

## Home Audio Equipment Review



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### Krell KAV-400xi Integrated Amplifier

by Philip Beaudette

Writing audio reviews has afforded me the rare opportunity of auditioning a wide range of products, and lately I've been listening to a number of integrated amplifiers. As each new integrated goes into my system, I have expectations based on my experiences with those that have gone before. Each time I hear something I like, the performance bar is raised for everything that follows. Most recently I've been listening to the \$2500 USD KAV-400xi, which until recently was the top stereo integrated amp in Krell's lineup (that honor now belongs to the FBI, a \$16,000 300Wpc behemoth). The KAV-400xi represented the first time I'd ever listened to something from the well-known American manufacturer, and I wasn't sure what to expect. After a couple of months with the KAV-400xi, I think it's safe to say that the performance bar for integrated amplifiers just keeps inching upwards. Keep reading for details.

#### Description

Krell Industries has been designing and building audio components since 1980, and today the company not only makes electronics for stereo and home-theater use, but loudspeakers as well. If you're



#### Review Summary

**Sound** "The KAV-400xi tends towards a slightly warm sound, never straying into a cool, sometimes clinical realm. It was rhythmic, fluid and smooth, and its clean delivery had me turning up the volume just to hear music energize my room." "With 200Wpc on tap, the KAV-400xi made pointless any concerns about power output. Even when played loud, the KAV-400xi never showed a sign of strain or compression." "One of the defining sonic characteristics of the '400xi was its ability at reproducing a credible soundstage. In this regard, it is one of the best integrated amps I've heard."

**Features** "A low-negative-feedback design that features a fully balanced signal path from input to output. All circuitry up to the driver stage is pure class A." "Flexibility is one the '400xi's strengths. Turn the unit around and you'll see three pairs of single-ended RCA inputs, a tape input and output as well as one balanced XLR input."

**Use** "Unfortunately the remote control doesn't meet the same aesthetic standard as the rest of the package. It's a credit-card-styled number that, although very thin and discrete, felt cheap in comparison to everything else. In its defense, it worked well and did everything I needed."

**Value** "This is an integrated that should keep that nasty upgrade bug away for some time. When the bug does bite, be sure you have deep pockets, because higher performance won't come cheap."

concerned about synergy, Krell makes your life easy by offering everything, including cables, to build a system the company claims is greater than the sum of its parts.

I couldn't test that assertion as I only auditioned the KAV-400xi, an integrated amp that boasts 200Wpc into 8 ohms and 400Wpc into 4. The unit is a low-negative-feedback design that features a fully balanced signal path from input to output. All circuitry up to the driver stage is pure class A. As with all Krell components, the '400xi's bandwidth is greater than 300kHz, which Krell claims results in nearly flawless reproduction in the audible range.

Flexibility is one the '400xi's strengths. Turn the unit around and you'll see three pairs of single-ended RCA inputs, a tape input and output as well as one balanced XLR input. Although Krell advocates the use of balanced connections, I was forced to use the single-ended inputs because my CD player isn't balanced. The preamplifier section also comes equipped with RCA outputs for those who wish to use it independently of the amplifier section or for biamping. Furthermore, there is an RC-5 input as well as a 12V trigger input if the user wants to turn the unit on or put it in standby mode through other components. Conversely, there is also a 12V trigger for control of other components with the '400xi.



On the right side of the front panel is the power switch, above which is located an LED to indicate when the unit is turned on (it glows blue) or in standby (red). Input selectors are on the center of the faceplate as is the button to select the tape input. Finally there is a Mute button and a small display used to view volume or the channel balance, which can be adjusted using the remote. A machined aluminum volume knob completes the appearance; its silky-smooth operation made it a pleasure to use.

Depending on your setup, one particularly useful feature of the KAV-400xi may be its

Theater Throughput mode, which allows you to bypass the volume and balance controls of the '400xi and instead delegate that control to an external surround-sound processor. When Theater Throughput is engaged the amplifier section can be used to power two speakers in a home theater setup. This is a useful option because it allows the powerful '400xi to drive the front two channels in a home theater. I don't even own a television, so I never used this option, but in an industry driven by features, this option may sway some buyers.

The KAV-400xi measures 17 3/8"W x 3 1/2"H x 17"D and weighs a hefty 30 pounds. Although it's relatively slim, the '400xi has nearly square dimensions, and its solid weight made it feel very sturdy. The review unit came in the Krellcoat finish, a sleek silver color that looked very sharp. A couple of people who saw it were very impressed and commented on how expensive it looked. If you value aesthetics as much as performance, you'll love this integrated.

Unfortunately the remote control doesn't meet the same aesthetic standard as the rest of the package. It's a credit-card-styled number that, although very thin and discrete, felt cheap in comparison to everything else. In its defense, it worked well and did everything I needed.

## Sound

There are numerous ways to tweak the design of a solid-state integrated amplifier. Some companies cut corners by using lower-quality components or skimping on the power supply. Others design and build each piece with painstaking attention to detail such that cost isn't considered. Of these two philosophies, Krell certainly falls into the latter school of thought. Good solid-state designs typically feature extended highs, taut and tuneful bass that can pack a wallop, and a low noise floor that enables impressive detail retrieval. The KAV-400xi qualifies as a "good" solid-state integrated amp.

The KAV-400xi tends towards a slightly warm sound, never straying into a cool, sometimes clinical realm. It was rhythmic, fluid and smooth, and its clean delivery had me turning up the volume just to hear music energize my room. I wasn't ever disappointed. With 200Wpc on tap, the KAV-400xi made pointless any concerns about power output. Even when played loud, the '400xi never showed a sign of strain or compression. In my room and with my listening habits it wasn't possible to exhaust the KAV-400xi's power reserves. Unless your room is enormous, your speakers are very insensitive or you are trying to reproduce rock-concert SPLs, the KAV-400xi has all the power you'll ever need.

### Associated Equipment

**Loudspeakers** – PSB M2 and Energy Reference Connoisseur RC-70.

**Integrated amplifiers** – NAD C372, Flying Mole CA-S10.

**CD player** – NAD C542.

**Interconnects** – AudioQuest Copperhead.

One of the defining sonic characteristics of the '400xi was its ability at reproducing a credible soundstage. In this regard, it is one of the best integrated amps I've heard. I discovered this while listening to several live rock recordings. Observant readers will have noticed that I typically use a handful of live recordings for critical listening. There is good reason for doing this. High-end audio is about offering a window into the original performance. Re-creating sound to such an

**Speaker cables** – AudioQuest Type 4. exacting standard is a very difficult task, one that is more often than not poorly executed at some point in the audio chain. However, live performances are excellent reference points because most of us have heard live music. When I listen to such recordings I ask myself a simple question: "Am I there or not?" With the KAV-400xi, the answer was a resounding "YES!" Much of my time with the KAV-400xi was spent listening to rock'n'roll, so energetic was its presentation. On Pearl Jam's *Live on Two Legs* [Epic EK 69752], the band was spread across a wide stage and surrounded by the screams of adoring fans. Their presence was so well portrayed that I could imagine what it was like being in that audience, which is the goal of any piece of audio equipment.

This you-are-there-ness more was even apparent as I listened to Radiohead's *I Might Be Wrong* [EMI 7243 5 36616 2 5]. On "Everything in its Right Place," images were filled out and well defined. Thom Yorke's voice sounded huge, occupying the whole front of the stage and easily filling the room. Although the vocals weren't intended to sound realistic (obviously the human voice radiates from a single point, not a diffuse area of space), the effect is well suited to Radiohead's music, which conjures dense soundscapes not unlike those of Pink Floyd. With the '400xi, the music sounded full and had an excellent sense of depth and layering. As big as they were, images didn't blend together but remained distinct within their own discernible space. "Dollars and Cents" is interesting in that the tambourine is the focal point of the song, with guitars and drums falling in place behind and around. I've seen Radiohead several times, and I don't ever remember the tambourine sounding so prominent and central. However, the KAV-400xi wasn't to blame for this. It presented things as they were on the disc, for better or worse. In most cases, it was for the *much* better.

Another live album I played with the '400xi in my equipment rack was Alice In Chains' *Unplugged* [Sony Music B000002BM5]. "No Excuses" is a great track for showing off your hi-fi system. It features a big, three-dimensional soundstage and plenty of pop to the percussion, which sets a lively tempo to the song. As with the other live recordings, the KAV-400xi produced a wide wall of sound with good depth (are you starting to notice a theme yet?). Bass was crisp and quick, the sense of timing serving the energy of the piece very well. On "Got Me Wrong," a guitar starts playing on the right, and is soon joined by the drum kit located back of center and a second guitar on the left side of the stage. As singer Layne Staley comes in, his voice is centered, though not directly out front but rather set back a bit. As I listened to this song I was impressed that the music could sound so real, so present. The only thing I was missing was the matching DVD (it exists).

Switching to a trip-hop disc in the form of Massive Attack's 1997 album *Protection* [EMI 7243 8 39883 2 7], I found that the '400xi produced bass to the same high standard as its soundstaging. "Heat Miser" features the sound of a person breathing with the help of a respirator, while a simple bass line and piano play around this central image. A friend once said she found the song frightening, but I think it works very well. The material is dense enough to immerse the listener in a scene of his or her own creation. Bass was deep and well controlled, neither obscuring the piano nor the sound of the breathing. The piano added an air of mystery and suspense to the song, the notes sounding crisp, their decay easily audible.

One CD I bought several months ago and have spent a lot of time with is Mazzy Star's *So Tonight That I Might See* [EMI, B000002V07]. On "Five-String Serenade" the '400xi portrayed the acoustic guitar with a warm, full-bodied tone, while the tambourine shimmered believably behind the plane of the speakers. In this song Star's voice commands the most attention, her vocals spread out in front of the listener, adding greatly to the perception of space around her position. Similarly, on "Unreflected" the reverb of the drum and Star's lyrics produce a large almost cavernous space, painting another dark and expansive acoustic environment. This disc showed off everything that the KAV-400xi does well, which is just about everything, period.

## Comparison

I've discussed at length the impressive soundstaging abilities of the KAV-400xi. For me, this was the most notable of its sonic strengths, and the one I wrote about most frequently in my listening notes. Almost immediately, however, the KAV-400xi reminded me of a more detailed and open-sounding version of my NAD C372 (\$899). I don't say this to slight the Krell integrated, but it does warrant some explanation.

As I wrote in my review, the C372 performs very well in many areas, particularly when one considers how relatively inexpensive it is. However, as good as the NAD integrated is, the Krell is more sophisticated and betters it in many ways. On its own the C372 is a great integrated. However, switching between it and the '400xi, I found that the KAV-400xi sounded more open and could produce music that extended well beyond the boundaries of my speakers. Voices and instruments in that crucial midrange region were better separated spatially, and the bass was firmer, providing a more disciplined sound. The differences weren't subtle, nor would I expect them to be given the gap in their prices. Although it costs considerably more, the Krell KAV-400xi also has considerably more to offer and therefore easily justifies its asking price in relation to its less expensive competition.

Despite all the praise I've lavished on the '400xi, it's not perfect. As good as it sounds, it's not as refined as the Flying Mole CA-S10 (\$1795). I've never heard an integrated amplifier control the bass driver of a speaker as well as the CA-S10. That little digital wonder produced bass that was as tight as I think I'd hear at just about any price, and warmth or bloat didn't exist. Furthermore, the noise floor of the Flying Mole integrated leaves something to be desired in the Krell.

Taken on its own the '400xi certainly sounds detailed, but not as detailed as the CA-S10. The Krell integrated tends towards a slightly warmer sound, never straying into the sometimes-clinical realm of the CA-S10. The Flying Mole integrated is neutral and detailed to the point of being analytical, whereas the Krell actually sounds a touch loose in comparison, though always remaining musical.

Each of these integrated amps offer a unique sonic signature that I am convinced will appeal to a certain group of listeners. When I consider them all, the KAV-400xi offers the most complete performance, albeit at the highest price. Still, you get what you pay for with it.

## Conclusion

I had *fun* with the Krell KAV-400xi. Its sound was big and powerful, and I played plenty of live music with it because on those discs its sound was very present. This went a long way toward musical fulfillment. While I can't imagine anyone disliking this integrated amplifier, that doesn't mean I think everyone will love it. Some listeners may migrate toward a different sound -- one that's even more detailed, darker and sweeter -- but I think most will find aspects of the KAV-400xi they respect and even admire.

If you're looking to buy an integrated amplifier you can live with for a long time, you'd better add the KAV-400xi to your audition shortlist. This is an integrated that should keep that nasty upgrade bug away for some time. When the bug does bite, be sure you have deep pockets, because higher performance won't come cheap.

...*Philip Beaudette*

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**Krell KAV-400xi Integrated Amplifier**

**Price:** \$2500 USD.

**Warranty:** Five years parts and labor.

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