

NOVEMBER 2003

MAGNUM DYNALAB MD-90t TRIODE TUNER

Exploring the air waves on triodes

I am in one of those rare Hifi hobby states of being that's completely satisfied with the performance of my rig. The combination -- of Avantgarde Duo loudspeakers, Fi 2A3 amplifiers, Tom Evans Design preamplifier, Audio Logic 2400 DAC, Meridian 508.20 CD player as a transport, all tied together with Nirvana cables -- captures the combination of sonic and emotive traits I crave. In this state of magdalen contentment, I've been on a quest of exploring new music for its own sake, enjoying the pure adventure on this -- usually under heavy construction -- audiophile avenue of bliss.

My voyage into musical rather than hardware discoveries got me thinking about tuners. They seem to be an ideal way of exploring new music. After thus concluding that it would be a generally cool and phat thing to explore the world of tuners, I contacted the nice folks at Magnum Dynalab for one of their new *Triode Series* FM tuners, only to receive an immediate heads-up from prez Larry Zurowski on the entry-level \$1,595 MD-90t which was inspired by Magnum Dynalab's \$5,850 MD-108 tube-hybrid flagship.



There are a number of appearance and performance options whereby to trick the MD-90t out - and no, the guitar's not one of 'em. The standard faceplate is black but a spare \$100 turns it silver or gold anodized with contrasting lettering. Internal Kimber silver wiring is said to improve detail and high frequency extension for \$175 while infrared remote adds \$395, balanced audio outputs \$100. Magnum Dynalab also had sent along their indoor/outdoor omni-directional AM/FM antenna to displace my usual secretary for reception duties. This \$99 vertical half-wave design made of stainless steel is a little longer than a dreadnaught guitar and accompanied the standard, zero-options MD-90tduring the review process.



To the uninitiated like me, the MD-90t can look at first somewhat intimidating. There are three different metered displays, four different toggle switches, a rotary tuning knob, and a frequency LED display. So after unpacking the unit, I set it aside to study up on the manual before firing up my luxu radio loaner.

The manual was written in such a way as to suggest that the Magnum Dynalab folks actually *care* that one got off - to a good start with their baby, that is. The toggle switch to the far right turned on the AC power to cause all meters, frequency display and the stereo indicator to light up for a rather beautiful effect during black-out listening.



This tasty amber glow wasn't unlike a vacuum tube or candlelight, with the stereo indicator emitting a twinkly blue.

On the fascia's left side, three vertically aligned toggles switch between stereo/mono to clean up



noisy stereo transmissions; intermediate frequency; and mute to suppress weak signals during station scanning. The stereo/mono option worked really well. Tuning into a very noisy station, going to mono created perfect background blackness. A blue indicator below the signal meter lights up for stereo mode and extinguishes in mono. The IF intermediate frequency selector toggles between bandwidth 1 and 2 settings (BW1/BW2), the latter *reducing* bandwidth to 'narrow' to eliminate adjacent-channel interference. The function proved useful by eliminating weak stations during a frequency up/down scanning of the available airwave menu.

The left of the meter trio shows multi-path interference, allowing fine-tuning of antenna orientation and position to ideally read 'zero'. I just plugged the antenna in, leaned it up against the wall and enjoyed perfect reception without even trying. A reception-challenged area would truly demonstrate this feature's usefulness, but as it stood, I could remain oblivious to multi-path needle deflections. The middle *center-tune* meter allows precise calibration of a station's strongest center frequency while the right window displays signal strength. Not so complicated after all. In fact, it turned out that the MD-90t was far easier to use than appearance would have suggested. After I dialed in the station I wanted, there really wasn't anything else to do but enjoy the tunes.

My impression of the MD-90t's build quality was altogether positive, the solid and attractive appearance suggesting a lot of value for its \$1.6K list price. However, casual window shopping wouldn't suggest any tubes inside the chassis safe for the tube emblem 'round back. A tinted see-through top cover like the Tom Evans Design Vibe (no tubes) or a vented top like the Audio Logic DAC (tubes) would be swell so you could peek inside to spot those glowing tubes - tube crazies like that sort of teasing. The three-stage radio frequency tuner front-end is a Magnum Dynalab exclusive and designed/ manufactured in-house, with the manual stating that they're the only company in the world to build their own as "no other manufacturer can produce one that meets our exacting specifications". Other technical details are the Philips 6922 tube in a zero feedback amplification stage designed by Zdenko Zivkovic; Solen polypropylene capacitors in the signal path; and a toroidal power transformer.



So how does the MD-90t sound? Very good. In fact, I was rather astonished at *how* good the MD-90t performed in my Duo-Fi-Vibe-Nirvana system. Case in point: John April -- of local bluegrass guitar, mandolin, and banjo fame -- stopped by on a Saturday afternoon for a quick visit. I had NWPR's Inland Folk program running, playing a nice number with Tony Rice and Doc Watson on guitars. John grabbed my flat-pickin' Gibson Advanced Jumbo guitar off its stand and began to jam along with Tony and Doc. After the tune ended, John wanted to know which CD that had been. "It's not a CD, it's an FM tuner from Magnum Dynalab I am reviewing for 6moons", I retorted glibly. "Wow!" countered John. And "Wow!" was right. The sound quality of Tony and Doc through the MD-90t wasn't that far off John's live sound playing the Gibson AJ. Granted, the FM broadcast was a little softer, less percussive, less present than the real thing, but *not* leagues apart. More importantly, it was musically engaging to the extent that it made John want to grab my guitar off the stand and play along. Now that, my friends, is high praise!

It was also very easy to hear the difference between digital and analog broadcast sources. You could easily tell if a station was playing vinyl or CD if you listened for it. I guess I was surprised by this. I didn't really expect this level of resolution from FM signal sources. Could it be that with FM -- as with RedBook digital -- there's a lot more musical data embedded in the raw medium than anyone would have reckoned? It appears that the music is just waiting there, hidden, to be revealed by a high quality source component such as the MD-90t.

The overall character of the MD-90t was neutral in the most complimentary sense of that term - neither dark nor bright. The nature of a given broadcast recording or other associated equipment in the signal chain had considerably more effect than any fingerprint of character from the tuner itself. In my Duo-Fi-Vibe-Nirvana system, you can hear everything that makes high-sensitivity and single-ended triodes so popular: Dynamics, communicative directness,



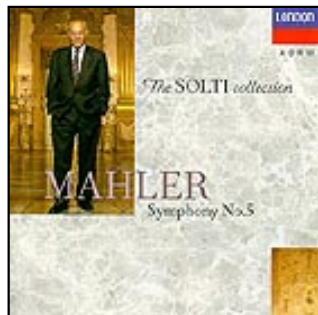
scads of detail and natural tonal colors. In a second system around the Harbeth Monitor 30 loudspeakers and Naim NAC 112/ NAP 150 entry-level separates, the MD-90t let all of *their* traits emerge: Outstanding communication of musical intent; melodic & rhythm prowess; and the incredible articulation of timing accents that give music life on a note-by-note basis.

The perspective of the MD-90t was no easier to pin down than its character. It again seemed largely dependant on the recording and other associated equipment, rather than any intrinsic trait of the MD-90t itself. If the recording was close mic'd to position the listener in intimate proximity, that's how the MD-90t would depict it. If a recording was encoded with a mid- or rear-hall perspective, that's what the MD-90t would parlay.

With the MD-90t in the Duo-Fi-Vibe-Nirvana system, the sound emanated largely from behind the plane of the Duos, yet with certain information present in front of the plane as well, particularly when moving outside the speakers' location towards the sidewalls. On some familiar recordings, I have even heard distinct images coming from positions as much as four feet to the sides of the Duos, giving at times an almost holographic wrap-around effect, with sound breaking down the sidewalls like ocean waves. This sonic phenomenon must be revealing out-of-phase artifacts present on certain recordings, perhaps due to the microphone and mixing style during the mastering and production process, but it's quite astonishing and entertaining when heard. In today's context, it must be considered quite an accomplishment that the MD-90t could reproduce that effect from FM when called upon by the transmitted programme material.

The amount of soundstaging information contained within FM signal -- and as captured by *this* triode tuner -- was considerable. There was even a good sense of soundstage depth extending back towards the rear wall of the recording venue. This became particularly evident on the classical music broadcast from the Washington State University by Northwest Public Radio (89.1), a station I've been listening to and enjoying a lot of late. Stage height too was good, with instrument and vocalist sizing proportional to the recording perspective. This clearly avoided that "mini-ships on mini-seas" effect which some equipment is guilty of. If the rest of your system can reproduce correct sizing information, the MD-90t will deliver the goods.

The MD-90t also reproduced the sound space of the recording venue well, giving that voluminous spacious sound that many audiophiles love when present on the recording. Image specificity was very good, making it easy to pinpoint the location of instruments within the soundstage. Image dimensionality was good, too, but perhaps not outstanding when compared to the palpability of the Audio Logic 2400 DAC. Also, image density (think laser hologram versus the real thing) was not quite as solid or robust as it could be, having a slight see-through quality to it, with more rounded-over edge definition than the more vivid Audio Logic.



While listening on NWPR 89.1 I discovered Gustav Mahler's gem of his *Symphony # 5 in C-sharp* as played by the Chicago Symphony Orchestra under Sir Georg Solti [London 414321]. I marveled at the beautiful and appropriately rosy texture of the strings, how well all the sections of the orchestra could be identified as clearly occupying their own unique space on the soundstage. When the horns entered, there was a brassiness and power that evoked awe. Ditto for the low frequencies which had compelling weight and convincing power. Resolution and immediacy were excellent, with appropriate textural string fabric ranging from silkily smooth and beautifully ravishing to biting and stringent as the music required. On another recording, the sounds of fingers moving over guitar strings, the movement of piano pedals, all those familiar little details that make recordings come to life, were clearly evident, showing the MD-90t possessed of the requisite transparency to allow one to hear *deeply* into a recording.

Tonally, the MD-90t was equally convincing: Instruments and vocals had the 'voice' they should; cymbals the appropriate scintillating shimmer when struck; bells the appropriate piercing purity one expects. Macro-dynamics were good if perhaps somewhat constrained. However, the moderate and micro-dynamics were *very good*, injecting life into the music such as to rivet my attention by imbuing notes with realistic accent, infusing rhythm with a believable and captivating beat.

When NWPR played Franz Schubert's "Notturmo" from his *Piano Trio in E-minor Op 148 D 897* with Oleg Maisenberg on piano, Gidon Kremer on violin and Clemens Hagen on cello [Philips 434033], I was entranced by the beautiful and ravishing piano tone, which built in intensity throughout the interplay between violin and piano. I was swept away in a musical moment. When I listened to FM programming through the MD-90 Triode, an engaging musical experience was repeated time and again.

The MD-90t also related the tempo of music in a very believable way, giving a visceral sense of the music's inherent speed and changes therein. When the music sped up, you clearly sensed acceleration; when it slowed down, you felt the appropriate sense of braking. Not all equipment does tempo this well. That sadly diminishes the artists' musical intent to evoke feelings of exhilaration or relaxation. Some equipment portrays homogenous tempi to never convey appropriate sense of speed or speed changes; but the MD-90T did it well.

With the Harbeth-Naim system in particular, the MD-90t gave keen insights into the way notes were accented, fused into grouped beats, beats into measures, how these beats impacted the feel of the music, its forward momentum. A piece of equipment that infuses music with energy and forward momentum to reveal inflective accents is said to have rhythm. Some gear turns rhythm mechanical or sterile like a drum machine. Other equipment diminishes the dynamic micro impact of beats, making music sound lifeless and boring. But in both the Harbeth-Naim and Duo-Fi-Vibe-Nirvana systems, the MD-90T showed itself to be a good rhythmic performer, helping me to be drawn into the musical message.



When NWPR played Charles Ives' *The Unanswered Question*, with the New York Philharmonic under Bernstein [Deutsche Gramophone 429220], I couldn't help but feel drawn into the music's brooding intensity and mysteriousness. I hastily added to my notes "Buy this disc!" The MD-90t also made excellent sense of the melody and its interplay with rhythm. The Dynalab tuner differentiated extremely well between rhythm and melody, allowing the full measure of the melodic line to emerge from the rhythmic accompaniment. Some highly resolving equipment tends to sound edgy and mechanical as opposed to fluid and organic. The MD-90t was both resolving and continuous to give a fluid and natural audio experience with plenty of musically relevant natural detail. In my experience, tube equipment often excels with this aspect of reproduction better, but the brilliant operational amplifier-based Tom Evans Design equipment from England is but one notable exception to this 'rule'.



Summing Up

The MD-90t is an attractive, well built, fine sounding audio device that provides a lot of value for its \$1595 asking price. It not only sounds good but also *plays* music in outstanding fashion. The MD-90t has instilled a new sense of adventure and discovery into my musical listening hobby. I have experienced new and uncharted musical revelations at every turn of the dial. When I find music I really like and want to listen to over and over again, I go out and buy the software knowing it'll be a winning addition to my collection.

The MD-90t is fun in a variety of ways: Weekday mornings, I've been getting up to the news while preparing for work. Weekday evenings while prepping dinner, I enjoy listening to classical music. Saturdays, I look forward to a good laugh while following Car Talk. On weekends, I fancy exploring folk, blues or anything else that catches my whimsey. On weekend evenings, I explore jazz. Having an FM tuner at my beck and call is a new experience for me. I've found that I derive a great deal of entertainment and satisfaction from listening to FM broadcasts through the MD-90t. I dare predict you would, too.

A brief interview with Magnum Dynalab's president Larry Zurowski



Larry, as president, what is your role at Magnum Dynalab?

As president, it is my job to insure that product quality and customer service stay #1. I am always looking ahead to new products and ideas too, while keeping in mind what our strengths are, with the focus of staying in the two-channel arena.



What was your inspiration for the Magnum Dynalab Triode series of tuners?





The inspiration or driving force was *one* person, Zdenko Zivkovic. Zdenko was a former designer of Sonic Frontiers equipment. He came to us and said that given the great RF section we already had in our tuners, he could add a new sonic dimension by using triodes; and that he could do it in such a way as to appeal to *all* music lovers.



The sonic attributes of the MD-90t are considerable. What sorts of design elements did you incorporate to give the MD-90 Triode such outstanding sound quality? The MD-90t is also particularly adept at communicating the emotive aspects of the musical experience. How did you achieve this?



There are three design elements we paid close attention to, that make a big difference in sound quality. First we paid special attention to the ground plane to insure that the main signal is not affected by any stray ground path signals. This is very important because it ensures that the micro information of the music signal isn't lost. Secondly, the design has zero feedback. Zero feedback maintains the integrity of the original waveform, which is crucial. Thirdly, the power supply is designed to eliminate the ripple effect, which allows the full harmonics of the music to come through. When you design a product with the above criteria, you allow the emotional aspect of the music to come out - and you also get excellent sound.

Larry, who is the customer that is most likely to appreciate the Triode Series?

That's easy! Anyone who enjoys a variety of great music will appreciate our tuners!



Okay, I had that coming! How would you say that the sound differs in the Triode Series from their solid-state brethren?



Tough question. We have customers who like the solid state versions for the accuracy of their top end, but as you are experiencing, the Triode design is pretty complete. I think the decision to buy the solid state variants lies in economics -- they are less expensive - and some people are concerned about replacing tubes and the costs to re-tube. [Note: Replacement cost for a set of tubes is approximately \$40 - Jeff.]

How do the tuners change in design and performance as you move up the Triode Series?



There are two aspects to our tuners. First and most important -- and the thing that differentiates us from all other manufacturers -- is that we design and manufacture our own varactor-tuned front ends, which is where it all starts. If you do not have a good front end, you cannot achieve the musical fidelity that customers should expect. As you move up our line of tuners, we increase the number of RF stages from three in the MD-90 to five in the MD-108. We also tighten the allowable tolerances in the selection process of the critical components. The other half of the tuner is the audio section. Here again differentiation is done through component selection and matching of critical components, both solid state and tubes. We also add more user features as you move up the line. This allows customers to choose a tuner that will satisfy all their desires and be tailored to the application they have in mind.



In my ignorance, I assumed that FM signals would have significantly lower fidelity than you get with either a digital or analog source feeding a system directly. However, this does not seem to be the case. FM signals have remarkable fidelity through the MD-90t. Could it be that with FM -- like with RedBook digital -- there is a lot more music present in the medium than anyone would have guessed?



Yes, this is a very accurate statement. As a parallel, with a turntable, the better the cartridge, the better the sound - because you are able to retrieve more information. I have drawn this parallel with many people: The front end of a tuner is like the cartridge on a tone arm, or the laser on a CD player. The better the quality of the information collected and purified by the tuner's front end, the better the signal that you can pass to the audio section. I think the technical term is that you are able to capture more of the harmonic structure, and that is what creates the emotion from the music you are experiencing with the MD-90t.



I have been totally captivated by the tuner experience. It's a little hard to articulate in writing how much adventure and fun there is associated with the FM medium through a great tuner like the MD-90 Triode. It's amazing how much good programming is out there both with music, news & entertainment. What do you enjoy most about tuners and the FM medium?

The part of FM that we find exciting is that you can experience all different types of music, some of which is not readily available on CD or LP. Plus, you can sample certain songs before you decide to go ahead and buy the CD or LP. A lot of people who buy our products comment that they did not know FM could sound so musical.

Our readership is a truly international in scope. Are there any factors our international audience should take into account when choosing a tuner and antenna?



The criteria for a tuner around the world are the same - a good tuner front end, a good audio section, and of course, a good antenna.

As a final question, what wisdom would you impart to those who are new to the world of FM tuners?



Once you get your tuner, make sure you have a good antenna. Then go up and down the dial to find those hidden gems you could never enjoy before, and have fun with the music!



Thanks Larry, it's been great chatting with you.





Jeff Day