



## Simaudio Moon Evolution 850P line preamplifier



When I reviewed Simaudio's [Moon Evolution 880M](#) monoblock amplifier for the June 2013 issue, I communicated via phone and e-mail with the company's VP of marketing, Lionel Goodfield. When the topic of hearing the 880Ms at their best came up, I could almost imagine him shrugging as he said, "Just use it with the most transparent, revealing preamp you can find." Not surprisingly, he then went on to say that Simaudio's own Moon Evolution 850P would serve nicely in that role. My cynical side might normally have discounted any such suggestion from a marketing man, but I'd been hearing the same sort of thing from other sources. And, as it happened, there was an 850P at *Stereophile* World Headquarters . . .

### Love at First Sight

When it comes to being swayed by a pretty face or curves that are just so, I'm as shallow as the next guy—and I was *particularly* taken with the good looks of the Moon Evolution 850P. Its case is similar in appearance to other Moon Evolution models, but in this case the visual design works especially well. The two chassis—the preamp itself, and its controller and power supply—are so proportioned that the stacked pair look simultaneously light and substantial, and the mix of finishes, textures, and shapes works perfectly. The balance of sleekness and solidity is carried over to the aluminum remote control, with which a vast array of functions has been cleverly arranged to be controlled with a small number of buttons.

### Be Careful—Beauty Can Be Skin Deep

But the 850P's to-die-for looks are only the start. Like its Moon Evolution siblings, the 880M amplifiers, the 850P incorporates a full complement of Simaudio's latest proprietary technologies. One that's

immediately obvious, even from the outside, is the mechanical damping system that the company calls M-Octave. It's not enough for Simaudio to isolate the audio circuits from the power supply and control functions by putting them in a separate chassis. Nor is it enough to split the left and right channels into completely separate circuit blocks, each with its own dedicated power supply. Two massive, antiresonant chassis aren't enough, nor are the spiked feet. In the M-Octave system, Simaudio decouples the audio circuit board from the chassis with eight compliant feet, each made of an elastomeric material and pre-loading chosen for their ability to damp the frequencies relevant to that part of the board. The system even suspends the rear panel's input and output connections from the chassis. A platinum-sledgehammer approach? Perhaps, but in a price-be-damned product—the Moon Evolution 850P costs \$28,000—well, why not?

SimLink is a dedicated protocol the 850P uses to communicate with other Moon components. The power supply incorporates 40 examples of the unique filtering topology that Simaudio calls Independent Inductive DC Filtering, or  $i^2$ DCf. The M-Ray volume-control circuitry, a particularly impressive bit of technology, contributes to both sound quality and ease of use. The circuit, which ranges from 0dB (no output) to 80dB (full output) in 530 steps, uses an optical encoder that reads the knob's position, then controls relays to select and insert in the signal path a combination of high-precision film resistors. A particularly nice touch is that M-Ray adjusts the volume in steps of different size, to allow the user to precisely *and* quickly fine-tune the level. From 0 to 30dB, the increment is 0.1dB. Between 30 and 80dB, holding the remote's Volume button down changes the increment to 1.0dB, to quickly make coarse adjustments; repeatedly pushing the button returns you to increments of 0.1dB, to more precisely adjust the level.



Flexibility of inputs and outputs is another area in which the 850P pays big dividends in usability: It has three balanced and four unbalanced inputs, a monitor/signal-processor loop, and two sets each of balanced and unbalanced outputs. Each input can be labeled and tailored in several ways using the preamp's onboard software. Using Simaudio's M-Lock protocol, a maximum volume can be set for each input, and that level can be offset by  $\pm 10$ dB. Each input can be programmed to activate either or both 12V triggers, bypassed for use in a home-theater system, or disabled entirely, to isolate and remove that block from the preamp's signal path.

In the 850P, even the basics—the mundane, nameless technologies and components—are selected or developed to be the best possible, regardless of cost. At the highest level are the fully balanced differential configuration, the two chassis, and the true dual-mono layout. The 850P uses top-quality parts: huge, custom-built toroidal transformers, and passive components sourced from single lots, measured, and matched.

## Giving a Listen

I auditioned the Moon Evolution 850P in several different setups over the course of a few months, but when I sat down to do some serious listening, I began with a system built around the combination of 850P and 880M monoblocks. When I'd listened to this combo earlier this year, I'd been struck by how different the 880Ms sounded from other amps I'd heard. It took me a while to wrap my head around what they were doing, but I finally concluded that they were getting it right. The 880Ms' characteristics were obvious, regardless of what components surrounded them, but the 850P-880M combo was unquestionably better. However, when I assembled and optimized the system (see "Sidebar"), things got a bit interesting. After a round of tweaking that was quick and easy—any change made a BIG difference—I ended up with an eclectic mix of Nordost, Audience, and Stereovox cables, and a listening room that allowed sources and the entire system to sound their best.

I began my first listening session with *Acoustic*, by Everything But the Girl (CD, Atlantic 82395-2), an album I'd listened to and loved but had always thought a bit overprocessed. Ben Watt's and Tracey Thorn's voices were too smooth and sweet, and the guitar and piano each had a rich, burnished glow that was undeniably gorgeous, but not really what you'd hear at a live performance. I punched up track 5, a cover of Tom Waits's "Downtown Train." The music started just as I settled into my chair, and I froze. A few seconds later I hit Pause, sat back, and exhaled. *Jesus, Mary, and Joseph!* I thought. *What the hell is going on?*

I started the track again. This time, I got 15 seconds into it before I hit Pause and stopped to think. To say that "Downtown Train" sounded different from what I was used to is an understatement. It sounded like a completely different recording. Instead of the smooth, overprocessed character I'd always taken for granted as being an integral part of this recording, it sounded as if it had been assembled from voices and instruments that had each been recorded simply and in a natural space. Instead of sounding like pure cane sugar, Thorn's voice took on different characteristics as she changed pitch and phrasing, with a bit of a smoky, whiskey-like texture when her voice dropped deep into her chest.

The opening guitar strums had a sharp, clear attack, each string ringing clearly as it was struck. The mix of sounds composing each chord was clear and properly balanced, beginning with the attack of each string, and building in richness as the body and soundboard resonances built and evolved. Listening to another cover from *Acoustic*, of Bruce Springsteen's "Tougher than the Rest," I noted that the piano sounded much more alive and lifelike than the luscious but stylized version of it I'd grown used to hearing.

I hadn't heard *Acoustic* through the 850P-880M combo before, and certainly the 880Ms were major contributors to the dramatic difference I was hearing. So, too, were the changes I'd made to my listening room. By swapping components in and out, however, I was able to conclude that the 850P was also an important piece of the puzzle. Listening to several other preamps showed me that the 850P was, in comparison, essentially transparent, and was simply letting through more of the recorded information. By removing the smoothness I'd always heard from *Acoustic*, the 850P showed that it had been due to a faint, liquid translucence that was obscuring low-level details.

The voices in "Tougher than the Rest" drove this point home. Before I'd installed the 850P, the details of Watt's background vocal, and at times even the pitches, were hard to make out. Nor was the image of his voice well defined, and the space around it often blurred into the image of Thorn's voice. And since the ambient environments described by the two different spaces were *very* different, the result was a jumble in which neither voice really matched the air that surrounded it. Watt's, in particular, sounded disembodied, detached from the rest of the performance.

As happens in most of my listening sessions, the first album led to my choice of the next. The way the 850P decoded the two singers in "Tougher than the Rest" made me think of Warren Zevon and Bruce Springsteen in "Disorder in the House," from Zevon's *The Wind* (CD, Artemis ATM-CD-51156). I

recalled it as sounding less confused than the Thorn-Watts track, but still enough so that Springsteen's voice, distinctive as it is, and even when singing a significantly different vocal line, was sometimes buried in the mix. Listening to this track through a few different systems confirmed my recollection, though the production wasn't as muddled as I remembered from listening to this track through other systems.

When I added the 850P to the system, things snapped into focus. The opening acoustic guitar riff was much cleaner and more dynamic, which made its presence more lifelike. Its aural image was more tightly focused, as were all the images, with a clear, open cushion of air around it. The dynamic transients at the leading edges of the chords were unquestionably larger through the 850P, and Jim Keltner's drums were sharper and more dynamic. By listening to several different setups, it became clear that the 850P did, in fact, set a new standard for transparency. In engineering terms, I concluded that it was combining vanishingly low distortion and crosstalk, a similarly low noise floor, and an extraordinary ability to reproduce transients. In a musical sense, the result was a much more compelling performance with dramatically more energy and drive.



In the duet passages, Springsteen's voice was clearer and easier to follow with the 850P in the system, and the space around it was clear, coherent, and sharply bounded. I've seen Springsteen perform this type of duet in live performances many times, and hearing one reproduced with the clarity and impact of the 850P-880M combo triggered those memories. I had a vivid mental image of Springsteen leaning back and sideways, singing into a shared microphone. His solo guitar had the same effect, conjuring up images of him grimacing as he held and bent notes, as I've seen him do in any number of concerts.

That mental image of Bruce leaning into the mike reminded me of how Lynn Miles stretches and bends her voice, so I popped in her *Unravel* (CD, Okra Tone OKR 4967) and cued up the title track. Ian Lefevre's opening guitar lines were sharper than I'd remembered, the image of the guitar was more tightly focused, and the surrounding space seemed much more. The same was true of Peter Von Althen's snare drum—the better-expressed transients and greater spatial precision gave the entire performance a tighter, more energetic feel. And Miles's voice, kind of a cross between those of Lucinda Williams and Karla Bonoff, was every bit as nuanced and charismatic as I expected. Stripped of any translucence, her voice was purer than I'd heard it before, and she sounded more confident and

sure when changing pitch. Her dynamic range was also noticeably wider, and all her changes in volume, however large or small, from soft to loud or loud to soft, were a bit larger and a bit cleaner than with other preamps. And about midway through the track, when Miles starts bending and stretching notes, it wasn't the subtle effect I'd remembered. With the 850P in the system, the change was much more dramatic, conjuring up another vivid mental image—of Miles leaning back slightly and tipping her head as she squeezed the note from progressively farther up her throat as she bent the pitch upward.

Next up was *Endless Summer*, a 1974 compilation of early-'60s Beach Boys hits (LP, Capitol R22359)—I was curious to hear what the 850P might unearth from its grooves. What I heard was remarkable, very natural-sounding voices that had obviously been recorded in a simple, almost raw kind of way. There were the familiar harmonies, now presented as clear, distinct voices and spaces assembled in simple, sometimes crude mixes. The 850P allowed me to hear far more of what was going on, from doofy little guitar parts and quietly brushed snare drums buried in the mix, all the way up to the heavy, echoey overdubs and wood blocks of "In My Room."

*Endless Summer* also highlighted a slightly unusual aspect of the 850P's sound that helped explain why it was such a good match with the 880Ms. One of the things that had stood out about the amps was the way they seemed to weight all parts of an arrangement equally. I struggled a bit with this when reviewing them, wondering if they weren't foreshortening depth and compressing the stage into something less three-dimensional. The 850P's low noise floor, better-expressed transients, and sharper focus, on the other hand, gave images much more body and depth.

The path music leads us on is rarely straight. For whatever reason, I followed up *Endless Summer* with Vivaldi's *The Four Seasons*, performed by Nicholas McGegan and the Philharmonia Baroque Orchestra, with solo violinist Elizabeth Blumenstock (CD, Philharmonia Baroque 03). This superb disc combines great, one-of-a-kind period instruments, a wonderful recording venue (a soundstage at Skywalker Ranch), and excellent engineering and production by David Bowles. The window opened by the 850P was no less than stunning—I was captivated to a point uncomfortably close to obsession. I returned to this disc again and again during my listening sessions, ostensibly to analyze and critique, but really just to sink once again into these performances in this space.

But because I listened so often to this disc, the 850P's transparency uncovered a glitch I hadn't noticed before. At a few points during Blumenstock's solos, the otherwise seamless blend of instruments and spaces unraveled a bit—the image of her violin wasn't quite right. The ambience immediately surrounding the instrument suggested one location relative to the listener, her placement on the soundstage created by the mix suggested another, and neither really fit with the other performers. It was a glitch, to be sure, of the sort that usually bothers me—and it didn't bother me here. Glitch or no glitch, the combination of *The Four Seasons* and the 850P was consistently and incredibly satisfying, musically.

I've written a lot about the 850P's sound, particularly the things its transparency allowed me to hear that I hadn't before. But I haven't dwelled on tonal balance, performance at the frequency extremes, or harmonic textures because, over and over, what I heard in those regards were the contributions of the other components in the system, or the contributions of the room. I've also not written much about how the 850P might affect someone's connection to and enjoyment of the music. These, too, will depend, to a greater extent than with a lesser preamp, on the other parts of the system, the room, the recordings themselves. A word of caution may be in order here, but it's not *caveat emptor*—it's *be careful what you wish for*. For me, the 850P more firmly cemented my connection to the music, and increased my enjoyment of it more than I would have thought possible. Night after night, I found myself on the sort of meandering path I've described here, intending to listen to one or two albums and finding myself, several hours later, surrounded by jewel cases and LP jackets.

### **The Last Word**

Earlier this year, when I finally understood what I was hearing from Simaudio's Moon Evolution 880M monoblocks, I concluded that my observations weren't about what the amps were adding to the sound, but about what they weren't. The same was true, and to an even greater degree, with Simaudio's Moon Evolution 850P preamplifier. It's the most transparent preamp—or audio component of any sort—that I've heard. In my room and system, the 850P provided a crystal-clear window on any

contribution from or change made elsewhere in the system while seeming to add nothing of its own. It's handsome, exquisitely well built, wonderful to use, and provides enough flexibility and functionality for any system I can imagine. I found the 850P to work beautifully with a wide range of equipment; combined with the matching 880M amps, it formed a system as good as or better than any I've heard anywhere, at any price.

The 850P sells for \$28,000—for me, an awful lot of money. Add a pair of 880Ms, and a topnotch front end, speakers, cables, and widgets, and you've probably spent more than \$100,000, or even \$150,000—which is *really* an awful lot of money. But if you're a divorce attorney or a billionaire, or have just won the lottery, you should consider the 850P when you're assembling that \$150,000 dream system. Or, if you're planning on *becoming* a divorce attorney or a billionaire, you might consider picking up an 850P now—its transparency will make it much easier to hear what's going on in the other components you're shopping for. And even if it's unlikely that an 850P will fit your budget anytime soon, I'd still urge you to beg, borrow, or steal one, just to hear what's possible with today's technology.

Earlier this year, I discovered that Simaudio had hit a home run with the Moon Evolution 880Ms. With the Moon Evolution 850P, they've swung for the fences again, and this time they've hit a grand slam. **Very, very highly recommended.**

### **Specifications**

Description: Two-chassis, dual-mono, line-stage preamplifier. Inputs: 4 unbalanced (RCA), 3 balanced (XLR), 1 unbalanced monitor/processor loop (RCA). Outputs: 1 variable-output unbalanced (RCA), 1 fixed-output unbalanced (RCA), 2 balanced (XLR), 1 unbalanced monitor/processor loop (RCA). Other connections: Simaudio SimLink I/O, IR port, 2 configurable 12V trigger signals, RS232 I/O. Input impedance: 11k ohms. Input sensitivity: 200mV for 4.0V RMS. Maximum voltage gain: 9dB. Output impedance: 50 ohms unbalanced, 100 ohms balanced. Maximum output voltage: 7.5V unbalanced, 15.0V balanced. Frequency response: 5Hz–100kHz, +0/–0.1dB. Signal/noise ratio: >130dB. IMD: unmeasurable. THD (20Hz–20kHz): 0.0005%. Crosstalk at 1kHz: –130dB. Power consumption at idle: 25W.

Dimensions: 18.75" (475mm) W by 4.0" H (100mm) by 16.75" (425mm) D. Controller/power supply: 18.75" (475mm) W by 4.0" (100mm) H by 17.0" (430mm) D. Combined net weight: 72 lbs (32kg).