Tri-Planar Mk VII Precision Tonearm

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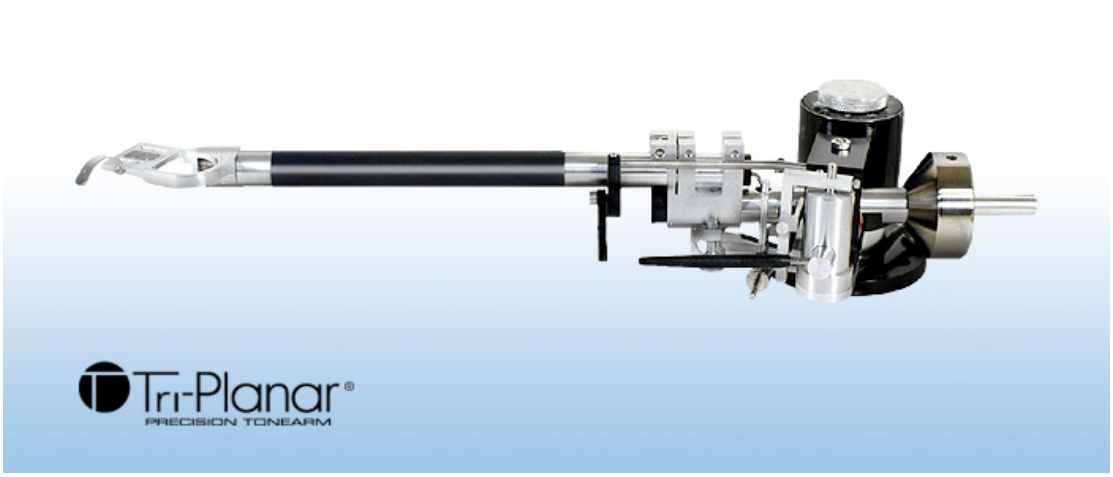

Already the winner of two TAS Golden Ear Awards (by HP in 2003 and me in (2004), the latest version of the Tri-Planar tonearm is long overdue for more formal recognition in these pages. A classic of analog design, the Tri- Planar was the brainchild of a rather eccentric watchmaker and amateur big- band trumpeter named Herb Papier, who was also an expert calibrator of chronometers for the U.S. Navy. Back in 1967, Papier started tinkering with a tonearm project he hoped would solve the three major challenges he saw facing arm design: adjustable azimuth, adjustable VTA (vertical tracking angle), and a bearing that would sit at the same plane as the record. Over the next many years, Papier built pre-production units for friends, and at the 1981 Consumer Electronics Show debuted what was then called the Wheaton Decoupled Arm. Papier renamed the arm Tri-Planar to more accurately reflect his work with the three planes of tonearm geometry, and continued to refine his concepts. (As early Tri-Planar owners can attest, there were sometimes fuzzy lines between different iterations of the arm, though Papier would gladly upgrade older versions for a reasonable price.) In 1994, a 23-year-old audiophile named Tri Mai was teaching art at a Minneapolis college while dreaming of purchasing his own Tri-Planar. (Mai, who is half French, escaped Vietnam at age nine with 25 other “Boat People.” Eighteen survived the journey.) After obtaining his dream arm, Mai began phoning Papier with questions about the finer points of setup and design. The men started a correspondence, and in 1998 Papier invited Mai to visit him at his home in Maryland. Mai stayed a week, sitting at Papier’s side, watching (and occasionally helping) him assemble a few of the handmade Tri-Planars.
By 1998, Papier’s health and hand- arm dexterity were weakening, making it difficult to execute his work with the precision required. He again invited Mai to visit—this time for a three-month stretch. It was at some point during this trip that Papier invited Mai to carry on his legacy. It took another six-month visit to

work out the details of the trans- fer, during which Papier taught his protégé everything about the Tri-Planar (then in a Mk VI incarnation), ensuring that Mai could build the tonearm to his exacting standards. After acquiring Tri-Planar, Mai moved the operation to Minneapolis. “I’m privileged that he picked me,”
Mai told me. “Several companies were bidding on the arm for its prestige and reputation, but they weren’t interested in carrying on the integrity of the design. I was, but I also think Herb chose me because I was younger and wouldn’t mess with it,” he added with a laugh.
Papier died in 2003, at age 83, just about the time that Mai—then in his third year of production—introduced the Tri-Planar Mk VII, which includes many of its inventor’s last thoughts on the tonearm. (A stipulation in their contract put a seven-year freeze on the design, after which Mai may incorporate his own ideas.)
I’ve now lived with the Mk VII for close to two years, with the Clearaudio and Redpoint turntables discussed below, as well as two cartridges—the Cardas Heart and Shelter 90X (both of which will appear in a future column). Naturally, different platforms and cartridges will yield different overall results, but several identifiable characteristics of the Tri-Planar remain constants. Where earlier editions of this arm known for delivering great solidity, focus, and superior staging, they were tonally on the dark, lush side of the sonic spectrum, and added a velvety romance to the sound. Grant you, I have nothing against romance, and would take a beautified sound over a sterile one every time. What’s special about the Tri-Planar Mk VII is that it retains the signature weight and focus of past designs, has even better holography, detail, dynamic range and nuance, and yet it also brings along a much greater

sense of tonal neutrality.
Simply put, like the best of today’s components, the Tri-Planar gives the impression that there is less electromechanical stuff between you and the music. With this arm, full-bodied instruments, such as Janos Starker’s cello in the Bach Suites [Speakers Corner/Mercury] and Roy Haynes’ drums in Analogue Productions’ stunningly good 45rpm pressing of Thelonious Monk’s Thelonious in Action, have the dimensional body, power, and gravity to suggest a fine facsimile of the real things. The sound of Haynes’ drums on the Monk record is especially lifelike, while, say, Milstein’s Stradivarius in a Bach

Partita [DG] or the delicately struck triangle, caressed hollow-body electric guitar, and breathy aspects of Ella Fitzgerald's voice in "Good Morning Heartache" [Clap Hands, Here Comes Charlie!, Verve] retain their natural delicacy and lightness, and yet have a strong physical presence. Never before in my experience has a reproduced triangle sounded at once so percussive yet whisper-soft.

In addition to bringing home the natural relative proportions of instruments' physical scale and dynamic contrast, the Tri-Planar Mk VII is a master of soundstaging and imaging within.Where many audio components tend to sheer off the outer edges of the sound-stage, and increasingly so as depth recedes, the Tri-Planar does not. Instead, and this is of course dependent on the record and associated gear, it seems to open up the farthest reaches of the stage, as if illuminating previously dark corners. Within that space, voices and instruments "materialize" with particular vividness and tangibility. This can be heard on any number of LPs, but two that immediately spring to mind are Classic Records' 45rpm single-sided pressing of the Royal Ballet, and Wilco's a ghost is born[Nonesuch/Rhino], where each allowed the already superb and transparent Kharma 3.2 speakers to display a heady level of sonic "invisibility." At $3900, the Tri-Planar continues to sit among a small handful of today'stop-tier pickup arms, and it's one with quite a long track record, too. Under Mai's stewardship, that should continue for years to come. Mai's final words to me were, "Our advice to owners of the arm is to enjoy it for ten years before thinking about any upgrades."

Tri-Planar Build & Setup

Each of the 140 separate pieces that makes up the Tri- Planar is tested before assembly. The arm's features include an annealed-aluminum coaxial damped arm tube (annealing is the process of heating and slow cooling that increases strength),a damped headshell,a clamping yoke design that firmly couples the headshell tube to the bearing tube (making for a single unit that still allows for azimuth rotation at the headshell),hard-polished needle and cone bearings that are individually adjusted in each arm (making it as friction-free as uni- pivot, according to Mai),VTA that can be adjusted during play,a progressive anti-skate design,decoupled counterweights that allow proper stylus force for any cartridge without altering effective mass and a silicone damping trough.

The Tri-Planar is easy to mount via three screws at the base—no other plinth or arm platform drilling is required. And though setup is not unusually difficult, the instructions need updating (more detailed text and photos would be a great help), and I would never recommend self-setup to the analog novice. There is simply too much fine-tuning required if you're to realize this arm's full potential. WG