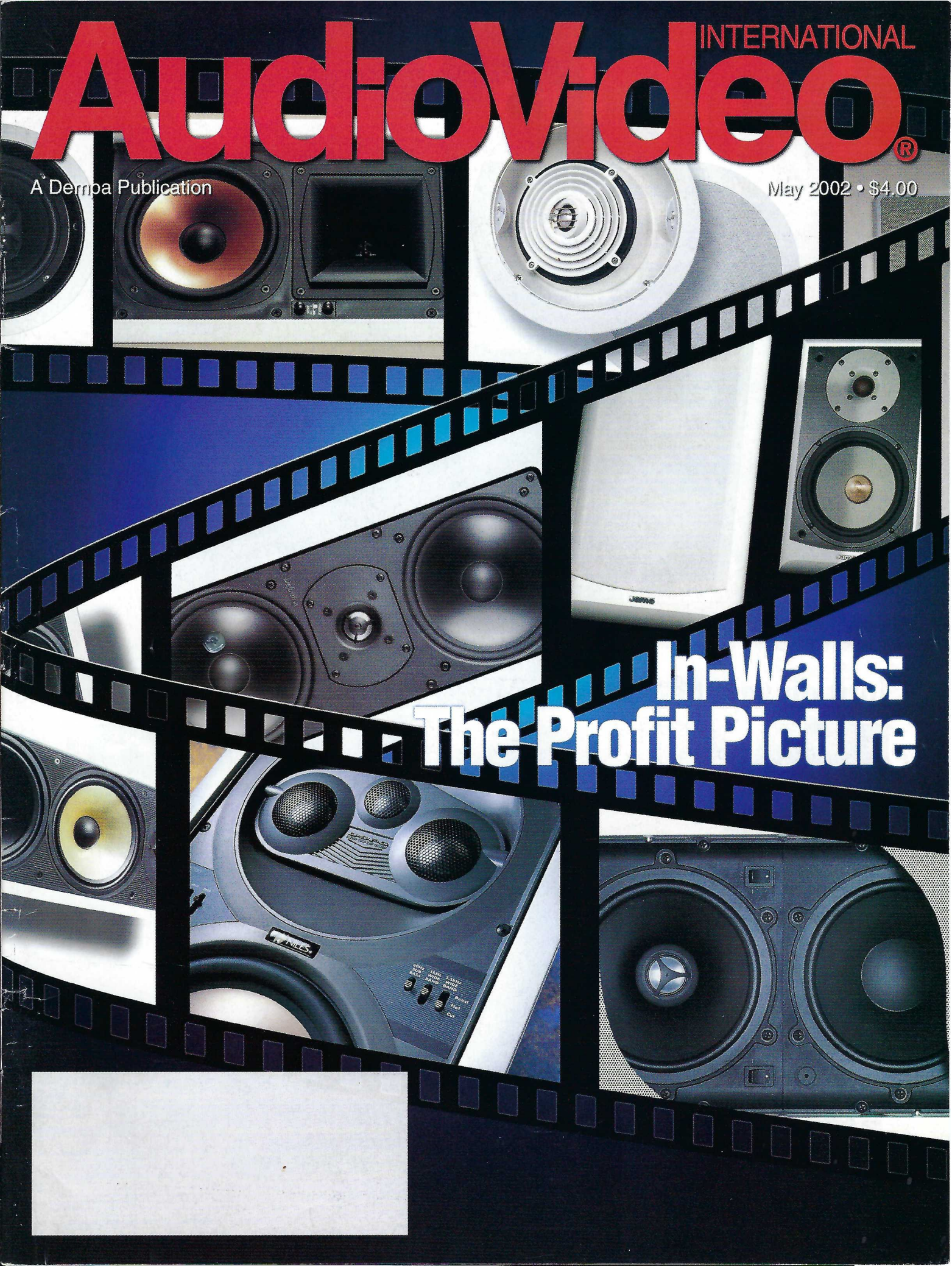


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In-Walls: The Profit Picture



IN-WALLS: 'HIDDEN' PROFITS IN PLAIN SIGHT

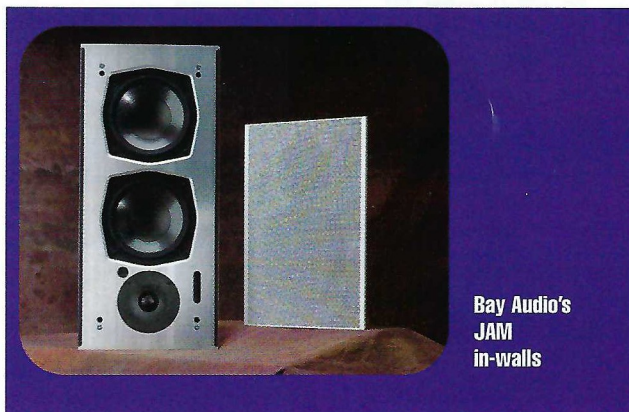
Constant technology improvements making their way into in-wall and in-ceiling speakers lead to sound opportunities for dealers & custom installers

by Micah Sheveloff

One of the hottest product categories in the consumer electronics realm is the discreet in-wall speaker system. Consumers love the fact that these products all but disappear into their sheet rock or ceiling tiles; however, the category has presented a host of challenges to loudspeaker designers who seek to deliver great sound along with the practicality of the flush-mount solution. Research and development has led to substantial improvements in the performance capabilities of the in-wall design, and a group of respected manufacturers have agreed to share their thoughts on the current state of the art.

IRA FRIEDMAN, BAY AUDIO

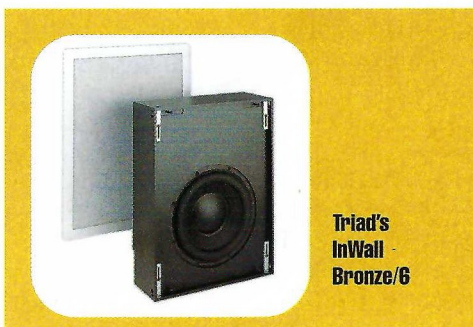
One of the best ways [for retailers] to move out of the fray and distinguish their businesses from the competition is to migrate toward a higher-performance offering. The greatest gain in system performance will come from the speakers, so start by spec'ing a more expensive product than usual. That means in-wall speakers above \$500/pair. High-end speakers should be matched with appropriate electronics, so moving up to a better-quality



speaker requires a better-quality distributed audio system. A system that performs better will generate more referrals. If a dealer consistently undersells performance (as a way to keep system prices low and capture the bid), he can be sure that those referrals will be for lower-price-oriented, budget-conscious customers, making it difficult to move his business up. Tomorrow's referral is a reflection of today's customer.

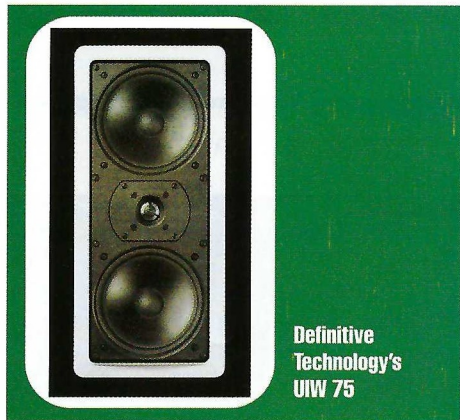
LARRY PEXTON, TRIAD SPEAKERS

Most dealers undersell their clients when specifying in-wall speakers. Considering the total cost of whole-house audio, the [additional expense] of using a [better-quality speaker] with a sealed enclosure is a relatively small percentage of the overall job cost. The benefits for your clients (and for the quality of your referrals) are disproportionately large. In most cases, traditional [unenclosed] in-wall speakers create a back wave that will bleed through the rear wall and into the adjoining rooms, irritating your clients.



SANDY GROSS, DEFINITIVE TECHNOLOGY

There is a significant group of consumers who want upscale performance in an in-wall format and are willing to pay for it, if the quality is properly demonstrated. Although there are some excellent in-wall products available today, not all perform sonically equal to their cost. I feel strongly that

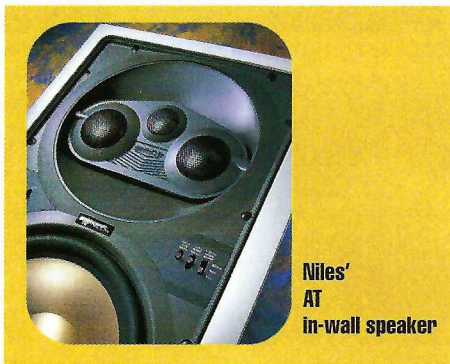


Definitive Technology's UIW 75

provide the same sound quality as our line of home speakers.

AL BURDETT, NILES AUDIO

Now that in-wall and in-ceiling loudspeakers are the norm rather than the exception for distributed home entertainment systems, it is natural that the demand for higher performance has also increased. Capitalizing on these trends, savvy retailers

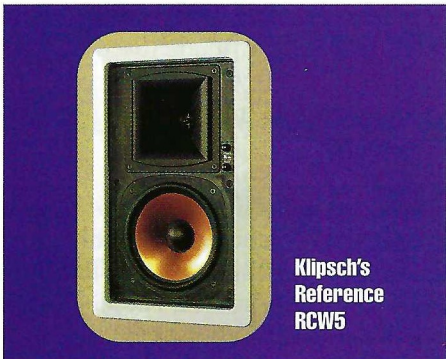


Niles' AT in-wall speaker

[should] recognize that the same opportunity to step up a customer in the traditional box speaker [category] also exists with in-wall and in-ceiling loudspeakers. Niles has adopted an application-specific design philosophy; engineering a solution that overcomes the inherent challenges of flush-mount installations and allows the installer to configure the sound specifically for a [particular] location or environment. Today, the true measure of a high-performance speaker is how it performs after it has been installed, which, consequently, is how the listener will judge the value of his or her purchase.

DAVE RUTZ, KLIPSCH

Retailers will lend credibility to themselves by selling good sound quality in-the-wall. That quality may be a solid platform to move from the distributed audio sale and introduce the consumer to the idea of home theater speakers. Illustrating the value of a step-up loudspeaker prevents everything



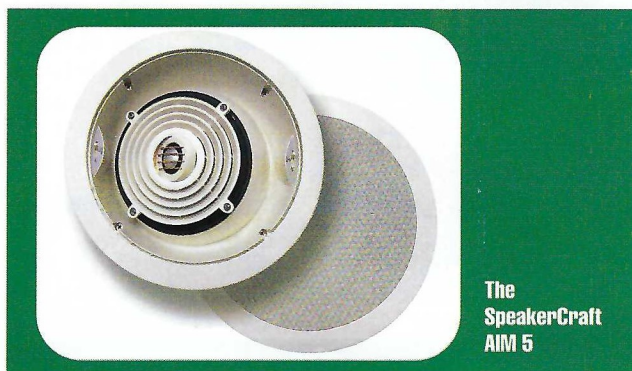
Klipsch's Reference RCW5

both retailers and consumers should evaluate these speakers based on sonic performance. We offer both forward radiating and bipolar designs of in-wall loudspeakers that were designed to provide

from becoming just another appliance to the customer. Our research has shown that the installers do the wiring and the distributed audio, but often fail to close the home theater sale, losing out to the local hi-fi shop. We suggest that you build on the consistency of the Klipsch brand, emphasizing that the consumer should have Klipsch quality throughout the entire home, including in a home theater system.

JEREMY BURKHARDT, SPEAKERCRAFT

Since [we see that] in-ceiling speakers far outsell in-wall speakers, Speakercraft has focused its core development re-



The SpeakerCraft AIM 5

sources on AIM, a pivoting woofer and tweeter in-ceiling speaker system. AIM allows the installer to pivot the woofer and tweeter toward the listening area. This is ideal for home theater applications because the television is rarely in the center of the room. By using the ceiling as a sounding board, consumers need not worry about taking up valuable floor space, like they would with box-type speakers. AIM can pivot 360 degrees at a 30-degree angle, providing sound to a much greater area than traditional ceiling speakers that are directed straight down.

PETER HOAGLAND, OSCAR CIORNEI, RUSSOUND

We want to provide our dealers with whole Russound system packages, and as a result, our speaker sales have more than doubled this year over last. We have committed considerable resources going forward to develop this important category. Our dealer/installers look for unique features that differentiate our product from conventional speakers. Our two-way concentric design not only produces a great image, it also reduces the overall footprint of the speaker, making it less obtrusive. Another critical aspect of better-quality custom speakers is ease of installation, which, of course, saves time and money. Our engineers take great pains at the earliest design stages to research how we can



Russound's SP652.1

make our speakers as simple as possible to install, as it ultimately becomes an important selling feature.

PAUL MADSEN, CANTON

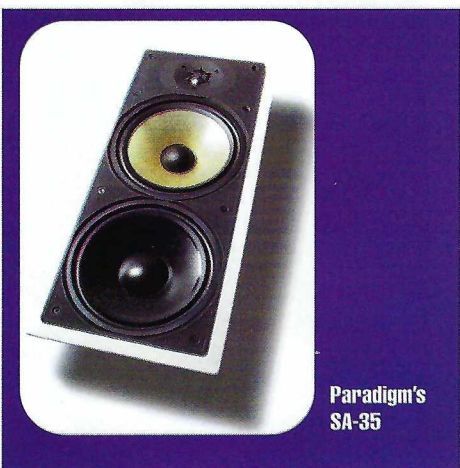


Canton's
Ergo 180

Canton loudspeakers are made in Germany, about an hour North of Frankfurt. Their in-wall speakers are engineered to sonically match their corresponding series of box-type loudspeakers, and the in-wall

versions are considered strictly an extension of their enclosed speaker line. I have observed that the consumer's trust in the installer or integrator is the key component that leads to a step-up speaker sale. Often, that trust is earned through word-of-mouth referrals, and once earned, the customer is likely to buy whatever the installer recommends. Step-up in-wall speakers make sense to the Canton customer, who is already shopping for a better-quality loudspeaker.

MARK ALING, JACK SHAFTON, PARADIGM



Paradigm's
SA-35

In-wall speakers used to be a compromise product that simply brought sound into the room in a distributed system. The focus was not on performance. Now, we engineer our in-wall speakers to sound like

their bookshelf counterparts. We compare the two using the double-blind testing technique, in order to be certain that the in-wall designs match the performance of our bookshelf speakers. Our current line features 14 different models of in-wall loudspeaker, and it appears that the days of invisible audio/video displays in dealer showrooms are finally here. Our dealers who have embraced this concept have seen both an increase in consumer interest and sales volume because many customers are seeing and hearing this technology for the first time, not relying on their imagination in order to decide if these products are right for them.

PETER TRIBEMAN, ATLANTIC TECHNOLOGY

There certainly are lots of options for the consumer within the in-wall speaker category. Our objective was to produce



Atlantic
Technology's
in-wall
THX speaker
system

a better-sounding product that offered invisibility and performance, and was also installer-friendly. The single most important thing, if possible, is to bring the "couple," who is shopping for a system, into a demo room together. The salesperson then has the opportunity to point out both the outstanding performance and the invisibility of the system simultaneously, driving home the impact of the step-up speakers. The objective is to elicit an emotional response from the customer, which cannot be done by looking over a catalog.

PETER WELLIKOFF, B&W



B&W's
Signature
7NT

Consumers desire a superior in-wall speaker product, and they expect to spend premium dollars to get it. Along with the increase in cost, they want performance

equaling or exceeding their expectations. In-wall speakers are only hindered by a legacy of early products that were lower-end or converted car speakers. Now, in-wall speakers have a high level of performance, integration and elegance. Retailers who do not offer this step-up category are missing the boat.

DAVID SMITH, SNELL

Our goal was to find a way to adopt a home audiophile speaker to the in-wall format. It is our belief at Snell that there is a substantial consumer demand for a higher-end invisible speaker, especially with the interior decorator having a more prominent role in the layout of many of today's expensive homes. In terms of product cost, I think that the sky's the limit, as long as we can justify the increase in performance of the in-wall

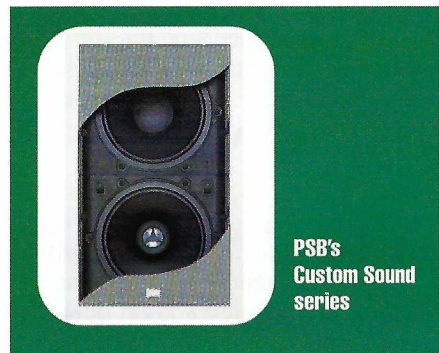


Snell's
AMC700

format. We also realize the importance of making our speakers installer-friendly, because often, it is the installer's recommendation that is the key to a successful sale.

JIM PRICE, PSB

I see retailers who really need to do a better job of displaying

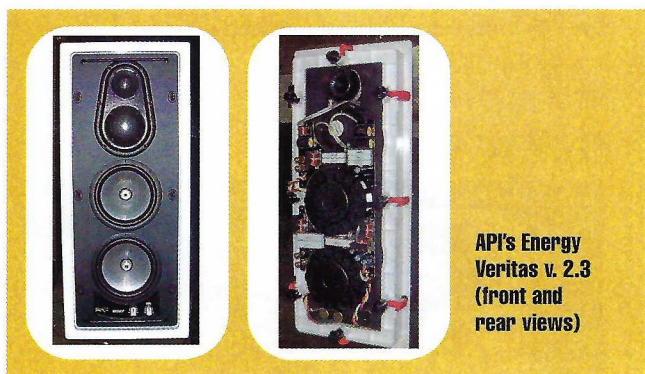


PSB's
Custom Sound
series

ing the in-wall category, so that consumers can hear them side by side and realize the sonic benefits of spending more money on a step-up product. PSB dedicates training efforts to both the sales and installation personnel at our dealers. The installers learn about optimum placement for in-wall speakers and how best to install them. The salespeople are trained to appreciate the sonic characteristics and feature benefits of the PSB line. Our intention was to engineer something that would truly stand out in the marketplace due to its sound quality and value. The PSB in-walls are designed to work with the vertical column of air found in a wall space. Paul Barton did extensive research in Canada's National Research Council, an R&D facility in Ottawa. It was a long-term project that required many months of dedication.

KEVIN GABRIEL, API (MIRAGE, ENERGY)

In-wall speakers are a huge part of the custom installation and distributed-audio market. Our new flagship in-wall designs in both the Energy and Mirage lines should have reached our dealers by late summer. They will employ MDF baffles and special mechanical vibration stoppers to improve both overall sound quality and bass response. Consumers want to maintain a high level of performance without having to use an intrusive box speaker. We believe that

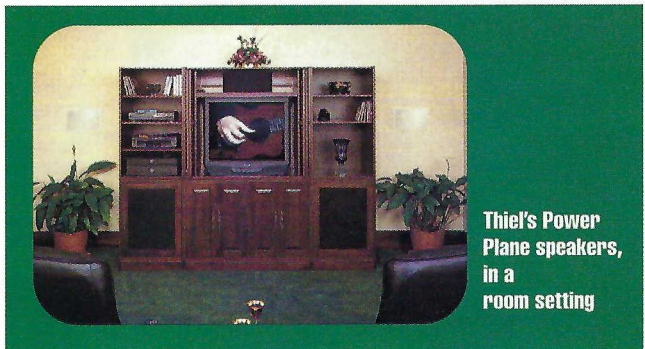


API's Energy
Veritas v. 2.3
(front and
rear views)

it is vitally important for the retailer to demonstrate our in-wall speakers and our box speakers together, so that they can do A/B comparisons for the customer. This will assure them that they can realize the same sound quality by utilizing a pair of in-wall speakers for the rear channels in a surround system that they would have gotten by using enclosed speakers. These Mirage and Energy in-wall loudspeakers have been engineered to sonically match their respective box-speaker counterparts. Retailers should be creative about displaying in-wall speakers and remember that they can be installed almost anywhere in the store. Using in-store wall space effectively can save them real estate throughout the rest of the showroom.

KATHY GORNIK, THIEL AUDIO

There are many dealers doing upscale installations that in-

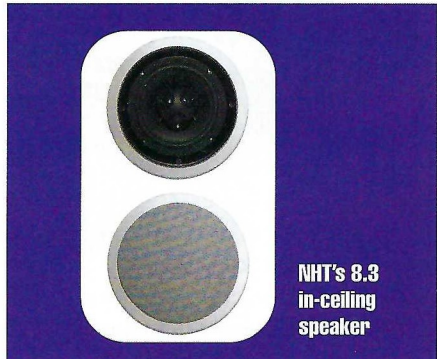


Thiel's Power
Plane speakers,
in a
room setting

clude such costly components as a 50" plasma display who are not necessarily installing high-end speakers to go along with the system. The step-up speakers are often the forgotten piece of the puzzle, because it was only a short time ago that there were not many high-performance options available in the category. A big step for Thiel was when Jim [Thiel] was able to overcome the technical problems that plagued the in-wall design. The entire in-wall assembly is engineered to mount to the studs, not to the actual wall material, so as to reduce the transfer of acoustic energy into the wall that could cause audible distortion. The coaxially mounted woofer and tweeter ensure that all listeners hear time-correct reproduction regardless of their listening posi-

tion. The fully enclosed cabinet and the phase and time coherent design provide the consumer with a truly high-end alternative to a floor-standing speaker.

CHRIS BYRNE, NHT

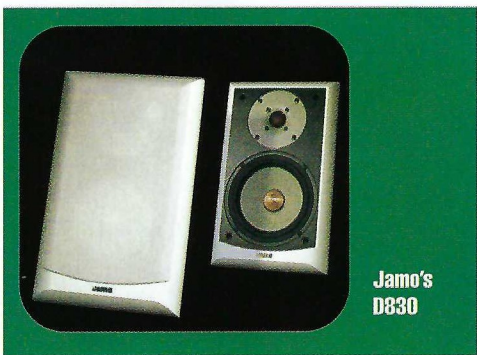


**NHT's 8.3
in-ceiling
speaker**

It is clear to us that both in-wall and in-ceiling designs require extensive development in order to achieve a higher-end product. Extra attention must be paid to the acoustical and

mechanical characteristics of the speakers, requiring additional development time for special drivers that will work correctly in a wall environment. It is paramount that the potential for vibrations is addressed, and there must be isolation between the speaker and what it is attached to so that it stays quiet when in use. In-ceiling speakers go through the same kind of rigorous development. Our three-tweeter array is not an inexpensive component to manufacture; however, it addresses the problem of directionality caused by mounting a speaker overhead.

HELGE FISCHER, JAMO



**Jamo's
D830**

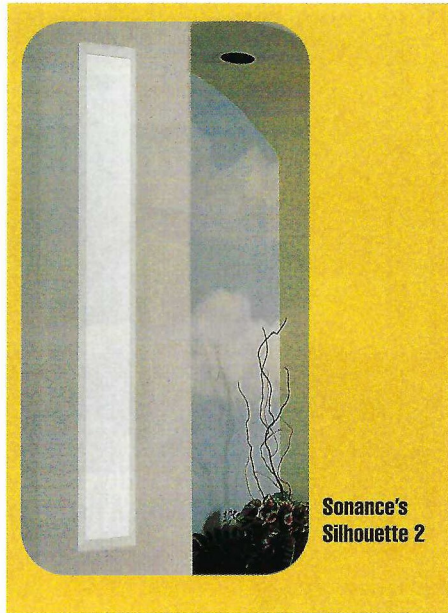
We have created a sales tool for both consumers and salespeople called Custom Guide, which uses a four-step barometer to help assess the customer's

needs. Just as better enclosed speakers make a conventional sound system better, step-up in-wall speakers have the same effect and added value to the consumer. The Custom Guide helps take some of the mystery and fear out of the process for the customer. The Guide even explains the basics of the custom installation process, and highlights the many options that even the salesperson might overlook. Jamo offers four levels of speakers, and the Guide helps consumers decide for themselves where in the home that they might want the best-quality components.

MITCH WITTEN, SONANCE

Retailers are setting up demo facilities so that they can illustrate what the in-wall experience might be like for customers in their own homes. Most consumers associate in-

wall or in-ceiling speakers with background music in restaurants or with announcements in airports. They have never heard a truly high-performance, flush-mount speaker. Sonance does dealer training both in our facility and on site for the retailer, providing technical guidance and placement suggestions as well as sales instruction. Through engineering, Sonance has been able to design an in-wall speaker that will satisfy the most discriminating audiophile and the most particular interior designer, without compromise to either. Sonance in-wall speakers are perfect for both stereo and multi-channel playback applications.



**Sonance's
Silhouette 2**

ELI HARARY, INFINITY

We found that there was a demand for high-performance in-wall speakers for rear-channel theater applications. Our engineers began with a fundamentally flawed concept (the in-wall speaker design) and applied a great deal of engineering in order to address three primary issues: 1) Listeners are very often off-axis from the speakers, so Infinity created the Listening Window Selector that pro-



**Infinity's
CAS 2.1
(far left)
& 3.1**

vides on-axis response at up to 30 degrees off-axis from the loudspeaker; 2) The baffle for both models of Infinity in-walls rides on a suspension system, significantly reducing the transfer of energy from the speaker to the wall; 3) Infinity engineers greatly reduced diffractions by moving the drivers just forward of the wall material. The speakers are mounted in a baffle constructed of Norel, a GE plastic that, although costly, has a very high damping factor.