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The Magnum Dynalab MD102t Valve Tuner

by Alan Sircom

It's bloody typical; that balmy, the midst of that record-breaking August heatwave is the perfect time to review a tuner with perma-triodes! You see, the triode output stage for the £2,695 Magnum Dynalab MD102t has the tubes in standby mode whenever mains is connected. There isn't even a main on/off switch; the only way to switch off the tuner totally (and thereby power down the triodes) is to turn off the mains at the wall socket.

In fairness, these triodes do not run that hot in standby mode, but when you get beyond about 35 degrees C, anything that raises the ambient temperature is sworn at. Those with strong eco-chummy sensitivities might balk at the number of whales destroyed in the ozone layer by leaving a pair of 6922 double triodes burning away constantly. The rest of us will just have to suck up a slightly augmented 'leccy bill.

The 't' suffix of the MD102t is, in essence, a £500 option on the standard, entirely solid state, MD102. It's not the only option; £400 on top of the basic price of the MD102 or MD102t buys you a remote control that can access the tuning without leaving the sofa. It also allows five station presets stored in its memory without having potentially sonically degrading presets in the tuner itself. And then there's the choice of finishes; as well as a decent shade of black with gold lettering, it's possible to buy the MD102t in gold with black lettering, or even silver with black lettering. But be warned that it's likely that the distributor, Branko Bozic of Audiofreaks, will try to talk you out of this last one – though no one knows why).

The valve output stage isn't the

only special feature of the MD102t. One of the big reasons why Magnum Dynalab is the audiophile's choice is that it is one of the last companies to produce its own front end. The tuner head part makes or breaks the sound and performance of a tuner – and most companies use cheap OEM phase locked loop tuner heads. Ultimately, no matter how good the components in the rest of the tuner, this is a bit like using an el-cheapo cartridge in a £10,000 turntable. Every tuner that made a profound impact upon the high-end community – from the old Marantz 10B and Leak Troughline right up to the late, lamented Naim NAT 01 and 02, Linn Kremlin, Day-Sequerra and Onix tuners – have sported custom-designed tuner heads. The downside to this custom produced front end is



the prohibitive cost. Magnum

Dynalab's five-stage tuning front end is entirely custom made and must be one of the last tuners to do so. In the process, this means the method of holding onto a radio signal is now a combination of heavily-shielded toroidal transformer and stabilised power supplies.

Audiophile credentials abound throughout the MD102t. The alloy casework is entirely non-magnetic. It features Black Gate capacitors, Burr-Brown op amps, MIT capacitors in key

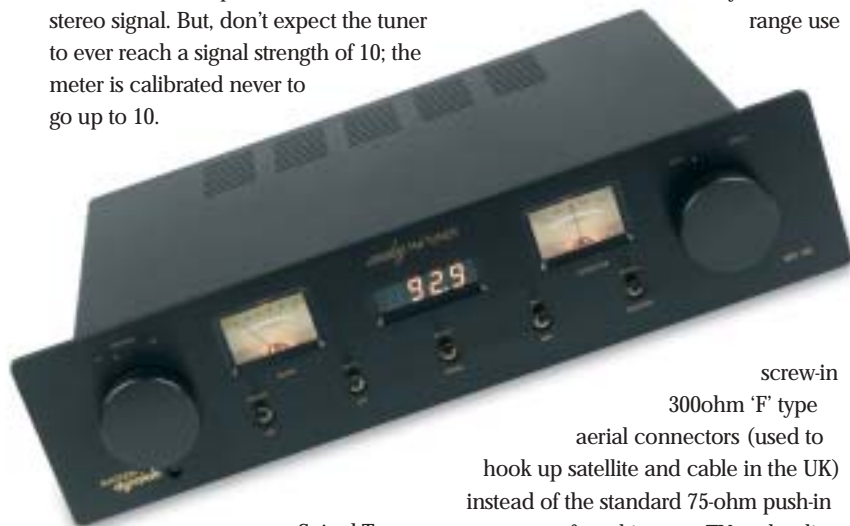
stages of the signal path and – where appropriate – Kimber Hyper-Pure copper wiring. Even the circuit board is above average and extremely thick. In fact, the most hard-core of tweakers would have a tough time up-rating the MD102t. You could upgrade the MD102t a notch by fitting Pearl Coolers around the pair of tubes; these would extend the life and reduce microphony of the already remarkably un-microphonic Amperex

"Bugle Boy" 6922s. Pearl Coolers are fitted to the output stage of the more up-market MD106 (with its fancy 'magic eye' tuning aid).

The front panel is a radio enthusiast's dream. Forget presets, you get two big dials, five toggle switches, two needle meters and a central LED frequency display. The big right dial is all you get for tuning, but you also get a toggle switch to adjust the Intermediate Frequency bandwidth, a mono-stereo switch and whether the left-hand meter registers signal strength or multipath interference.

The IF bandwidth setting is useful when the nearby pirate radio station starts blurting out over the Sunday afternoon Radio Four play. Dropping the toggle into BW2 places the tuner into its 'narrow' bandwidth setting; sonically not as good as the 'wide' BW1 setting, but better at rejecting adjacent channel interference. If the signal is really poor, though, you can also drop into mono mode, which helps lose a lot of interference compared to the stereo sound. ▶

▶ When using the left-hand meter in signal mode, the higher the signal the better; when in multipath; the lower the better. Flipping between the two – while also checking the right hand ‘centre tune’ meter – can produce the ultimate stereo signal. But, don’t expect the tuner to ever reach a signal strength of 10; the meter is calibrated never to go up to 10.



Spinal Tap fans will never accept this, but the rest of us will be happy not to need to repair the meter every six months or so.

The ‘mute’ button doesn’t do what most ‘mute’ buttons do. It places a limit on the tuner, overlooking the weaker signals while tuning. This means that while tuning the MD102t from station to station, there’s no more hiss and noise. Just silence. In its default setting, the MD102t has this mute setting switched in.

The provision for switching between aerials (that large dial on the left hand side) is an odd one, but entirely logical when you think it through. You might want a higher gain aerial with a narrow acceptance angle for the stations you listen to 95% of the time and one of those Antiference Allrounder aerials for general listening. Or you may want one fixed mounted aerial and one on a rotator. Or, perhaps

you just like the idea of owning an aerial farm on your roof and want people to think you are a local branch of GCHQ. Whatever, the two aerial option is a good one. Just remember that the Magnum Dynalab range use

screw-in 300ohm ‘F’ type aerial connectors (used to hook up satellite and cable in the UK instead of the standard 75-ohm push-in connector found in most TV and radio settings. A good aerial installer can provide a suitable connector and fit it inside of five minutes, or you can use a 300ohm to 75ohm Balun transformer, but it means off-the-shelf coaxial aerial sockets are hard to find.

Aside from the two aerial sockets (and



the lack of an on-off switch by the IEC socket), the rear panel of the MD102t sports a pair of high-quality WBT gold plated phono sockets for single-ended operation and a pair of equally top-notch Neutrik XLR sockets for balanced output.

There’s a hidden extra to the Magnum Dynalab system. You can use it with the excellent £95 ST-2 whip aerial. A bit like an old-fashioned 54inch high car aerial, The Wave, single-element dipole antenna is ideal for eliminating multipath interference, from signals bouncing off buildings. This is why, although the ST-2 will never have the gain of something like a roof-mounted Ron Smith Galaxy 17, it does perform wonders in a built-up area, and many will trade a bit of hiss for a lot less spitch and sibilance (the over-emphasis and spittyness of ‘s’ sounds). Although it’s classed as an indoor aerial, the ST-2 is discrete and good enough to sit outside, bolted to a wall (you may want to weatherproof the aerial with liberal amounts of Vaseline – and that will make you an interesting local talking point). It also has the advantage of connecting using a 300ohm F type connector, so there’s no need for a Balun transformer in the chain.

The tuner takes a good 48 hours to really come on song. That’s not just hi-fi sensibilities; when first used it takes a couple of days for that power supply generated signal lock to really grab hold of a signal. Until then, signals can drift slightly, which is unheard of in this sanitised, phase locked loop world we live in.

And that is why the Magnum Dynalab is so damn good. A modern digital FM tuner works by tuning precisely to distinct ‘steps’ across the frequency range and if the station frequency lies somewhere between two steps – tough, you get a slightly out of tune, but precisely locked, signal.

The analogue tuner head of the MD102t allows you to tune to your favourite station with the sort of precision a digital tuner can never achieve, and the tuner sounds all the better for it. ▶

► Just how good? Suddenly, compression seems to be less of an issue than it seems through PLL tuners. Even the most heavy-handed of Optimod compression is not as noticeable when precisely tuned. But when the compression is cut away, something really magical happens.

Sweltering heat takes its toll on the listener, but there is an upside to the timing of the review; you get to listen to The Proms; live feeds of Radio Three which will justify the expense of the MD102t within about a nanosecond. It became a nightly occasion, and a daily obsession: sometimes discovering new (to me at least) works; other times visiting old favourites anew. It was never passive listening, though.

The MD102t won't let you listen to these live recordings passively; you are drawn into the passion and the fire of the music, or repelled by the performance. New works leave you hungry for more or flat and uninspired. Before long, you start muttering about last night's prom to people in coffee shops, strange looks notwithstanding.

Quite by chance, a track from the new Kraftwerk *Tour De France Soundtracks* CD was being played on a local indie station, while it was still fresh in my memory from being played through my own CD set up. While my own polycarbonate spinner isn't exactly in Wadia territory, it's distinctly better than the sort of ruggedised CD players used in radio studios. Except this time

that professional CD player sounded more 'analogue' through the radio than I expected it to sound. The MD102t isn't playing music with rose-tinted spectacles, but it is digging up every last ounce of quality from a radio station.

The addition of the valves adds a smoothness to the sound. They also seem to give aid to the soundstage depth of the MD102t. Whilst wide, if not exceptionally so, soundstage is wonderfully deep space and draws the listener in to the best of radio. Strangely, it even has some solidity to the overall sound; something that never normally happens in radio broadcasts.



There are no downsides to the MD102t. Well, almost.

Only two issues spring to mind (constantly running tubes notwithstanding). First is that, despite being the best tuner you can buy under £2,700, it's still some way from the performance of the top of the line MD108; I heard this briefly while picking up the MD102t from the distributor and that particular tuner is so good you can almost hear what colour shoelaces the DJ is wearing. The other downside is that this tuner spontaneously grows tuner enthusiasts in exactly the same way flats in London spontaneously grow Australians. Somehow, a tuner buff will discover you have one of the world's best tuners in your system and then one will turn up on the doorstep. Soon, more will follow, like zombies with signal strength meters. I know this from

direct experience. I have a friend who is a real radio die-hard and I casually mentioned that I had this tuner in for review. He came round to listen to a Prom... and cried. A day later, he asked if he could come back and bring friends. My advice; buy one of these and never mention it to anyone; you never know who's a closet tuner geek.

Radio is often the poor relation of hi-fi. This is different... and as far removed from regular 'digital FM' tuners as a VPI is from a Technics DJ turntable. And it makes absolute mincemeat of DAB. Who needs presets when you can have valves and dials? Buy this and discover why all-analogue radio still matters. ➤+

TECHNICAL SPECIFICATIONS

Type:	All-analogue FM tuner
Inputs:	2x 300ohm F-type connectors
Outputs:	1x pair single ended: 1.0V 1x pair balanced: 2.2V
Signal/Noise ratio:	80dB
THD mono/stereo (MD102):	0.10%
THD (tube output stage):	1.8%
Stereo separation:	50dB
Audio Frequency response (+/- 1dB):	15Hz-17kHz
Dimensions (HxWxD):	114 x 483 x 381mm
Weight:	7.1kg
Price:	£2,695

Magnum Dynalab ST-2

Type:	Vertical omnidirectional FM antenna Half wave design
Output:	1x 300ohm F-type connector
Length:	1.37m
Price:	£95

UK Distributor:

Audiofreaks
Tel: 020 8948 4153
E-mail: info@audiofreaks.co.uk

Manufacturer:

Magnum Dynalab Ltd
www.magnumdynalab.com