Class A for 1-3 Watts

Input Impedance - 10K

Output Impedance after Volume Control - 2K (pre-out)

Fully Balanced Amplifier Design - 10 Sanken Output

Transistors per Phase (40 Total)

Inputs - 5 Analog (2 balanced XLR, 3 single ended including Surround Sound Processor input), 3 digital (2 Coaxial, 1 USB)

Outputs - 1 line level pre-out

Input Sensivity - 1.2V RMS

Total Harmonic Distortion - 0.05% at any power

Dynamic Headroom - +3dB

Shipping Weight - 65 lbs

Dimensions (W.D.H.) - 19" x 20" x 6.5"

Fuse Replacement:

120V, 10amp slow blow OR 240V, 6.3amp slow blow

Tube Specifications - 2 x 6922 Cryovalve

Warranty - 2 years



MAGNUM DYNALAB

PURE SOURCE AUDIO

Magnum Dynalab Ltd.

8 Strathearn Avenue, Unit 9

Brampton, Ontario

Canada

L6T 4L9

P: 905.791.5888

F: 905.791.5583

TF in North America: 800.551.4130

info@magnumdynalab.com

www.magnumdynalab.com