

Ray Samuels Audio Emmeline XR-10B Phono Preamp, Shelter 90X and Micromagic Magic Diamond Cartridges

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An excellent and versatile phono preamp and two great—and very different—cartridges.



Emmeline XR-10B

If you have a conversation with Ray Samuels, you'll discover that he's an enthusiastic guy with a lingering affection for the military planes he used to build electronics for. This explains his habit of naming his audio designs after fighting machines. His lineup includes the Stealth (a preamp/headphone amp), and the Raptor and the SR-71 (both headphone amps). But Samuels has a soft side, too, reflected by the rather sweet name that precedes the masculine nomenclature—Emmeline. Emmeline, you see, is Samuels' daughter. It's probably my imagination, but I wonder if this could explain why

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Diminutive Samuels' products may be; toys they most certainly are not. To

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see what I mean, take a look inside the XR-10B, a \$5000 solid-state phono preamp with outboard power supply. Not only does Samuels hand-assemble each dual-mono unit—only the power cord and umbilical between the two chassis are shared—but he does so using FR4 (a

military-spec circuit board material), .1% tolerance Vishay resistors, and tantalum and polypropylene caps, which he meticulously places at 90-degree angles

to each other in order to minimize noise. The power supply is just as carefully assembled, and houses two small toroidal transformers—one for each channel.

Like the Manley Steelhead, which also sports a separate power supply, the XR-10B is a most versatile phono pre-

amp. You can hook up three different arm leads at a time—there are several 'tables out there that will accept up to three arms—or, if you're truly whacked-out about analog, three entirely different 'table/arm/cartridge combinations. Simply select the one you want to listen to using the center knob, and choose (and do experiment with) the appropriate load, capacitance, and gain for each channel from the flanking trios of smaller knobs (the capacitance switches affect only moving-magnet designs). In addition, the XR-10B sports both single-ended and balanced outputs (hence the unit's "B" designation), which are active simultaneously and at the same output level, allowing you to drive the different inputs of one or even two line stages.

For moving-coil users, the load and gain switches are this design's most useful and luxurious functions. I mean, would you rather futz around with those impossibly tiny DIP-switches and loading pins to change these parameters, or simply turn two little rotary knobs? Via the latter, the Samuels' unit lets you choose impedances of 30, 50, 80, 100, 1K, and 47K ohms. Since most cartridges have a recommended range of impedances, you can easily listen to a few different choices and go with the one that sounds best to you (lowering the load generally darkens the sound, while raising it opens things up), which was incredibly handy while evaluating the two cartridges discussed below.

The thing you'll notice when first easing the stylus into the grooves is that music emerges from the XR-10B against an unusually silent background. This is one of the quietest, least grainy phono preamps I've heard. (The only model I know of that's even quieter is Sutherland's battery-powered Ph.D.) Another notable characteristic of the XR-10B is something I'll describe as a kind of uncluttered neutrality. This device is very clean and clear. It lacks the immediately recognizable sonic signature we usually hear when we place a new component in our systems, although there's lots of space (if not cushions of air) between instruments. This is not to say that the XR-10B's

entirely "neutral" or free of coloration—nothing is—but that its "sound" takes that much longer to identify.

Tonally, the Emmeline is very consistent from bottom to top. Its overall character is one I would describe as a touch dark, somewhere just off center. This is tricky to gauge because I'm not talking about the kind of pervasive midnight-black that solid-state once had in such abundance (and that we're witnessing the gradual disappearance of), but something rather more akin to a delicate ink wash that removes a bit of the bloom from Sonny Rollins' saxophone, or some of the old-gold glow from Nathan Milstein's Strad during a Bach Partita



[DG], or a few of the shimmering overtones from Glenn Kotche's cymbal work during "Hell is Chrome" on Wilco's *a ghost is born* [Nonesuch/Rhino]. This slight darkness also comes with a touch of dryness that, on the one hand, give Milstein's bow a keen sense of precision, attack, and dynamic excitement as it pushes and pulls against the violin strings, but, on the other, snatches away a degree of sweetness, breath, and poetry.

Transients—like those delivered by drummer Billy Higgins on Sonny Rollins' *Our Man in Jazz* [RCA/Classic]—have a convincingly effortless speed to them. Be it a wooden stick ricocheting off a snare head like a rifle bullet or a kick drum's sock to the abdomen, the Emmeline's quickness and explosive directness make music very exciting. Likewise, Rollins' tenor sax—a big horn with an imposing presence when heard live—comes across with an in-your-face swagger and bite reminis-

cent of the real thing, and his improvisations, particularly on "Oleo," are breathtaking. What you won't get with the Emmeline that I hear with first-rate tube units such as the Artemis Labs PL-1 or the Steelhead is as convincing a recreation of Rollins' breath traveling through the instrument's body and then blossoming from the horn's bell.

The Emmeline's signature came well into focus while I listened to Paul Fetler's *Contrasts for Orchestra* [Mercury/Speaker's Corner]. It projects a terrifically open and precisely defined soundstage, with laser-like imaging and clearly defined inner voices, a detailed if not overtly rich palette of tone colors, good if not the most orgasmically layered depth, and a fine semblance of instrumental size and dynamic scale. Consistent with my other listening experiences, there wasn't as much air around or between the instruments; extreme dynamic swings were excellent while micro-shifts were somewhat less good; and the harmonic bloom tube lovers love simply isn't going to be found here.

But then, try as I might, I've still not run across a "perfect" component. The XR-10B's strengths are many, and it will appeal especially to those who value the more precise presentation of solid-state over the more romantic glow of vacuum tubes. Combine its sonic attributes with first-rate parts, fine build-quality, and a rare set of input, output, and control features, and you get one of today's most compelling pieces of LP playback equipment.

Moving-Coil Stories—Shelter's 90X and the Micromagic Magic Diamond

Shelter's 90X has deservedly garnered reams of praise from the audiophile press for its outstanding performance and relatively affordable price. (At \$2700 it is Shelter's top

model and competes with moving-coils at the highest levels.)

Another cartridge, albeit one at nearly double the cost, has been generating its own buzz for a while, and that's the Magic Diamond from the Swiss maker Micromagic.¹ Since AXISS distributes both in the U.S., and since I'd been using the Shelter on my Tri-Planar/Redpoint rig for many months, AXISS' Arturo Manzano and I agreed that I should also try out the Magic Diamond. The result was a fascinating look at two cartridges, each with strengths and tradeoffs that practically mirror each other.

As Jonathan Valin noted in last year's Golden Ear and Product of the Year Awards, Shelter's 90X combines transient speed with rich and fully articulated timbres, which reach deep into the bass. So, for example, if you were to put on a fine jazz record, like The Sonny Clark Memorial Quarter's *Voodoo* [Black Saint], the Shelter is going to fully flesh out this recording's huge, warm-sounding bottom registers. From Ray Drummond's bass to Bobby Previte's drums and Wayne Horvitz's piano, the 90X puts meat on the bones in a way that few moving-coil cartridges can. And yet that meat isn't mere fat—all weight and no definition. No, the Shelter brings plenty of muscle and definition to each of these instruments, with a body, power, and all-enveloping warmth that border on the sensual. It does the same with higher-register instruments, too: John Zorn's screaming, skronking alto sax, Previte's cymbals, the piano's treble range—all display the body of the real things, and yet nothing lags or gets masked by sheer power. Like one of those great syrahs from the Northern Rhône, the 90X is loaded with finesse and complexity, and yet its bigness can wow you.

By contrast, and while we're on the wine analogy, the Micro Magic is more Burgundian. A few seconds is all it

takes before this cartridge displays its refined nature, its touch of class. Where the Shelter makes *Voodoo* tremendously exciting and almost intoxicatingly rich, the Micro Magic brings forth subtler distinctions. The most fleeting events—a barely tapped rim shot, softly swooshed hi-hat, or a ride cymbal's decaying shimmer, leaving its sonic trails floating in air just a wee bit longer—come across as closer to the real things. Zorn's alto really wails (he rides the edges here), and the Magic never gets flustered, never cracks or gets harsh. Where the 90X brings a hint of a hooded quality to his horn, the Magic never does. Along with this refinement, though, the Magic can lay a most solid foundation. Bass notes, while exquisitely defined, are not as rich as they are with the Shelter, and yet they remain as rooted as an ancient oak. But while the Shelter shows almost reckless disregard for any and all dynamic extremes, the Magic holds back a bit, is so controlled as to be almost buttoned-down-sounding.

On a rock record like the Wilco, the Magic is notably beautiful. It brings out gorgeous textures from the band's multi-layered instruments—ringing acoustic and electric guitars, organ, piano, complex drum patterns, even a simple bass line. By contrast, the Shelter is not as defined and inherently lovely, but it's got more rhythmic drive, more of the music's pulse

Because the Magic is so refined, natural, and lovely sounding, with less of the rollin' and tumblin' rock and jazz enthusiasts may prefer, classical music would seem to be its home court.

And indeed, with the Mahler Third [Horenstein/LSO, Nonesuch] the Magic came across as incredibly effortless and easy, with a terrific sense of transparency that allows you to hear deep into the

orchestra, and little if any sense of electro-mechanical detritus around the players. There's great detail and clarity, yet not a hint of sterility or other hi-fi artifacts. The symphony's wide dynamic range was impressive in scale, massed strings truly beautiful, shimmering in unison to Mahler's passionate score, while the many and brief solo passages (French and English horns, oboe, a hesitant violin, or the softest tap on a tympani) emerged from their own specific spaces, against a deeply ambient background.

By now you can probably guess how the Shelter "interpreted" this piece. It



SPECIFICATIONS

Shelter 90X

Type: Low-output moving coil
Frequency response: 10Hz–50kHz
Load impedance: 100 ohms
Recommended tracking force: 1.4–2.0 grams
Output: 0.6mV
Weight: 9.7 grams

Magic Diamond

Type: Low-output moving coil
Frequency response: N/A
Load impedance: 40 to 250 ohms
Recommended tracking force: 2.2–2.5 grams
Output: 0.3mV
Weight: 14 grams

Emmeline XR-10B phono preamp

Inputs: Three stereo pairs via RCA
Outputs: RCA and XLR
Input Loading: 30, 50, 80, 100, 1K and 47K ohms
Input Capacitance: 50pf, 100pf, 150pf, 220pf, 270pf, and 330pf
Output Voltage: 18VRMS
RIAA: 15Hz to 20kHz (0.1dB)
Output Impedance: Within 300 ohms
Gain Settings: 40dB to 70dB in six increments
Dimensions: 9" x 2" x 6" (per two units)

ASSOCIATED EQUIPMENT

Redpoint Model B turntable; Tri-Planar VII arm; Artemis Labs LA-1 linestage and PL-1 phono stage; Balanced Audio Technology VK-31SE preamp, VK-55 and VK-250 amps, Edge G.5 amp; Kharma Ceramique 3.2 speakers; Nordost Valkyrja interconnect and speaker cables, Thor power conditioner, and Brahma AC cords; Finite Elemente "Spider" equipment racks; ASC Tube Traps


¹ Lloyd Walker of Walker Audio is very high on this design.

wasn't as detailed or as exquisitely beautiful, but it was more dynamically explosive (as heard in the final movement's tympani thwacks and brass choirs). But if the Shelter's soundstage is wider, the Magic's is deeper; and while the Shelter is the more dramatic performer, it can't ride the music's most rolling dynamic waves the way the Magic can.

And so it goes, from Nirvana's

Unplugged [Geffen] to Starker's famous Bach Suites [Mercury/Speaker's Corner], the Shelter is more sinewy, funky, less pretty, and more exciting; the Magic is sophisticated, seductively beautiful, and more detailed. Different strokes, folks.

High-end audio is in the midst of another one those occasional "golden" periods where design advancements, better component parts, the birth of new

companies, and the rejuvenation of the old guard (witness Audio Research's newest Reference gear as reviewed by Jonathan Valin in our last issue) are resulting in a plethora of exciting new products. And yet, if anything, today's offerings are more diverse than ever, which just goes to show that there are any number of ways to reach the absolute sound. 

MANUFACTURER AND DISTRIBUTOR INFORMATION

SHELTER 90X AND MAGIC DIAMOND CARTRIDGES

AXISS DISTRIBUTION, INC.

17800 South Main Street, Suite 109
Gardena, California, 90248
(310) 329-0187

axiss-usa.com

Prices: Shelter 90X, \$2700;

Magic Diamond, \$5000

EMMELINE XR-10B PHONO PREAMP

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