



READY TO RUMBLE – Audio Video Interiors

By Howard S. Caan – July/August 2003

James Loudspeaker's tiny but mighty subwoofer satisfies our lust for theatrics and sophisticated, musical bass.

I think we can all agree—from the humblest home theater in a box to the most extreme high-end extravaganza—subwoofers are indispensable. Not so long ago the best models were always chunky, obtrusive things but, thanks to a bunch of design breakthroughs, a new generation of downsized high performance models have proven themselves to be effective purveyors of home theater bombast. But, there's a big-but, most pint-sized boomers aren't all that musical.



Most small subs are as accurate as an Enron balance sheet. That's why I'm jazzed about this new sub from James Loudspeaker, the EMB-1000. It's equally adept at both music and home theater duty.

Since it's such a little thing, and it doesn't look all that different from legions of competing designs, I had to find out what's so special about this sub. I rang up the company to get some answers, and I wanted to know if there really is a James at James Loudspeaker. Well, there is, sort of. The company is named after its founder Jeffery (James) Coombs. I guess "Jeffery Loudspeaker" didn't sound right.

James, er-Jeffery, was out of town, so I spoke with Mike Park, James Loudspeaker's VP of R&D, about the inner workings of the EMB-1000. Park patiently explained that the sub's interior is divided into three sections: the rear-most compartment houses the amplifier and associated electronics, the airtight middle section is reserved for the active 10-inch driver sporting a massive 15-pound magnet, while the front proudly displays the 10-inch pneumatically coupled radiator. It's definitely more involved than your average sub. Those two 10-inch units work as a tag bass boosting team, and at certain frequencies the "pneumatically coupled" front mounted radiator produces greater excursion (driver movement) and thus more bass, than the powered driver itself! This arrangement lets the woofer loaf while the external passive radiator generates feel-it-in-your-gut deep bass. Very clever! Park claims this technique, dubbed the "Energy Multiplied Bandpass," reduces distortion while increasing output and impact.

When most of the better muscular baby subs easily pump out basso profundo, they also produce gobs of distortion and rely on correcting servos so they don't shake themselves into oblivion. Self-preservation is a laudable goal, but these circuits tend to flatten dynamics and muddy the sound. The wee James sub is so inherently stable it doesn't need protection devices and can still churn out deliciously turgid rumblings.

The passive radiator is a relatively heavy spun aluminum diaphragm and, beyond the advantages listed above, it eliminates any possibility of chuffing or wheezing noises endemic to ported subs. The cabinet and drivers are all made by James Loudspeaker; the 1000-watt amplifier (3000 watts on peaks) is built by a subcontractor, to James' specification. That extra-potent amp produces twice the output required for the EMB-1000 to reach full volume; even during heavy load conditions, the sub is just cruisin' (the electronics also provide gentle equalization required to reach ultra low 20 Hz region). The little guy is virile enough to fill 14 by 20 foot rooms; feel free to double up on subs in larger rooms.



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Build quality of the slightly larger than a cubic foot sub is satisfyingly robust; you can get yours in a classy piano black finish or black granite. In either case, gold hardware accents add a bit of contrast against the brushed metal baffle and spun aluminum radiator. As subwoofers go, it's a looker.

'Round back you'll find line-level inputs and outputs, as well as high-level metal binding posts that might be put to use in two channel systems. The EMB-1000 sports a variable 40-150 Hz low-pass crossover, but the direct input that bypasses said crossover will be the connection scheme of choice in most home theaters (your receiver or pre/pro's bass management will provide the necessary filtration). Once you park the 38- pound EMB- 1 000 in your home theater, hook-up and set-up chores should precede without a hitch.

My Integra DPS-7.2 DVD player, Sun fire Theater Grand III pre/pro and B&K AV6125 power amplifier rounded out the review system. I can't explain why, but my near full-range Dynaudio Contour 1. 3SE speakers' imaging and portrayal of space, even in stereo, was dramatically improved when the EMB-1000 was engaged.

I find that interesting-a great sub's contribution to the sound isn't just "more bass." No, for some reason my system's top to bottom transparency seems to improve when a great sub plumbs the depths and perfectly synchs up with the main speakers. The best subs add a sense of dimension and space lacking in all but the very best full range speakers. By carefully sculpting the lower extremities, the sound is more tactile, more palpable. And all of that good stuff isn't just for wham-bam special effects driven sci-fi or war extravaganzas-the James sub worked its magic on straight dramatic fare like Glengarry Glen Ross. That DVD is about as talky a film as you can get but, even there, the EMB-1000's presence was felt.

I next trotted out a bunch of great sounding DVDs, Fight Club, Moulin Rouge, and Pearl Harbor, and the EMB-1000's visceral bass practically massaged my toes!

On the Talking Heads' concert DVD, Stop Making Sense, the EMB-1000 easily delineated Tina Weymouth's throbbing bass lines from Chris Frantz' heavyweight kick drum. Sure, any halfway competent sub can deliver the weight, but most lack the finesse to let you really hear what's going on down there. The 1000's output is so clean and distinct; I'd go so far as to say it's the perfect combination of solid, tuneful, and deep.

Neil Young's Red Rocks Live DVD is a real torture test for subs-it's mixed with an overabundance of bottom end-so it's unusually thick-but the EMB-1000 was unperturbed and uncovered quite a bit of music down there, which added immeasurably to the realism of the sound.

The James' precision sound really came to the fore when I played some outstanding recordings of stand up bass. The EMB-1000 emitted not a scintilla of boom or bloat, but the primal growl, the sense of air moving inside a massive instrument the little powerhouse nailed it. Most of the time, I never even thought about the EMB-1000's contributions' and that's the way it should be, but when Charlie Mingus gets down, man, you feel it. With James Loudspeaker's amazingly talented EMB-1000, the baby sub has come of age. It can satisfy our lusts for home theatrics and sophisticated, musical bass like no other sub in its class. #