

In-Wall Subwoofer Roundup

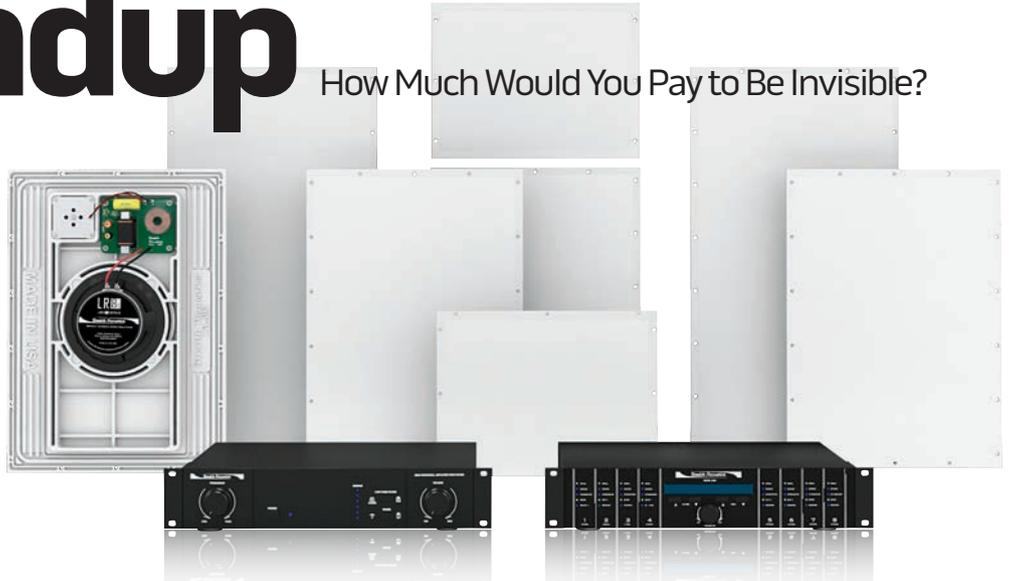
How Much Would You Pay to Be Invisible?

By Darryl Wilkinson



POWERED subwoofers are needy beasts. They need electricity. They need cables. Perhaps worst of all, they also need floor space—but not just any floor space. In order to sound best, subwoofers often demand real estate in the room that is inconvenient, at best, or simply impossible to live with. And, honestly, the looks of most subwoofers range from bland to butt-ugly. Wireless subwoofers and wireless add-on kits eliminate the signal cables, but the issues of power cords, proper placement, and drab décor remain. These are not endearing attributes.

An architectural (e.g., in-wall, in-ceiling, or even in-floor) subwoofer, on the other hand, does away with those pesky ergonomic problems of in-room subwoofers. The wires, for example, are hidden in the wall. Unlike in-room subwoofers, an architectural sub's amplifier is typically located with the other A/V gear in the system, so



the power cord and audio cables are out of sight, as well. Most importantly, an in-wall/-ceiling subwoofer takes up absolutely no floor space—and, depending on the subwoofer, is no more noticeable than an average speaker grille on the wall. In a few special cases, the entire surface of the subwoofer can be painted or wallpapered to become totally invisible.

Yet, to paraphrase an old adage, the road to audio hell is paved with

poor implementations. Architectural subwoofers are hard to do right for a number of reasons, not the least of which are dimensional constraints and wall-resonance issues. As a result, you don't find tons of them on the market. Good ones do exist, however, so we've rounded up a trio of architectural subwoofers to give them a run for the money. But we didn't take the easy way out and just lean the cabinets up against the wall to audition them. That's not how

they'd be used—or ultimately sound—in an actual home installation. So editor Rob Sabin had me sharpen my drywall knife, open up a few walls in my house, and try to get an honest-to-goodness, real-world experience with each one. It turns out that you can make a powered subwoofer disappear—for a price—but there are some trade-offs to consider before cloaking one of the most important components in your theater system.



Equal but Opposite

By Darryl Wilkinson

Sunfire HRS-IW8 In-Wall Subwoofer and Amp

PRICE \$1,700

SUNFIRE IS NO STRANGER TO the small-box, high-output subwoofer concept, dating all the way back to 1996 with company founder Bob Carver's original True Subwoofer—an 11.5-inch cube with one active driver and one passive radiator powered by a (claimed) 2,700-watt internal amplifier. A couple of years ago, the company rejiggered the configuration, moved the amp to a separate chassis, and put two 10-inch woofers in a 4-inch-deep box that would fit in a standard wall. To prevent the SubRosa SRS-210W from shaking the crap out of the wall it was hiding in, Sunfire borrowed the Third Law of Motion from Isaac Newton (don't worry, he won't miss it) and installed an "IBEAM device" inside the subwoofer cabinet that creates an equal but opposite force to cancel the mechanical vibrations that would normally be transferred to the cabinet when the drivers move. This is the essence of Sunfire's StillBass technology.

The HRS-IW8 is a junior version of the SubRosa described above. The

AT A GLANCE

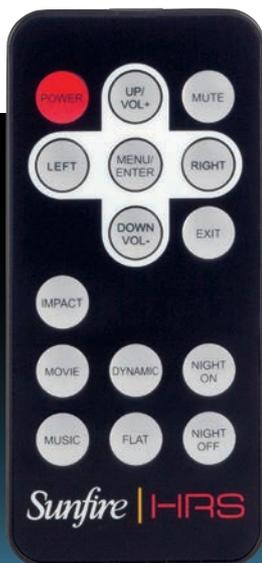
-  **Plus**
-  **Stillbass anti-shake technology**
-  **520-watt amplifier with DSP equalization**
-  **Minus**
-  **Flangeless grille looks less than elegant**
-  **Output drops off fast below 30 Hz**

HRS-IW8's 24.63 x 12.13 x 3.75-inch cabinet also easily fits (vertically) in a standard stud wall, but the sub's cabinet contains a pair of smaller, 8-inch, active woofers powered by an external 520-watt amplifier. (Although the HRS-IW8 system normally ships as a one-amp/one-sub package, the HRS-IW8 amplifier is somewhat unusual in

that it can drive up to two HRS-IW8 woofer cabinets.) The system comes

with a small, credit-card-size, IR remote control that provides access to the five preprogrammed EQ presets, sub volume level, night mode on/off, and other menu functions. The amplifier's chassis is thin (1.75 inches high) with a beautifully simple and elegant faceplate that sports a small

backlit display, a round control knob, and a power button. Its built-in system integration capabilities are very basic and limited to an external IR receiver input and one 12-volt trigger input. Sunfire claims a frequency response of 33 to 150 hertz for a single HRS-IW8 and amp.



THE VERDICT

A solid, albeit pricey, choice for an in-wall sub.

SUNFIRE HRS-IW8 IN-WALL SUBWOOFER AND AMO

PRICE: \$1,700

Sunfire • (760) 710-0993 • sunfire.com

Face-Off

The HRS-IW8 subwoofer cabinet is straightforward to install and uses six dog-ear-style clamps (three on each side) to secure the cabinet to the wallboard. There's a shallow channel wire running from top to bottom on the backside of the cabinet. Sunfire says that, in addition to conveniently providing a bit of room for the speaker wire, the channel helps support the weight of the wire and keeps it from pulling on the binding posts. The build quality of both the woofer cabinet and the amplifier is top-notch, and the 12 small magnets on the inside of the metal grille maintain a near-death-grip hold on the face of the cabinet. The flangeless grille, however, sits on the surface of the wall and juts out nearly three-eighths of

an inch into the room. The lack of a flange makes the transition from wall to grille more noticeable, and that, combined with the grille's relatively large perforations, makes it look a bit less sophisticated than it actually is. Setting up the amp's minimal number of programmable parameters is quite fast and easy.

Putting the Hammer Down

There's no doubt that the Sunfire HRS-IW8 is an attention-getter. It had plenty of kick that easily filled my 12 x 24-foot theater room, and the Music mode EQ setting added a nice emphasis in the lower bass region that pleasantly warmed up Dire Strait's old classic "Telegraph Road." It was also quite impressive with heavy-hitting movie scenes, such as the encounter Thor has initially with Iron Man and then Captain America in *The Avengers*, especially when Thor puts the hammer down on Captain America's shield. As with just about any in-wall subwoofer, however, it's not a match for an equivalently priced in-room sub, such as the \$1,800 Legacy Audio Metro sub I recently fell in love with.

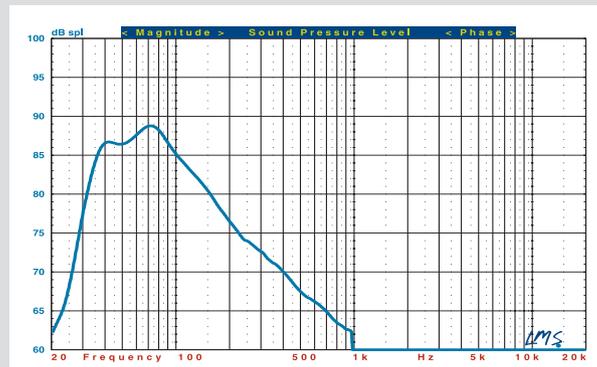
While it's a highly respectable architectural subwoofer, there were several drawbacks I found with the Sunfire HRS-IW8, foremost of which is the lack of substantial output below 30 Hz. (Despite the fact that Sunfire rates the HRS-IW8 down to 33 Hz, with the sub installed in the wall near a corner in the front of my theater room, the HRS-IW8 actually

got down to 30 Hz before rapidly tailing off.) Another issue is the amplifier's lack of extensive EQ customization or system integration features. Since so many AVRs and pre/pros now include high-performance acoustic correction capabilities, though, this is probably

a minor issue. The last concern, as I've previously mentioned, is the clunky-looking grille. Even with those caveats, the Sunfire HRS-IW8 certainly remains a good choice for most theater rooms needing a hidden subwoofer, albeit a bit pricey.

Test Bench

Sunfire HRS-IW8 Subwoofer



This graph shows the quasi-anechoic (employing close-miking of all woofers) frequency response of the HRS-IW8 subwoofer (blue trace). The HRS-IW8's close-miked response, normalized to the level at 80 hertz, indicates that the lower -3-decibel point is at 37 Hz and the -6-dB point is at 33 Hz. The upper -3-dB point is at 100 Hz with LFE mode engaged and EQ set to Flat. — MJP

SPECS **HRSIW8 Subwoofer** 8 in fiberglass woofer; 520 watts RMS; sealed enclosure; line-level in, XLR (2), RCA (2); 12.1 x 24.6 x 3.8 in; 27.5 lb. **HRSIW8 Amp** 17 x 11.25 x 1.75 in; 17.6 lbs

