

# EQUIPMENT REPORT



## Krell S-150m Monoblock Power Amplifier

Small, Lightweight, and Affordable—But Still A Krell

Steven Stone

**W**hen I began writing for TAS in 1983, if you wanted a state-of-the-art solid-state amplifier that could drive any speaker you purchased either a Krell or a Levinson. Period. Flash forward to 2010. Both Levinson and Krell are still around, although under new proprietorships. But unlike 1983, audiophiles now have far more choices in amplification, including some options that make both Krell and Levinson seem modestly priced in comparison.

Krell's least expensive amplifier nowadays is the S-150m, priced at just \$5000 per pair. It's in a compact (by Krell standards) cabinet that remains cool enough for a cat to sleep on. Back in 1983 no one would have dreamed that Krell would offer an energy-efficient amplifier, or one that didn't require a Fabio-physique to carry, not drag, around solo. But Krell's new under-30-pounds S-150m monoblock claims to be exactly that—a Krell for those of us who don't live in the gym. So how Krell-like can the S-150m possibly be? Let's find out.

When I asked Krell's director of engineering, Todd Eichenbaum, about the S-150m's overall design he said, "The S-150m is basically a scaled down Evolution Series amplifier. It has fewer output transistors, a simpler power supply, and the circuit itself is simpler. But the design goal was to retain as much of the performance of a full-blown E Series as possible."

When I asked Todd Eichenbaum why the S-150m ran so cool he replied, "It's the heat-sink system. It was originally developed for the Showcase multichannel amplifier, where it had to cool seven channels. It is extremely efficient. Couple that with only having to do one channel and you have a cool-running amplifier."

Throughout my phone interview with Todd he stressed that the S-150 isn't about new technology as much as it is about refining and simplifying existing Krell designs. Technology that Krell first developed and used in 1996 can still be found in the

S-150m. Although this contemporary incarnation is simpler, it still embraces the same design philosophy as, and circuit topologies similar to, other "classic" Krell designs, in addition to drawing on Krell's newer technologies.

I asked Krell to send me three S-150m amps so I could power all the front channels in both of my room-based systems. Installation was simple, and except for making sure the balanced/single-ended toggle switch on the back of the amplifier was in the correct position, unremarkable. Once the power switch on the back of the amplifier is turned on the circular light which surrounds the front-panel on/off switch glows bright red. Turning on the amplifier changes the bright red circle to bright blue. And I do mean *bright* blue. If you're not into vibrantly colored lights, you can turn this one off via an internal jumper switch. A second internal jumper can disable the front on/off switch completely. You turn on the amplifier by plugging it in. This feature is designed for integration into 12V-triggered AV systems.

During the review period all three of the S-150m monoblocks performed without a glitch or problem of any kind. It's now thunderstorm season in the Rockies, so the S-150m's were subjected to several power outages, thunderstorms, and other power vagaries. Again, no signs that these sorts of real-world AC phenomena had any effects on the amplifiers. The amplifiers were all connected to AC through PS Audio Quintet and Quartet AC conditioners most of the time, especially when I was away from home. For some listening sessions I plugged the amplifiers directly into the wall without additional power devices.

I typically run stereo subwoofers with the crossover point anywhere between 55Hz and 80Hz. The S-150m proved itself practically "plug-compatible" with the last basic power amplifier I had in my system, the Bel Canto Ref 1000 Mk II, which also

## Under the Hood

The S-150m has two unity gain input buffers, one for each signal phase (inverting and non-inverting). They drive the balanced input of the voltage gain stage while isolating it from the source components. Although the S-150m is called a fully balanced circuit, the output of the voltage gain stage is single-ended as is the output of the amplifier. All the circuitry is discrete, allowing each section of the S-150m to be designed and optimized for the task at hand. The amplifier uses its own internal ground reference rather than an external balanced line. It then uses this new balanced signal for the current mode gain stage.

The output uses a triple Darlington stage with three pairs of high-speed high-current complementary bi-polar transistors driven by a single pair of transistors. This single pair is, in turn, driven by four pairs of smaller bi-polar devices optimized for high-frequency operation.

Requiring no additional filtering, the S-150m is designed to be stable no matter what the impedance load. It doesn't even need output inductors or a Zobel R-C network to maintain unconditional load stability. A Class A/B amplifier, the S-150m operates in Class A for its first couple of watts. The input buffers, voltage gain stage, and drive stages all operate in Class A mode. **SS**

produces 26dB gain. During both manual and automatic system set-up procedures the prior settings I used with the Bel Cantos were also perfect for the Krells.

From the first notes several unmistakably Krell-like characteristics emanated from the S-150m amplifiers. Whether they were connected to Dunlavy SC-VI, Genesis 6.1, or AV 123 Skiing Ninja-modified X-Statik speakers, the S-150m amps exhibited a level of dynamic control and ease that made me sit up and take notice. From Abra Moore to Yoel Levi and the Atlanta Symphony Orchestra (the first and last artists in my iTunes library) the S-150m displayed a dynamic liveliness and dexterity that at times verged on the uncanny. On the Punch Brothers' *Punch!* the background singers' subtle micro-dynamic shadings came through with mesmerizing clarity.

Krell amplifiers have always had a reputation for tight yet musically convincing bass. The S-150m maintains Krell's rep. The bass lines on Was Not Was' cover of "Papa Was a Rollin' Stone" pulse with enough mirror-ball disco thump to make all your stuff go bump. Acoustic basses, such as on Angela Easterling's "One Microphone" from her *Blacktop Road* CD, should pop in their initial attack. The S-150m preserved the opening pop as well as the subsequent rumble.

In several of *The Absolute Sound's* reviews of Class D amplifiers their lack of extreme-upper-frequency air and extension has been mentioned when they've been compared to the best conventional solid-state power amplifiers. The first notes of Sharon Gilchrist's shimmering mandolin on Peter Rowan and Tony Rice Quartet had more air and greater upper-frequency harmonics that I had

been hearing through my Bel Canto REF 1000 Mk II amplifiers. This "extra" treble openness surprised me, but after multiple months of listening I'm convinced the Krell's upper-frequency presentation isn't an additive effect—it's the way high frequencies should sound.

The S-150M's treble presentation is on a par with the best amplifiers I've heard regardless of their circuit. It deftly walks that fine line between dark and light, delivering both upper-frequency sweetness and airy extension. This treble presentation also affects the amplifier's overall resolution. Glenn Gould's *Goldberg*

## SPECS & PRICING

### Krell S-150m Monoblock Power Amplifier

**Inputs:** One balanced via XLR connector, one single-ended via RCA connector

**Outputs:** One pair via WBT binding posts

**Input impedance:** 20k Ohms (balanced or single-ended)

**Frequency response:** 20Hz-20kHz +0, -0.12dB; 0.3Hz to 120kHz +0, -3dB

**Signal-to-noise ratio:** >109dB unweighted

**Gain:** 26.2dB

**Input sensitivity:** 1.70V RMS (single-ended or balanced)

**Output power:** 150Wpc into 8 ohms, 300Wpc into 4 ohms

**Damping factor:** >115 at 20Hz

**Dimensions:** 3.40" x 5.66" x 21.90"

**Weight:** 17 lbs.

**Price:** \$2500 each

### ASSOCIATED EQUIPMENT

#### Room 1 System

CEC TL-2 CD transport, Oppo BDP-83SE Blu-ray player, Apple TV, Sonos Z90, VPI HW-17, ClearAudio/Souther TriQuartz arm, Denon/VanDenHul cartridge, Michael Yee Pfe-1 phono preamp, Lexicon MC-12B HD pre/pro, Monster HTPS 7000, PS Audio Quintet AC Conditioner, Genesis 6.1 surround speaker system, two Genesis S2/12 subwoofers, one Genesis 4/8 subwoofer,

two JL Labs Fathom F112 subwoofers, Synergistic Research Designer's Reference interconnects and speaker cables, Cardas Clear Interconnect

#### Room 2 System

Oppo BDP-83 Blu Ray Player, Logitech Slim Systems Squeezebox Duet music server, Logitech Slim Systems Squeezebox Touch music server, Meridian 598 CD/DVD player, VPI TNT-IV turntable, Graham 1.2 tonearm, ClearAudio Victory H cartridge, Vendetta SCP-1B phono preamp, Meridian 568.2 Pre/pro, Meridian 518 Digital processor, PS Audio Premier AC power regenerator, Chang Lightspeed CLS 9900 AC conditioner, Dunlavy Signature VI main speakers, Dunlavy Signature IV center speaker, Dunlavy Signature IAV rear speakers, two Genesis G-928 subwoofers, two Earthquake Supernova 12 Mk VI subwoofers, Three Snell 550 passive subwoofers, three Bryston BP-120 powerpack amplifiers, Audio Magic and Synergistic Research interconnects, Audio Magic Sorcerer and Synergistic Research Alpha Quad X-series speaker cables, Cardas Clear bi-wire speaker cables

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Variations on SACD still ranks as my number one commercial recording for listening into a live mix. The S-150m does an impressive job of separating Gould's verbalizations, thumps, and peddling noises from the sound of the piano itself.

Having extra high-frequency cues also translates into additional spatial information. On Malcolm Sargent's rendition of the *H.M.S. Pinafore* overture with the Pro Arte Orchestra, the acoustics of that big ol' empty stage and hall are more obvious. On my own recordings the overall soundstage size is ever so slightly larger than it is through the Bel Canto amps. Depth and dimensionality were identical with the two amps, but I was able to pinpoint instruments' physical location quicker with the S-150m.

As any audio dweeb will tell you, the midrange is where most of the music is. The S-150's midrange is as grainless and glare-free as any solid-state amp I've ever heard. Its performance easily keeps pace with the Pass X-150 power amplifier in this respect. Both have glare-free upper midranges, but the Krell is dynamically more nimble. The Krell nails a string's pizzicato, from the beginning attack to the quick muffled fade, with a sense of ease and control that sounds slightly more dynamic than the Pass X-150. Maybe it's just that the Krell has more headroom, but whatever the reason, I've never heard the Dunlavy SC-VI speakers sound more harmonically balanced or dynamically alive than when they were connected to the Krell S-150m amplifiers.

So do the S-150m amplifiers have any weaknesses? Or to put it another way, do these little dynamos make buying a bigger Krell

folly? Well, the S-150m is only 150 watts into 8 ohms or 300 watts into 4 ohms. In some systems, that may not be enough juice. On the other hand, if you're a single-full-range-driver-in-an-open-baffle sort of person, then the Krell's 150 watts will be about ten times more than you need. But for most of us great unwashed, who employ medium-sensitivity speakers in a medium-sized room and don't specialize in listening to Wagner or Black Sabbath at concert-hall levels, the S-150m will scratch your Krell itch.

Compared to the best amplifiers I've heard in my own systems the S-150m acquits itself well. The Pass X-150 is slightly more three-dimensional and juicier harmonically. In the race to be green the ICE-powered Bel Canto REF 1000 Mk II still operates far more efficiently and uses less power, but the S-150m only draws 30 watts when idling.

Back in the good/bad old days, if you owned a pair of Apogee Scintillas you had two amplifier options, either a Krell or a Levinson. From their very first offerings Krell earned a reputation for being bulletproof, reliable, good sounding, and really really heavy.

It's nice to discover that Krell's newest, smallest, and lightest amplifier has retained all of the attributes (except for the heavy part) that the company's reputation was founded on. Want to own a Krell that will break neither your back nor your pocketbook? Give the S-150m a serious listen. Look out Earth, the Krell are still here. **tas**



Soulution

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- Absolute Power Cord
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- YG Acoustics
- and many more...

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