



## EQUIPMENT REVIEW

# Magnum Dynalab MD-309 integrated amplifier

by Alan Sircom

**O**h yeah, Magnum Dynalab... the tuner company. Except the MD-309 is entirely free from tuners. Our ability to neatly compartmentalise companies might mean the MD-309 hybrid amplifier never gets the recognition it deserves, because Magnum Dynalab is 'the tuner company' and not even thought about as a maker of anything not directly tuner related. Which is a crying shame because it's a really good amplifier.

It's a hybrid design, using one of Magnum Dynalab's special CryoValve 6922 tubes per channel in the preamp stage. This CryoValve treatment is a combination of grading and enhancement to the standard valves, involving a 100 hour stay at -196°C, 100 hours of 'vacuum enhancement' and a 100 hour soak test/'annealing' at 175°C. After each stage, batteries of tests are run to determine the performance of the valve. Whether the cryogenic process has any tangible benefit or whether the process is just a series of very stringent gradings is moot, because the end result is said to be better preamp tubes than most, making a smoother, more dynamic sound and a longer-lasting one, too.

The power amp side is wholly solid-state, featuring 40 Sanken output transistors (10 per phase per channel), which give the MD-309 a rated power of 225 watts per channel into eight ohms. The big potted toroidal transformer that dominates the inside of the 309's case help give the amp a very stiff power supply, evidenced by the doubling of power (450 watts per channel) into a four ohm load. Of course, two rows of heatsinks to keep those 40 transistors cool, added to a dirty great potted transformer and a front panel that's an inch thick in places all adds up to one pretty damn big and heavy integrated amp design. One that's echoed in the remote handset; this is essentially a standard oval button design using the Philips RC-6

remote codes. However, instead of retaining the standard plastic fantastic handset, MD has rehomed the remote PCB inside a brushed alloy case that's nigh on an inch thick and weighty to boot. Overkill, perhaps, but it all adds to the experience.

This amplifier design (known as Hybrid-Acoustic Technology, according to the company's Director of Design, Zdenko Zivkovic) uses the output transistors to act as a current, rather than voltage, amplifier. This spells a hybrid amp without output transformers, and is uniquely different to other similar hybrid designs (such as Pathos' INPOL system), although those differences are not immediately apparent.

There's a common look between this and the company's top MD-109 tuner. Two big blue sideways VU meters flanking a large blue touch-screen and with two big knobs at either side of the centre panel. And yes, that faceplate is almost an inch thick of solid aluminium. Understated it might not be, but consistent... definitely. Both products add a clever level of digital operation to what is essentially an analogue product. In this case, individual sources (three phono and two XLR balanced) can be level matched at input, home cinema processors and diagnostic systems can be run at will.

The digital control unit is immediately apparent because of that inches wide dark ▶

▶ blue on pale blue touch screen on the front panel. This rivals Audio Research's Reference preamps for across the room volume level readability, but also has details of source and more on tap. You control source selection by the hard right knob, the volume by the left and all other operations (including power on) are controlled from the front panel. Which means – like Chuck Norris – the MD-309 does not sleep. It waits.

Power on takes about 20 seconds of warm up from standby to music playing. When adjusting volume level (or changing sources) there is a mild pitter-patter sound from the logic driven gain control. There's also the occasional clicking of relays as you move from analogue to digital or back again. This is nothing to worry about (in fact, it's something praiseworthy as this switching circuitry means less sonically deleterious components in the chain to get in the way of the sound).

Then there's the digital processor built into the amp itself. This is a Burr Brown DAC with three digital inputs, including USB for computer audio sources (sadly, this section is not in the photo sample). We suspect this is fast becoming one of the standards for integrated amplifiers in 2010 and beyond – in five years time, it might be virtually unthinkable to release an amp without a USB-supporting DAC on board, such is the delta-v of this part of the market.

This is a mercifully unfussy amplifier design. Fancy mains leads... who needs 'em? Exotic supports... pah! I'm not saying the MD-309 won't benefit from a spot of audiophile obsessive-compulsive disorder (especially as those plastic coated multi-way WBT speaker terminals cry out for thick wires to hang out of them), but it doesn't need such flummery to make a good sound. In that way, it's so Canadian in the manner of Bryston, Moon and co. And more power to it for that. It didn't seem to need much of a run-in, either. The tubes need a few minutes to come on song, but the amplifier sounded good out the box and stayed that way.

One functional niggle concerns the MD-309's back panel. The coaxial digital inputs are lined up in exactly the same direction as the line inputs, even to the point of using little red and white collets around the gold WBT phono sockets. This means if you are scrabbling round the back of the amp, you can end up connecting a line source to the two digital coaxial inputs by mistake.

A good sign of a fine amplifier is its ability not to change dramatically in performance when moving from input to input. Switching from a balanced

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input to a single-ended one (both times using the outputs of the excellent Lyngdorf CD-1 and the Esoteric X-05 tested in this issue, using Cardas Clear for both XLR and phono connection) highlighted how remarkably well balanced this amplifier is handling both types of input. This is remarkably rare in reality; some amps (Electrocompaniet, for example) are essentially balanced designs with single-ended inputs coming along for the ride, others (Coda) seem to consider balanced as an afterthought. The MD-309 handles both with equal aplomb.

This is a very different sound to the typical smooth, effortless musicality of many products in the Audiofreaks portfolio. Those after a big, black version of the conrad-▶





▶ Johnson sound will not find it here. Instead, it's a more rhythmic, up beat sound; not bright and not aggressive, but the kind of thing with a very taut, deep bass that makes you want to put tracks with a bit of boogie on the CD tray. It made even the most turgid white-boy reggae track ('Something I Do' from Robert Earl Keen's *The Rose Hotel*) sounds almost like Toots and the Maytals meets King Tubby.

It's not just a rock-hound though. There's depth, intellect and subtlety behind the power and very tidy, deep, powerful bass of the MD-309. 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, whether that be Jack White performing cruel and unusual experiments on a 50 year old guitar, John Pickard's modernist *Flight of Icarus* scaring the capacitors out of most amps or Ben Webster helping to re-define the term 'cool' in jazz, the MD-309 takes it in its stride.

The built in DAC is extremely good, too. It's not a step-change product – no-one's going to consider sidelining their dCS converter for what goes on inside the MD-309, but it's more than good enough. It was every bit as good as the tones coming out of the Esoteric and improved on the basic Lyngdorf sound by no small degree. USB too is good, but this section loses something in comparison to some of the better USB-based DACs around; the little HRT Streamer + is a more confident and temporally tighter sounding converter. As a first outing to computer-based music sources, this is a fine introduction, but it left Lowell George sounding as if he'd had a mild groovectomy when playing 'Lafayette Railroad' from Little Feat's *Dixie Chicken* – something that wasn't apparent on either the regular digital audio or the analog inputs. Perhaps this wouldn't have been so apparent if the rest of the presentation was less funky, of course.

For most users at this time, I suspect the mild limitation of USB input will not be a great stumbling block. Instead, those who get past the fact that this is an amplifier from a tuner company will find themselves listening to one of the very best integrated amplifiers out there. +

## TECHNICAL SPECIFICATIONS

Magnum Dynalab MD 309 hybrid integrated amplifier

**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

**Output sensitivity:** 1.2V RMS

**Tube compliment:** 2 x 6922 Cryovalve

**Power Output:** 225 watts into eight ohms, 450 watts into four ohms

**THD:** 0.05% at any power

**Frequency Response:** 2Hz-100kHz (+0dB, -0.25dB)

**S/N ratio:** -110dB, A Weighted

**Dynamic Headroom:** 3dB

**Operational class:** Class A/B (class A for 1-3watts)

**Input Impedance:** 10K

**Output impedance:** 2K (pre-out, after volume control)

**Dimensions (WxHxD):** 48.3x16.5x51cm

**Shipping Weight:** 29.5kg

**Price:** £5,995

**Manufactured by**

Magnum Dynalab

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