



# VPI Classic 3 turntable & Classic-JMW tonearm

By Michael Fremer • Posted: Oct 14, 2011



Trends in turntable design shift back and forth over time, each "advance" turning out to be a mostly sideways move. Over its long history, VPI's founder and designer, Harry Weisfeld, has moved the analog goalposts back and forth as he's refined his thinking. His early turntables were mostly standard spring-suspension designs of normal size. By the time Weisfeld produced his fully tricked-out TNT model, which was originally designed to stably hold the heavy moving mass of Eminent Technology's ET2 air-bearing arm, he'd moved to a massive, oversized, sandwiched plinth with isolating feet at the corners. He first used springs and, later, air bladders originally designed to cushion a tractor-trailer's load, and which he'd found in a trucker's supply catalog. Via an O-ring, the TNT's outboard motor drove one of three pulleys that protruded from holes in the plinth, and attached to a T-shaped subchassis that, in turn, drove the other two pulleys via two additional O-rings.

Through the years there were more modifications of VPI turntables: the extra pulleys disappeared,

multiple belts were replaced by a single belt, and a flywheel provided an interface between the platter and the motor. There was even a beltless version driven by a flywheel. You can find images of "the VPI variations" online.

A few years ago, Weisfeld was apparently struck by the great sound of an old Empire Troubadour turntable whose motor was integrated into its plinth, something most designers of premium turntables long ago abandoned for what seemed obvious reasons concerning the direct coupling of noise. He built a prototype of such a design and was surprised by how great it sounded, and by how many problems the return to the old thinking could solve, assuming the motor could be properly isolated within the plinth. The result, the original VPI Classic (\$2750), became one of VPI's best-selling products and is still available.

### **The Classic 3**

The Classic 3 turntable (\$6000) is the most recent VPI model, and includes some significant refinements, including a massive new plinth structure in which a ½"-thick plate of machined aluminum is bonded to a 1/8"-thick steel subplate that itself is bonded to 2" of MDF. The result is a massive, well-damped, ultra-low-resonance, 60-lb platform that sits on newly designed feet that, Weisfeld claims, produce greater stability and provide a better aesthetic match to the new plinth, which is finished in lustrous piano-black lacquer. The review sample's top plate was finished in wrinkled pebble black.

The drive system consists of an AC synchronous motor fitted with a two-step Delrin pulley that interfaces, via a rubber O-ring, with an 18-lb aluminum platter damped with a stainless-steel disc bonded to its underside. The platter rides on a pre-lubricated inverted ball bearing and a composite thrust pad.

I'm happy to see the switch of platter material from acrylic to damped aluminum; Weisfeld says the latter can be more precisely machined, and is more easily damped, more resistant to changes in temperature and humidity, and more dense. And he and I agree that it *sounds* better than acrylic. The Classic 3's platter is machined to accept VPI's peripheral ring clamp, which is included, as is their heavy HR-X center weight. Although the Classic 3 has been designed for the LP to be in direct contact with the platter's aluminum surface, some buyers have been using as a record mat the thin rubber mat that protects the platter surface during shipping. Weisfeld is agnostic about whether this is a good idea or not.

Most important in a turntable like the Classic 3 is how the motor is simultaneously integrated into and mechanically isolated from the plinth. Here the motor, fitted from below, is attached to a heavy plate that in turn is attached to the plinth top, but separated from it by a rubber damper. There's another rubber damper under the motor. The motor is a high-torque model, but when I placed a stethoscope against the plinth and listened, I heard virtually no motor noise.

### **JMW-Classic tonearm**

The JMW-Classic, an upgraded version of VPI's JMW Memorial 10.5i tonearm, costs \$2600 and features a new stainless-steel armtube, bearing assembly, and base mount. It is wired with Nordost Valhalla cable from the cartridge pins to the RCA jacks (XLR jacks are also available).

Since its launch, the JMW Memorial arm has undergone significant renovations that have resulted in major mechanical and sonic improvements. While the JMW-Classic retains the concept of the original, almost everything about it has been rethought and upgraded. On the original arm, azimuth was set by rotating an offset ring attached by an O-ring to the lower part of the arm's bearing-cup housing. Thus the O-ring, attached to a high mass, essentially acted as an unwelcome high-frequency spring vibrating at musical frequencies. On the JMW-Classic the azimuth is set by rotating either that ring or the counterweight. The original cantilevered bearing platform was relatively thin and unsupported. It is now far more massive and rigid, and a secondary locking support ensures rigidity. The circular mounting block of stainless steel makes possible the rigid connection of arm to plinth, and the overall design ensures a commendably low center of gravity.



What hasn't changed is the arm-rest lock—it *still* doesn't really lock—and, as with all "pure" unipivot arms, lateral instability remains a problem: even with damping fluid in the bearing reservoir, when I lowered the stylus to the record surface, the arm took almost 10 seconds to completely stop rocking. It looked worse than it actually was—for whatever reason, the rocking was inaudible. While the anti-unipivot lobby claims that such a design means that the arm will move in directions other than the desired lateral and vertical, I challenge anyone listening to this turntable to *hear* anything other than rock-solid images across the entire record surface.

VPI includes its antiskating mechanism, already attached to the mounting block for the RCA jacks. You'll need less antiskating with the JMW's 10.5"-long arm compared to a 9" arm, but I still recommend using it. VPI supplies O-rings for the antiskating lever. I'd prefer a sliding weight—the closer the O-Rings are placed to the antiskating device's pivot point, the less offset mass they provide—but that's a minor quibble.

### **Setup: Relatively Easy**

Everything needed to set up and use the Classic 3 and JMW-Classic is in the box, including VPI's overhang jig and azimuth rod and a Shure stylus-pressure gauge. While the see-saw Shure gauge will get you close, I still think if you're going to spend \$6000 on a turntable that can accommodate cartridges costing same, you should invest in a digital stylus gauge.

Remove the plinth from the shipping carton, set it atop your chosen platform, level it via the feet, place the platter atop the pre-lubed bearing, slip the O-ring over the platter and motor pulley, plug in the AC cord, and you're ready to install a cartridge. It's that easy. But before you do, you'll surely take a few minutes to admire the beauty of this turntable. In my opinion, it's the best-looking VPI ever.

The JMW-Classic arm is as easy or as difficult to set up as any pure unipivot for which azimuth is a critical parameter. If you follow the instructions and use the included tools, you'll get it close enough for enjoyment, but it can be better done with more sophisticated tools (and, of course, I recommend my setup DVD, available from the *Stereophile* [website](#), which includes detailed instructions on how to set up a VPI).

The overhang jig is sufficiently accurate, but the rod method of setting azimuth will at best get the stylus perpendicular to the record, and that hardly guarantees that you've properly set azimuth. (Using this method, a small metal rod rests in a groove in the headshell. You adjust the azimuth angle so that the distance from record surface to rod is equal on both sides.) Get the Musical Surroundings Fozgometer or Dr. Feickert Analogue's Adjust+. You'll add maybe \$300 to your investment, and it will be well worth it.

### **The Sound of Both Hands Clapping**

I know what they say: "Don't knock it till you've tried it." In this case, I knocked it first. Before listening to the Classic 3, I put the stylus in a stationary record groove and did some tapping. As I've pointed out before, how a turntable responds to such an impulse doesn't necessarily indicate how it deals with sustained musical signals. The Classic 3 was definitely more lively in this regard than the essentially inert Dr. Feickert Analogue Blackbird, the last 'table to sit atop my HRS platform. Tapping either the aluminum top plate or the lacquered periphery produced a fairly loud knocking sound from the speakers. Tapping the top of the HRS platform produced an equally lively *knock* of much lower frequency. (Tapping the HRS rack on which the platform sat produced silence. The HRS rack *works*.)

Next I checked the Classic 3's speed accuracy, using Feickert's iPhone app and a test record. Each of the four grooves on the 33.33rpm pulley step produced slightly different results, as did the three on the 45rpm step. Each was relatively close to perfect, but the uppermost groove produced remarkably consistent and stable readings of from 33.30 to 33.39rpm. The lowest groove was 33.45–33.50rpm. The upper groove of the 45rpm step produced the result closest to perfect: 44.99–45.05rpm. These are superb results by any measure. So if you want perfection, find the right pulley groove and measure with a device as accurate as the free Feickert app (you'll need a test LP with a 3150Hz tone).

First up on the JMW-Classic was the Lyra Helikon SL, a lower-output version of the standard Helikon. It's fast, honest, on the analytical side, and highly detailed. If the Classic 3 sounded warm and soft, I'd know it wasn't because of the cartridge!

It's fun to play new records on unauditioned gear—you can assess the performance without prejudice. You might say that not knowing anything about the recording leaves you adrift, but if you have your system's reference sound well locked into your brain, even unfamiliar recordings will demonstrate identifiable sonic characteristics, such as excessive brightness, and mushy or overprominent bass.

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TURNTABLE REVIEWS

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So up first was Paul Simon's newest album, *So Beautiful or So What* (LP, Hear Music HRM-32814). If Simon's flair for melody isn't what it once was, his poetry more than makes up for it. The musical landscape is dominated by instrumental and rhythmic references to world music, but the vibe is more *Bookends* than *Graceland*—except that now Simon is living it.

So many years have passed since I had a TNT, and so much equipment has come in and out of my listening room, that you'd be more than justified in being skeptical about what I found with *So Beautiful or So What*—but the first play of this album had me thinking that the Classic 3 sounded even faster, tighter, and more transparent than the TNT. It might not have had the TNT's ultimate weight, but its overall cleanness, rhythmic snappiness, and dimensionality made the Classic 3 a more exciting spin.

That was my original thinking, and nothing I heard later changed it, including finding in the record jacket a coupon for a free 24-bit/96kHz FLAC download of [So Beautiful or So What](#) (the vinyl is a much better value than the CD, even if it was cut from a CD-resolution file). After downloading the files to my [Meridian Sooloos](#) server, I compared the vinyl and high-resolution digital versions of "Love and Hard Times," a complex, cinematic effort.

The *best* the LP should have done was sound as good as the file—assuming the cut was from a hi-rez file to begin with. If the LP was cut from a 16/44.1k CD master, it shouldn't sound as good as the hi-rez file. But I was listening more for tonal balance than for retrieval of detail. The comparison proved that the Classic 3 was a remarkably neutral, tonally well-balanced combination of turntable and tonearm capable of floating three-dimensional images as well as 'tables costing far more—and, of course, that the vinyl mastering was honest.





"Love and Hard Times" opens with an acoustic piano, then Simon's closely miked voice in front of it. Throughout the song, orchestral "sound effects" placed in space behind Simon's closely miked voice punctuate the melodic flow. There are strings and a silky-sounding acoustic guitar with a crystalline top end. The biggest difference between the two versions was the hi-rez file's slightly lower noise floor and greater transparency. The vinyl was *slightly* warmer, with images that were *slightly* less compact, and the overall sound was a bit more mechanical. But otherwise, the overall balances—and, more important, the listening experiences—were equally good. And this tune is the last track on the side.

Later I switched to the Soundsmith Sussurro, a low-output, wooden-bodied, moving-iron cartridge that Peter Ledermann codesigned with Frank Schroeder. It has a somewhat smoother, more liquid sound but greater transparency and blacker backgrounds than the Lyra Helikon SL, and sounds somewhat warmer in the lower mids. Those differences came through precisely as I'd heard them with these cartridges mounted in the Graham Phantom tonearm on the Continuum Audio Labs Caliburn.

Compare an all-analog LP like *The Nat King Cole Story* (five 45rpm LPs, Capitol/Analogue Productions APP-SWCL 1613) with the very-good-sounding SACD and there's no comparison: the vinyl sounds breathtakingly more *real*. If you listen to the SACD first, you think, *Well, how much better than this can it get?* Then you put on the vinyl and find out. The SACD sounds like a very good recording. On the LP, Cole sounds alive on the other side of the mike.

The Classic 3 rendered well Cole's dry yet mellow voice without it blossoming in the bottom octaves or smearing in the upper ones. Sibilants were ideally sharp and cleanly rendered. In fact, this 'table's overall attack was masterful, with a precision and a clarity I can't recall hearing from the VPI Scoutmaster Rim Drive (\$8200) I reviewed in February 2009, and a "blackness" to the backgrounds that I'm sure the Scoutmaster couldn't produce.

Assuming a recording contains such information in the first place, the best turntables float stable, three-dimensional stages with solid images that can appear well forward of the plane described by the speakers' positions. In great part, they can do this because of their ability to produce "black" backgrounds. The Classic 3 wasn't as quiet as the Continuum Caliburn at more than 20 times the price, but it came closer than any 'table I can recall that costs under \$10,000—without a tonearm.

Yarlung Records has issued two LPs from analog master recordings made with a single-point AKG stereo tube microphone. Both are transparent, reference-quality recordings of superb music performed in a concert hall. Cellist Antonio Lysy's *At the Broad: Music from Argentina* (LP, Yarlung 517V) and Petteri Iivonen's *Art of the Violin* (LP, Yarlung 0578V) are worthy of your attention for music, performances, and sound. Hearing either played on the Classic 3, you wouldn't know you were listening to a record, so free from mechanical artifacts and so black were the backgrounds.

The Classic 3 did microdynamics better than any other VPI turntable I've heard, and reproduced the tonality and textures on the Yarlung recordings so well that I was almost fooled into thinking I wasn't hearing a recording at all. The Continuum Caliburn can do this a bit more convincingly, but again, it's the difference between affordable and not.

The Classic 3's overall performance was in the same league as Brinkmann Audio's Bardo (\$9490 without tonearm but with optional stainless-steel and precision-ground crystal platter mat and Brinkmann's screw-down record clamp, [reviewed in May 2011](#)), and I think its backgrounds were blacker than those of the Dr. Feickert Analogue Blackbird (\$7995 without arm, reviewed in September 2011). On the other hand, the Blackbird is richer in the midrange, and in that regard its sound is closer to the Caliburn's.

Some might find the Classic 3 somewhat lean and "brash," but I think its clean, lively sound is one of its strongest suits. In any case, you can adjust that somewhat with damping fluid in the arm bearing. Use too much and it shuts down the sound, but apply it carefully and the tonal picture coheres.

Alto saxophonist Jackie McLean's *Destination . . . Out!* (LP, Blue Note/Music Matters MMBST - 84165), one of the more unusual and uncharacteristic Blue Note releases, features Grachan Moncur III on trombone, Bobby Hutcherson on vibes, Larry Ridley on bass, and the great Roy Haynes on drums. The opener is a dreamy, dirge-like Moncur original, "Love and Hate." Engineer Rudy Van Gelder records vibes better than pianos, and here he's got McLean in the left channel, Haynes and Moncur in the right, and Hutcherson and Ridley at center. With either cartridge, the Classic 3 produced prominent instrumental attacks at the expense of the sustain, so the midband wasn't as lush as the Caliburn's; the sound of Hutcherson's vibes may have

been more about the metal bars being struck than about the ringing of the resonator tubes, and Haynes's drum kit was more about the cymbals and less about the skins, but I was able to hear these differences only in direct comparisons with the Continuum. The VPI's images were also consistently somewhat larger, less solid, and more compact.

Most significant, in terms of both decay and microdynamics, the Classic 3 played on the same field as the Continuum Galiburn (\$149,995 with tonearm and stand)—and it costs \$6000.

### **Conclusions**

The Classic 3 is the fastest, most coherent-sounding VPI turntable I've ever heard. Its measured accuracy and consistency of speed were about as good as a belt-drive turntable can achieve, and its combination of a high-mass plinth, a superbly machined aluminum platter, a carefully damped and isolated motor, and the JMW-Classic—a fully realized version of VPI's JMW tonearm—make this remarkably compact, easy-to-set-up turntable one of today's great values in analog audio. I don't hear how you can go wrong buying one.