

The Magnum Dynalab MD 109 Tuner



by Alan Sircom

There is a sense of the traditional to FM tuners. They have a sense of decorum; staid even. Hardly the sort of thing that you'd expect 50 Cent to get excited about: Until now that is — the Magnum Dynalab MD 109 fits the bill perfectly. It is the King of Bling, in tuner terms.

This FM only unit has all the elements needed to loft it to the top table of radio receivers. *First, it's made by Magnum Dynalab; that in itself is an arbiter of the highest quality.* Okay, having a brand name is no automatic guarantee of quality, *but like there hasn't been a duff Rolls-Royce or a naff Leica, so there isn't a mediocre Magnum Dynalab tuner.* Next, the MD 109 is dubbed the 'Triode Reference FM Tuner' by Magnum Dynalab and is they feel, their best effort. Then, instead of the usual tuner circuit, the MD 109 features the proprietary TRACC (Triode Reference Audio Control Center) circuit and features a toroidal transformer the sort of size normally found in power amps. Then, finally, there's the display and the sheer simplicity of the device. There's another bonus, too. .. but let's not spoil the fun just yet.

This big, heavy tuner comes in an even bigger and heavier blue flight case. This is too snug for the remote control to be packed in with the case, so this has to travel separately. But, given the robust, tank-like build of the handset, it should be able to look after itself. Other remote controls tend to dive down the back of the sofa in fear when confronted by this Mike Tyson of a handset. Yes, it has all the ergonomics of a housebrick and functions happen a little slowly, but the 18 buttons are big and clearly marked and I'm happy to trade small and breakable for big and brutal.

The unbreakable build of the remote extends to the tuner itself. *Magnum Dynalab makes big, solidly built products, but this is exceptional even against such impressive stable-mates. The flight case seems almost superfluous; you could drop the MD 109 out of the back of a low-flying Hercules onto a concrete airstrip and the only thing that would dent is the runway. Well, almost.* There are smaller, lighter and less well-built power amplifiers — can you think of any other tuner (the legendary Marantz 108 excepted) that needs two people to lift it out of the packaging?

This is Magnum Dynalab's World Source Platform. Not just marketing hype,

the platform (and the aforementioned TRACC technology entailed within) has taken two years to design. Basically, it means the MD 109 delivers an unparalleled 200 ohm output impedance flat from 0.2 Hz to 200 KHz, (which virtually eliminates the influence of the interconnect cables). It also has a signal to noise ratio better than 110 dB, with no phase shift or distortion variance from 0.2 Hz to 200Khz. Much of this is thanks to the power supply stage, as designer Zdenko Zivkovic concentrated much of his effort on perfecting the ground plane. By lifting the audio ground from the chassis ground, it's suggested that impurities that originate with the ground plane are effectively eliminated, leaving only the original signal. *A ripple-free power supply and a hefty pair of transformers (one for the RF and control stages, one for audio) help, too.*

The RF stage has been completely redesigned as well. Already well known for rolling their own, Magnum Dynalab take the concept to the limit here, with an eight-stage Varactor —tuned front end.

This allows three levels of IF selection (instead of two in previous Magnum Dynalab models) for absolutely pin-point precise analogue tuning, which is surprisingly

ly drift free from the outset. Normally, Magnum Dynalab tuners

bristle with toggle switches, covering all the finer points of locking a signal in place. Not here. Instead, the MD 109 sports just two dials; the right hand one covers tuning, the left is a selector, but for now is effectively dormant. But, all those other controls are still required by a tuner of the MD 109's mettle. So, where are they? This is where that huge LCD display comes into play. It's actually a touchscreen. Touch-screen panels are not new to audio — Classé has been using them for a while, as have various homecontrol systems — but it's the first time something so advanced has been used to control something as retro as

a fully analogue, tube tuner. Along the bottom of the LCD screen are six 'soft' buttons for power, stereo/mono, band (actually that three position JE sensitivity control, not AM or FM selection), blend, mute and display dim. The touch-screen is good for 10,000 hours, more if mostly dimmed, but doesn't switch off completely until you turn the tuner off. This can be a distraction in some rooms, as can the large display, but at least the station's frequency can be read across the room. ...even if that room is the Albert Hall. You can manually store up to 40 presets, and these can be accessed from the touch screen or the remote. Sadly, the inclusion of the display spells the end of the magic eye found in other Magnum Dynalab designs. This is a shame because it's one of the most easy, intuitive and accurate ways of determining how good the signal is. But, the big signal strength and centre tune VU meters are in place, arranged vertically either side of the main display.

When first powered up, the tuner goes into a diagnostic/stealth mode for half a minute or so, during which it presents a big Magnum Dynalab logo on the touch screen until it reaches the right operating temperature and turns back to being a tuner. So far, so very high-tech. There's a word in the name that suggests an older heritage though; triode. This tuner uses four of them, 6922 double triodes to be precise, sourced from different manufacturers for different uses within the tuner itself. The 6922's used in the V1 and V2 sockets are Amperex Bugle Boys, while the V3 and V4 positions are

occupied by Jan Philips designs. The only other physical switch is the on/off rocker switch at the back of the tuner. The rest of the rear panel is populated with an IEC mains input and both heavy-duty gold-plated phono and XLR sockets for single ended and balanced output. There's an f-type aerial input, and there's also a large blanking plate, too. More on this later.

It's been getting harder and harder to write about Magnum Dynalab tuners, because you keep running out of superlatives. *Every time you hear one, you are surprised by how close to the studio you are getting. And the next one up the portfolio just gets better than the last.* Now we are at the top of the Magnum Dynalab tree. Now, it gets silly. You start



to question if it's possible to hear that much detail from a tuner source, no matter how impressive that source may be. After all, FM broadcasts are often compressed and the sheer live nature of the medium at its best can produce compromises in their own right. Besides, most of the time, you are listening to CDs being played through players markedly inferior to the one in your system. But strangely, none of this seems to matter.

The odd thing is just how much the MD 109 improves even the dirtiest talk radio ('dirty' here meaning 'poor sound quality' and has nothing to do with shock jocks like Howard Stern). When Baz from Leytonstone calls in to the station on his mobile phone, you don't expect much, yet the MD 109 rewards such listening by seeming to eliminate spitch from the transmission that normally gets between you and the person speaking. But, that's merely an aperitif. The entrée is decent live broadcasts, well produced plays and the sort of highclass programming the BBC is occasionally so justly proud of.

There is a sense of naturalness to the source that you don't often get with CD, even when the station is playing CDs. Now, that's odd. It's an analoguelike sound, without being faux analogue-y. I suspect this may be something to do with the deep yet close-knit soundstage, or maybe that FM as a source introduces more crosstalk than CD. Whatever, I found the playing of CD music on the radio on a par with the best home sources on this tuner.

This is an interesting conclusion. Crosstalk — where the signal from the left channel bleeds into the right and vice versa — is a given on FM, but usually it's masked by the noise floor of the signal. Or, so I thought. Perhaps, that noise floor is in part related

found on any current tuner, simply because the DaySequerra is back and is an untested force).

Soundstaging is another Magnum Dynalab strong point, amplified to the nth degree here. The sound is deep, wide but not especially so and with surprisingly good soundstage height. It's rare to find a wide soundstage on FM, unless it's done at the expense of all other dimensions, but there's no sense of trade-off on the MD 109. The sound stands slightly wide of the loudspeakers, but this is easily overlooked when you listen into the cavernous depth of the staging. A quick snippet of Brahms on Radio Three ably demonstrated this; the image depth seemed to be well past the end of the living room walls, and should have come with a sign saying 'Here be Dragons!'

Of all the tuner benefits, the most obvious one is vocal articulation, though. *The MD 109 sets a benchmark for voices that no other tuner can match as yet. News programmes take on a clarity and directness that makes them sound like it's a conversation in the room, not in a remote studio. The voices are not behind microphones, they are living, breathing solid human beings, there in the room with you. This makes outside broadcasts to war-torn zones or rainforests seem rather strange and discomforting when the giant gorilla (or guerrilla) jumps out of the sideboard.*

All of these aspects could be very closely replicated — to a lesser degree — with a cheaper tuner. But no tuner combines all these aspects so gracefully and so incisively. This doesn't just put you in the broadcaster's suite, it makes you a part of the broadcasting chain. I found myself talking back to the people in the room as if I

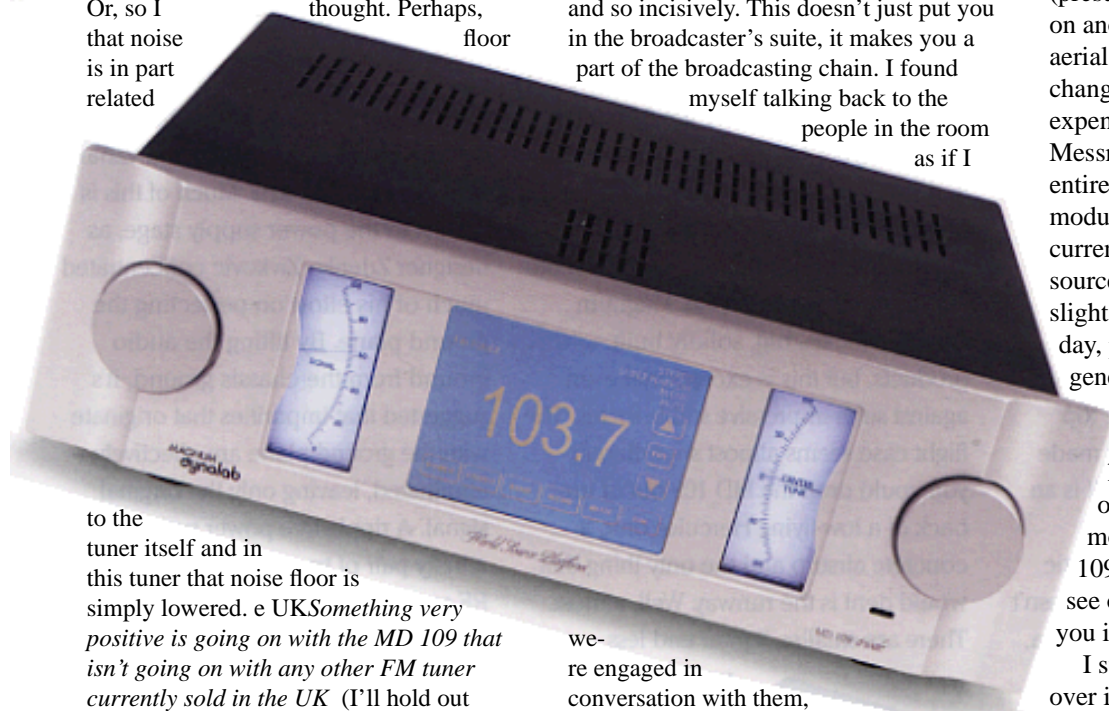
TECHNICAL SPECIFICATIONS

Type :	All analogue Valve FM tuner
Valve complement:	4x 6922
Audio frequency response:	2Hz-200kHz (±0.05 dB)
Output Level:	2.0V (balanced) 1.0V (single-ended)
Output impedance:	200 ohms (2 Hz - 200 KHz)
Signal to noise ratio:	>110 dB
Usable sensitivity (mono):	0.7 microVolt
50 dB quieting (stereo):	2.3 uV (20.0dBf)
Capture ratio:	1.5 dB
Image rejection:	125 dB
Signal to noise ratio:	80 dB
Alternate channel (wide):	>46 dB
Alternate channel (narrow):	>70 dB
Alternate channel (super narrow):	80 dB
Adjacent channel (wide):	3 dB
Adjacent channel (narrow):	21 dB
Adjacent channel (super narrow):	48 dB
Stereo separation:	50 dB
AM suppression:	70 dB
SCA rejection:	80 dB
IF Rejection:	80 dB
Dimensions (HxWxD):	152 x 483 x 407mm
Weight:	17.1 kg
Finishes:	Black or silver
Price :	11.710,00 E / £7990

they were in a studio and weren't really in the same room as me. This was disturbing, but understandable and there was no need to reach for the chlorpromazine. *That almost hallucinogenic holographic property transcends normal tuner values, though and is my main justification for recommending an eight grand tuner in what are the twilight years of FM.*

Of all the FM-only tuners yet tested, this is the most future-proofed. Why? Because of that 'another bonus' mentioned earlier. There is a panel at the back of the MD 109 that is currently blanked over. Soon, that panel will be filled... with a digital tuner module (presumably the aerial input is located on another plate so that if a second aerial socket is required, it's easier to change back plates than deliver an expensive tuner into the hands of Messrs Black and Decker). Although entirely untested as yet, that digital module option means this tuner is currently the only dedicated FM-only source component that doesn't have a slight tinge of Death Row about it. One day, perhaps soon, perhaps not for a generation, analogue radio will switch off forever. Anyone buying an expensive FM tuner today is hoping the switchoff is a long way off and they will get a decade or more from their purchase. The MD 109 is different. It will confidently see out FM. .. and still be waiting for you in the DAB future.

I still miss the magic eye, but I'll get over it.



to the tuner itself and in this tuner that noise floor is simply lowered. *Something very positive is going on with the MD 109 that isn't going on with any other FM tuner currently sold in the UK (I'll hold out from saying this positive trend is not*

we're engaged in conversation with them, then shaking my head to remember