

Loudspeaker History with a GoldenEar Ending

Join us now as we cruise through the Fog of Ages to the early days of home High Fidelity systems. Please keep your hands and arms inside the STM (Sonic Time Machine) as we whiz past myriad artifacts of sounds and equipment past. Quick! Look! There's an 8-track tape deck. And over there, a reel-to-reel recorder. My, how quaint they look now. Oh, do you recognize those round black discs? They're called "records" and you play the music encoded on them by placing a tiny needle in their grooved surfaces and spinning them round and round. Honest. Why, did you know you can't even control the "record player" using your smartphone? Who'd believe it!



The AR3a - a Classic East Coast Sound Speaker

Ah-ha. Now we've passed through the DMP (Discrete Mono Period; none of that synthesized mono using left/right speakers with a push of the Stereo/Mono button for us) and the Plasticine Disc Era. Ah, look there, a Tubed Monophonic Console Radio with record player. Can you believe our forefathers, the Cro-Monorockers listened to this stuff? Well, on we whiz, to the Golden Age of High Fidelity Audio, during the 50's and 60's.

Through these two decades there were several developments that expanded the reach of High Fidelity to a much broader population than had been exposed in the past. The introductions of stereo; stereo long play records; FM Stereo broadcasting; relatively compact acoustic suspension speakers that delivered deep, powerful bass; solid state high power amplifiers instead of tubes; and many more developments, made it possible for music lovers to get good fidelity that would fit in their rooms (and lifestyles) at reasonable prices. Interestingly, many of the aforementioned technical sound quality developments were the result of improvements in movie theater sound and not initially intended for the home market.

East Coast, West Coast, British Sound??

During this time (and perhaps a little before) three distinct general philosophies of loudspeaker design appeared on the home Hi-Fi market. In the 50s and 60s, there was an East Coast Sound, refined, laid back and with a full, good sealed-enclosures bass - great for classical, folk and jazz.

Then there was a West Coast Sound, in your face, punchy - great for rock, blues and R&B. The WCS speakers were typically ported, higher efficiency and more forward in their sound. And then came the British Sound, more refined with a focus on clarity and imaging, a bit light weight in bass balance and extension.



The JBL 100 - a Classic West Coast Sound Speaker

And then in 1972, three Johns Hopkins graduates, including GoldenEar founder Sandy Gross, decided there was a better way. Inspired by full range electrostatics like the KLH 9s and Quads that were his reference, along with British speakers like the BBC's reference Spondors, and with the desire to combine it all together with efficiency and dynamics for rock and roll, sophistication for classical and you-are-there presence for jazz - they developed speakers at Sandy's first company, Polk Audio, with a neutral, accurate sonic balance with speed and definition that didn't require expensive or high powered amplifiers and could be placed almost anywhere in a room,

And the world loved the speakers. Refined and developed over many years while at Polk, and then at Definitive Technology, his second company, Sandy and his teams have worked hard to continue to deliver superb performance and exceptional value. Now at GoldenEar, Sandy feels that 40 years of hard work has come to fruition. We asked him to describe the GoldenEar sound, and what he looks for in a great speaker and system. Here is what he had to say:

"I am often asked to describe the sound of our speakers. A simple answer would be that they are designed to sound like nothing except what is being played through them. Of course, a perfect loudspeaker would have no sound of its own, and we do strive for perfection. But nothing is perfect, however, so I like to consider the following when answering these questions..."



Truly Great Speakers are Capable of "Suspending Disbelief"

What are the Key Performance Factors That Make a Loudspeaker Great?

First, and most important to me, is the concept of "suspension of disbelief." What we mean by this is the ability of the loudspeakers, and of course the whole audio system, to in effect disappear and allow you to forget that you are listening to a recording in your room. In other words, to "suspend the disbelief" that it is not real and allow you to believe that you are actually in the space where the musicians are performing or where the movie action up on the screen is happening.

A really good audio system and truly great speakers are capable of achieving this. In fact, with movies it is the sound system and not the picture that frees up your disbelief and allows you to feel like you are really part of the action. "Suspension of disbelief" is the key to great, lifelike sound and this has always been the primary goal when we create our speakers. Many years of loudspeaker design and critical listening have lead us to the techniques we employ to achieve the necessary qualities to achieve this result.

The Next Question is, of Course, What Qualities are Important in Achieving this "SUSPENSION OF DISBELIEF?"

For me, the secret lies in the imaging qualities of a system. Imaging is a quality that cannot be measured. It can only be heard and experienced. Achieving great imaging is more of an art than a science. Imaging is the ability of a sound system to place the sonic events of a recording accurately around the room without regard to the physical locations of the speakers, thus replicating the reality

of the original sonic event and soundfield. A truly great loudspeaker system will disappear and the sound will seem to float in the air with tremendously lifelike height, width and depth. We refer to this as a three-dimensional soundstage and speakers that excel at it, such as GoldenEar's, deliver a sonic three-dimensionality that can be almost frightening in its realism.

With GoldenEar loudspeakers you will not be aware of the sound coming from the specific locations of the speakers. Instead, the soundstage will spread seamlessly and fill in the spaces between all the speakers. It will extend beyond them in terms of depth and above them in terms of height. This almost magical quality of superb imaging is what allows you to close your eyes and imagine that you are in Carnegie Hall listening to the Philadelphia Orchestra, in Madison Square Garden listening to the Rolling Stones, in the Village Vanguard listening to John Coltrane alive again or rocketing through space in a starcruiser dodging meteors. It really does it for us and so we have always spent a tremendous percentage of our engineering and development time focused on achieving superior imaging.



Does the Speaker Make You Feel Like You Are There?

Of course, there are many other key aspects of superior sonic performance that we strive for excellence in - and achieve. We are often asked what they are and how we evaluate our achievement of our design objectives during the development process. We certainly feel that precise measurements are important. Because of this and unlike many manufacturers who settle for simple FFT measurements that only approximate true and accurate anechoic measurements, at GoldenEar we built our own large-scale anechoic chamber. We feel that this is absolutely critical in order to obtain accurate and meaningful measurement data. But most important in our development process is listening with a wide variety of critical program material in order to optimize all the many aspects of superior sonic performance.

An interesting and little-known fact is that although our loudspeakers have often been praised as being the absolute best available for home theater, our engineering team, along with Don and myself, have always devoted most of our listening time to music. This is true more than ever at GoldenEar because exceptional performance on music is more important to us now and, additionally, is the real key to home theater excellence as well. We have found that the qualities that allow a speaker to excel in the reproduction of music and home theater are clearly easier to refine to an ultimate level when working with music.

I am speaking now of achieving a smooth, natural and extended frequency response - sound with a homogeneous quality that appears to come from a single real acoustic source rather than from a group of drivers that each covers a different frequency range. I am speaking of achieving a high-definition, transparent clarity that seems to lift the hazy veils that often separate us from being part of the live sonic event. Our achievement of these important performance parameters is absolutely critical for the full enjoyment of music and equally important for home theater. And of course, we also focus on tremendous yet effortless dynamic range, powerful, deep, tight, rock-solid bass response and silky-smooth high frequencies that seem to extend forever - all of which is desirable for home theater sonic spectacles as well as musical excellence.



The Signature GoldenEar Sound is Consistent Through All of our Loudspeakers, Regardless of Price (Triton Seven and Triton Two Shown here)

The GoldenEar team fully utilizes all its combined experience to deliver these qualities and more for sonic superiority that is often unequalled in competitors' speakers selling for three, four or five times as much as a GoldenEar. Most importantly, the signature GoldenEar sound is consistent through all of our loudspeakers, regardless of price. Why? We hear very well and we care enough to set the same sonic goals for every loudspeaker we create, whether it is our least or most expensive. We don't feel that having less to spend means that you are looking for lesser quality. We lavish the same kind of care, expertise and experience that is usually reserved for the highest-priced high-end speakers on every GoldenEar speaker that we create. We do it because we can - and because we know that you will enjoy and appreciate the result.

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