

ELECTRONICALLY REPRINTED
FROM APRIL 2010

Bauer Audio dps

ART DUDLEY
TURNTABLE



Bauer Audio dps turntable

DESCRIPTION Two-speed belt-drive turntable. Motor: three-phase AC synchronous. Speeds: 33.33, 45rpm. Motor frequency accuracy: $\pm 0.1\%$.

DIMENSIONS 17.7" (450mm) W by 7.2" (183mm) H by 13.8" (350mm) D. Weight: 50 lbs (22.7kg).

SERIAL NUMBER OF UNIT

REVIEWED USA08004.

PRICE \$9250. Approximate number of dealers: 50.

MANUFACTURER Bauer Audio, Pollinger Strasse 4, 81377 Munich, Germany. Tel: (49) (0)89-719-39-80. Web: www.bauer-audio.de. US distributor: Ayre Acoustics, Inc., 2300-B Central Avenue, Boulder, CO 80301. Tel: (303) 442-7300. Fax: (303) 442-7301. Web: www.ayre.com.

Although LPs remain, for me, the high-end medium of choice, I'm not terribly interested in today's high-end record *players*. Most of them, from the 1980s through the present, have been soulless, uninspired, me-too products that utterly fail to communicate the presence, momentum, and punch of recorded music. And in certain ways—expense, complexity, size, cosmetics—some have been, quite simply, ridiculous.

But a relative few have seemed the products of original thinking. And most of *those* have stood the test of time: The Well Tempered Turntable. The Rega Planar 9. The Roksan Xerxes and its descendents. The VPI Scout and its variants.¹

If only for the originality and sheer quality of its design, I wonder if the dps turntable from Bauer Audio of Munich, Germany—the model name is an initialism for its native-language descriptive, *der plattenspieler*—might also deserve a place in that select group, far from the overpriced, overstyled, underengineered norm. Near the end of last year, after a mildly agonizing wait, I received a sample of the dps from US distributor Ayre Acoustics and set about learning the answer.

¹ I would add the seemingly intelligently designed Simon Yorke, except that I've never heard one in my home, or in a music system that was at all familiar to me.

Description

The dps turntable hides a number of surprises under an outwardly simple skin. The bottommost portion—let's call it the plinth—is a precisely cut and polished sheet of aluminum, about 0.4" thick. Adding to the mass is a stainless-steel motor housing fastened rigidly in place at the left-front corner; together, it and the plinth weigh a little over 15 lbs.

That aluminum plinth is also home to three shallow PVC cups, on threaded acrylic posts, that the user can raise or lower in order to level the next layer up. All three cups are filled with elastomer buttons, which act as supporting springs for the next layer.

The middle portion of the dps is a laminate of six separate sheets: two layers of a lossy damping material—described as an anti-vibration foil—sandwiched by three relatively thin sheets of Baltic birch plywood, with an even thinner sheet of cork bonded to the underneath of the uppermost surface. The laminations are hidden from view by a serenely pretty hardwood frame, although the layer of cork stands very slightly proud of it, by design. That thin sheet of cork serves to support the dps turntable's uppermost layer: a sheet of shiny black acrylic, beautifully made, and pierced by precisely milled mounting holes for the platter bearing and tonearm, as well as an opening through which the top of the motor pokes.

The acrylic top sheet is fitted with a substantial alloy bearing well, with an inside diameter of 30mm. At the center of the well is a stationary spindle 10mm in diameter, machined from a tungsten alloy, recessed on its top end to receive a 3mm ruby thrust ball. A multi-tiered polymer hub, 25mm in diameter at its largest point, slips over the spindle and contacts the thrust ball, becoming the sole moving part of this inverted, zero-clearance bearing—but there's a twist: The hub also contacts the bottom of the well through a pliant O-ring. That, along with the presence of a viscous silicone oil in the bearing well, creates considerable resistance.

That seems wrong, of course—until you consider the other half of the dps drive system: a three-phase AC synchronous motor with exceptionally high torque. That motor, custom-made for dps and topped with a well-machined polymer pulley, remains in full-power mode as it works to overcome the constant friction in the platter bearing. In the process, speed stability,

as governed by the motor's external power supply, itself becomes both a constant and a fixed element, irrespective of platter inertia. Contrast that to a system in which the power delivered to a synchronous motor is reduced after startup, as the platter and bearing spin more or less freely: From that point forward, the power supply, no matter how cleverly designed, can merely correct rather than *maintain* the speed.

Looked at another way: The combination of resistive bearing and high-torque motor confers the benefits of a high-mass platter, but without the mass—and thus without the consequent penalty of stored energy. That design innovation allowed designer Willibald Bauer to select light, rigid, and altogether vinyl-like acrylic as his platter material, with all the attendant benefits.

So we accept that the platter bearing and motor of the dps turntable comprise a single element of the design—yet even that falls short of the full truth. The third, equally crucial part is a high-quality power supply for the motor, without which the above would be of little consequence. And this is where Bauer's US distributor, the manufacturer Ayre Acoustics, arrives on the scene. Charles Hansen of Ayre first saw the dps at a show in Frankfurt a number of years ago and was thoroughly impressed, especially with the upmarket version, in which the three-phase AC motor is driven with a custom three-phase power supply. Yet the upmarket power supply adds significantly to the price—so, to allow the dps to be

sold in the US for more or less the same price as in Europe, Willi Bauer agreed to let Ayre create a three-phase supply for a North American edition of the dps. Hansen and his team had to start with a clean slate.

That turned out to be a good thing. Ultimately, Ayre developed a pure analog oscillator—a digital supply would have been a snap, but it would have dumped RFI into the system—with three outputs, spaced 120° from one another and amplified by a zero-feedback amp (an Ayre hallmark, after all). And because no motor is perfect, the individual levels for all three sets of windings can be adjusted to match the motor. Neat.

Installation and setup

My review sample of the dps turntable was installed by Willi Bauer, during a time when he and Ayre Acoustics' Steve Silberman were traveling through my area on their way to New York City. But, with respect for the designer's expertise, nothing about the setup of the dps seemed beyond the capabilities of the average hobbyist. In fact, during the review period, I had cause both to change tonearms and to temporarily move the turntable out of the way—and none of that was very hard at all.

That said, the current dps owner's manual covers only the Ayre-built power supply, with no information at all about the turntable itself. Unless and until a more comprehensive manual is published, the buyer *should* expect his or her dealer to perform all setup chores.



Inside Ayre's three-phase power supply.

As with so many very good turntables—and a few bad ones—the design of the dps is such that the thing must virtually be assembled in situ. That in itself didn't take long, and the process began with one element I haven't mentioned until now: a thin, pliant, foam-rubber-like mat of the same dimensions as the dps itself, which is spread over the user's equipment support, under the aluminum plinth. The Shindo-green mat—too bad you can't see it in use!—didn't react in any way with the finished surface of my wooden Box Furniture Company rack, and was easy to remove when the time came.

From there, installing the dps was a straightforward matter of: lining up the various strata with one another; leveling the surfaces; adding the viscous oil, thrust ball, and hub to the bearing well; installing the platter and belt; and connecting the power supply to AC socket and turntable alike.

As first installed, my review sample was equipped with Bauer Audio's brand-new dps tonearm, a well-conceived and -made unipivot with a carbon-fiber armtube and a neat trough for oil damping. Given the newness of the Bauer arm and my interest in assessing one component at a time, I soon switched over to my own well-loved Naim Aro tonearm, the use of which can be considered the basis for all the observations that follow. (With Bauer's and Ayre's indulgence, I may report on the dps arm at some other time.) That Willi Bauer also has a great deal of experience with the Naim arm was obvious in a number of ways: The opening for the Naim's mount was located and milled perfectly on the spare acrylic top supplied, and the correct opening—with the correct subminiature screw holes—was made for the Aro's electrical disconnect plug. According to their website, Bauer can even supply a totally Naim-friendly top, the underside of which is milled to accept Naim's onboard Prefix phono stage.

During assembly I noted that literally all of the dps's component parts were apparently very well made. Notwithstanding the small gap between the motor and the acrylic top, all of the layers lined up perfectly with one another. And neither the motor pulley nor the acrylic platter—the latter supplied without a mat, and with a spin-on acrylic record clamp—showed any signs of runout error. The only wrinkle was that, on the coldest and hence driest days here, the acrylic was more than slightly prone to

static electricity.

The Ayre power supply was a breeze to use: It didn't hum, it didn't overheat, and it was easy to select between 33.33 and 45rpm; the latter speed simply required me to press and hold the supply's combination pilot light and power switch for longer than two seconds.

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Listening

The dps sounded like the most precisely made, brilliantly set-up Linn or Roksan turntable I'd ever heard. Its musical tightness and rightness, in terms of pitches and rhythms alike, were unsurpassed in my experience: If there exists a domestic playback product that can do a better job of nailing those musical essentials, I have yet to hear it.

The dps was also, as far as I could tell, the most completely uncolored turntable I've heard. Similarly, it was among the most spatially amazing source components I've had in my home: Playing stereo records, its ability to suggest depth and the precise layering and positioning of voices and instruments was almost revelatory. (On that count I'll go back on my word, briefly, and say that the combination of dps turntable and dps tonearm was superior, although

the German 'table wrung a lot more spatial performance from the musically solid Naim Aro than I'd imagined was there.) On Leonard Cohen's "The Gypsy's Wife," from *Recent Songs* (Columbia JC 36264), the voice, guitar, bass, and oud were all disembodied from the speakers, yet solid in their own rights. My reference Thorens TD-124, with EMT 997 or Schick tonearm, was just as solid and substantial, but flatter and less spatially detailed. And Howard Hanson and the Eastman-Rochester Symphony Orchestra's recording of Samuel Barber's *Capricorn Concerto for Flute, Oboe, Trumpet and Strings* (Mercury Living Presence SRI-75049)—the sort of beautifully made LP that sounds fine on almost any player—was more convincing on the dps: great snap, great presence, and, again, extraordinarily good stereo imaging. Flutes, trumpets, and all the string-section voices were *there*.

Given that superior pitch stability was among the goals specified for the dps's unique bearing design, I made sure to audition a few records with which I'm most sensitive to wow and flutter, particularly Nick Drake's "Time Has Told Me," from the album *Five Leaves Left*, itself from the *Fruit Tree* reissue box (Island 006025 17456969). The combination of Drake's rich chord voicings and mildly out-of-tune guitar make for challenging listening, even under the best of playback circumstances; on the dps, that and the other selections on the album were supremely easy to enjoy. Additionally, the instruments and voice had more substance than with my combination of Linn LP12 and Naim Aro—especially, I noticed, regarding Danny Thompson's acoustic bass, which sounded both bigger and woodier on the dps.

ASSOCIATED EQUIPMENT

ANALOG SOURCES Thorens TD-124 Mk.II, Linn Sondek LP12 turntables; EMT 997, Thomas Schick, Naim Aro, dps tonearms; Shindo SPU, Ortofon SPU 90th Anniversary, EMT OFD 25, Edison Spirit 78, Miyabi 47, Grace F9E cartridges.

DIGITAL SOURCES Sony SCD-777ES SACD/CD player; Ayre QB-9 USB DAC (with Apple iTunes).

PREAMPLIFICATION Auditorium 23 Hommage T1 step-up transformer; Ayre Acoustics P-5x phono preamplifier; Shindo Masseto, Tempo Electric Arthur Loesch 1.1 preamplifiers.

POWER AMPLIFIERS Shindo Haut-Brion & Corton-Charlemagne, Quad II.

LOUDSPEAKERS Audio Note AN-E/SPe HE, Wilson Audio Specialties Sophia II & Sasha, Quad ESL.

CABLES USB: Transparent Performance USB. Interconnect: Audio Note AN-vx, Shindo Silver.

SPEAKER Auditorium 23, Naim NACA5. **AC:** JPS Labs The Digital (Sony SACD/CD player).

ACCESSORIES Box Furniture Company D3S rack under source & amplification components; Keith Monks record-cleaning machine.

—Art Dudley

Comparing the combination of Bauer dps turntable and Naim Aro with my Thorens TD-124 turntable and EMT 997 arm might be interesting to most listeners, if not germane to the experiences of most audio hobbyists: The point can't be overmade that cartridges that work with one combo often can't function at all with another, making direct comparisons tricky and beset with the need for more than the usual degree of *inference*. (We can only *guess* what an Ortofon SPU might sound like with a Naim Aro: The pairing is in fact impossible.) That said, my Thorens setup often sounded fuller and deeper in the bottom two octaves, if occasionally a bit *too* full. Carl Radle's electric bass line in "Run of the Mill," from George Harrison's *All Things Must Pass* (Apple STCH 639), sounded pleasantly bigger on the Thorens; on the dps, by contrast, Radle sounded more "in the pocket," leaning against the beat in a more convincing and compelling way. But the hugely deep bass and percussion in "Polly Come Home," from Robert Plant and Alison Krauss's *Raising Sand* (Rounder 11661), sounded thoroughly better on the Thorens rig: bigger, deeper, scarier. Even subtle low-frequency content, such as the low B with which the double basses of the London Symphony open Peter Maag's recording of Mendelssohn's *Overture: The Hebrides* (Decca/Speakers Corner SXL 2246), was at times stronger, and thus more musically effective, on the Thorens.

Notwithstanding its lesser *whomp*, the dps was quite good at getting across timbral color and richness, given records so endowed; in other words, the *lean* bass of the Bauer Audio turntable didn't translate into *lean* sound overall. The clarinet that opens Messiaen's *Quatuor pour la fin du temps* (Deutsche Grammophon/Speakers Corner 253 093, with Luben Yordanoff, violin, Albert Tetard, cello, Claude Desurmont, clarinet, and Daniel Barenboim, piano) sounded, if anything, richer and more complex on the dps. And for whatever reason, the Naim Aro was better with the dps than with the Linn LP12—same cartridge, of course—at keeping clean and poised the intense piano chords that open the work's *Vocalise* section. And the contribution to the playback made by the dps's superb spatial qualities can't be overstated.

Finally—and of great importance to me these days, having immersed myself in the world of powerful idler-wheel turntables,



Willi Bauer installs the dps in Art Dudley's system.

PHOTO: ART DUDLEY

high-mass tonearms, and low-compliance pickups—let's consider the notion of musical momentum and flow: that feeling of the notes being pulled along *purposefully* rather than just bunching up between the speakers. In recent years I've come to expect less in that regard from modern players than their vintage counterparts, but I was pleasantly surprised by the dps. It sounded dis-

painstaking setup—and that have a resolutely powerful motor/drive system. For anyone who needed it, here's more evidence.

Other than that, all bets are off: As so often happens in the face of original ideas, certain older notions fall by the wayside. Thanks to the fresh design work of Willi Bauer (and, for that matter, Charlie Hansen), the dps turntable may change your

AN EXTRAORDINARY PRODUCT, AND FULLER THAN MOST OF IDEAS AND MUSIC.

tinctly more involving than my Linn LP12 when used with the very same arm and cartridge, so much so that I wish the dps had a wide enough top plate to mount a *proper* 12" tonearm (just kidding—sort of) so that I could make a real and fair comparison. But even as it stands, the dps was consistently involving and satisfying, and as far as very recent turntables are concerned, only the VPI Scout is on the same performance level in this regard.

Conclusions

Reviewers do their best work when they keep their minds open and avoid even *thinking* doctrinaire thoughts. That said, I can't fight the fact that the very best turntables I've used have been the sort that require

mind about belt drive, acrylic platters, clamps, or any number of other things.

But forget all that: Sound trumps theory and music trumps sound, by which axioms the Bauer Audio dps turntable is a striking, unambiguous success. My lack of enthusiasm for most modern record players has, I'm sorry to say, left me relatively ill equipped to judge the dps on the basis of value. But I'm satisfied that its US price is quite fair compared with what the 'table sells for in Europe, and I'm very much convinced of the quality of its parts and construction. As the English say of new products that seem more than prepared to compete, this should put the cat amongst the pigeons.

An extraordinary product, and fuller than most of ideas and music. ■