



MAGNUM DYNALAB
PURE SOURCE AUDIO

MD 209

2-Channel Hybrid Audio Receiver
Featuring Hybrid Acoustic Technology



- HYBRID-ACOUSTIC™ CIRCUITRY
- FUNCTIONAL & STATELY FACEPLATE
- FLEXIBLE INPUTS/OUTPUTS
- ON BOARD DAC
- AUDIO PROTECTION BOARD
- WORLD LEADING COMPONENTS
- MAGNUM DYNALAB BUILD QUALITY

FEATURES

MD 209
Hybrid Receiver

MD 209

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.

FUNCTIONAL AND STATELY FACEPLATE

With a bright LED display, symmetrical knobs and meters, and a 3/8" thick faceplate, the MD-209 is as attractive as it is easy-to-operate.

INTEGRATE ANY DIGITAL SOURCE COMPONENT

The MD-209 2 channel audio receiver 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.

WORLD-LEADING FM SECTION

With 8 stages of RF filtration and our in-house designed and manufactured RF front-end, our FM tuner section will astonish you with the audio clarity and realism that is characteristic of every Magnum Dynalab tuner.

FLEXIBLE INPUTS/OUTPUTS

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-209 acts as the backbone for any home audio/video system.

AUDIO PROTECTION BOARD

The MD-209 comes equipped with a proprietary circuit to run regular diagnostics on the device, ensuring safe and efficient operation of the unit at all times and safeguarding against any unwanted current that may harm your speaker.

MD REFERENCE CRYOVALVE TUBES

Specially designed and manufactured 6922 vacuum tubes are used in the pre-amp section of the MD-209. A unique cryofreezing process provides decreased microphonic effects, eliminating any stresses in the tube generated at the point of manufacturing.

MAGNUM DYNALAB BUILD QUALITY

Solid footings, 24K gold plated .093" thick circuit boards, hefty internal heat-syncs and a burly chassis are all characteristics of our unrelenting commitment to quality.



THE 2-CHANNEL RECEIVER

Serious High-Fidelity in a 1-Box Solution

It was in the early 2000's when we launched our first 2-channel Audio Receiver – the MD 208. Revered around the world and acclaimed for its ability to provide high fidelity performance comparable to many of the world's best separate components, the MD 208 proved that there was a place in the hi-fi world for a one-box audio receiver. Although some of our users chose to use the MD 208 in a secondary listening environment (office or 2nd home), the performance of the device led to its inclusion in primary home audio systems around the globe.

From this background, our engineers worked on areas for improvement. It wasn't until late 2006, when we introduced the use of vacuum tubes into our line of FM tuners, that we elected to work towards a Triode design in a pre-amp/amplifier. The result? Hybrid-Acoustic Circuitry – a circuit design that takes advantage of both tube and solid-state technology, all the while delivering the same outstanding performance listeners have come to expect from Magnum Dynalab. Introducing the MD 209 – a product almost 3 years in the making, and one that we're comfortable designating a world reference 2-channel audio receiver.

From Ernie Fisher of The Inner Ear Report: *"I had the earlier version MD receiver and reviewed it in 2002. I was quite happy with it giving it top rating. Nevertheless, the MD 209's performance offers much improved musical essence — better harmonic capability, more appropriate rendering of tonal hue and instrumental timbre and less "bite" compared to its earlier solid state version."*

"The MD 209 receiver's amp/preamp section belongs to audio's high-end category and will compete with many distinguished separates I have run across over the years. There isn't a doubt in my mind that this "stereo only" component is a breakthrough, even the paradigm of modern audio receivers."

EVOLVING TECHNOLOGY

Hybrid Acoustic Circuitry

The simple and efficient treatment of the analog signal throughout the MD-209 is, without a doubt, the hallmark of this marvelously musical device. Our Director of Design Zdenko Zivkovic has worked tirelessly to develop the Hybrid-Acoustic design platform, the backbone of this Hybrid Audio Receiver. This distinctive circuit path delivers the unique combination of long tube life (expected to be greater than 7 years under normal use), with high-current output in a design that generates half of its gain from the triode stage. 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-209 is equipped with an output stage that generates power through the use of 20 Sanken output transistors (10 per channel), which amplify current, NOT voltage, eliminating the need for traditional output tubes that are typical of tube amplifiers. This allows the Cyrovalve tubes to operate efficiently, and when combined with a collection of world-leading components, including Mundorf Supreme capacitors in the tube gain stage, Kimber Hyper-Pure cables throughout the device and WBT binding posts and Cardas RCA connectors, it's no surprise that the ultimate result is a perfect reproduction of the original dynamic signal.

Not to be overlooked, we've also equipped the MD-209 with a 650VA power plant that is more than capable delivering current to all critical components. A shielded toroidal transformer and 8 Mundorf electrolytic capacitors delivering a total of 80,000uF of filtration ensures a flat DC supply of power.

FUNCTION

With an incredibly intuitive LCD touchscreen and a functional remote, the MD-209 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-209 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.

RF SECTION

A Legend in FM Reception

From a history of world-leading RF designs, we have put our best into the MD-209. An eight stage Varactor tuned front end ensures that this source is unequalled in its ability to receive and replicate a pure FM signal. With two stages of I.F. selection, you can opt for the setting that allows the



most authentic, pure listening experience regardless of the reception environment and conditions. The automatic gain control feature ensures that the tuner will optimize R.F. performance no matter the strength of the input signal.



As is the case with all Magnum Dynalab FM Tuners, we design and produce our own analog front ends. This integral core to any tuner is carefully built in-house to meet our rigid standards and specifications, and in addition, great care is taken in matching all critical components, especially the IF filters. This attention to detail for a circuit path that is often overlooked ensures that the FM section of our MD-209 is sure to be a hallmark source for your home audio system.

DAC

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.

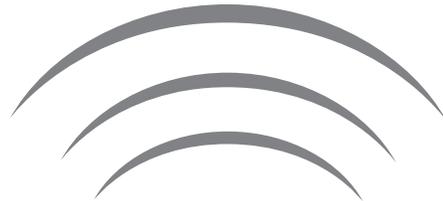
MD 209 Hybrid Receiver

SPECIFICATIONS

Power – 125 watts in 8 ohms, 250 watts into 4 ohms
Audio Frequency Response – 2Hz - 100KHz
Class of Operation – 50 % of gain class A, 50 % of gain class AB
Harmonic Distortion – < 0.05 % (2hz-100KHz)
Total Harmonic Distortion – <0.1
Gain Control – Burr Brown
Signal to Noise Ratio – > -115dB
Gain – 28dB
Output devices – Sanken (bi-polar)
Input Sensitivity – 1.2 volts at full power
Input Impedance – 10K
Output Impedance – 2K
Inputs – 5 Analog (2 balanced XLR, 3 single ended including Surround Sound Processor input)
Outputs – 1 line level pre-out, 3 digital (2 Coaxial, 1 USB)
Dimensions (W.D.H.) – 19" x 19.5" X 6.5"
Weight – 51 lbs
Fuse Replacement – 120V, 6.3amp slow blow OR 240V, 4 amp slow blow
Tube Specifications – 2 x 6922 Magnum Dynalab Cryovalve
Warranty – 2 years

RF Specifications

Usable sensitivity – (mono) 0.7 u V 9.0 dBf
50 dB quieting (mono) – 2.0 u V 9.9 dBf
50 dB quieting (stereo) – 2.3 u V 20.0 dBf
Capture ratio – 1.5 dB
Image rejection – 125.0 dB
Alternate channel (wide) – >46.0 dB
Alternate channel (narrow) – >80.0 dB
Adjacent channel (wide) – 3.0 dB
Adjacent channel (narrow) – 30.0 dB
THD (mono) – 0.10%
THD (stereo) – 0.10%
Stereo separation – 50.0 dB
AM suppression – 70.0 dB
SCA rejection – 80.0 dB
IF Rejection – 80.0 dB
19 KHz & 38 KHz component rejection – 75.0 dB



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