

# The VPI Aries 3 Turntable, JMW 10.5i Memorial Tone Arm And Dynavector DRT XV-1s Moving Coil Cartridge A great sonic foundation! Review By Wayne Donnelly

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This is a review that almost never happened. A few years ago, I had reviewed and purchased an excellent analog rig — Basis 2800 turntable with vacuum hold-down, Graham 2.0 arm (subsequently updated to the 2.2), and Transfiguration Temper moving-coil cartridge — and it had given me very satisfying results. I knew that the VPI tables were highly regarded, but their top model HR-X, which I certainly found intriguing, was just too darned big to sit atop my Arcici Suspense Rack, and I didn't have the space in my California condo to accommodate a dedicated floor-standing turntable support more than a yard wide. (That space constraint had been what originally kept me away from Basis's also very wide flagship, the Debut.) Even after moving into my more generously proportioned new digs in Chicago, I still wanted to keep my turntable atop my Arcici rack. Therefore, I was sure that my rig would be good for the long haul.

But I kept hearing, from people whose judgment had proven reliable over the years, that the newest VPI tables were truly outstanding, and that the Aries 3 in particular was a price/performance standout. So, finally, I decided to check it out, together with the best Dynavector cartridge, the DRT XV-1s, which has consistently gotten immoderate raves from reviewers and audiophiles. So I made a few phone calls, and a few weeks the Aries 3/XV-1s adventure began.



#### Aries 3: Basic Overview & Upgrades

The Aries 3 may be purchased with no arm (the buyer can specify an arm board appropriate to the chosen arm) for \$2950, or with the latest version of VPI's 10.5-inch JMW Memorial unipivot arm for \$4800. The 1.75-inch thick standard platter is formed with non-resonant acrylic, and its inverted bearing is similar to that used in VPI's flagship HR-X. The bearing shaft is 60-Rockwell hardness, ground and polished, and the platter rotates on a Teflon/Delrin composite thrust plate for exceptionally low noise.

The solid black aluminum motor assembly weighs almost ten pounds. It houses a low-noise 300-RPM synchronous motor with a Delrin motor pulley. This is a very low-noise system, as the fundamental resonance of the motor is at 5 Hz, too low for a cartridge to pick up.

To optimize stability and damping, the Aries 3 chassis is built as a sandwich of two layers of 5/8-inch polished black acrylic, top and bottom, with a 5/8-inch aluminum center section, exactly like the HR-X chassis. This provides an inert, quiet and stable platform for the platter and pickup arm. The plinth sits on four aluminum cones whose bottoms are hardened steel balls. This cone suspension, in combination with the laminated chassis, is solidly rigid. The cones are adjustable for leveling. The Aries 3 circular black acrylic arm board is 4-inches in diameter and 1-inch thick. It mates well sonically with the laminated chassis.

The "Mini-HRX" Upgrade Path

The Aries 3 can be taken to a performance level that, according to VPI's founder and chief designer Harry Weisfeld, comes very close to the ultimate resolution offered by the HR-X. The purchaser can opt for the new JMW Memorial 10.5i pickup arm; VPI's Synchronous Drive System for precise, infinitely adjustable speed control; HR-X periphery clamp and center weight; Mini-TNT feet; a single-motor flywheel; and 25-lb. Super Platter. This deluxe version of the Aries 3 is offered at a bundled price of \$7700 — not a trifling sum by any means, but still well short of the HR-X's \$12,000 price tag. It is this comprehensively upgraded Aries 3 that is reviewed here. Upgrade details follow:

#### JMW Memorial 10.5i Arm

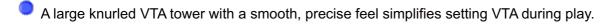
The new JMW 10.5i arm represents further refinement of VPI's earlier 10- and 10.5-inch arms. By going to a dual mounting design, VPI has made an arm that is clean, fast, powerful-sounding and easy to optimize for any cartridge. The 10.5i incorporates several significant improvements over its predecessors. These improvements include:

The larger dropped counterweight puts more mass below the arm's pivot point, improving stability.



A secondary mounting with under-base placed between the arm rest and the arm lift improves the

arm's rigidity. VPI says this is the only arm that enables both VTA adjustment and then relocking as rigidly as with a solid-mounted arm while listening. This function contributes significantly to the speed and low bass detail of the 10.5i arm.



- The azimuth ring on the 10.5i has the larger side weights of the HR-X's 12.7-inch arm for improved stability.
- Fluid damping is available for cartridges that require it (such as Grado and Clearaudio).
- All possible parameters are adjustable.
- Optional balanced XLR output connections are available.

#### Synchronous Drive System (SDS)

The SDS combines a turntable motor speed controller and a line isolator into a 16 x 3 x 12-inch package. The SDS delivers clean, accurate power using advanced digital technology and quartz crystal accuracy.

The SDS allows adjustment of both the voltage and frequency fed to the turntable motor. Adjustments are easy from the front panel via intuitive soft-touch controls. The selected output voltage and frequency are visible on the large LED display. The SDS slowly ramps the voltage and frequency up or down to the selected value, to avoid premature motor wear from abrupt changes. During motor startup, the SDS increases output voltage to bring the platter up to speed quickly. Once the desired platter speed is reached, the SDS ramps output voltage back down to reduce motor vibration, thereby lowering the system's noise floor.

The SDS circuit provides highly accurate and stable line frequency. Additionally, it effectively isolates the output voltage from the input voltage, eliminating voltage spikes, low-level fluctuations, RFI and frequency variations. Instead of merely filtering the power line, the SDS first changes incoming AC into pure DC voltage, and then digitally regenerates its own clean signal. The SDS works best with synchronous-motor-driven 115-volt turntables, such as those from VPI. The speed of a synchronous motor is determined by the frequency it is fed. It is only logical that a device whose speed is based on line frequency will always function better when fed a stable frequency. Constant motor speed translates into quieter, more faithful musical presentation.



If you are one of the greatly diminished number of 78 RPM record collectors, you know that many historical recordings were not transferred onto LP at the proper speed. The SDS enables correcting the musical pitch of those recordings by varying the speed of the turntable. In addition, collectors who have VPI turntables that run at 78 RPM will be able to adjust them accurately to compensate for the wide variation in recording speeds used in the 78 RPM era.

#### Mini TNT Stabilizer Feet

These heavier and more stable composite TNT-style feet improve stability and vibration control over the standard cones. This is a simple, cost-effective upgrade: just unscrew the cone feet and screw in the Mini TNT Stabilizer Feet to take the Aries 3 closer in sound to the HR-X.

The Mini Stabilizer TNT Feet weigh almost 1 lb. each, and are well isolated. They are a composite of Delrin and stainless steel, similar to the turntable's sandwich plinth design. They have an integrated damping mechanism. The bottom of each foot has three steel ball bearings that contact the stand to further minimize vibration. The combination of all these design features yields a lower noise floor, tighter bass, and improved overall clarity and soundstage resolution. Dimensions: 1 7/8" tall, 2 1/2" diameter

#### **Single-Motor Flywheel**

A motor/flywheel combination fits into the round motor cutout on the left side. A machined housing, 300 RPM motor, and 10-lb. flywheel spinning at 400 RPM make wow and flutter extremely low.

#### **Super Platter**

This is the most advanced platter VPI has ever made. Made from an acrylic/stainless/acrylic sandwich (like the chassis) and weighing 25 lbs, this platter upgrade fits all VPI turntables EXCEPT the HR-X. This platter improves bass performance, accepts the periphery clamp, is ultra-quiet, and is more stable and dynamic than the standard platter.

#### **Periphery Clamp and Center Weight**

The outer periphery record clamp centers on the platter, not the record. With the center weight, it provides vacuum-like hold-down without the problems frequently cited in a vacuum system, especially the pressing of dust particles into the surfaces of vinyl records. These beautifully machined pieces are to my eye real industrial art, and highly effective at flattening and damping LPs to obtain more focused and relaxed sonic presentation.

## **Review Setup**

The VPI/Dynavector took the place of my Basis/Graham/Transfiguration rig in my reference system. At the core of the system is the VTL TL 7.5 Series II line preamplifier. Amplifiers were the 600 wpc Spectron Musician 3 Signature Edition Mk. II (the original was a "Best of 2006" Blue Note Award winner) and 800-watt VTL Siegfried Reference tube monoblocks. The turntable fed phono preamps from JoLida, Audible Arts, ModWright and ultimately my reference Ray Samuels Emmeline XR-10-B. (Listening comments for this review refer primarily to the XR-10-B.) The digital source was a Denon 3910 multi-format disc player with tube output stage by ModWright. I also listened to Chicago's fine-sounding classical music station WFMT on my tubed JoLida JD 402 tuner. Speakers were the Analysis Audio Amphitryon planar/ribbons (a 2006 Blue Note Award winners). Various combinations of cables from JPS Lab, Bybee Technologies and TG Audio connected the system.

Accessories included the Audio Desk CD lathe, VPI HW-16 record cleaning machine, Marigo Lab resonance-control devices, AudioTop CD, LP and contact cleaners, and the astonishing Bybee 'Super Effect' Speaker Bullets. Sources and preamps were plugged into a recently upgraded Bybee/Curl Pro power conditioner, and that plus the amplifiers was powered through an ExactPower EP-15A voltage-regulating conditioner. (My building has over-voltages in the 130V range at night, and the EP-15A takes in that voltage and outputs balanced 120V, a healthier amount of juice for the system. The Aries 3 sat atop an Arcici Suspense Rack, with additional isolation from a dedicated Gingko Audio platform, and was fitted with a removable Plexiglas Gingko dust cover. Other components sat on Gingko platforms, in both the Arcici and a Sanus A/V rack.

Although it is compact enough to meet my requirement that it fit atop my Arcici equipment rack, the Aries 3 appears generously proportioned. Its black-and-silver color scheme and superb finish give it a look that I call "refined industrial." I find it very handsome, and its appearance inspires confidence that it will be an outstanding performer.

# Listening

One of my chief motivations for undertaking this review was the opportunity to compare the effect of VPI's center/periphery clamps against the vacuum system used by the Basis. Let me say at the outset that I have liked the vacuum hold-down provided by the Basis very much in the years I have used it. I have heard all

the arguments about the dangers of pressing dust and grime into the vinyl of my precious LPs, but only a few times ever have I actually heard a record become noisier after having been sucked down to the platter with that system. The key to avoiding such problems is to be meticulous in keeping one's records clean. In a sense, that imperative had forced me to become much more disciplined in maintaining LP hygiene than I would otherwise have been. My old first-generation VPI record-cleaning machine has more than earned its keep!

For me, the biggest downside of the vacuum was the noisy pump, far too loud to be in the listening space, and often problematical even in an adjacent room. Basis did supply it with 50 feet of vacuum hose and electrical wire, to allow for sufficient isolation from the listening space. But that still required drilling holes and pulling wires, not the way this music has ever liked to spend his time.

So, the first thing I wanted to explore was how well the VPI combination clamping system would compare to the undeniable sonic benefits of the vacuum. Where better to start than with solo piano, always a challenge for any audio system. The great Reference Recordings LP *Nojima Plays Ravel* quickly made it clear that this system works spectacularly. The shifting moods and brilliant colors of *Gaspard de la nuit* emerged from the speakers with stunning clarity and impact, and the silent background seemed even purer and blacker than I could remember ever hearing with this remarkable record. That initial impression was repeated over and over as I dug out other gems from my collection.

Previously, one of my favorite parlor tricks had been to switch off the vacuum while a record was playing, which unfailingly demonstrated to visitors the efficacy of the vacuum hold-down. Now I tried playing the same record with and then without the periphery clamp (obviously this could not be done while the record was playing, but otherwise the comparison was apt.) And the relative results were similar. With the removal of the periphery clamp, the solo piano would lose a touch of its solid in-the-room quality, and some of its transient explosiveness. In addition, the degradation of the sound was even more pronounced if I also removed the VPI center weight, which was closer to the effect of a vacuum-less Basis. Put the clamps back on, and the sound immediately regained its focus and transient precision. After the first evening's session, the call was clear to me: the VPI dual-clamp system was the winner in properly flattening and damping LPs, and the tactile pleasure I felt in handling the periphery clamp was a bonus.

What also became clear that first evening, and reinforced in subsequent sessions, was that the Aries 3/XV-1s combo delivered an incredible dynamic range. Quiet passages were presented with extraordinary delicacy, with subtle shadings of color I had not previously perceived, and the power of an orchestra in full cry leapt into the listening space with ferocious, almost overwhelming impact.

All of those qualities were clearly evident in one of my most treasured recordings, the (now, sadly, out-of-print) three-single-sided 180-gram Classic Records reissue of the celebrated Mercury Living Presence recording of Stravinsky's complete *Firebird* by Antal Dorati and the London Symphony — still, to this listener, unmatched either musically or sonically despite being now half a century old. Thrill seeker that I sometimes am, initially I went straight to disc 3, encompassing from the awesome "Infernal Dance" (that'll knock the dust off your speakers) to what Stravinsky himself once described wryly as the "wide-screen Technicolor" finale. That is about as exciting as orchestral music gets, and this time I could hardly believe my ears. Later I returned to play the entire piece, and discovered again and again small epiphanies of color and phrasing throughout this definitive performance.

The Aries 3/XV-1s combination excelled in capturing the spatial qualities of some of my favorite records. One of the best tests I know of for spatial resolution is the excellent reissue of Gil Evans' *Out of the Cool*, especially the fantastic opening cut, "LA Paloma." The gatefold album cover features a diagram laying out the positions of the many musicians, and I felt I was hearing that layout with a depth and placement precision — both laterally and front-to-back — that had never before been so clearly rendered.

A very different but equally revelatory experience was playing the Decca/London set of Puccini's *Turandot*. Decca's great producer John Culshaw "staged" his opera recordings, blocking the action in front of the microphones as if capturing a live theatrical performance. The soloists and chorus move about as they would in the opera house. Act 1 has the hero, Prince Calaf, entering from one side and encountering his father Timur and the slave girl Liu, entering from the opposite side, who have been searching for him. As they meet, the boisterous crowd swirls around them. The movement and vocal counterpointing are tremendously exciting, and we can virtually "see" the action unfold.

This recording also shows off how beautifully this rig captures the human voice. I have never heard Luciano Pavarotti's ringing tenor and Joan Sutherland's stratospheric soprano more fully realized on record, and Monserrat Caballe's heartbreaking "Signore Ascolta" exposed me for the softie that great music can turn me into — goosebumps and tears!

But sometimes I crave coarser pleasures. One of my very favorite live rock albums of all time is The Rolling Stones' *Get Yer Ya-Ya's Out*. This 40-year-old record catches the band at its best, and the sound holds up very well today. The Aries 3/XV-1s setup really kicks with this LP — capturing vividly the great rhythm section of Charley Watts and Bill Wyman, the punchy guitar sound of Keith Richard and Mick Taylor, and of course Jagger's swaggering vocals. So truly does the LP render the big-arena ambience that I felt almost as if I was hearing a good surround system. Big fun!

#### About the Dynavector XV-1s

As I cautioned above, the listening impressions described here necessarily reflect the systemic interaction of table, arm and cartridge. I am satisfied that VPI's contribution is unmistakable. Rock-solid speed accuracy and superior dynamics are a great sonic foundation, and I have never had a table that so effectively suppressed LP surface noise. (That latter phenomenon is one of the mysteries of vinyl playback that I have never really understood, and no one has ever been able to explain to me. However, I remember years ago when upgrading first the power supply and then the platter bearing of my Michell Gyrodec immediately caused a dramatic lessening of surface noise, among other sonic improvements. On numerous LPs, many of them having been played dozens, even hundreds of times, the Aries 3 made them sound virtually new.) And the JMW 10.5i arm proved a superior carrier for the XV-1s. I never heard any mis-tracking, no matter how heavily modulated the grooves. I am confident that the VPI package allowed the cartridge to perform at its best.

A couple of small notes: Dynavector recommends a high tracking force of 2.2 grams, but I preferred the slightly better focus and bass performance with 2.5 grams. Also, I found the highs more open and relaxed-sounding with a load of 100 ohms, rather than the specified 30 ohms. (My Ray Samuels Emmeline XR-10-B phono preamp provides for instantaneous comparisons with front-panel parameter adjustments.)

I have listened to many truly excellent moving coils over the years, from Van den Hul, Benz/Cardas, Miyabi, Koetsu, Clearaudio and Transfiguration. All of them had undeniable virtues, and some had less admirable tradeoffs. And of course I never heard any of them on this terrific VPI rig. Still, I don't think any of them had the total quality of the Dynavector DRT XV-1s. With it I hear extraordinary extension, but no moving-coil sizzle or etched highs. Bass is deep and tight, never overblown. Imaging is precise in all dimensions within a huge, deep stage. It is simply the best cartridge I have ever heard. It's \$4,250 price is not cheap, but if you want the best, I think it's reasonable. I haven't heard any of the five-figure-price-tag cartridges out there, but I can't find any reason to go there. The Dynavector is a stone winner!

## Conclusions

If you have read this full review, the conclusions will be obvious. If you're a skip-to-the-end type, be assured that this VPI/Dynavector combo gets top marks. I'm sure that both the table and cartridge would perform admirably mated to other partners. But together they are the answer to my analog prayers. I purchased the review units, and they bring me great pleasure day after day.

## **Specifications**

**VPI Aries 3 Turntable** 

Wow & Flutter: < .02 Rumble: > 80 db down Speed Accuracy: within .1%

Total Weight: 64 lb.

Platter Runout: +/- .001 inch

Warranty: 3 years

Price As Reviewed: \$7700