GoldenEar SuperCinema 3D Array XL Review

GoldenEar has just expanded their SuperCinema sound bar product line with the introduction of the new SuperCinema 3D Array XL. While perhaps a little imposing, at a shade over 62 inches long, it has a depth of barely 3 inches making it perfect for wall mounting under your flat panel display. Such an arrangement can make the 3D Array XL the perfect front channel anchor to a modern and stylish home theater system. Even when combined with just a subwoofer, the 3D Array XL projects an expansive sound field that lends itself quite well to both movie and stereo music enjoyment. It delivers a number of construction and engineering features that promise the sound quality that GoldenEar is known for, while allowing perhaps a little more decorator freedom to you or your significant other.
• Good looks and solid construction, matching the appearance of the SuperSat line
• Uses GoldenEar’s well-regarded midrange and Folded Ribbon tweeter drivers
• Special 3D optimization technology used to reduce cross talk and improve sound
• Can be wall mounted or placed on an A/V stand with included adjustable feet
• Big “audiophile” sound from a product category that is typically not so “audiophile”

Introduction to GoldenEar SuperCinema 3D Array XL Review

“More boxes?!”

I get this a lot. Even before I was a reviewer for Secrets, my wife, who is an excellent sport, put up with my ever changing and evolving home theater hobby. She’s been a constant witness to an array of different speakers coming in and out of our basement HT room. They typically would be towers or large bookshelf speakers on stands along with some fairly big subwoofers. And while it’s understood that, in my art studio and the HT, I get to decide what goes in those rooms (she decides in the rest of the house) it’s no secret that, were she calling the shots here, smaller, less obtrusive equipment would be chosen instead.

I refuse to be moved to this way of thinking. I have listened to many a so called “lifestyle” system. I have many friends, and some family, who have such setups and every one of them leaves me unimpressed. That’s not meant to be a knock on my friends and family; they have different objectives than I do. They are more concerned with having smaller speakers and less complicated setups for audio visual entertaining. I have no such hang-ups, much to my wife’s chagrin. I place a premium on function over form and, for me; sound quality is the ultimate arbiter. Hence, big speakers rule the day in our home! Then I got a call from GoldenEar…

GOLDENEAR SUPERCINEMA 3D ARRAY XL REVIEW SPECIFICATIONS

• Design: Sealed, 2-way, Three channel (Left, Center, Right) Speaker Array
• Drivers (Left and Right): One - HVFR™ High-Velocity Folded Ribbon Tweeter; Two - 4-1/2” High-Definition Cast-Basket MVPP™ Mid/Bass Drivers
• (Center): One - HVFR™ High-Velocity Folded Ribbon Tweeter; Four - 4.5” High-Definition Cast-Basket MVPP™ Mid/Bass Drivers
• MFR: 80 Hz - 35 kHz
• Efficiency: 91 dB
• Nominal Impedance: 8 Ohms
• Dimensions: 4.75” H x 62.1” W x 2.7” D
• Weight: 22 Pounds
• Finish: Gloss Black with Magnetic Grille
• MSRP: $1,599 USD
• GoldenEar
The GoldenEar SuperCinema 3D Array XL (that's a mouthful!) arrived neatly at our home in a long slender box that my son nicknamed “the torpedo.” Unpacking the sound bar revealed a few quick things. First, at 62 and 1/8th inches it is, indeed, long and won’t go completely unnoticed. Second, at just shy of 3 inches deep, it'll be easy to mount and should visually match up well with most flat panel TVs on a wall.

Next, this sucker is no lightweight! At a weight of 22 pounds the 3D Array XL is durably built out of aircraft grade aluminum, feeling almost like a solid billet of the stuff. It also comes with a removable front grille that attaches with magnets. Lastly, this is a passive array of the Left, Center and Right channel speakers. There is no active amplification or gain control on the array and so it requires you to connect it to your HT receiver as you would any other group of front channel speakers.

So the first question that popped into my mind was; “Hmmm, this thing is supposed to replace my front two towers and center channel speaker?” If it was almost any other speaker company I would have thought it a joke. Honestly, the 3D Array XL isn’t much bigger than a 2 by 4 wall stud. However, with my previous experience reviewing the GoldenEar Triton Sevens still fresh in mind, I pretty much understood that this wasn’t going to be just any old sound bar I was about to audition.
Design and Setup of the GoldenEar SuperCinema 3D Array XL

As I mentioned already, the 3D Array XL is a newer and larger addition to GoldenEar’s sound bar line. Featuring additional drivers and increased power handling over the existing 3D Array model, the design and look of the 3D Array XL generally mirrors GoldenEar’s SuperSat line of speakers. The housing is mainly gloss black with a textured matte black front baffle with gloss black end caps.

The long, one-piece curved grille is firmly secured with magnets and requires a little extra care to remove due to its length. The longer length of the 3D Array XL is meant to match well with flat panel displays in the 65 to 70 inch diameter range. The overall shape appears nicely sculpted, is elegant and refreshingly, not boxy looking. There are two keyhole slots in the back to facilitate wall mounting.

An included cardboard template with appropriate markings helps to guide you in that effort. If you plan to seat the Array on a stand or on your entertainment center, as I did, GoldenEar provides threaded adjustable feet that attach to the back of the Array to help aim its trajectory appropriately. GoldenEar kindly sent me an aftermarket stand to use in case I was planning to mount the Array on top of my TV, but in my current setup, it wasn’t necessary.

The gold plated speaker binding posts are clustered centrally at the rear of the Array and are in appropriately labeled pairs, “Left, Center and Right.” Bare wire and Banana plugs look to be your best bet for making those connections as the posts may be clustered a little too tightly for spade plugs to work.
The driver complement is arranged as follows: M-T-M (midrange-tweeter-midrange) on either end of the Array while the center is configured as M-M-T-M-M. The drivers themselves consist of GoldenEar’s well-regarded High-Velocity Folded Ribbon Tweeters or HVFR™ and their 4-½ inch High-Definition Cast-Basket Mid/Bass Drivers with Multi-Vaned Phase plugs.

One of the main technical features of the 3D Array XL is what GoldenEar calls “3D imaging optimization technology.” Quoting the manufacturer’s website: “This technology, pioneered by Sandy Gross, effectively addresses certain problems that have been brought up recently in a 3D audio research project being conducted by Dr. Edgar Choueiri at Princeton University. Dr. Choueiri points out that the crosstalk that exists between the left and right loudspeakers and our contralateral ears, especially when the left and right channels are minimally separated (as we normally encounter in soundbar systems), is deleterious to our brain’s ability to fully experience and process the imaging cues so necessary for 3D imaging perception. These imaging cues are present in the recordings but dramatically corrupted in typical soundbar playback.” When I spoke with GoldenEar co-founder Sandy Gross directly, he elaborated about the technology a little bit more: “What is happening is that there is a cancellation signal (L-R and R-L) which is radiated from discreet cancellation drivers (on the outer extreme of the cabinets) which cancels much of the in-ear crosstalk going from the wrong channel to the wrong ear. This crosstalk is a form of distortion that interferes with the brains processing of the imaging information. It is important with normal speakers, but especially important when the left and right channels are close together, as they are in a soundbar. We also introduce some frequency response contouring in the cancellation drivers, which also helps.”

In setting up the 3D Array XL in my home theater, I was able to place it just under my plasma display, seated on my entertainment center, at just about ear level. The threaded feet worked perfectly to keep the Array stable and properly aimed. My front three channel speaker connections all converged snuggly to the back of the Array via banana plugs. Now we were ready to dial in the distances and room correction.

In regards to Room correction and the 3D Array XL, Sandy Gross indicated to me in our conversation that typical room correction programs like Audyssey would adversely interact with the 3D optimization tuning and throw off the desired effect and benefits of the Array’s
design. So I decided to run Audyssey and conduct a little listening experimentation. Sure enough, I agreed with Sandy’s advice.

The 3D Array XL sounded better to me without Audyssey processing in the loop. However I liked what Audyssey was bringing to the table in regards to my subs and surrounds. So how could I get all the speakers in my surround system, anchored by this Array, to play nice together? Well, Audyssey thankfully provides an EQ mode called “Bypass L/R” which, in a nutshell, applies processing to all speakers except the front left and right channels. After some extended initial listening I settled on using this EQ mode to best show off what the Array could do on its own and when used as part of a complete surround system.

Rounding out the review system were two pairs of GoldenEar SuperSat 3 speakers for side and rear surround duty and twin GoldenEar ForceField 5 subwoofers to cover the low end of the spectrum. As an aside, one ForceField 5 sub would normally be plenty for my, and most, home theater rooms out there. I, however, have never liked settling for “normal” and GoldenEar, being the sonic enablers that they are, were only too happy to oblige me!

Associated equipment used in this review includes: Pioneer KURO 50” Plasma TV, Denon AVR-X4000, Panasonic DMP-BDT220 Blu-ray Player, Sony PS3, Nintendo Wii, Panasonic LX-900 Laserdisc Player, Motorola DCH-6200 Cable Decoder box, APC H-15 Power Conditioner and Blue Jeans Cable speaker wire and interconnects. All listening was performed with the mains, center channel and surrounds crossed to the subwoofer at 120 Hz.

**The GoldenEar SuperCinema 3D Array XL In Use**

“Wow! Look at all the extra space!” These were the first words out of my beloved’s mouth when she came downstairs to check out the review set up. “Uh huh,” I said. “Just don’t get your hopes up. I like my towers plenty and I don’t plan on getting rid of them!” As I’m talking, I see her eyes darting back and forth sizing up the newly liberated room space. Her mind is clearly racing, making instant analysis of what kind of decorator flourishes she can festoon on MY room. “Alright, some music then,” I interject. And with that, the audition begins…

Starting with some stereo material, first up was “Broadway the Hard Way” by the late Frank Zappa. A live concert recording, culled from his 1988 world tour, it solidly showcases Zappa
and his band’s musical virtuosity and topical humor on a suitably grand scale. From the opening notes of “Elvis Has Just Left the Building,” the 3D Array XL painted a huge sonic picture that extended well beyond the ends of the sound bar and far into the room, ending just behind our heads. In stereo, with only the left and right sides of the Array and the subwoofers playing, we got an excellent sense of the size of the stage along with precise placement of all the vocalists, guitars, horns, percussion, etc.

On the track “Any kind of Pain,” the saxophone just blew out so clearly and stretched well into the room. And Zappa's guitar solo was placed dead center of the stage and was rendered with an almost palpable texture. Another track, “Why Don’t You Like Me?” is a rather biting spoof on Michael Jackson featuring singing by Zappa and band members, Bobby Martin and Ike Willis. As the song progressed, each vocal part was clearly placed in its appropriate space. Martin and Willis were solidly on the left and right respectively and well into the room while Zappa's voice was in the center but a little farther back in space, all the while, various percussion parts were reverberating from beside and behind us.

Little supporting instrumental details like bells, chimes and certain xylophone parts were handled with detail and finesse and didn’t get lost in any of the complex arrangements. Transitions from the 3D Array XL to the twin ForceField 5 subwoofers were pretty seamless. I didn’t feel like I heard any gaps or sensed that any information was missing throughout the performance. The 3D Array XL, so far, seemed to be living up to its name, delivering 3D sound that was quite XL indeed!

Being in the mood for some more guitar, but on a bit of a smaller scale, I loaded up “Boy In The Boat” by Canadian rock guitarist David Wilcox. There is an American folk singer by the same name but, trust me, if you hear this David Wilcox; you’ll never mistake the two! This CD is a studio album with a small, tight backing band and is well recorded and very dynamic with not a lot of compression. With the first track, “Drop The Pressure”, the 3D Array XL immediately puts you in a smaller, more intimate setting.

The sound still extended well beyond the Array and behind us but, as any really good set of speakers does, it placed us in the performance as well. The harmonica parts of the song sounded crisp and clean without getting harsh as I raised the volume. Wilcox’s voice was well in the room and was floating just above the center of the Array. His vocals were
reproduced honestly and with the appropriate weight, they didn’t seem thin or lacking in any way.

On the track, “Catman”, a slow burn blues tune about someone who’s trying to steal another guy’s wife, the Array does a fantastic job reproducing the characteristic ring and twang of Wilcox’s Fender Telecaster. The background of the song starts very quietly so it allows the 3D Array XL to reveal great little details like Wilcox’s breathing during some of the whispered vocal parts or the scratching and resonance of the guitar strings. At the end of the song when everything builds up really loudly and Wilcox is almost screaming, there is not a hint of break up or bad behavior coming out of any of the drivers.

The dynamics, from beginning to end, are handled very, very well. It’s stuff like this that lesser speakers tend to miss or not get quite right, so there is something to be said for the GoldenEar’s efforts here. This is not a mere “lifestyle” speaker product. The GoldenEar 3D Array XL paints a really immersive sonic picture. What’s more impressive still is that, putting the excellent subwoofers aside for a moment, most of this wonderful high fidelity sound was coming at us, out of a sound bar. A very thoughtfully designed, craftily executed, I’ve seen handrails that are bigger, sound bar! This 3D optimization tuning stuff is no joke!

Wanting to see how the Array carried it as part of a full surround system but still in a music sort of mood, I loaded up the SACD of Steely Dan’s “Gaucho” and played the multi-channel mix. Umm……WOW!

Just…..WOW! I realize as a reviewer that sort of response is hard to quantify but honestly, 20 seconds into “Babylon Sisters” and that was the only thing going through my mind. There’s no doubt that a large part of my excitement here has to do with the undeniable synergy of listening to a complete GoldenEar system. The panning of sounds just flowed so well from speaker to speaker that it just made for a very cohesive presentation.

Focusing on only the array, it handled Donald Fagan’s distinctive vocals just perfectly with the center channel of the Array now active. All the various guitar solos were rendered cleanly and with a deft liquidity that is an overall hallmark of this album. My favorite bit is Larry Carlton’s guitar solo on “Third World Man.” The Array really knocked that one out of the park, in all its sublime glory. As on the Zappa CD, the sax and horn sections just spread way outside the confines of the Array and had no trace harshness or brittle edge.
Listening to this SACD, I can easily see the rational for someone to do away with a system of larger boxes and adopt this much more space-friendly GoldenEar setup that I have here. From a sonic standpoint, you really aren’t giving up anything unless you have a really large room.

Moving on to a movie for a change of pace, we put on “The Best Exotic Marigold Hotel.” A heartwarming British movie featuring Dame Judi Dench, Maggie Smith, Bill Nighy and Dev Patel. The story is mainly about a group unrelated seniors who, for various reasons, decide to leave England and relocate to India to take up residence in a remodeled grand hotel that has been advertised as a retirement community. When they all arrive, they find the hotel is old and in disrepair and it is run by the good hearted but fast talking and driven Patel who has advertised it as what he wants the hotel to become, it’s just not near there yet.

The movie sets up a stark contrast (both visually and sonically) between the dreary, uptight English opening act and vibrant, colorful and noisy Indian acts. It was particularly in the noisy Indian market and street scenes that the entire GoldenEar system kept us suitably immersed in the environment, with all the surround details cleanly reproduced without getting jumbled or muddy sounding. The 3D Array XL kept the entire dialog clear and intelligible, even while there were trucks, cars and mopeds panning across the front three channels.

The Indian music passages that played during key moments throughout the film, the Array reproduced those parts of the score with such lushness that it gave each of those scenes so much extra depth and emotion. Out of curiosity I tried playing some of the movie again but, this time, just through the 3D Array XL and subwoofer combination only. I wanted to see how the Array would handle a multichannel soundtrack basically matrixed to itself only.

Well, it did quite a credible job of creating an enveloping surround field. It was smaller in scope, to be sure, than it was having the full surround system active, but we definitely got a good sense of space with surround elements appearing to our sides and a little behind us. Someone who is in a space limited dwelling could do quite well with the 3D Array XL, a subwoofer and a modest home theater receiver and not feel like they are sacrificing too much of the movie experience.
Going back to surround music, we decided to play “Cream Live at Royal Albert Hall.” Part of a reunion tour for Cream back in 2005, this concert video was shot over four days at Royal Albert Hall in London. The 3D Array XL did a standout job of keeping one of the most famous power trios in rock history, firmly anchored and delineated, in the front three channels. Ginger Baker’s drum set was firmly in the middle with snare, toms and cymbals sounding dynamic and just right while the kick drum his were solidly felt coming through the subs. His voice also sounded properly weighty and gravelly on the song “Pressed Rat and Warthog.”

Jack Bruce, on bass, stayed mostly on the left depending on the shot. His characteristic vocals also came though really well particularly on “Spoonful”, “Politician” and “We’re Going Wrong.” His bass lines, which had a good meaty heft, were clearly discernable coming through the subwoofers, even while the kick drums were playing as well. Bruce’s extended harmonica solo on “Rollin’ and Tumblin’” was also cleanly reproduced without edge or grain.

Eric Clapton and his Stratocaster were mostly in the right channel and when he was lending accompanying vocals to Jack Bruce there was a nice little interplay going on between left and right. Details like that allowed the 3D Array XL give us a sense of scale to the stage at Royal Albert’s. Clapton’s vocals and guitar work on “Badge” and the standout “Stormy Monday” were peerlessly recreated by the Array while the surrounds filled it out with just the right amount of reverberation and background elements to complete the whole picture. At first, it really made wish I had jumped on a plane and bought some tickets for that show back in ’05, but truly, it wouldn’t have looked or sounded any better that it did in my home theater at that very moment. Bravo
Conclusions about the GoldenEar SuperCinema 3D Array XL

So, does the GoldenEar 3D Array XL make all those big tower speakers out there obsolete? Well.....no, it doesn't. Let's face it, if it did then GoldenEar wouldn't be selling their Triton line now would they? That being said, this Array, combined with a capable sub (like the ForceField 5) smokes a lot of tower speakers that I have heard in the past. This combo makes a very compelling case for itself as an excellent 2 channel stereo setup creating a wide and engrossing soundstage without sacrificing clarity, detail or nuance.

GoldenEar's 3D Optimization Tuning succeeds in serving the music while also helping serve your, or a significant other's, décor requirements in one fell swoop. In my opinion, comparing the Array to a typical “lifestyle” system would be doing it a grave injustice. The 3D Array XL constitutes serious high fidelity that any “lifestyle” system I’ve ever heard, can’t hope to touch. I could easily see an apartment or condo dweller starting out with a 3D Array XL and sub package and be perfectly happy with that until they move into a house where they could simply add on and complete the full system.

As part of a full surround package, it makes it really difficult to rationalize why you would need anything bigger in all but the largest rooms. In my home theater, the complete GoldenEar system was stunningly cohesive at music and movies. It painted a huge and involving picture that made music and movie nights an absolute treat. I really can’t pay it a much higher compliment than that. Well done GoldenEar, well done indeed!