Equipment REPORT

Soulution 750 Phono Preamp Absolutely Top-Notch Jonathan Valin



s most of you know, I'm a tube guy at heartparticularly when it comes to preamps. But if I were in the market for the state of the art in analog, I'd make a big exception for the solid-state Soulution 750 phonostage. Yeah, at \$25k it costs a lot of dough and, yeah, it doesn't have all the bloominess and dimensionality of a great tube unit (although stay tuned for the good news on this subject). What it does have-what all of Soulution's products have—is the lowest noise and highest transparency to sources of any electronics I've yet reviewed. In spite of its neutrality and high resolution, it is also, like its companion pieces (the 700/710 amplifiers and the 720/721 linestage preamplifiers, reviewed by me in Issue 199), an extremely gemütlich component-not too lean and not too fat, not too dark and not too light, not too cool and not too hot. Like Baby's porridge (and all other Soulution electronics), in tonal balance and dynamic range and scale it is "just right."

Designed by Christoph Schürmann (as every piece of Soulution gear has been), the 750 leverages the same core technologies that made the 720/721 preamps and the 700/710 amps such epiphanies. To refresh you on how these products (and the new 750 phonostage *par excellence*) achieve new standards of transparency to sources, let me reiterate some of what I said in my original Soulution review.

For designer Schürmann and Soulution's owners Cyril Hammer and Roland Manz, the key was to lower distortion to previously unachievable levels—and with it the usual signature colorations (the darkness, the graininess, the edginess, the harshness, the flatness of aspect and thinness of timbre and texture) of solid-state components. To bring this trick off, Schürmann turned to what is probably the most widely discredited of all distortion-lowering strategies—negative feedback.

The trouble with applying a massive amount of negative feedback, as some of the Japanese majors proved to everyone's dismay back in the 60s and 70s, is that while it does lower harmonic distortion it also drastically increases transient intermodulation distortion (and other time-domain distortions). Indeed, the very things that we most disliked about 60s and 70s solid-state (the

piercing brightness and harshness and sandpaper-like grittiness) could be laid at feedback's door. Ever since then, the received wisdom about solid-state has been that negative feedback is a bad thing—only to be applied sparingly and locally. Shorter signal paths and fewer parts, on the other hand, are good things.

Schürmann and Soulution turned this conventional thinking on its ear. Together they decided that it wasn't feedback itself, but the *speed* at which the feedback loop operated that was the problem. To eliminate the time-related distortion, the graininess and edginess that feedback engenders, those feedback loops had to be made to correct errors instantaneously. This meant that circuits and power supplies had to operate at incredibly high speeds and with incredible precision.

Forgetting about shorter signal paths and fewer parts, Schürmann found ways to do these very things, reducing propagation delay times (the amount of elapsed time it takes to correct a signal via feedback) to 5–10 *nano*seconds (billionths of a second), where big solid-state amps and preamps typically have propagation delay times of 1–5 *micro*seconds (millionths of a second). This thousand-fold increase in speed allowed for an increase in negative feedback (and a drastic lowering of THD levels), without the usual price paid in time-domain errors.

One result of Schürmann's new thinking was greater complexity—Schürmann is reported to have proudly proclaimed that the 710 amplifier all by itself used over 3000 parts. While this may not seem like a thing to brag about from a simpler-isbetter vantage, as I said in my original Soulution review, there is no question that his design achieved its goal. Measured results were phenomenal. In the 710 stereo amp, for example, THD was well below 0.006%, the signal-to-noise ratio well above 108dB, channel separation an astounding 86dB, damping factor above 10,0000, and slew rate 330V/ns, while power bandwidth extended from DC to 1MHz. The sonic effect: You heard more of everything.

Through the Soulution 750—which may be the crown jewel of the entire Soulution line—you hear all of that and then some. Here is a *phono preamp* with a power bandwidth of DC to 1MHz, distortion under 0.006%, a slew rate of 400V/ns, and a signal-to-noise ratio greater than 100dB!

Equipment REPORT - Soulution 750 Phono Preamp

You won't have to be a golden ear to judge the results. Critical little performance details that are hard or (occasionally) impossible to hear through even the finest competing phono preamps—such as the faint touch of tremolo, here a literal expression of vulnerability, that Alison Krauss adds to select lyrics in her sad song of busted romance, "Ghost in the House"—are as clear as day through the 750. Ditto for staging details—such as the way the extra battery of trumpet players (all nine of them) and other augmenting brass instruments have been situated on tiers of risers at the far right of the stage in the Denon recording of Janácek's Sinfonietta. And double-ditto for mastering details, such as the dubbing in of Joni Mitchell's voice as she sings multiple backup to her own lead on "Carey" from Blue.

The constant thumping of the *una corda* pedal on Diana Krall's thoughtfully expressive version of "A Case of You" (for more on which, see my Oracle Delphi review), the traffic noises outside Walthamstow Hall on Dorati and the LSO's bang-up performance of Schoenberg's Five Pieces, the way Sinatra adds a surge of extra energy to the lyric "What's new?" at the close of his great rendition of the song of the same name, using this added volume and vigor

Soulution 750 Setup

As I've already noted, when I first got the Soulution 750, it did not come with its own power supply. In order to power it up you had to attach it via a supplied LINK cable to one of Soulution's two preamps. Though the external power supply for non-Soulution owners, the 750PSU, raises the price of the preamp substantially for users who don't already own the Soulution 720 or 721 linestage, it is likely to be worth the expense given the 750's superb sonics and the net savings over buying one of the Soulution linestages. (I'll report on the sound of the 750 with PSU at a later date.)

Like all Soulution gear, the 750 is a highly configurable component. Not only does it have three inputs (any or all of which can be used for moving-coil or moving-magnet cartridges), but those inputs can be individually adjusted for gain, high-pass filtering, bandwidth-limiting, mono/stereo, and loading. Loading is set via a set of three massive plug-in cards supplied with the unit (Soulution can custom-make these cards in any value you want) that slide into slots above each input. The unit I tested came with low, medium, and high resistance cards plugged into the three inputs. The Soulution 750 also has two outputs-one balanced XLR and one unbalanced RCA. If you so choose, you can plug one or both into your linestage and simply use the linestage to switch between balanced and unbalanced.

Be aware that, at 37.5 pounds, the 750 is a hefty piece. You will need a sturdy stand that allows some headroom above the phonostage, which runs warm. Also be aware that, unlike the Reference Phono 2 and several other current phonostages, the 750 does not make provisions for changing equalization curves. It is RIAA-only. Personally, I don't see this as a demerit, but you might. JV

to project a false confidence (like a guy trying not to reveal his heartbreak and helplessness), before his voice finally collapses into a revelatory whisper of despair on "I still love you so" and the bravado is given up...the Soulution 750 brings you all of these things, and does it from top to bottom (its grip, pace, and body in the bass are truly exemplary), on every track you listen to. Best



Type: Solid-state phono preamp (powered by Soulution 720/721 linestage preamp) Imputs: Three moving magnet or moving coil with adjustable

impedance
Outputs: Two (one unbalanced,

one balanced)
Gain: 54/60dB

Dimensions: 480 x 450 x

417mm Weight: 17kg

Price: \$25,000, 750; \$7500,

750PSU

AXISS AUDIO (U.S. DISTRIBUTOR) 17800 South Main St., Suite 109 Gardena, CA 90248

Gardena, CA 90248 (310)329-0187 axissaudio.com

REVIEWER REFERENCE STEREO SYSTEMS

Loudspeakers: Magico M5, MartinLogan CLX, Magnepan 1.7, TAD CR-1, Morel "The Fat Lady"

Linestage preamps: Audio Research Reference 5, Soulution 720, BAlabo BC-1 Mk-II, Technical Brain TBC-1 Phonostage preamps: Audio Research Reference 2, Audio Tekne TEA-2000, Lamm Industries LP-2 Deluxe Power amplifiers: Audio Research Reference 610T, Soulution 700/710, Lamm

Soulution 700/710, Lamm ML-2, BAlabo BP-1 Mk-II, Technical Brain TBP-1 "U.S.

Export" edition

Analog source: Walker Audio Proscenium Black Diamond record player, AAS Gabriel/Da Vinci turntable with DaVinci Grandezza tonearm, Oracle Delphi Mk VI with SME V tonearm

Phono cartridges: Benz LP S-MR, DaVinci Grand Reference Grandezza, Air Tight PC-1 Supreme, Clearaudio Goldfinger v2

Digital source: dCS Scarlatti with U-Clock, Soulution 740, ARC Reference CD8
Cable and interconnect: Tara Labs "Zero" Gold interconnect, Tara Labs "Omega" Gold speaker cable, Tara Labs "The One" Cobalt power cords, MIT Oracle MA-X interconnect, MIT Oracle MA speaker cable, Synergistic Research Absolute Reference speakers cables and interconnects, Audio Tekne Litz wire cable and interconnect

Accessories: Shakti Hallographs (6), A/V Room Services Metu acoustic panels and corner traps, ASC Tube Traps, Symposium Isis equipment stand, Symposium Ultra equipment platforms, Symposium Rollerblocks, Symposium Fat Padz, Walker Prologue Reference equipment stand, Walker Prologue amp stands, Shunyata Research Hydra V-Ray power distributor and Anaconda Helix Alpha/ VX power cables, Tara Labs PM 2 AC Power Screens, Shunyata Research Dark Field Cable Elevators, Walker Valid Points and Resonance Control discs, Winds Arm Load meter, Clearaudio Double Matrix record cleaner, HiFi-Tuning silver/gold fuses

Equipment REPORT - Soulution 750 Phono Preamp

of all, it does this magic trick without the usual sacrifices that electronics designers make to increase transparency. Here there is no desaturation of tone color (no overripening of it, either), no lower-midrange suckout, no added zip in the upper midrange. It's extraordinary to come across products that manage to be this detailed and transparent without giving up some natural density of timbre at some place in the frequency spectrum.

also extraordinary—perhaps unparalleled in my experience—to come across a solid-state phonostage that has this much bloom. By this I mean the three-dimensional projection of instrumental images. Where most solid-state gear flattens out instruments and tightens up their outlines, reducing their size and sharply defining their edges so that they sound the way a contact print of a large-format negative looks, the Soulution does neither of these things. Images aren't miniaturized; instead, they retain their natural size and soft-edged outlines (except on sharp transients, of course), and, because it is populated by these more life-sized images, the stage itself is wider, deeper, taller, more naturally sized (depending, of course, on the engineering of the recording). Better still, the Soulution 750 doesn't flatten the bodies of instruments. While I wouldn't say it has all the three-dimensionality of a tube unit like the ARC Reference Phono 2, it has more of it than any other solid-state phonostage I've yet heard. As a result, you can listen "around" voices—hear them blooming front-to-back and side-to-side into their own 3-D space and, at the same time, hear the studio/concert-hall space

behind and between them. While the Soulution 750's bloom may be closer to a bas-relief than to ARC's full-blown statuary, the very fact that it has bloom is a wonderment.

Nitpicks? Well, the Soulution 750 (and Soulution gear, in general) isn't as inherently beautiful sounding as BAlabo gear, but it is more dead-center neutral and standard-settingly transparent to sources; it isn't quite as high in resolution as Technical Brain (nothing is), but it is fuller and what some listeners may consider more natural in tonal balance; as noted, it isn't as bloomy and airy as ARC, but it has more bloom and air than other solid-state; its bass is bigger and fuller than that of some of its competition, but it still manages exceptional grip, pace, and detail in the low end.

Perhaps, the 750's one and only indisputable drawback—at least for non-Soulution owners—was that, as it was originally released, you had to power the 750 from a Soulution 720 or 721 linestage preamp via a supplied LINK connection. In other words, the 750 was not a stand-alone product. Starting in October, however, the company will begin marketing an outboard power supply, the \$7500 750PSU, eliminating the greater expense of having to replace your linestage preamplifier with one of Soulution's own to reap the considerable sonic benefits of the 750.

My conclusion? The Soulution 750 is the most neutral, detailed, transparent-to-sources, lifelike solid-state phonostage I've yet heard. It will appeal to absolute sound listeners and fidelity-to-mastertape listeners equally. It is, in fact, what I would buy if I wanted the best, had the money, and weren't buying a tube phonostage.

