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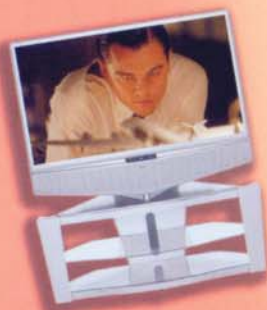
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MartinLogan Voyage and Legacy Harmony In-Wall Loudspeakers

High-performance in-wall loudspeakers from two of high-end audio's best brands.

Among the most promising new products heard at last January's Consumer Electronics Show was MartinLogan's new Voyage loudspeaker, which appeared to be a breakthrough in in-wall designs. I recently had the opportunity to take it and the Legacy Harmony for back-to-back test drives. The two speakers are similarly priced but the resemblance stops there. They are as different as can be while still belonging to the same genus.

As a test setup for these and several other in-walls still to be reviewed, I built a couple of freestanding bays from 2"x4" studs and half-inch sheetrock, imitating as nearly as possible the wall construction in typical American homes. Each bay measures 8' tall by 20.5" wide. For rigidity, I used double studs on all four sides of the frames, screwed them together every 12", and similarly secured sheetrock panels front and back. Twenty-four-inch horizontal supports on the bottom were fitted with screw-on plastic feet to protect our hardwood floors. To reduce boominess in the stud bays, I put a piece of fiberglass insulation in the top and bottom of each one. The internal volume of each bay is 4669 cubic inches, or 2.7 cubic feet, very much like a typical mid-sized column speaker. For testing, I used 25' runs of Red Rose 336 speaker cable to my Parasound Halo A 51 amplifier.

MartinLogan Voyage

The MartinLogan Voyage is a three-way loudspeaker with two 8" woofers, two "advanced thin film" (ATF) electromagnetic midrange drivers, and a center-mounted ATF tweeter in an

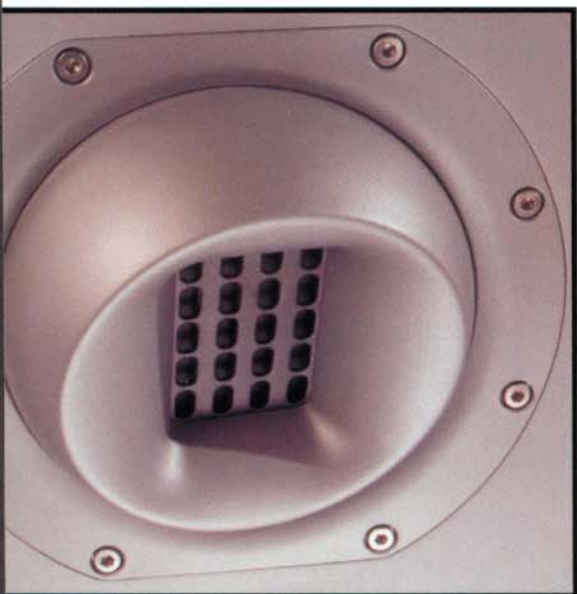
"eyeball" device that can be rotated 90 degrees and tilted 20 degrees in any direction. The Voyage can be mounted horizontally or vertically (used for left, right, or center channels) and comes with a flexible grille that slips easily into place.

The whole affair is finished in a high-tech silver gray and is designed to complement a 50"-or-larger flat-panel TV in a contemporary setting. The end caps can be removed for painting, and MartinLogan can supply grilles in many colors. This provides any number of ways to coordinate them with your wall color—matching, complementary, contrasting, or for the decoratively inventive, some bold tri-color scheme. I imagine that interior decorators will flock to this speaker because of its visual versatility. As delivered from the factory, it has a stunning high-tech look that elevates it to an architectural element—the opposite of the approach taken by most makers of in-wall speakers, who typically emphasize their products' ability to disappear. Even without its grille, the Voyage got a big thumbs-up from my mate.

The speaker is a breeze to install: Position the mounting template on the sheetrock, cut out a rectangle, connect the speaker wires, and push the whole assembly into place. At less than 26 pounds, each Voyage is easy to handle—truly a one-man operation. Its rigid one-piece construction is ingenuity itself. Once the speaker baffle abuts the sheetrock, all you have to do is tighten the "dogs" or mounting clamps with the supplied hex tool in a cordless drill at low torque. No need to over-tighten—when the dog bottoms out, your drill will slow down and stop. The baffle seats to the sheetrock and insures a leak-free seal.

Despite a caution from one MartinLogan exec that the Voyage might sound a bit "icy" until it had a chance to break in, I thought it sounded wonderful right out of the box: exceptionally clear and open, and dynamic as hell. The eyeball tweeters let you direct high frequencies at your listening position, a feature that enables an unprecedented degree of imaging precision. I would never have believed that in-walls could deliver imaging comparable to freestanding audiophile speakers, but the MartinLogans did this easily. The top end is open and phenomenally detailed, the midrange is clear and rich, and the bass is amazingly articulate.

Among the many pieces of music I enjoyed through the Voyage were Patty Smith's excellent cover of Prince's "When Doves Cry," on her two-disc compilation *Land (1975-2002)*, a recording with a dynamic, seductive bass line and powerful but intimate vocals. Similarly orchestrated, but with deeper bass, is "You Did" from San Francisco rocker Chuck Prophet on his CD *Age of Miracles*. In



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both cases every nuance was clear—including the microtonics of plucked bass strings. Few loudspeakers have that kind of resolving power.

I invited my friend Marc over to hear the MartinLogans—he had purchased them for the unfinished renovation of his attic—and he was amazed that the bass they were producing was all theirs. He swore that my James SG-10 subwoofer was on, and when I demonstrated that it wasn't, he was more eager than ever to get the construction done. Were the Voyage to be installed in a 2"x6" stud bay, with shear-wall construction (sheetrock over plywood)—in other words, in a larger resonant cavity with stiffer baffles—my guess is that its bass could reach subwoofer depths unaided. As it is, the Voyage goes deeper than any in-wall I've ever heard, and more dynamically, too. The gentle roll-off at its bass limit (-3dB point is 40Hz, according to the manufacturer) is the lowest I've ever encountered in an in-wall, and one that's perfectly respectable in most freestanding speakers. Using my 2"x4" mockups, blending in some subwoofer bass below 50Hz gave the room acoustic just the degree of low-end reinforcement it needed. With a powered sub, the MartinLogan Voyage is capable of near-world-class performance.

Layering of instrumentals was likewise phenomenal—"multidimensional" is not too strong an adjective. A great recording to reveal this is *The Songs of West Side Story*, the 1996 Grammy production. Selena's "A Boy Like That" had a reach-out-and-grab-you rhythmic intensity, and in Natalie Cole, Patti LaBelle, and Sheila E.'s joint contribution, "America," the slow buildup from simple vocals to full-scale roof-rattling gospel was as exhilarating an audio experience as any I've had in a long, long time.

Superb performance with music would imply superb performance with

movies, and I wasn't disappointed here, either. *Star Trek: Nemesis* was delivered with earthshaking effects intact, as was the hilarious space spoof *Galaxy Quest*. The Voyage was equally adept with less demanding material. The dialogue of *Being Julia*, the wonderful theater-insider tale of a burned-out actress who finds new life in an affair with a much younger man, came through with every breathy detail as clear and memorable as if it were whispered in my ear.

Many loudspeakers sound their best at moderately loud volume—too low and they don't have the right tonal balance, too loud, and they start to screech. The MartinLogan Voyage sounded perfectly balanced at every notch on the volume knob, from let's-talk-over-the-background-music to earsplitting THX levels. There aren't many speakers that can do that, just as there aren't many that offer the Voyage's combination of versatility, musicality, clarity, and dynamics.

At \$1995 each, the speaker isn't cheap, especially by in-wall standards, but by every measure of performance it so clearly outdistances the competition that it's in a class of its own. MartinLogan has an undisputed winner in the Voyage. As a product category, in-wall speakers have enjoyed huge improvements in recent years, driven by the home-theater boom in general and by the popularity of flat-panel TVs in particular. Many of them are quite good, but in my opinion, MartinLogan's Voyage is the new standard by which others must be judged.

Legacy Harmony

Legacy Audio's Harmony is a unique riff on the in-wall theme. Large and imposing, the Harmony has a three-way driver array—1" dome tweeter, twin 4" midranges, and 12" woofer



Mounting clamp for MartinLogan Voyage

aided by a 12" passive radiator, all of them mounted on the front baffle of a sealed box that fits almost rail-to-rail between studs in a standard wall.

With the grille in place, the front of the cabinet protrudes more than 3.5" off the surface of the wall, making this loudspeaker as much an on-wall as an in-wall. The sealed box insures consistent performance regardless of conditions inside the wall—insulation, cross-blocking, and other unpredictable structural anomalies that could compromise the performance of an open-back design. The visible portion of the cabinet features Legacy's signature fine wood craftsmanship—an oak baffle with perfectly-fitted top and bottom trim, contrasting fluted sidepieces, and a carved wooden flange surrounding the tweeter. The company offers the speaker in many different finishes, some at premium prices.

Installing the Harmony requires a cutout 38.5" high by 14" wide. I made my cutouts slightly larger to allow a bit of wiggle room in slipping the speakers into place. The installation kit includes two pre-drilled wooden blocks, six screws, a few cardboard spacers, and a structural drawing to show you how the speaker should be secured. Once the blocks are in place, you attach your speaker wires to the five-way binding posts at the bottom of the speaker, throw the adjacent impedance switch to match your amplifier, and slide the whole cabinet into place. It hangs on the blocks and is secured by two screws driven in from the front. At 56 pounds, the Harmony isn't excessively heavy, but its cumbersome shape and lack of handholds makes installing it a two-



person operation. One healthy person can do it, but there's a risk of dropping it, and believe me, you wouldn't want one of these landing on your foot. Nor would you want to damage the ornate woodwork.

The speaker's appearance, like that of most Legacy products, is an homage to fine cabinet building. In direct contrast to the Voyage's light airy look, the Harmony is ponderous. The look is intentionally at odds with contemporary décor but would work well in traditional settings or in home theaters with plenty of dark wood and heavy fabrics. I greatly admire the skills of Legacy's craftsmen, whose products often call to mind the AM radios of the 1930s.

The Harmony's midrange drivers are mounted so they touch in the center, with the tweeter nestled above them. The active woofer is above this assembly, and the passive radiator below. When used for music, the Harmony has a mellow, diffuse sound, less focused than the Voyage, but with seamless integration of the midrange and high frequencies. Its presentation of vocals, woodwinds, and strings is lovely and natural sounding; the soundstage as wide as Texas.


Although I can't know for sure without disassembling one, I guess-

timated that the Harmony's interior volume is somewhere in the neighborhood of 3190 cubic inches, or approximately 1.8 cubic feet—a rather small volume to support a 12" woofer. That the speaker is capable of low bass at all is somewhat a wonder, but it does get down there. Bass generated by the Harmony feels warm and substantial—visceral, sometimes—but lacks speed, articulation, and finesse. With music recordings, the Harmony didn't offer the fine distinctions between bass notes that the Voyage presented so clearly. A feeling of muddiness pervaded everything from the midbass down, and there was some difficult-to-define disconnect between the bass octaves and the midrange, regardless of the type of music played.

On the other hand, it was quite satisfying with movies, which I believe was the intention of its designers. In the delightful film *The Wedding Singer*, which is full of music and musical effects—several scenes involve characters talking while bass-heavy pop music plays—the Harmony did an excellent job of sustaining the background reality while offering the dialogue in bold relief. And with a sensitivity of 91dB (meaning it's easy for an amplifier to drive), the Harmony is capable of wall-shaking sound-pres-

AUDIO REVIEW

sure levels. Some of the sonic effects in *28 Days Later*, for example, are so dynamic they can jolt you from your seat. The Harmony did so, while revealing layers in the soundtrack.

The Harmony's less-than-state-of-the-art bass capabilities won't bother many potential buyers, especially those who value low-end palpability over articulation. It has many other redeeming qualities that make it a good choice. Its smooth upper-frequency response is pleasant and non-fatiguing, and the look is perfect if you've got a Montana ranch house full of slate and stone, heavy timbers, and handcrafted artifacts. A place like that is the Harmony's natural environment. 

SPECIFICATIONS

Voyage

Frequency Response: 40Hz–20kHz ±3dB

Sensitivity: 91dB/2.83 volts/meter (mounted on wall)

Impedance: 5 ohms

Driver complement: Two 8" woofers, two 1.5" x 6" ATF midrange transducers, one 1.5" x 2.25" tweeter

Weight: 25.5 lbs. each (11.6 kg)

Harmony

Frequency response: 38Hz–25kHz

Impedance: 4 ohms

Sensitivity: 91dB

Driver complement: One 1" silk-dome dual-diaphragm tweeter, two 5.25" Kevlite TI cast-frame midwoofers, one 12" carbon-reinforced pulp woofer, one 12" passive radiator

Dimensions: 40.75" x 16.25" x 6"

Weight: 54 lbs. each

MANUFACTURER INFORMATION

MARTINLOGAN

2101 Delaware Street

Lawrence, Kansas 66046

(785) 749-0133

martinlogan.com

Price: \$1995 each

LEGACY AUDIO

PO Box 36

Macungie, Pennsylvania 18062

(800) 283-4644

legacy-audio.com

Price: \$1800 each in standard finish; \$1900 each in premium finishes. (The Harmony center channel is priced the same as the left/right pair.)