

EXCLUSIVE

THE GRAND OPENING OF CBS STUDIOS' HIGH-END ROOM

Ultimate Audio

DEFINING EXCELLENCE

FORBIDDEN PLEASURES!

KRELL KPS 25sc PLAYBACK SYSTEM
AND FPB 300c AMPLIFIER

ABSOLUTE POLARITY

THE KEY TO PERFECT SOUND?

**THE BEST 3 WATTS
IN HIGH-END AUDIO!**

WAVELENGTH AUDIO'S MERCURY
SINGLE-ENDED AMPLIFIER.

SECRETS TO SUCCESS

TONY FAULKNER ON THE
STATE-OF-THE-RECORDING ART



SUMMER2000 VOL4 NO3

SECOND ANNUAL CABLE SURVEY

• CARDAS • HARMONIC TECHNOLOGY • KHARMA • XLO

In case you've blinked, as I must have, Krell has transformed its range completely over the past two or three years. Partly philosophical and partly cosmetic, the overhaul consists of nothing less than a repositioning of the brand in the high-end firmament; I've no doubt that the inspiration for the "new" Krell was driven by the overwhelming growth in the home theater market and the explosion in custom install. To make the leap which would identify Krell as a brand friendly to non-masochists, the new products had to be designed to eliminate techno-fear. At the same time, they had to look like the exclusive, high-roller wares that they are. More importantly, they had to achieve this without alienating the faithful. ● To Krell traditionalists, that means built-like-a-vault robustness, Class-A operation, brutish and quasi-military looks, acres of heat-sinkage and—above all—the kind of sound that is never less than commanding. I suppose that if a shrink were to analyze the classic Krell customer in sexual terms, he'd be the "D" in a B&D scenario: Krell forces the listener to sit still and pay attention. It is as far removed from the pixies 'n' fairies rosy-glow world of single-ended triodes as is possible, and the two approaches are therefore not even remotely comparable. Hell, they're mutually exclusive. But the aspects of solid-state monster-amplifier high-end ownership that seduce audiophiles are precisely the traits that instill fear in non-audiophiles. Now, Krell is suitable for both.

TWO PEAS IN A POD

KRELL KPS 25sc Playback System and FPB 300c Solid-State Amplifier BY KEN KESSLER

LOOKS AND LOGIC

So what's been applied to the range to make it more warm and fuzzy in the eyes of the nervous? Krell's Sustained Plateau Bias circuitry took the pain out of Class-A operation, CAST technology eliminated mismatches related to cables and connections while all but eliminating the sonic differences in a Krell-based set-up*, the on-board protection regimen inspires near-total confidence**, the set-up facilities provide total flexibility, a single "table-top" remote control can operate the whole shebang while a smaller one is also provided with just the basic CD and volume commands, and the new look is as far removed from the battleship grey of yore as to suggest European input from Danes or Italians. The mix of glossy and satiny blacks, the departure of the famed handles from the front panel (not necessarily a good thing when you have to move the stuff) and the improved fit and finish place Krell into the luxury class by virtue of its style, substance and presence—not just the price tags. The two-tone black and grey look remains current with the home-theater products and the KAV "economy" models.

[Note: CAST and Sustained Plateau Bias cannot be summed up in the space allocated to a single review; the author advises those of you with unquenchable technical curiosity to log on to www.krellonline.com for full technical details.]

What I have before me isn't just a col-

lection of components, but a complete package, barring loudspeakers. (And given that non-sequitur called the Krell Master Reference Subwoofer plus main man Dan D'Agostino's formative years in the industry including a stint as a speaker designer and his immutable perfectionism, I wouldn't be surprised to see Krell-made speakers one day.)

It consists of the KPS 25sc playback system and the FPB 300c stereo power amplifier, the former a wry combination harking back to the days when you could buy such things as tuner-preamplifiers. In a sphere where purists prefer to have every single link in the chain as a separate component, there's an element of irony in combining a CD transport, a comprehensive DAC with facilities far in excess of a CD player's needs AND a full-blown preamplifier with both line level analog inputs and an array of digital inputs to access the sophisticated DAC. If not irony, then call it yah-boo-sucks nose-thumbing.

Its logic is unassailable: The transport matches the DAC, and the DAC matches the preamplifier in a manner that cannot possibly be bettered by unrelated separates, or even by components from the same "house." Moreover, the losses and intrusions of linking them together are eliminated, this degree of integration reducing noise and distortion while improving signal transfer, timing and linearity (though purists would argue that

they like to have a separate chassis and separate power supply for each stage). Better still, Krell has always offered an upgrade path, and there are plans to produce a DVD module, all the better to exploit the KPS 25sc's 24-bit/96-kHz DACs. Additionally, all circuitry is mounted on easy-to-change plug-in cards.

The KPS 25sc is an impressive beast, though not large merely for the sake of it. Those ample dimensions have to house more than a stand-alone transport or single-chassis CD player—the extra space is needed to contain the comprehensive, fully-remote-controllable preamplifier section. It uses direct-coupled, high bias, pure Class-A, Krell Current Mode circuitry, the latter described as "a faster and more linear method of amplification, [which] operates in a high-speed current domain to deliver wide dynamics and high resolution."

At no point will you feel that the combining of three components means that anything was left out, especially not from the preamplifier. In addition to its own display, it occupies the right half of the fascia with press buttons to access six digital inputs, including the CD section, while another bank of five chooses four line inputs and tape. Further right is the rotary volume control, while at the extreme right are the display and buttons to select fixed or variable output, phase inversion and menu, the latter accessing all manner of secondary customizing functions. These

* If CAST eliminates cables differences, then why does Transparent make a CAST-dedicated cable, and why won't any ol' wires be good enough? Just thinking out loud...

** As one who has seen too many unlikely candidates burst into flames, for me there will never be ANY product which inspires total confidence. Accidents do happen, after all.



include level trim, the assigning of specific names to the inputs, configuring it for theater throughput and much more.

At the left are the CD-related controls, including the transport buttons, the display, LEDs to indicate that the signal is locked and that HDCD is active, as well as a power-on button for the unit and a power-off button just for the CD player portion. Primary on/off is at the back, along with gilded phono sockets for the analog sources, one pair of XLR balanced inputs, a pair of fixed and a pair of variable RCA phono outputs, a pair of fixed and a pair of variable XLR balanced outputs, and smack in the middle are the LEMO-style CAST outputs. Grouped to the right of the CAST connectors are two Toslink and two coaxial digital inputs, the same again for outputs, a single XLR digital input and digital output, and a selection of connectors for remote linkage and integration with installed systems and A/V set-ups. Aside from the absence of AT&T and BNC digital connectors, I can't think of anything else they've left off the unit.

Topping the chassis is the best audio party trick in ages. Krell has used massive plexiglass covers for years on its top-loaders, but this flagship features a clever shutter system which is crystal-clear when the drive is stopped, but which turns opaque when play is initiated to keep stray light out of the drive. And dropping it causes no harm: A piston damps its descent. Access the menu, and you can set it up for always clear, always opaque, auto-play when the lid is closed and more. I tell ya, this thing will keep the toy-oriented busy for months...

SYSTEM LOGISTICS

For the digital-to-analog processing, Krell designed its own digital interpolation-filter system based on dual 80 MHz Motorola DSP circuits, and the system offers HDCD decoding through a Pacific Microsonics PMD 100-decoder/digital filter. A master oscillator and clocking system synchronizes all digital circuits to eliminate jitter, the digital section receiving its feed from a professional-grade CD transport with a high power neodymium direct-drive motor with oversized drive shaft. As has been Krell practice for some time, the unit comes with a low mass, electrolyzed metal disc clamp to isolate and damp the CD for accurate data recovery. The clamp bears a special finish created with an electrolyzing

process which ensures maximum conductivity while preventing static interference. A belt drives the laser assembly mechanism and viscous damped suspension eliminates unwanted vibrations and preserves error-free data transfer.

In direct opposition to those who insist that every stage needs its own isolated housing, the unit employs three independent power sections consisting of 13 subsections to ensure total isolation between analog and digital circuits. Me? I'm starting to appreciate space savings, even if the elimination of a couple of AC plugs doesn't affect me any more with 42 sockets to hand.

Speaking of AC, you just gotta see the captive main cable sprouting from the back of the Full Power Balanced 300c stereo power amplifier. Looks like it came off of an industrial stove. Big, fat—I suppose it's absolutely necessary, because the FPB 300c dims my lights slightly when switched on—either from the AC or out of stand-by. Hell, everything about it is big. It occupies a space of 19 x 10 x 21½ inches (w x h x d) and weighed enough for me to enlist the help of a friend; at my age, I don't want to court the services of an osteopath humping around a 110-pound lump. Oh, and the fins are still too damned sharp-edged. My ankles and calves look like I've been in an S&M session with a foot fetishist.

Krell

Rated at 300 Watts into 8 Ohms, 600 Watts into 4 Ohms, and 1200 Watts into 2 Ohms, the FPB 300c is way more than I need for the speakers I have in my 12 x 18 foot listening room. The Wilson WATT Puppy 6 is so sensitive that it hardly taxed it at all, while Orchid's Heil AMT-equipped LWO, at 89 dB/1 W, didn't cause it to break out in a sweat either. The FPB 300c is fully balanced from input to output, employs a computer-regulated power supply to make the unit virtually immune to fluctuating line voltages and features Class-A operation to full-rated output. The amplifier uses proprietary Krell output and driver transistors.

Its front bears only a power button should you choose to take it out of standby manually rather than via remote. Above it is the infrared sensor, topped by a quartet of LEDs to indicate standby mode, bias, CAST and regulation; the unit goes through a self-analysis procedure when switched on from cold or just out of standby. The back contains CAST and XLR balanced inputs, Krell Link in/out, main on/off and two pairs of custom-made speaker terminals (requiring spade connectors) for easy bi-wiring.

First things first: I stuck with CAST connections throughout, after determining that the sound was cleaner and more precise than XLR balanced operation. At the risk of sounding like a Krell mouthpiece, I also learned, through trying four different sets of balanced leads, that the differing sounds of cables left me consistently dissatisfied. Now I'm NOT saying that you can't find a set of XLR-terminated cables that are superior to the Krell-supplied CAST leads. But, in my situation, the CAST set-up sounded better every time. Completing the system with the Wilsons were my old Harmonix wires. That's it: No accessories, no platforms, no feet. All I did beyond connecting the stuff was to let it run in for a few days, and kept it in standby mode when not in use.

THE PARTS VS. THE WHOLE

Confession time: As both items just keep getting better 'n' better, am I reviewing them too early? Am I going to find a month or two down the road that I underestimated their capabilities? I hope not. I certainly haven't explored every option related to the DAC configuration, nor veered from the factory settings because the validity of the review depends on how it sounds straight out of the box. Besides, I like the lid goin'

smoky when the CD starts...

When comparing the front-end to a bunch of players of various vintages but impeccable pedigrees, it was clear that Krell has managed to extract more from the soon-to-be-outgoing format than I thought possible. Alas, I didn't have the main contender, Linn's CD-12, at hand, but I just don't remember it having the same sort of bass control exhibited by the KPS25sc. What surprised me, though, was the sensation of warmth on particular



recordings of the other extreme: The bassless CDs from the Persuasions. (OK, OK, so their voices go de-e-ep, but they aren't exactly gonna rattle any woofers.) Upper bass/lower-mid coherence has always struck me as the component that adds richness to male voices, and solid-state sound is often too lean in this area. The Krell actually sounded more lifelike on male vocals than my revered Marantz CD-12, itself the only non-tube player which could match a CAL Tempest IISE. Something most definitely was afoot.

It became clear when turning to the amplifier for duty with other ancillaries, having used the KPS 25sc in fixed output mode through other preamplifiers and power maps. It was reassuring to find that that the FPB 300c exhibited almost precisely the same sonic signature as the front-end when fed by a different preamplifier. Neutrality is a given; this amplifier is so clean and uncolored that it defies the old chestnut about big amplifiers lacking the finesse



of smaller versions. So controlled is its power delivery that I couldn't excite any traces of brutality or coarseness; then again, it was barely cooking when it reached the point where my ears began to hurt. If there are any grounds for citing differences (beyond their actual roles as preamplifier and power amplifier) between the KPS 25sc and the FPB 300c,

the former is slightly richer when played through other systems, leading me to surmise that the amplifier veers toward the lean, as if to compensate. At the frequency extremes, these are two peas in a pod.

But rather than focus on each, it's more sensible to treat them as an operational whole. As a team of sorts, they flaunt speed and detail of a degree I've not heard from any of my cherished tube amplifiers, while the dimensional virtues suggest that Dan D'Agostino has been watching too many David Lean films. These units provide scale and scope that push the room boundaries, provided the speakers themselves are the sort that "disappear" when set up properly and with worthy amplification. The Wilsons do this well; so did the Quad ESLs I used with care if not quite trepidation. I returned to the *Glory* soundtrack for a taste of the epic, and was not disappointed: The sound spread out around, behind and in front of the speakers like a blanket. Or a battlefield, given the material.

I also took a digital audio feed out of a DVD player to try my new fave A/V bass test (the "crushy, choppy" things in *Galaxy Quest*), the Krell system feeding them to the Puppys with such tight transients and commanding slam that I made a mental note to price up five channels' worth of FPB. The litany of "impact," "boldness" and "control" kept recurring. I now despair ever

Krell

wasting the term "visceral" in the past. In every sense, the system produced a 3/4 scale rendition of the MRA-based systems I've heard, which is just as it should be, given the price differential.

But at \$10,000 for the amplifier and \$22,500 for the CD playback system, the Krell pairing ain't cheap. In fact, it's terrifyingly expensive. On the other hand, I can't remember the last time I used a system that offered such set-and-forget ease, that behaved (in that respect) not like a pain-in-the-ass high-end thoroughbred, but like a user-friendly, mid-fi Japanese system. On one hand, you know you're listening to the sort of sound that just isn't available in lesser systems. On the other, you have to keep pinching yourself because you're starting a little monologue that deems the Krell system "practical" and "sensible." Amusingly, it is.

In pursuing the high-end with blinkers on, we've forgotten what painless home entertainment can be. It's like the Italian supercar owner who lies to himself and says that the unreliability, poor panel fit

and lack of amenities (like a comfortable seat) are all part of the experience. Audiophiles, too, have put up with so much aggravation that I can picture manufacturers swapping stories late at night in the bar at CES, laughing at the mugs who suffer gross incompatibilities and mismatches, limited facilities, absurd operating procedures, \$20,000 cable bills and more. In this respect, the Krell set-up was a lesson in high-end pleasure without the tears. The words "cake," "having," "eat" and "your" springs to mind. ©

► **Krell Industries Inc.**, 45 Connair Road, Orange, CT 06477-3650. Phone: (203) 799-9954. Fax: (203) 891-2028. Web site: www.krellonline.com. Designer: Dan D'Agostino.

FPB 300c SOLID-STATE AMPLIFIER. Type of amplifier: Fully balanced, Class-A solid-state amplifier equipped with Krell's proprietary CAST technology. Power rating: 300 W (8 ohms), 600 W (4 ohms) and 1200 W (2 ohms). Frequency response: 20 Hz to 20 kHz (+0 dB/-0.05 dB). S/N: 117 dB. Total harmonic distortion: 0.02%. Input sensitivity: 2.35 V. Input impedance: 100 K. Power consumption: 75 W (standby), 350 W (idle), 3000 W (max.). Detachable

power cord: No. Dimensions: 10 x 10.3 x 21 inches (w x h x d). Weight: 110 lbs. Price: \$10,000.

KPS 25sc PLAYBACK SYSTEM. Description: Integrated CD transport, DAC, and preamplifier using CAST technology. Frequency response: 0.1 Hz to 1 MHz (+0/-3 dB). S/N: 104 dB (A-weighted). Total harmonic distortion: <0.005%. DAC: dual balanced Krell designed 24/96. Digital filters: 8X oversampling, dual Motorola 56009 SSPs; Pacific Microsonics PMD-100. Disc drive: Krell top-loading data grade mechanism. Output voltage: 13 Vrms. Input impedance: 98 K. Output impedance: 17 ohms. Gain: 12 dB (balanced), 6 dB (single-ended). Digital inputs and outputs: 1 AES 110 ohm, 2 x S/PDIF, 2 x EIAJ optical, via TosLink. Analog inputs: 1 pr. Balanced via XLR; 4 pr. single-ended via RCA connectors. Analog outputs: 1 pr. fixed balanced and 1 pr. variable balanced via XLR; 2 pr. fixed single-ended and 1 pr. variable. 1 pr. variable via 4-pin bayonet connectors. Volume control resolution: 16-bit. Balance control resolution: 0.5 dB. Remote control: 1-tabletop infrared direct access, 1-handheld infrared and 1-RC5 via DC power connector. Detachable power cord: Yes. Dimensions, lid closed: 19 x 5.3 x 15.4 inches (w x h x d); lid open: 20.5 inches. Weight: 45 lbs. Price: \$22,500.