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Review

Acoustic Signature Challenger MK2

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Acoustic Signature Challenger Turntable and Funk FX-R II Pickup Arm

A Worthy Little Brother to One of Analog's Top Dogs

Wayne Garcia

onfession: Even though I'm a longtime contributor to (and once-upon-a-time editor of) these pages, I still await each issue with the same almost childlike eagerness I had as a "civilian" reader. And having attended many a trade show over the years I'm also close with several of the guys who write for TAS, which makes reading about their latest music and equipment discoveries that much more exciting. I guess some of us never grow up—thank goodness!

Moreover, as an analog lover I'm both slightly jealous and constantly amazed at the quality as well as depth of vinyl playback gear my old friend Jon Valin reports on. (And as a writer I am perpetually floored by the excellence of Valin's prose, his thoroughness, his wit, and, dammit, his ability to maintain his freshness and sense of wonder issue after issue, year after year. Besides, I ask, who but he would have me on the hunt for a zither recording?)

Having first read JV's enthusiastic blog post about the German-made, \$34k Acoustic Challenger Ascona turntable and Kuzma 4Point arm (and later his full review in Issue 225), I jumped at the chance to hear the \$4500 Challenger, Acoustic Signature's "entry-level" high-mass (50.7 lbs.) turntable, which arrived sporting the distinctive looking, British-built Funk FX-R II pickup arm (\$2395).

Setting up the Challenger, as Valin likewise noted about the Ascona, is simplicity itself. There's little to do but place the

platter over the bearing, attach the external motor pod, connect it to the power supply, and level the thing via the large adjustable aluminum feet. After that you can concentrate on arm setup, and then tweak exact speed via the adjustable pots that reside inside the control box. Although this is a minor hassle, it's not the kind of thing one does frequently; thus, I don't consider the need to remove and reattach the control-box case a particularly big deal.

As Acoustic Signature's literature states, "The bearing is the heart of every turntable." And so it goes that the company's entire range—from the \$2500 Ecco! to the top-of-the-heap Ascona—beats to exactly the same drum: namely, the extremely low-noise platter bearing invented by designer Gunther Frohnhöfer. With a goal of achieving "exact fit, extremely low noise, very low friction, and long-term stability," Frohnhöfer hit on a bearing made from hardened and polished steel, with an unusually durable ball made from a tungsten-carbide material. The bearing housing holds "matched and aged" sintered-bronze inserts, which, as they are self-lubricating, are absolutely maintenance-free. Finally, the bearing thrust-plate is made of something called TIDORFOLON, a material crafted of ferrite, vanadium, Teflon, and titanium.

Brian Tucker of Pro Audio (importer of Funk Firm and U.S. Sales Director for Goerner Communication, distributor of Acoustic Signature) shared these further bits of information: "The sleeve part of the bearing is [made] longer as the weight

ABSOLUTE ANALOG - Acoustic Signature Challenger Turntable

and size of the platter [for different turntable models] goes up. Interestingly, the sintered-bronze sleeve bearings are of the same design and tolerance as [those found in] the Studer tape recorder. The bottom TIDORFOLON 'thrust plate' is also the same concept in all models, but the bearing itself varies with the platter mass. The bearing assembly has a 10-year warranty."

The Challenger's motor is Dutch-made, and, again, is the same employed for all Acoustic Signature 'tables excepting the Ascona, which uses a trio of them. The control unit is dubbed "Alpha-S" and differs from that of the Ascona in that the Alpha-S is analog and the Alpha-DIG (standard with the Thunder and Ascona 'tables) is DSP-based and can drive three motors simultaneously.

The Alpha-S converts AC line voltage to DC current. In turn, a precision oscillator creates what is said to be a "perfect" sinewave at 12VAC to drive the motor, "resulting in a perfectly steady and constant platter rotation." Claims for so much perfection aside, I did find the Challenger's drive system to be a seriously solid performer. Moreover, the Alpha controllers are said to be impervious to voltage fluctuation as well as to extraneous noise generated by household appliances and the like. By the way, Challenger owners may add additional motor drives-up to a total of three-for \$950 a pop, but will also need to upgrade to the more robust Alpha-DIG controller (\$1650). Though this may seem expensive, and I have yet to try these upgrades, given the German craftsmanship (and outstanding sound I will soon, finally, get around to describing) and what I assume will be a fairly audible uptick in performance, I would venture that these are worthy paths to consider.

The 50mm-thick, twenty-pound aluminum platter is machined—as are all tooled parts—in-house on a 20x precision CNC (Computer Numerical Control) device. Acoustic Signature uses a soft alloy to minimize resonance, and the platter's underbelly is then coated with a damping material to further reduce material vibration. A micro-thin felt mat sits between platter and LP surfaces. No clamp or weight was supplied with the review sample.

The Challenger's aluminum tonearm mounting structure fits a series of plates that can be ordered to accommodate any arm, and up to three arms may be used. Each additional base and mounting plate sells for \$850; plates alone are \$350. Considering the Challenger's various motor and arm options, the temptation to geek-out might prove too much for some of us.

The review sample came supplied with designer Arthur Khoubesserian's \$2395 Funk FX-R arm (see sidebar for design details), which is the only model I made this evaluation with, along with both the Benz SLR Gullwing and Transfiguration Phoenix cartridges.

In a Wall Street Journal article on the great white Burgundies from the village of Puligny-Montrachet, writer Jay McInerney called these pure, focused, complex, often angular beauties "the Grace Kelly of wines." My feeling about the Challenger could be summed up with the same image. Here is a turntable (and arm, of course) of remarkable purity, focus, elegance of presentation, and exceptional musicality. The design efforts Frohnhöfer aimed for, and the obvious first-rate build-quality, have clearly paid off with the performance of this remarkably low-coloration turntable.

You've read before how lowering electro-mechanical noise-

not just the obvious sort but the really low-level stuff we're not really aware of until it's gone or seriously diminished—not only makes for more neutral, detailed, and revealing components, but how the lack of crud "clinging" to reproduced music brings us that much closer to the original recording, and in turn to the performance.

Listen, for example, to a great sounding record like Gerhard's Libra, Gemini, Leo [Decca], where the Challenger/Funk's absence of lead-in groove noise renders the crashing opening chords as that much more startling. What follows is a stage of notable air and, if not endless space—it is, after all enclosed—something that sounds very much like that, with structural boundaries pushed far back and to the sides. Instrumental details, as you might imagine from such a low-noise playback system, are excellent. Things such as lone piano, violin, guitar, and castanets are defined with great focus, precision, and texture while occupying a space at once individually set yet also placed within an acoustical whole.

Turning to one of my "go-to" LPs, Argerich's reading of Ravel's Gaspard de la nuit [DG], I was again struck by this combination's transparency and purity of presentation, while noting a great sense of the interplay between the various musical voices as if they were in intimate conversation with one another. I also heard exceptional micro-dynamic articulation, and was also impressed by the explosive burst of macro-dynamics, as Argerich unfurled great clusters of chords and kaleidoscopic tone colors. This ranks among the very finest and most beautiful reproductions

SPECS & PRICING

Type: Belt drive, unsuspended

turntable Speeds: 33.3, 45

Dimensions: 17.5" x 14.5" x

5.5"

Weight: 50.7 lbs.

Price: Challenger, \$4500;

FX-R, \$2395

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ABSOLUTE ANALOG - Acoustic Signature Challenger Turntable

I've yet experienced from one of my most treasured recordings.

This ability to articulate the musical interconnectivity of lines was likewise apparent in Neil Young's *Line At Massey Hall* [Reprise], where, during "Cowgirl in the Sand," the way Young wove his voice and acoustic guitar-playing within the context of a highly three-dimensional space came alive with halos of harmonic overtones. Please forgive what may read like so much reviewer blather; putting voice to this kind of excellence, involvement, and musical revelation undoubtedly leads to tongue-tripping.

Compared with my long-time reference TW Acustic Raven One/Tri-planar VII rig, the Challenger/Funk does not have the same levels of weight and bottom-end oomph! But then I mentioned Grace Kelly earlier, not Marilyn Monroe.

And so with something like Coltrane's Crescent [ORG/Impulse 45rpm reissue] you'll hear a laser-like focus, a taut and angular presentation that's also seriously musical (tuneful and involving), with a relatively lean and detailed bass and drum sound that's not as rich or ultimately explosive as some other setups might be. I will again note the excellent balance and musical interplay and lack of noise and other resonant interference, and underline how very fine the listening experience was.

As you might imagine, powerhouse rock followed suit. Playing The Who's *Tommy* [Classic/Track] revealed exceptional tonal complexity to French horn, guitars, and bass, with great vocals and inner detail, though Keith Moon's drums did lack the last bit of testosterone- and booze-fueled wallop that air drummers might arguably prefer.

But I hope it's clear that I'm not suggesting that team Challenger/Funk is lightweight, cool, or in any way sterile. For instance, the big bass drum heard in the 3rd Tableau of Stravinsky's *Petrouchka* (Ansermet [Athena/Decca]) may not have had the ultimate punch, but it was terrifically fast, textured, and dynamically explosive. Bowed cellos and basses rumbled and

The Funk FX-R II

Although at first glance the Funk FX-R may appear to be little more than a modified Rega design, a lot more is going on here than initially meets the eye.

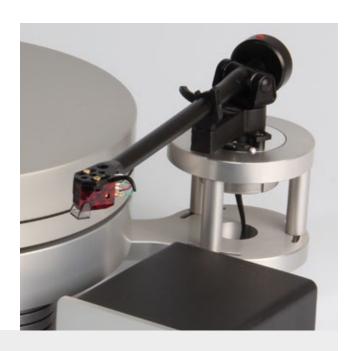
First, designer Arthur Khoubesserian (who made his reputation with the Pink Triangle turntables) guts the original lateral bearings and replaces them with Swiss ABEC-7 units.

The pillar, too, replaces Rega's plastic with a carefully machined upgrade with adjustable VTA, and the internal wiring is likewise replaced. Most radically, the thin-walled, lightweight, strikingly magenta-colored aluminum arm tube incorporates a patented carbon-fiber cross-section running the entire span of the tube-picture an X inside of an O-that achieves Khoubesserian's goal to create an armwand that is both extremely stiff as well as lightweight.

A Clearaudio-like mounting post with an SME finger lift sits at the tip of the wand, which makes cartridge alignment quite simple. And though I'm not prone to rest on a manufacturer's information to describe its process, in this case quoting a few lines from Funk's Web site strikes me as relevant to understanding the design as a whole:

growled with a fine clarity of voice, cymbal crashes lingered in space, and the rest of the music on this terrific-sounding disc was captivating, unfolding on a stage of great depth and air.

As always one must decide which set of tradeoffs, because there almost always are ones, one can best live with. Me? As much as I can be seduced by weight and power—and I love rock and other music that benefits from it—on a day-to-day basis I tend to prefer speed, detail, and low coloration as long as it doesn't veer toward to the cool and clinical. That's why I'm plenty happy with a straight pair of Maggie 1.7s and never wish for a subwoofer, and that's why, for these ears, the Challenger/Funk system is one of the best analog rigs I know of. to the cool to the coo



"To create an FX-R and incorporate Funk's F•X [which stand for "F Dot Cross"] technology takes a surprising amount of time and skill. Disassembling a [Rega] 301 is tricky and fiddly. The first job is to remove the arm tube. Next the bearings and plastic pillar have to be separated so the new machined pillar can be fitted...special tools and skill are needed if damage to the races is to be avoided...A new machined pillar, with the new ball races are now carefully assembled and pre-loaded. Next the arm tube is cut to accept the pre-assembled F•X tube. The bore of the casting has to be prepared and machined to size to accept the new arm beam. A new F•X tube already pre-assembled is then jigged and fixed to the rear bearing housing with all necessary shielding and new cabling...The transformed arm beam is now fitted to the main pillar assembly...The chosen cable is soldered...The final performance check: Bearing friction, continuity, alignment."

It would be fascinating to audition the Funk FX-R II on other turntables. As I said, this review reflects the sound I experienced from the combined Acoustic Signature Challenge and Funk arm. A match, it appears, from the minds of two very like-minded thinkers. **WG**