### EQUIPMENT REPORT



# High End XM Radio

Magnum Dynalab MD-609T XM Tuner

Neil Gader



f Rodney Dangerfield had been an audiophile, he might have joked that tuners "just don't get no respect." But they should. Tuners are tasked with responsibilities greater than typical source components. They are a sophisticated wireless intermediary that plucks a broadcast signal out of the air, then fine-tunes it, massages it, and amplifies it before sending it on its way to a preamp input. In my experience few tuners do as good a job as Magnum Dynalab analog FM tuners. Their build-quality is first-rate, and their sonics can even approach a good CD or vinyl source component. But the face of terrestrial FM radio has changed. Corporatization and consolidation have greatly reduced the once-rich breadth and diversity of free information and music. It's not over yet, but the trend is worrisome. Seeking to fill this growing vacuum are two national subscription satellite providers, XM Radio and Sirius Radio. And this is where Magnum Dynalab comes in. Applying the same attention to quality and resolution to the XM format as it has to analog FM, it has created the MD-609T.

No matter how you look at the MD-609T, it's a beauty. Its thick front panel is defined by a commanding 4.2" cobalt-blue LED screen, where all music metadata can be observed from even distant vantage points. A handful of buttons permits easy XM navigation of over 170 stations and preset assignments. I would have preferred a tuning knob to spin, but that's probably the "old school" in me. Also, the remote control is a little scrawny for such a premium rig. Its soft-touch buttons are uncommunicative, and it's missing a "Back" button to recall the previously tuned station. But as with every Magnum Dynalab tuner I've encountered, it's what's inside that impresses.

While XM Radio provides developers with the module containing the codec for decoding the incoming signal and dictates compression rates-according to MD's Director of Audio Design Zdenko Zivkovic, it's actually the design of the DAC and audio boards that turns the sonic key. The in-housedesigned digital-interface board uses a Cirrus Logic 192kHz digital audio receiver and partners with a Burr-Brown PCM1794 Delta-Sigma DAC. Its output is always 24-bit/192kHz. The audio output stage is driven by a quartet of MD6922 Cryovalve triode tubes seated in ceramic sockets. Zivkovic points out that there are no output capacitors after the gain stage of the tube, resulting in a very low 200-ohm impedance that remains flat across the entire frequency range. Put another way-it's the same analog output board that Magnum uses to hot-rod its ten-grand MD-109 FM tuner. A custom-designed power supply and toroidal transformer are treated to copious amounts of damping to purge extraneous noise. Tweaks include thick double-sided 0.093 circuit boards with gold contacts, and Vibrapod Isolators.

I should note that the MD-609T has to cope with a different set of problems than the MD-106T, the dedicated analog FM tuner I reviewed in Issue 152. In the FM domain you have signal strength issues, and noise and adjacent-channel interference to deal with. A light veiling remains part of the experience, compared with CD sources. For XM broadcasts there are three or more digital compression rates that cleave and color the sound. At its worst, on talk radio and news, the sonics have the same compressed and choppy quality that makes streaming radio over the Internet so disquieting at times. At its best, on classical stations and some special programming like "On Broadway," the sound is almost analog in the sense of continuousness. But, as with its FM forbears, don't expect the level of transparency you can get from CD or vinyl sources.

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Going in, I was skeptical of the MP3-like bit-rates that XM mandates but the virtues of Zivkovic's design are immediately evident to the ears. Listening to classical programming like XM Classics or Vox, where the bit-rate is the highest, I wouldn't have guessed that the MD-609T was anything but a solid analog tuner. I easily noted how the lower noise floor (versus the analog hiss of FM) is a real gift for low-level resolution and microdynamics in all genres of music. The sonics were seductive and even a little ripe in the mids and lower midrange. Bass definition and punch were superior, seeming to combine the best of solidstage digital and tube-based analog. The overall character of the 609T veers slightly to the darker side of the spectrum with a subdued treble that allows strings a natural luster and hints of layering and depth. Upper-octave air and bloom, on the other hand, aren't as present as they are on LP or CD. As a result operas and orchestras sound a little earthbound. Brass conveys a brown-sugar sweetness and French horns similarly communicate a golden mellowness. But transient speed and attack-the initial burst from the mouthpiece-seem somewhat truncated.

During the holidays I listened to a lot of Christmas choral music, and I was struck by the clarity of individual vocal images and the body and weight that illuminated their relationship with other nearby players. I did not anticipate the texturally rich and

## **SPECS & PRICING**

Satellite RF sensitivity: 92.2dBm Tuning range: 2332.5-2345.0MHz Signal to noise ratio: >110dB Frequency response: 2-200kHz +/-1dB Outputs: Balanced XLR, unbalanced RCA Dimensions: 19" x 4.1" x 14" Weight: 20 lbs. Price: \$3995 MAGNUM DYNALAB LTD. 8 Strathearm Avenue, Unit #9 Brampton, ON, Canada L6T 4L9 (800) 551-4130 magnumdynalab.com dimensional soundstage that the MD-609T presented—not just the general outlines of a symphony orchestra, but the inner specifics of placement and orientation. Even pop music stations exhibited well-defined placement and stable imaging within rock rhythm sections. Compared to the Magnum Dynalab 106T, the 609T is still edged out at the frequency margins, but it was a much closer race than I imagined.

Even factoring in the overhead of an XM subscription, Magnum makes a strong case for this format. You only have to consider what you're billed for cable or satellite television each month to justify such a wealth of music. I was impressed by the 609T's sonics and addicted to the broad offerings of music and information. Certainly, for many, radio isn't worth anything more than a cold Bose in the kitchen. But if fingertip access to a wide variety of music and unique programming is what warms your soul, it's really good to have an MD in the house. **TAS** 

#### Tuning Up XM

The experience of living with an XM tuner begins the moment it's initially powered up for the first time. (Actually the first step is plugging the XM antenna into the back panel input and elevating it.) In Los Angeles, I immediately attained excellent signal strength. The 609T comes pretuned to XM Preview (Channel 01). I could immediately hear that everything was operating adequately and was ready to move to the next step. Since the service requires activation, the tuner's digital readout prompts you to dial an 800 number or go to xmradio.com and keep the tuner's identification number at the ready. A choice of subscription options were explained at that time, typically \$12.95 per month. (A 3-year package drops the rate to \$9.95.) Following payment, I was asked to leave the unit tuned to XM Preview and wait approximately twenty minutes for the tuner to acquire the necessary data. When I returned, all systems were go. Stations, more than 170 of them, had been categorized by genre and were available at the push of a button!