

GoldenEar Triton Five Tower Loudspeaker Reviewed

Listening to the new GoldenEar Technology Triton Five tower speaker took me back to a day about 24 years ago when I was an editor at Video magazine. Home theater was just starting to happen, and one of the most interesting of the half-dozen or so purpose-built home theater speaker systems available at that time came from Definitive Technology, a new company led by a guy named Sandy Gross. He'd come up with the idea of making a horizontally configured center speaker that would fit on top of a rear-projection TV, and he stopped by to demo his system for us.

Not only did we love the center speaker, but we were amazed at how much we enjoyed Definitive's BP-10 tower speaker, which proved more versatile and enjoyable to listen to than most of the stuff we tried from the then-bigger names in audio.

As most audio enthusiasts know, Definitive succeeded wildly; and, after he sold it, Gross went on to found a new company called GoldenEar Technology. But his ethos remains the same: to make reasonably priced speakers that sound fantastic with any kind of music and with movies, too.

The new \$999-each (\$1,998/pair) Triton Five is the second-least expensive model in the Triton tower speaker line. It's 4.5 inches taller than the \$699-each Triton Seven, with dual six-inch midrange/woofers replacing the Seven's 5.25-inch drivers, and four bass-reinforcing, eight-inch

passive radiators instead of the Seven's two radiators. The more expensive Triton One, Two, and Three all incorporate subwoofer sections with built-in subwoofer amplifiers.

All GoldenEar speakers made to date incorporate an HVFR (High-Velocity Folded Ribbon) tweeter, a design also referred to as AMT (Air Motion Transducer) and used by many other brands. Instead of moving forward and backward, the HVFR's pleated ribbon squeezes to force air out, sort of like the pleats in an accordion do. While not every tweeter of this type is great, the better ones are revered for great treble detail and excellent dynamics.

The crossover is a moderately complex design with five large capacitors plus four inductors. It was pretty heavily covered in silicone caulk (to reduce vibration of the parts), and I would have had to scrape all that off to trace the circuit. But from my measurements and observations, I gathered that, while the crossover provides somewhat different filters for the top and bottom woofers, the close-miked acoustical response of the woofers measures the same, so it's a two-way crossover rather than a 2.5-way design, as some speakers with dual midwoofers use.

GoldenEar also makes an extensive line of center and surround speakers, as well as powered subwoofers and in-wall/in-ceiling designs, so it's easy to expand a pair of Triton Fives into any kind of surround system you want.

The Hookup

I didn't find anything particularly challenging or interesting about the setup of the Triton Five. The slight downside of buying the lower-priced passive Tritons is that you have to tune the in-room bass response by adjusting the distance from the speaker to the wall behind it (more distance equals less bass), instead of simply turning a knob as you can with the powered Tritons. This proved no problem, though, because the Triton Five sounded just right with the back of the speaker 26 inches from the wall. That's pretty close to where I usually put my Revel Performa3 F206 tower speakers.

Both speakers were toed in to point right at my listening chair; the tonal balance sounded just right that way, so I didn't feel the need to experiment with other placements. The speakers have a sock-style grille cloth that covers all of the drivers, as well as the sides, front, and back of the speaker. It's essentially non-removable; so, of course, I did all my listening with the sock grille in place.

For stereo listening, my test setup included a Classé Audio CA-2300 amp and CP-800 preamp/DAC, using a Toshiba laptop as a digital music file source. For movies, I used my Denon AVR-2809Ci AV receiver. I also used my Music Hall Ikura turntable as a source, feeding an NAD PP-3 phono preamp. For comparisons with other speakers, I used my Audio by Van Alstine AVA ABX switchbox, which permits precise level-matching and quick switching.

Performance

I did a couple of weeks of casual listening, mostly to TV shows and movies, with the Triton Five before I settled down to do a serious evaluation. It was obvious that the system sounded very good, not a whole lot different from what I'm used to hearing with my Revels.

The very first tune I listened to intently through the Triton Fives was "Who Cares?" from Cannonball Adderly's Know What I Mean? CD, recorded with pianist Bill Evans. Through the Triton Fives, "Who Cares?" had an intimate sound, as if it were performed in a relatively small, not-very-reverberant space--i.e., like most of the places where jazz was recorded and performed back then. The Triton Five let me hear how drummer Connie Kay's snare interacted with the room differently than Adderly's alto sax and Evans' piano did; the rim shots echoed off the walls, while the sax and piano did not (at least not audibly). Adderly sounded clear and colorless, and by that I mean I couldn't detect any sonic coloration marring his awesome tone. Kay's cymbals sounded extremely clear, yet without a trace of treble emphasis; in fact, they sounded a little soft, although that's the way the cymbals sound in most jazz recordings of this era. (Was it the tape? The mics? The way they played? I don't know.)

Percy Heath's bass was perhaps the most impressive of all because it had the perfect mix of fullness and tightness. I've played in jazz groups with upright bass players, so I have a pretty good idea of what the instrument is supposed to sound like, and this is it. I have to admit, this surprised me, as I

didn't expect that the somewhat oddball combo of dual midwoofers and four passive radiators would sound so good.

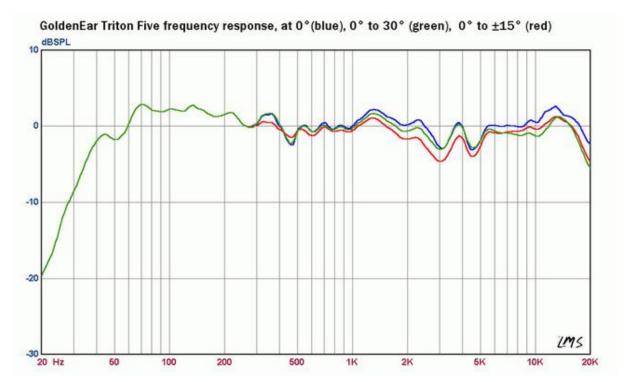
One of my usual test tracks, a stereo version of James Taylor's "Shower the People" taken from the Live at the Beacon Theatre DVD, confirmed that the Triton Five's tonal balance is right on. "Shower the People" is a very different recording from "Who Cares?" It's pop instead of jazz, live instead of studio, modern instead of classic. Yet the Triton Five sounded just right on this, too. The bass line dug really deep yet sounded perfectly tight and tuneful; the electric bass had character and tone, as it did when I've heard this recording on much more expensive systems. The glockenspiel--one of my favorite tests of tweeter response--also sounded unusually clear.

An even more striking example of the Triton Five's impressive bass definition came from David Chesky's "Concerto for Violin and Orchestra, Movement 1," from String Theory. The timpani on this piece sounded remarkably dynamic; and, rather than an indistinct boom, I got a clear sense of the mallets striking the drumheads. The Triton Five had no problem handling the deep fundamentals of the drums (and what I think is a big orchestral bass drum in the mix, too). Meanwhile, the imaging on the soloist's violin sounded amazingly lifelike for a speaker in this price range. If I'm not mistaken, I could actually hear the difference as the soloist's body (and violin) moved slightly. The presentation of depth during the pizzicato sections also impressed me; unless the speakers or my ears were playing tricks on me, it was obvious that the other violins were sitting about 10 feet behind the soloist.

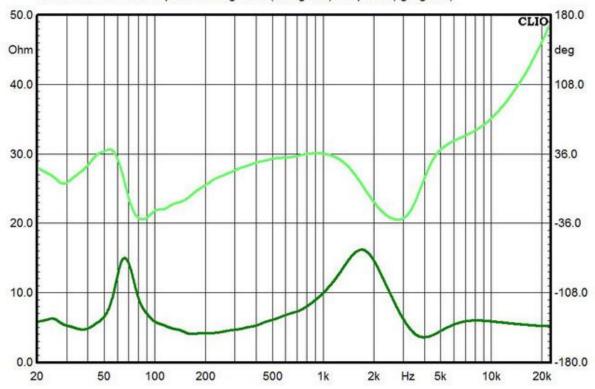
"These are just great," I wrote when listening to Steely Dan's classic "Aja." "They really light up the listening room, and they make the music fun to listen to without coloring it." The marimba on this tune, especially, came through with remarkable clarity; the Triton Fives delivered a realistic, wide sonic image of it, even though it's mixed to hard left. Again, the bass sounded perfect in level, tightness, and tone.

Measurements

Here are the measurements for the Triton Five







Frequency response

On-axis: ±2.8 dB from 37 Hz to 20 kHz

Average ±30° horiz: ±3.5 dB from 37 Hz to 20 kHz Average ±15° vert/horiz: ±4.6 dB from 37 Hz to 20 kHz

Impedance

minimum 3.6 ohms/3.9 kHz/-7°, nominal 6 ohms

Sensitivity (2.83 volts/1 meter, anechoic)

89.0 dB

The first chart shows the frequency response of the Triton Five; the second shows the impedance. For frequency response, three measurements are shown: at 0° on-axis (blue trace); an average of responses at 0°, ±10°, ±20° and ±30° off-axis horizontal (green trace); and an average of responses at 0°, ±15° horizontally and ±15° vertically (red trace). I consider the 0° on-axis and horizontal 0°-30° curves the most important. Ideally, the former should be more-or-less flat, and the latter should look the same but should tilt down slightly (by perhaps -6 dB at 20 kHz) as the frequency increases.

The Triton Five's largely flat response suggests a neutral tonal balance, the only anomaly being a slight reduction in lower treble energy between 2.4 and 5.2 kHz--although I know of at least one acclaimed speaker engineer who believes a slight dip in this region reduces overall brightness and makes the treble sound more natural.

Off-axis response is excellent. Both averaged responses look very close to the on-axis curve, and even way out at $\pm 60^{\circ}$, the response looks essentially the same, just tilted downward at higher frequencies, which is exactly what should happen. I've seen at least one reviewer make the blanket statement that AMT tweeters have poor off-axis response, and I can recall measuring at least one AMT that did, but this one and others I've measured prove that AMT tweeters can have dispersion that's as good as conventional dome tweeters.

Sensitivity of this speaker, measured quasi-anechoically from 300 Hz to 3 kHz, is 89.0 dB. Assuming you get about +3 dB more output in-room, it'll take a mere 6.3 watts to get you to a nice loud level of

100 dB. The impedance averages six ohms. I probably wouldn't want to drive a nice speaker like this with a \$300 AV receiver, but you certainly could.

Here's how I did the measurements. I measured frequency responses using an Audiomatica Clio FW 10 audio analyzer with the MIC-01 measurement microphone, and the speaker driven with an Outlaw Model 2200 amplifier. I used quasi-anechoic technique to remove the acoustical effects of surrounding objects. The TT1 was placed atop a 28-inch (67 cm) stand. The mic was placed at a distance of two meters at tweeter height, and a pile of denim insulation was placed on the ground between the speaker and the mic to help absorb ground reflections and improve accuracy of the measurement at low frequencies. Bass response was measured using ground plane technique, with the microphone on the ground two meters in front of the speaker. Bass response results were spliced to the quasi-anechoic curves at 270 Hz. Quasi-anechoic results were smoothed to 1/12th octave, ground plane results to 1/6th octave. Post-processing was done using LinearX LMS analyzer software.

The Downside

I noted two anomalies when listening to the Triton Five--one of which might be considered a character, the other of which is a limitation.

The one I might consider a character is what sounded to me like a slight zing in the frequency response somewhere around four kilohertz. It doesn't produce an overt coloration, but it does seem to have the effect of subtly emphasizing, perhaps even subjectively clarifying, voices. I noticed it with several tunes, including the James Taylor and Steely Dan tracks noted above. I wouldn't call it a problem or even undesirable, but it's the only notable departure from totally flat response that I heard.

The limitation is a predictable one: The midwoofers tend to compress on loud, bass-heavy material when the Triton Fives are running full-range, without a sub. For example, on Soundgarden's ultra-heavy "Drawing Flies" (from Badmotorfinger), the sound thinned out a bit as the bass couldn't quite keep up with the mids and the treble. The same was true when I played the depth-charge scene from U-571: when I pushed the speakers hard, the sound didn't distort so much as just thin out. So, you can use these without a sub, but don't expect muscular bottom end from a couple of six-inch drivers.

Comparison and Competition

As is my regular practice now, I compared the Triton Five to my usual reference speaker, the \$3,500/pair Revel Performa3 F206 using my Audio by Van Alstine AVA ABX box to perform level matching and switching. The F206 is probably as neutral and colorless as anything you can buy below \$5,000/pair, so it makes a good standard for comparison.

The comparison didn't embarrass the Triton Five, even though it's only 57 percent of the F206's price. I heard three major differences. Starting in the bass, the Triton Five's response on the deep bass line from Olive's "Falling" (from Extra Virgin) sounded smoother than the F206's, perhaps because its six bass-radiating components (two drivers, four radiators) somehow interacted better with my room acoustics than the F206's three bass-radiating components (two drivers, one port). But the F206's dual 6.5-inch woofers sounded more muscular than the Triton Five's woofers; I could push the F206 louder without compressing the bass dynamics.

The F206's mids sounded somewhat more open than the Triton Five's. The voice on the James Taylor cut cited above sounded a little more directional and less widely dispersed. The Triton Five's AMT tweeter produced a more present and slightly emphasized treble response; the F206's treble sounded more even.

Of course, \$2,000/pair tower speakers are quite common these days, so the Triton Five has lots of competition. Ones I've had experience with include the \$1,999/pair Definitive Technology BP-8060ST, a bipolar speaker with a built-in powered 10-inch subwoofer; the \$1,999/pair MartinLogan Motion 40, which has two 6.5-inch woofers and an AMT tweeter; the \$1,999/pair Monitor Audio Silver 8, with two six-inch woofers; the \$2,199/pair PSB Imagine T, with two 5.25-inch woofers; and the \$1,999/pair SVS Ultra Tower, with two eight-inch woofers. These are all excellent speakers that I can recommend without hesitation. Some will have advantages over others. The SVS Ultra Tower obviously has the deepest and most powerful bass. If you're looking for the most neutral tonal balance, the PSB Imagine

T would slug it out with the Monitor Audio Silver 8 and maybe the MartinLogan Motion 40. To my ears, the Triton Five's advantage is probably in stereo imaging: It really does deliver the sense that a real instrument is playing the room, perhaps more so than the other speakers I've mentioned.

Conclusion

The Triton Five is an excellent speaker that's well worth its price...and that really does work well for any conceivable application you might have for a tower speaker. Every time I listened to it, I marveled at how great it sounded with all the music I threw at it. You can't go wrong with this one.