

# Third Tower's a Charmer

By Darryl Wilkinson

## GoldenEar Technology Triton Seven Speaker System

**PRICE \$3,594**

**IT BEGINS** WITH A FAIRY TALE (OF sorts). Once upon a time (say, around 2013), a little company named GoldenEar made three bears—no, sorry, three tower speakers. The first speaker was tall and big with a deep, deep voice. But it was too big and too expensive for a hungry little girl roaming the forest—no, I mean, for some of the people shopping through a forest of tower speakers at the A/V store. The second tower was shorter and a bit smaller. Its voice was deep, too, but not quite as much as the papa tower's voice. Sadly, it was also too big to fit comfortably in some people's rooms, and still too big for some of their budgets. Then GoldenEar made a third tower speaker, even shorter and less expensive, and this speaker was... Well, that's what we're here to find out, isn't it?

GoldenEar Technology's Triton Seven towers are the third and latest addition to the company's

**AT A GLANCE****+** Plus

- Deep bass extension from dual passive radiators
- Remarkably full midrange
- Rearward rake with non-parallel front and rear baffles

**-** Minus

- You'll need to find a new home for your current speakers

Triton series. In some respects, they're the most anticipated, too. Previously, the ticket price for the least expensive critically acclaimed Triton tower, the Triton Three, was \$2,000 per pair. So when GoldenEar's co-founder Sandy Gross began hinting about a new, lower-priced Triton tower, audiophile ears everywhere perked up.

**That New-Speaker Smell**

I was fortunate enough to get my hands on one of the very first pairs of Triton Sevens to see the light of day—they still had that wonderful new-speaker smell—along with an equally fresh sample of GoldenEar's new center-channel speaker, the SCX. To complete the system, GoldenEar sent a ForceField 5 powered subwoofer and, for an unusual surround channel twist, a

**RATING**
**GoldenEar Technology  
Triton Seven Speaker System**

Performance ★★★★★

Build Quality ★★★★★

Value ★★★★★



pair of the company's Invisa 650 in-wall/ceiling speakers rather than the more traditional pair of monitor or on-wall speakers. Although I had several other projects with rapidly approaching deadlines crying for attention, I'm not exaggerating when I say I started cutting the packing tape on the Triton Sevens' boxes before the FedEx delivery truck had made it all the way out of my driveway.

A couple of features make the Triton Seven an obvious member of the Triton family. Cosmetically, it's a



● The Triton Seven uses two 5.25-inch woofer/midranges.

● This cutaway diagram shows how all of the drivers in the Triton Seven work together.

## THE VERDICT

The **Triton Sevens** provide rock-solid high-end performance for a mid-fi price.

## SPEAKERS

### GOLDENEAR TECHNOLOGY TRITON SEVEN SPEAKER SYSTEM

**PRICE:** \$3,594 (Triton Seven, \$699 ea; SCX, \$599 ea; Invisa 350, \$299 ea; ForceField 5, \$999)

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smaller version of the Triton Two (\$1,499/each) and TritonThree (\$999/each), with a similar trapezoidal shape that's 5.75 inches across in the front and gradually opens up to a rear width of 7.25 inches. Both dimensions are similar to the Triton Three, but the Triton Seven's 40.25-inch height is almost 4 inches shorter than its next-smallest sibling. At 11 inches in depth, it's also 2 inches shallower. So, in total, the Triton Seven (\$699/each) is about 20 percent smaller in internal volume than the Triton Three, though they create the illusion of being smaller than that because of the noticeable difference in height.

On the inside, behind the black cloth covering the front grille, is another feature that makes the Seven a true Triton: one of GoldenEar's High Velocity Folded Ribbon (HVFR) tweeters—the same high-frequency driver technology found in the other Triton towers. I'm a big fan of folded-diaphragm tweeters in general because of their

## The HVFR tweeter is a signature element of every speaker GoldenEar makes.

light, open, seraphic sound. This technology compresses and rarefies the air by squeezing a pleated, accordion-like diaphragm rather than pushing a diaphragm to and fro as a more common dome-style tweeter does. Although the basic concept was first patented in 1972 by Dr. Oskar Heil and has appeared in various speakers over the years, it's only been recent advances in materials and manufacturing that have brought updated versions of these tiny transducers out of the dim, obscure reaches of audiophilic tweakdom and into more accessible

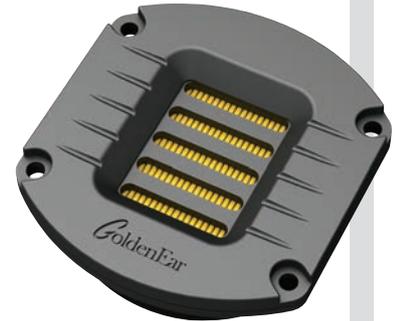
realms from companies such as MartinLogan, Legacy, and, of course, GoldenEar.

GoldenEar's HVFR tweeter is a signature element of every speaker the company makes (except the subs, duh). It's the same tweeter technology across the lineup, including the architectural speakers in the Invisa Series, which use a slightly smaller, pivoting version. This consistency in design and voicing throughout the various models is a huge reason why the GoldenEar speakers I've heard blend together so well in multichannel systems.

### Power Outrage

There are some important differences between the Triton Seven and the other towers, however. For one, as an interesting cost-cutting measure, GoldenEar does not ship power cords with the Triton Sevens. Unlike the Triton Two and Three, which include 1,200- and 800-watt amps for the woofer (and power cords!), respectively, the GoldenEar Triton Seven speaker is a completely passive design.

Obviously, being "powerless"—if only in watts, not sonics—is a powerful reason why the Triton Sevens sell for \$300 less per speaker than the Triton Threes. Whereas the larger speaker is a three-way design that incorporates a pair of 4.5-inch midrange drivers along with each model's particular powered woofers and passive radiators, the Triton Seven utilizes two newly designed 5.25-inch woofer/midrange drivers (one above and one below the



● GoldenEar's High Velocity Folded Ribbon Tweeter

tweeter) coupled to a pair of side-firing planar passive bass radiators. I must admit I thought it to be a bit strange, going from a design with 800 watts to one with 0 watts—especially when the bass output of the Triton Threes is so impressive—and the Triton Sevens, I was sure, would without a doubt suffer duly in any low-frequency comparison. In my mind, while comparing the Sevens with the Threes, I couldn't help but picture those new 5.25-inch woofers as if they were Max, the Grinch's poor, wretchedly overworked, scrappy dog, trying to haul the sleigh loaded with presents the Grinch had stolen from Whoville up to the top of Mt. Crumpit. Of course, that's a bit extreme, because a heavily laden sleigh is certainly more difficult to move than a pair of 8-inch planar bass radiators, but the image remains. (And now it's in your mind, too.)

### More of the Same

With its slightly angled, gloss-black, side end caps and swaddling black cloth grille, the new \$599 Super-Center X (SCX) center channel appears a bit smaller than its 20-inch width, 5.75-inch height, and 11-inch



● The Invisa 650 uses drivers similar to the rest of the Triton line.





● The ForceField 5 uses a 12-inch woofer.

dialogue with one special character not listed in the credits: the movie's sonic character. I'd anticipated there'd be plenty of chances for the ForceField 5 to strut its passive-aggressive stuff with giants clodhopping about, and that certainly was the case. GoldenEar's ForceField 5 was frighteningly good at hammering out extremely low frequencies and forcefully sustaining them when required. In addition to all its power, the ForceField 5 was also controlled and snappy, an aspect that made the many, many lightning strikes and thunderclaps in the movie amazingly believable—to the point that more than one thunderous boom made me involuntarily jump in my seat.

Beyond the boom, the overall acoustical artistry of *Jack the Giant Slayer* is one that delicately emphasizes the ambience of the scene, whether it's the high, echoing castle chambers or the breezy, open—and often stormy—air that

Jack climbs through on his way to the top of the beanstalk. Of course, one of the hallmarks of a great system is the ability to smoothly transition sounds around the room, such as how the GoldenEar Triton Sevens and companions performed when, near the very beginning of the movie, a giant grabs an unfortunate man and gobbles him up. The way the five speakers carried the poor guy's screams across the room was superseded in eeriness only by the sounds of the giant's lips as they closed down over the entire room. Later, when the beanstalk erupts through the floor of Jack's hut and carries it skyward, thanks to the room-moving low-frequency extension of the ForceField 5 combined with the seamless interplay of the Triton Sevens, the SCX, and the Invisa 650s, the sensation of a powerful—viscerally evil—force ramming its way up was frighteningly

depth would suggest. It makes full use of the available surface area by packing two 5.25-inch bass drivers and an HVFR tweeter on the front baffle along with a 7 x 10-inch planar passive radiator on the top. The SCX is also a completely passive design, and GoldenEar includes a set of three threaded brass inserts along with three adjustable rubber leveling feet in the box. Interestingly, there are four smartly spaced, pre-drilled holes on the bottom of the SCX. Two of them are for front corner feet, but you get a choice of two options for the third foot that supports the rear of the speaker, one near the back and another toward the middle of the cabinet. Your choice will alter the speaker's angle of attack, but using the centrally located hole might also allow you to slide the speaker back closer to the screen of a pedestal-mounted TV. That's a clever design feature that a lot of center channel speakers don't have.

The Invisa 650 architectural speakers (\$299/each) combine a 6.5-inch midbass driver with a center-post-mounted HVFR tweeter capable of twisting and pivoting approximately 30 degrees in any direction. I installed the pair of Invisa 650s in the ceiling above—but slightly out and behind—my couch and used the included white, round grilles that magnetically cling to the extremely sturdy speaker basket. (GoldenEar also offers a white,

rectangular grille for use when the Invisa 650s are mounted in walls instead of the ceiling.) The Invisa 650 has a “one-piece driver/frame/flange construction” that minimizes the speaker flange's circumference and, as a result, the overall size of the (very thin) grille. Gross says that the 6.5-inch driver is “constructed as an integral part of the unitized structure,” which is made using a marble-infused polymer. Each speaker includes a High Frequency EQ Control switch near the outside edge of the flange that's used to reduce the output of the HVFR tweeter in overly reflective rooms. I left the switch in the recommended “+” position.

Mark Fleischmann wrote about the ForceField 5 subwoofer (\$1,000) when he reviewed a 5.1-channel GoldenEar Aon 2 system earlier this year (*Home Theater*, May 2013). Nothing has changed since then. It's still the same combination of a proprietary DSP-controlled 1,500-watt switching amplifier packed in a 46-pound, 15-inch-wide x 18-inch-deep x 14.6-inch-tall battleship of a cabinet with an active 12-inch front-firing woofer coupled to a down-firing 12.75 x 14.5-inch planar passive radiator.

**Sonic, the Character**

I wasn't expecting much from the movie, *Jack the Giant Slayer*, but I was captivated from the opening



**The ForceField 5 was frighteningly good at hammering out extremely low frequencies.**

● The ForceField 5's back panel covers all the bases.



● Darryl describes the Seven's sound as natural and open.

lang's voices amidst the country twang of fiddle and steel guitar as the duo plaintively sing "Release Me" from Lovett's final release (*Release Me*) from his longtime recording company contract. In the case of the more ethereal tone and tempo of Vampire Weekend's "Step" (*Modern Vampires of the City*), the HVFR tweeters simply floated, easy and as unfettered as if gravity didn't exist, while the side-firing planar passive radiators coupled to the bass drivers were taut and fast. If you're looking to tear walls down with heavier bass-beat-driven songs, such as Macklemore & Ryan Lewis's "Ten Thousand Hours" or (yes) "Thrift Shop" (*The Heist*), the Triton Sevens won't fool you into thinking they're as equal to the task as are the powered Triton Threes (or Twos)—but the impressively dynamic bass just might have you peeking behind these sylph-like towers to see if there really is a power cord back there after all.

palpable. Short of adding a \$10,000 D-Box motion simulation couch to your system, I can't think of a way to improve what the Triton Seven system was able to do with that scene.

*The Call*, as you might expect since it's a story centered around a 911 emergency phone call, is a movie that's heavily dependent on dialogue with intricate shifts in the tones of voices and the clues that can be found in elusive background sounds. I didn't find it surprising at all that the SCX blended so smoothly with the Triton Sevens thanks to such similarity in the voicing of each speaker. The sounds of police helicopters, the tapping of a rope on a flagpole, the simultaneous conversations of multiple emergency operators, and the hesitant voice of Halle Berry answering an incoming 911 call were all articulated beautifully, regardless of their locations in the room.

Sans their multichannel companions, the Triton Sevens proved they're not solely a home theater speaker but are a serious, reference-caliber set of speakers for music, as well. They sound natural with an openness that revealed rich layers of detail within the gravelly yin and yang of Lyle Lovett's and k.d.

**Conclusion**

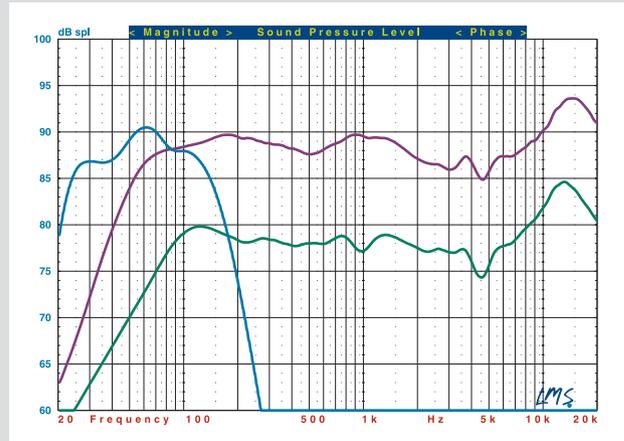
Somehow, like a guy rolling seven after seven at the craps table, GoldenEar has continued to come up a winner with each new speaker. More than that, the company always finds a way to push the limits in terms of performance, size, and, most amazingly, a whopping overabundance of performance for the price. The Triton Seven is no exception to the winning streak. For music, the Triton Sevens provide rock-solid high-end performance for a decidedly mid-fi price. Listening to them matched with the new SCX center channel, a pair of Invisa 650s, and the ForceField 5, you'll easily understand why I began this review with a fairy tale. The Triton Seven system is absolutely magical. It's one that anyone—not just Goldilocks—would find to be "just right." ♦



See [soundandvision.com](http://soundandvision.com) for full lab results and technical definitions

**Test Bench**

**GoldenEar Technology Triton Seven Speaker System**



**Triton Seven (purple):** +1.08/-4.16 dB from 200 Hz to 10 kHz; -3 dB @ 62 Hz, -6 dB @ 52 Hz; impedance minimum 4.54 ohms @ 200 Hz, phase angle -27.92 degrees @ 84 Hz; sensitivity 89 dB, 500 Hz to 2 kHz

**SuperCenter X (green):** +3.19/-4.22 dB from 200 Hz to 10 kHz; -3 dB @ 73 Hz, -6 dB @ 59 Hz; impedance minimum 3.90 ohms @ 200 Hz, phase angle -43.55 degrees @ 106 Hz; sensitivity 90.5 dB, 500 Hz to 2 kHz

**ForceField 5 (blue):** Normalized to level @ 80 Hz; lower -3 dB point @ 24 Hz, -6 dB point @ 21 Hz, upper -3dB point @ 138 Hz with Lowpass Crossover control set to maximum.—MJP

**SPECS**

**Triton Seven** 1.5 x 1.75 in Kapton polyimide film folded planar magnetic tweeter; 5.25 in cone woofer/midrange (2); 8 in passive radiator (2); 7.25 x 40.25 x 11 in (WxHxD); 32 lb • **SuperCenter X** 1.5 x 1.75 in Kapton polyimide film folded planar magnetic tweeter; 5.25 in cone woofer/midrange (2); 7 x 10 in passive radiator; 20 x 5.75 x 11 in (WxHxD); 15 lb • **Invisa 650** 1.5 x 1.75 in, Kapton polyimide film folded planar magnetic pivoting tweeter; 6.5 in cone woofer/ midrange; 8.13 x 3.44 in (dia x D); 4 lb • **ForceField 5** 12 in treated paper woofer/ midrange; 13 x 14 in Medite rectangular planar passive radiator; line-level LFE in, speaker-level in/out; 15 x 14.63 x 18 in (WxHxD); 46 lb



● The SuperCenter X uses a 7x10-inch passive radiator on its top surface.