

## VPI TNT V-HR turntable & JMW 12.5 tonearm

I'm a tinkerer. From homemade audio isolation and room-treatment products to a local area network (LAN) connecting my Macintosh laptops, I'm always building or modifying something. One of my latest projects is a combination of parts swaps and custom-machined bits to better adapt the ergonomics of my exotic Italian Bimota motorcycle to my distinctly un-Italian 6'3" frame. But regardless of what I'm into, I can't resist the urge to tinker.



Harry Weisfeld, the man behind VPI, is also a tinkerer, of which the evolution of his TNT turntable provides ample evidence (footnote 1). There's been a flywheel here, an air suspension there, a new, more solid mounting method for the bearing—each step an improvement in performance and user-friendliness.

### **The TNT V-HR**

The latest step in the TNT V turntable's evolution is the TNT V-HR. The "HR" stands for "Hot Rod" and reflects a number of small and not-so-small changes to the basic TNT V. The most obvious of these are the omission of the three-pulley subchassis and the lack of a removable tonearm board. The subchassis was dropped because, with the V-HR's new Rulon bearing (now included in the standard TNT V as well), its load balancing was no longer required. And, according to Weisfeld, the three pulleys "added noise, in the form of a subtle graying of the sound."

The armboard was deleted to increase rigidity, which is further improved by attaching the arm with a single, large-diameter nut that screws directly onto the arm pillar.

The final change in the HR, which will be retrofitted to the basic V version as well, is the use of a removable power cord for the motor. All of the other mods that resulted

in the TNT V—the new platter and flywheel, the air suspension, the single-nut mounting of the bearing cup—are included in the HR as well.

The TNT lineup now includes several models. The bottom rung is the \$2600 TNT Junior, which is suspended by Sorbothane bushings encased in the corner towers, uses a 1.5"-thick clear acrylic platter and lower-grade bearing, and omits the flywheel. Next is the \$4000 TNT 3.5, which maintains the Junior's bearing assembly but replaces the Sorbothane bushings with springs, uses the 23-lb multilayer TNT platter, and adds the three-pulley subchassis.

The TNT V, which goes for \$5800, switches to air suspension, adds the flywheel and single-nut-mounted Rulon bearing assembly, and, as of this writing, will no longer include the three-pulley subchassis. The TNT V-HR costs a bit more (\$8000) but is actually the better value, because its price includes the JMW 12.5 tonearm—the other TNTs come sans arm. The SDS motor/speed controller, back in production as of this writing, adds \$800 to the price of any TNT (the V and V-HR models are priced with SDS), or is available for \$1000 separately.

### **JMW Memorial 12.5 tonearm**

The JMW 12" Memorial tonearm has been tweaked as well, resulting in a number of small changes and the "12.5" appellation (the ".5" denotes an upgrade, not an increase in length). As noted above, the arm is now mounted using a single, large-diameter nut that screws directly onto the armtube, resulting in a much more rigid coupling to the armboard or plinth. Rigidity is also improved with the addition of a second contact point: a small pillar near the armrest. Once VTA is set, the pillar is screwed down until it firmly contacts the armboard or plinth, and is then locked in place.

A weight has been added to either side of the azimuth adjustment collar, to move more mass to below the bearing's pivot point. Similarly, a new counterweight design is used to further lower the arm's center of mass. Inside the armtube, the damping has been improved with the addition of a third layer of elastomer near the bearing end of the tube. And in one of those obvious-once-you-see-it touches, a small **V** groove is machined into the top of the headshell. Why? So the user can easily set a small tube (supplied) atop the headshell to more easily gauge headshell tilt while setting azimuth. Neat!

The retail price of the new arm is \$2800—the same as the previous version. The older unit, the JMW Memorial 12", will remain in the lineup at a reduced price of \$1800. On the drawing board, according to Weisfeld, is a no-frills version of the arm that will delete all of the adjustability, the interconnect box, etc., but will maintain the unit's basic quality and retail for \$800-\$900.

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## Setup

The Hot Rod replaced my TNT V in my system, and has overlapped a number of system changes and other reviews. I began my listening using a Grado Reference cartridge, but upgraded midway to the wonderful new Statement Reference, both feeding my VAC CPA1 Mk.III preamplifier or the Conrad-Johnson Premier 15/17LS combination.

The TNT-HR's integrated tonearm and deletion of the tri-pulley assembly made setting it up a snap. Similarly, adjusting and using the 'table were straightforward and intuitive. A few points bear mention, however. First, the TNT likes to be level—*really* level—so check it frequently. Second, I got the best result using the lowest possible air pressure that still "floated" the towers. More than that seemed to impose a very slight mist on low-level details; a bit of extra effort here is worth the trouble. Finally, I suggest paying religious attention to keeping the belts well-powdered and carefully aligned. I found that a bit of misalignment or a slightly sticky belt immediately showed up as a perceptible fluctuation in speed.

My only other comment is that while the TNT wasn't at all finicky, it did seem to be a very stable, low-noise platform. It will clearly and audibly showcase any deficiencies in the chain, from a poorly recorded LP to a slightly gritty or sticky stylus. As I spent more time with the TNT V-HR, I found myself returning to tweak the setup again and again—not to correct settings that had drifted, but to further optimize and wring even more information from the grooves.

## Use and Listening

I found it difficult to make a definitive comparison between the TNT V-HR/12.5 and the TNT V/JMW 12" combo that it replaced, because they never overlapped in my system. The change-out coincided with the remodeling of my listening room, so several weeks elapsed between setups.

Another complicating factor was that the remodeling changed the character of my listening room. Before, the room was slightly warm, with a distinct peak in the 80-120Hz region, but attenuated somewhat in the low bass. Now the room is now much more neutral—perhaps even a bit cool—with much better extension at the frequency extremes, and the new, hard surfaces result in a very fast, live sound. One of the TNT's characteristics, in all its incarnations, has been a slightly bloomy bottom end, so I struggled a bit sorting that out in the context of my room changes.

Finally—and most significantly—the changes between the two versions of the TNT were very subtle. There was nothing here as dramatic as the switch from spring to air

suspension in the TNT V, or replacing the old PLC to the SDS controller. Nonetheless, I think that the HR/12.5 improved on its predecessor's performance in a couple of areas.

With the HR/12.5 combo, there seemed to be a little more space and air throughout the soundstage and a little better ambience retrieval than with the previous version. At one point during the review I was listening to the lovely second movement, *Allegretto scherzando*, of Bartók's *Concerto for Orchestra*, with Reiner conducting the CSO (RCA/Classic LSC-1934). I zeroed in on a passage in which a series of soft, slow snare-drum rolls is followed by a delicate oboe line—the oboe enters just as the final echo of the drums fades out. What typically happens is that each instrument paints a vivid picture of its portion of the soundstage and the adjoining walls, but the two sounds are never quite woven together. The split second of silence between drum and oboe seems to be matched by a slight spatial seam, a thin line of nothingness between the two parts of the soundstage that I'd always chalked up to miking patterns.

With the HR TNT, the seam was gone. I could clearly hear the echoes of the drum fade away before the oboe entered, but with the HR, they were simply in different portions of the same, continuous ambient space—a space that encompassed the entire soundstage. When the rest of the orchestra dropped out from around the oboe a bit later in the movement, it didn't leave behind an electromechanical silence; the ambience seemed to flow in behind the instruments, leaving a coherent, tangible portrayal of the hall. I felt as if I could sense the musicians' presence—breaths held, bows poised above strings.

Another area where the new rig improved on the previous version was in its reproduction of transients. Leading edges of notes, from the very soft to the loudest, most explosive crescendo, were all a little sharper and cleaner than before. As a result, the HR's overall presentation seemed tighter, but without losing any of the TNT's beguiling coherence and effortless, relaxed feel. It just sounded as if everyone had sharpened up their playing ever so slightly, or was having one of those days when everything just *clicks*.

I don't know if the HR/12.5's added detail and precision resulted from a slightly lower noise floor (as Harry Weisfeld suggested), from a bit more rigidity in the mechanical pathways, or both. Whatever the cause, the combo did seem to extract a bit more information from the grooves than its predecessor, which translated into more snap and life and a more involving performance. With the HR, it was a bit easier to close my eyes and imagine the sounds originating within the soundstage rather than at the stylus/record interface.

I was playing a series of LPs for a friend one evening, mostly pop and rock albums from her late-'70s/early-'80s high-school days—Meat Loaf, Loggins and Messina, Joe Jackson, Modern English, etc. Over and over she would smile, shake her head, and say things like, "Wow...I never heard that guitar before," or "I never knew there were three harmony parts there...that's really nice." Admittedly, she'd never heard high-end audio before, so it was easy to make an impression. But when I pulled out a few of *my* old favorites to play for her, the new TNT's performance had me hearing new things, too.

On "Unknown Legend," from Neil Young's *Harvest Moon* (Reprise 45057-1), for example, fading echoes around the instruments and voices are used to create an eerie artificial soundstage. With the HR, the effect was much more noticeable; the space seemed to open up and expand to an extent that surprised me.

On "Ave Maria," from *Solo Pieces for Double-Bass and Piano* (Musical Heritage Society MHS 3807), Thorvald Fredin's bass seemed richer and more resonant than I remembered, and sounded quicker and more alive. And on the lowest notes, the tone was so pure and solid that it seemed as if I could feel the individual vibrations of the instrument's body. (*Solo Pieces* is a great album: a nicely performed, eclectic set of lovely duets with pianist Lars Roos.)

On another old favorite, "You're a Big Boy Now," from John Sebastian's *John B. Sebastian* (Reprise 6379), I was struck again by how effortless and natural the TNT/12.5 combo sounded. The notes and vibrations were more complex as well, more tonally vivid. I felt as if I was hearing more deeply into them, and could better unravel their harmonic nuances. And for the first time, I got a slight sense of space around the guitar's body, and a sense of chest or body behind Sebastian's voice. Incredible.

All of the TNT's traditional virtues successfully made the transition to the HR version as well, chief among them the easy, effortless feel and the unstrained, natural way notes started and stopped. The soundstage was deep and wide, extending well beyond, and seeming to dissolve, the speakers and my listening-room walls. The images were vivid and three-dimensional, with tangible stability and solidity.

Present, too, was the slightly warm tonal balance. Although the mid- to upper bass was articulate and well-defined, it was also just a touch bigger than life. Ray Brown's bass on Oscar Peterson's *Night Train* (Verve V6-8538) was a good example: articulate, round, and bouncy, but just a bit warmer than on CDs, or with some other 'table/arm combinations I've tried. It's not a large coloration, or the least bit amusical, but more like the character imposed by a slightly warm club or hall.

The very bottom end, on the other hand, was exceptionally tight and fast, and an improvement on the TNT V's already excellent performance. This was most evident in the reproduction of massed double basses. There was a better sense of detail, speed, and solidity with the 12.5/HR combo. Orchestras seemed even more solidly grounded, and more firmly and naturally linked with the surrounding ambient environment.

### **Summing Up**

The VPI TNT V-HR/JMW 12.5 combination represents another step forward in the continuing refinement of Harry Weisfeld's TNT series. As with most of his updates, these changes probably wouldn't have occurred to me, but they made perfect sense once I'd seen them. And, like most of the TNT's evolutions, the V-HR changes resulted in slight but noticeable, and musically significant, improvements on the previous version.

I heartily recommend the TNT series and the JMW Memorial tonearm—and particularly this HR/12.5 combination—to anyone in the market for a turntable. It's thoughtfully designed, beautifully built, simple and intuitive to set up and use—and, quite likely, one of the premier record-playing systems on the market today. And although it's expensive at \$8000, the price is competitive within the cadre of topflight analog rigs now available.

For owners of earlier TNTs, the question of whether or not to upgrade is a vexing one. It's tough to say that the changes are large enough to merit a swap. On the other hand, they're just the sort of subtle improvements that make a performance seem a bit more captivating—and allow you to rediscover old favorite albums all over again. It's tough to put a price on that, but now that I've heard the TNT V-HR/JMW 12.5 combination in my system, I couldn't go back.

Footnote 1: The original TNT was reviewed in *Stereophile* July 1990 (Vol.13 No.7) by Thomas J. Norton, the Mk.3 version by Michael Fremer in November 1996 (Vol.19 No.11), and the Mk.IV by Brian Damkroger in February 1999 (Vol.22 No.2).—**Ed**

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