

Magnum Dynalab MD-106t tuner

by Alan Sircom

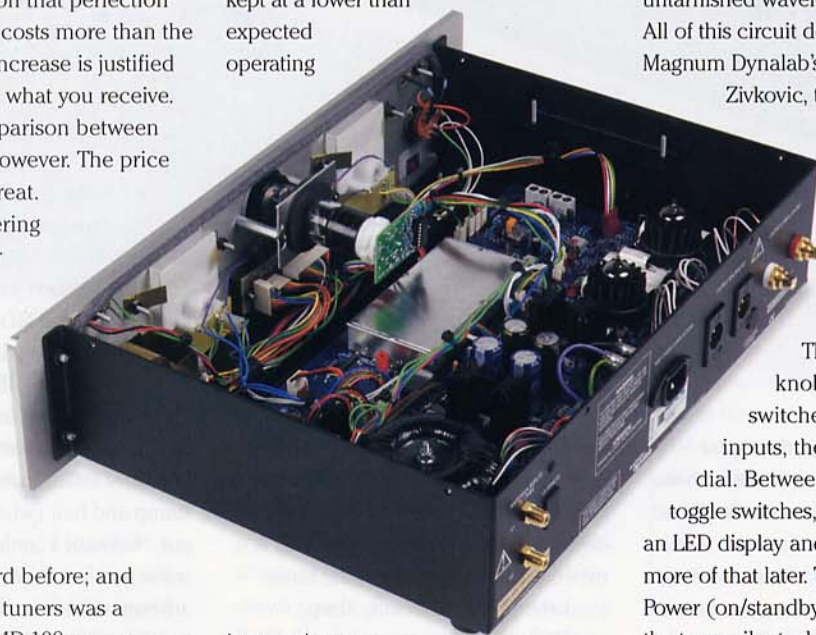
That 'perfect sound forever' marketing Philips used to launch CD entailed a philosophical problem for CD's replacement: how do you make a perfect thing more perfect? I have the same problem. The Magnum Dynalab MD-102t tuner reviewed back in Issue 26 was perfection in tuner technology. But the £3,600 MD-106t FM tuner improves on that perfection considerably. Yes, it costs more than the 102t, but the price increase is justified in what you get and what you receive.

This isn't a comparison between the 102t and 106t, however. The price differential is too great. Few people considering one would consider the other and even less will upgrade between the two. It's just that the 106t so effectively shifts the goalposts you can't help but compare it to every other tuner you have heard before; and unless one of those tuners was a Marantz 10B or an MD-108, every other tuner you've heard before will come out slightly wanting.

Magnum Dynalab separates the analogue RF and audio sections of the tuner completely, something that's only expedient in tuners designed from the ground up. Its custom-made five stage front-end RF circuit features hand-matched components in all key areas and means the tuner is off to a flying start when it comes to tuner sensitivity and lowering distortion. Magnum

Dynalab is one of the last companies hand producing its own tuner head like this. Off the shelf circuits, no matter how good lack this chance for tweaking or improving the sound.

Part of the sonic improvement comes from designing their own hybrid amplification stage, featuring a pair of Bugle Boy 6922 double triodes, kept at a lower than expected operating



temperature – and thus dramatically extending their life without compromising performance – by the fitting of Pearl Coolers on the tubes as standard. The 106t was the first of the Magnum Dynalab tuners to feature this triode stage. This sets it apart from practically all other tuners currently in production; even the MD-102t has the triode amplification as an optional extra to the standard circuit design.

Magnum Dynalab claim that

this custom approach bestows three benefits on the design. It means the tuner has better earthing than most designs, removing stray ground path signals that could undermine subtlety. This is aided by top-class power supply circuit design, with high grade components. Next comes the zero feedback circuit, to keep that untarnished waveform, er, untarnished. All of this circuit design is credited to Magnum Dynalab's designer Zdenko Zivkovic, the Zinedine Zidane of tuner design.

Functionally, the MD-106t behaves like any of the other tuners in the Magnum Dynalab range.

There are two big knobs; the leftmost switches between aerial inputs, the right is a tuning dial. Between them are four toggle switches, a pair of VU meters, an LED display and a magic eye, but more of that later. The toggles control Power (on/standby), Mute (which keeps the tuner silent when whizzing from station to station), Stereo (weaker, hissier signals sound better in mono and an IF bandwidth toggle switch that moves between wide and narrow bandwidth for better or faster tuning. In the middle of this quartet of toggle switches is the inset green four number LED frequency read-out. Above these toggle switches are two classic needle VU meters; for multipath distortion and signal strength (the latter is buffered, so it can never go right up to 10). ▶

► Most importantly, there's the magic eye, in this case a 6E5-style tube that has a little cup at the top of the tube to denote tuning status. This bathes the room with a turquoise glow whenever you approach the tuner (it has a sensor to detect nearby movement, saving the magic eye from being permanently switched on – useful given the cost and relatively finite numbers of magic eye tubes still in circulation). If you've never used a magic eye before (or oscilloscope tuning on some equally high-end tuners), it's surprising how intuitive it makes tuning become. You get the tuner roughly tuned using the VU meters and your ear, then fine tune using the magic eye

head can be more precise, but you need more accurate metering to determine just how close you are to the station. The magic eye is the ideal graphical interpretation of just how close you are to perfection.

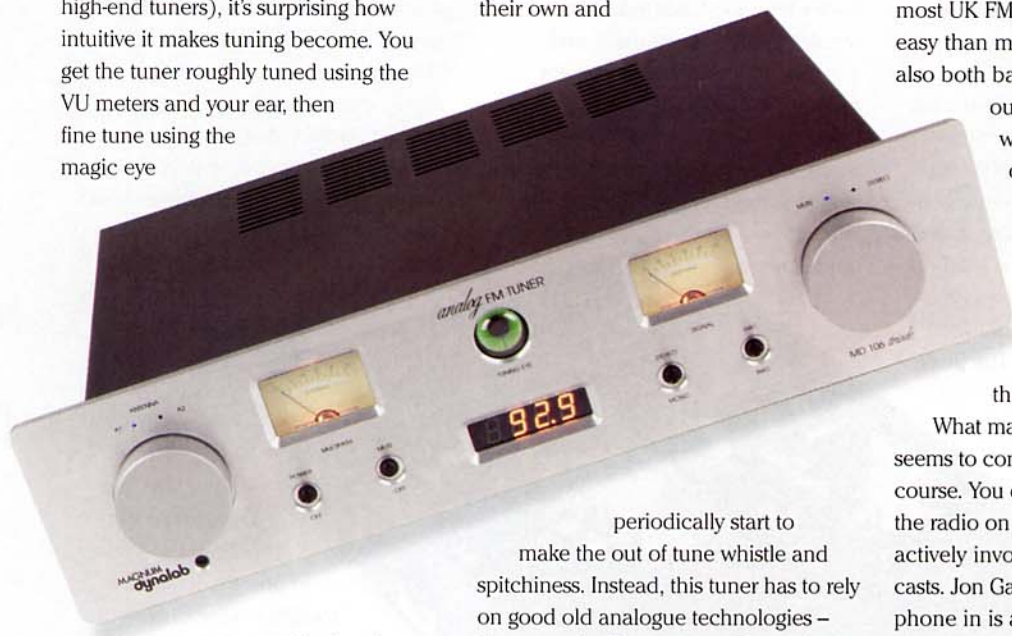
Now the 'bad side'. One of the joys of synthesiser tuners is a phase-locked loop, to keep the tuner on station. Without a PLL, the tuner can drift around the airwaves slightly, which is why channels played on basic transistor radios seem to have a life of their own and

every moment of every day. In fact, you have no say in the matter; once mains power is connected, the tuner begins heating the triodes. Only turning the mains off at the wall or ripping the IEC socket out of the back of the tuner discontinues the power feed.

The tuner has two antenna inputs, both using 300ohm 'F'-type inputs (found in satellite decoders) rather than the more UK radio-chummy 75ohm connectors. Although it is easy to find connectors to make the tuner fit most UK FM aerials, this makes it less easy than most to connect up. Here are also both balanced and single-ended outputs to a preamplifier – with a substantial 2V output on the single ended phonos, and the tuner can be supplied in one of three finishes; black, gold or silver. There will even be an optional remote control, in the coming months, too.

What makes the MD-106t so good? It seems to come with a radio appreciation course. You don't just listen passively to the radio on the MD-106t; you become actively involved with the radio broadcasts. Jon Gaunt's BBC London morning phone in is a fine example of this. Normally background controversy, this becomes inflammatory listening and feet stamp and hair (what hair?) gets pulled out. Normally I can take the ranting of some neo-fascist who wants to deport anyone without family ties dating back to 1066 or the raving of a bleeding-heart who wants free heroin for the nation's paedophiles as just London's crazies getting their 15 minutes of fame. But through the MD-106t, I seem to go all John McEnroe every few minutes.

Perhaps the nearest we get to shock jockism is too in need of anger management for the MD-106t. So, instead we scoot over to Classic FM or Radio Three. But that doesn't work either; that gentle piece of Mozart sounds all fresh and new. The Copland passages ►



to get the signal exactly on song. It makes those five LED signal strength meters supplied on most synthesised tuners seem a little unsubtle and pointless. Of course, magic eye tuning only works when you get rid of synthesiser tuning altogether.

Doing without synthesis has a good and a bad side. But the bad side goes away after a couple of days, so perhaps 'bad side' is too strong a term. The good side is that it affords the listener far closer tuning than any synthesiser can provide. If your favourite station is perfectly tuned at 93.523 kHz, for example and the synthesiser tuner tunes in steps and jumps between 93.52 and 93.53 kHz, you will never precisely tune that station in. Only an analogue tuner

periodically start to make the out of tune whistle and spitchiness. Instead, this tuner has to rely on good old analogue technologies – like a good, stiff power supply – to keep the tuner on song. This is no problem, but does mean that for the first few days, the tuner will drift a little. This is expected; just think of it as the tuner awakening from its beauty sleep.

This also means the tuner needs to be kept on permanently, but the valves run in stand-by mode, so they only receive the smallest amount of heater-juice and don't run hot. This has dual benefits; it prevents early death of the tubes (if anything it will keep them healthier longer, as powering up and down the heaters is a great way to shorten the life expectancy of a triode) and keeps the circuit on constant standby without the mains-sapping strength of valves running at full tilt

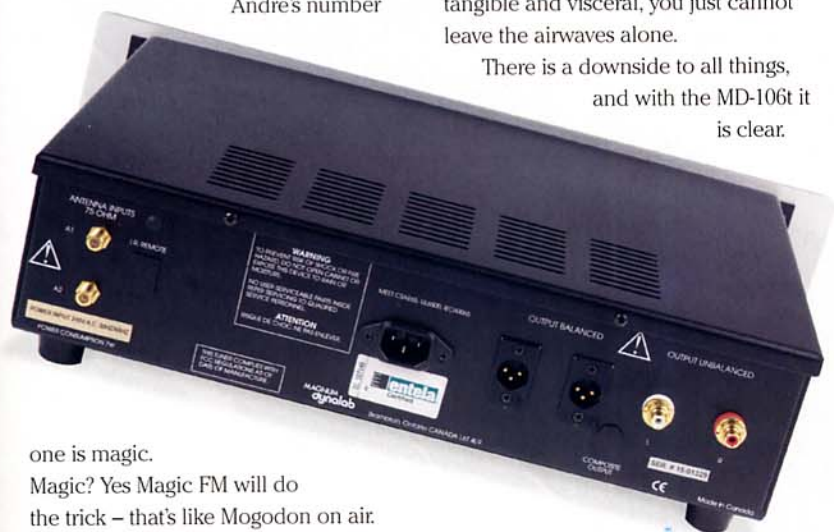
▶ make me want to saddle up and rustle some cattle and the Gorecki movement makes me want to slit my wrists and castrate an SS man.

From here, it gets personal. If I'm quick, I'll pick up *Book of the Week* on Radio Four: that's anodyne and soothing enough to stop all these hidden radio emotions. Oh no, it's a biography: I listen, enraptured to the tales of Nicholas Culpeper; I want to be a herbalist and I want to live 350 years ago.

This is all too intense, so I slide over to Capitol Radio for some bland pop. Oooh, isn't *Toxic* by Britney Spears a great record? I think Peter Andre's number

considerably better than the products in the FM studio, and you become acutely aware of the jump in technology when you listen to a CD being played through the studio components. But when you hear a live broadcast, or even a play that is recorded, such complaints fall away and the fullness and naturalness of the sound is so understatedly impressive, the miles between you and the broadcaster just melt away. You are in the same room as the orchestra, you are sitting in a 17th Century drawing room or you are sitting in the lap of the newsreader. You see, it's impossible to stay dispassionate about the MD-106t, it makes the aether so tangible and visceral, you just cannot leave the airwaves alone.

There is a downside to all things, and with the MD-106t it is clear.



one is magic.

Magic? Yes Magic FM will do the trick – that's like Mogodon on air. Strange, I always remember hating Dire Straits, but this really hits the spot. And so it goes on.

Eventually, you begin to settle down, good taste presides once radio listening becomes less of a stream-of-consciousness race through the airwaves. But the feeling of constantly listening to something live and new never once escapes you. Radio takes on a larger part of your life when played through the MD-106t.

Let's look at this less existentially. This is the most detailed, biggest and deepest insight into the radio studio I have heard to date. Any closer and I'd be staring into a microphone. And this is good and bad, because chances are that your CD and vinyl replay is

It changes the way you listen to radio. If you want something to softly numb you with elevator music, look elsewhere; whatever you play through the MD-106t draws you in. Even the most arch Radio Four play seems like the first-ever performance of *King Lear* and the thing is so mind-crunchingly detailed you start to listen for individual sheep baaaa's in the background effects to *The Archers*. In fact, those bloody sheep are the most telling factor in the tuner's quality. Through this tuner, and this alone, you get to recognise the timbre of each baaaa and start to hear that there are only a handful of recognizable sheep sounds, and they are constantly repeated. This comes with a secondary

realisation; not only does it seem like the BBC effects staff are pulling the wool over our ears (sorry), but you also discover how deeply sad you can be for listening out for individual sheep. So, not only do you become a tuner geek, you also become a sheep geek.

Order the MD-106t so that you can install it on a Wednesday if it is at all possible. This means, come Friday evening, your tuner will be waiting for you, rock stable and ready to roll. Now sit down and listen. Write off the whole weekend. Warn people that if they are accidentally exposed to the 106t's sound, they will listen for days on end, too. And, if you buy it in gold, expect people to fight over it, calling the tuner "my precioussssss". I want one! ➤+

TECHNICAL SPECIFICATIONS

Type:	All-analogue FM tuner
Inputs:	2x 300ohm F-type connectors
Outputs:	1x pair single-ended 1x pair balanced
Output Levels:	2V single-ended 3V balanced
Signal/Noise ratio:	80dB
THD mono/Stereo:	0.10%
Stereo separation:	50dB
AM suppression:	70dB
SCA & IF rejection:	80dB
19kHz pilot tone rejection:	75dB
Audio Frequency response (+/- 1dB):	15Hz-17kHz
Dimensions (HxWxD):	114x 483x 381mm
Weight:	7.1kg
Price:	£3,600

UK Distributor:

Audiofreaks
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Email: info@audiofreaks.co.uk

Manufacturer:

Magnum Dynalab Ltd
www.magnumdynalab.com