

Immersive sound.

-by Ryan Winberg, CEO

The experience begins with our ears.

When we began our work at Listen Audio Systems, we had a vision of recreating an acoustic experience that mirrored, as closely as possible, the environment of the recording studios and engineering studios in which all great music is mastered and finished. By and large, these studios are highly engineered environments meant to help sound engineers construct a final song or soundtrack. Creating products that duplicate this environment has proved to be a difficult journey with many facets.

As we began to study the intricacies of recordings, recording techniques, acoustics and our general perception of sound, we arrived at a paradox of our senses. That is, we humans receive most of the information about the world around us from our vision, not our hearing. All that we see can be easily interpreted from one person to another. When recreating something visual, it is quite easy to copy what you see - to trace with a pencil, to take a photo or video, or to paint or build something with a similar visual characteristic. This visual information is rather straight forward. Consequently, creating products or experiences in the visual realm is relatively straight forward as well.

Sound is not so straight forward. Our hearing is a secondary sense that serves to supplement our vision. As a secondary sense, hearing, for most people, is less specifically discernible than our vision;

i.e. the apple on that table is speckled and red vs. the drum in front of me is playing at 98 decibels, around 124hertz and at a distance of 1meter.

Additionally, the sound of each recording studio has a different aural signature. Each live performance has its own unique character. Each artist has their own way of manipulating an instrument to create the sound that tells their story. Equally complex are the myriad of

acoustical mechanisms by which we perceive and locate sound.

Corresponding to the complexities of the nature of sound are the variations within the art and science of sound engineering. Sound engineers spend weeks or even months on a single recording, working out details and subtleties to create a sound that is just right. They enhance the mood. They set the stage. They remove the noise. These various inputs come together into the tracks that we playback as soundtracks or music.

When combined, these factors accumulate to a detailed, nuanced and, from one recording to the next, a precisely unique quality. Each recording adopts an exclusive sonic footprint. When finished, soundtracks and musical tracks reach the customer as a finely tuned, painstakingly precise recording of the highest quality.

So, how do we create audio products that duplicate this quality and detail to create an equal experience?

Given the dedication to quality on the recording side of music, we believe that the same level of passion and conscientious attention to detail should be designed into the experience for the customer on the listening side of the recording. The market seems overwhelmed with products that fail to address the basic fundamentals of great sound reproduction - from insufficiently treated rooms to speakers without life or depth.

For us, the answer to this question is: acoustics. Sound is acoustic. While a loudspeaker is an electro-mechanical device, the work output of a loudspeaker is strictly acoustic. Unfortunately, so many products on the market fail to address this one, simple fact. At Listen, believe that every loudspeaker component should behave in an acoustic manner. This is where many loudspeakers miss the mark. A loudspeaker should be designed from the acoustic compression wave backwards. Designs that start with the enclosure material, enclosure shape, enclosure bracing, motor system, installation technique or retail cost will always sound incorrect.

Our loudspeakers are designed specifically from an acoustic standpoint. Every aspect of the design centers on acoustic principle: acoustic driver suspensions, acoustically appropriate centering of driver axes, acoustically damped enclosures, driver cone materials that acoustically decouple as frequency increases, midrange cones that act as an acoustic waveguide for the high frequency information from the tweeter (this geometry creates bending modes which we acoustically damp at the source, rather than with a heavy rubber surround, as is common). Even the adhesives we use feature damping characteristics at specific frequencies to create a loudspeaker that sounds natural and coherent.

This dedication to the sound quality of our speakers can be heard immediately.

The Larger Picture.

We often get the comment that it is strange to see a loudspeaker manufacturer that also manufactures acoustic products. Indeed, ours is the only company that we are aware of that manufactures both. The reason is both simple and is the fulcrum of our engineering outlook:

Sound is acoustic.

When this fact is considered, it makes sense that, to create a life-like listening experience, we would create products such as our DIFFUSE panels; rather than amplifiers, preamplifiers, cables, or switches.

When we dove into the dilemma of a realistic musical experience we realized soon enough that great loudspeakers were not enough. A great loudspeaker in a terrible acoustic environment is going to sound terrible. We have seen system after system with \$100,000+ worth of audio components in rooms that have not been addressed acoustically. These systems sound significantly less realistic than systems that cost around \$3,000 in an acoustically engineered room.

When listening, the experience of great sound begins with the listener's ears, not at the electrical

outlet. Acoustic treatments are of primary importance to the final experience - not line conditioners or cables.

Too often, we have seen audio system design that ends at the listener. We think this is where system design should begin. The level of impact and depth of immersion is directly affected by the environment around each listener. This includes the shape of the room, construction materials, furniture, acoustic materials and, finally, the loudspeakers. It is this principle that lead us to develop better loudspeakers and acoustic products-rather than loudspeakers andelectrical products.

Our vision is to passionately recreate beautiful sound - just as the artist passionately played it.

All of our products reflect the vision of detailed musical reproduction. Our design process starts with the listening experience. Our aim is to design an interaction and emotional involvement with music and soundtracks that is unparalleled today. VOICE loudspeakers in combination with DIFFUSE panels - in an acoustically correct environment - reproduce sound with enormous depth and width, with detail and clarity on a scale that is decidedly superior as regards impact and realism. Voices breathe from an immense sound stage, cymbals crash with immediacy, drums sound as if they are being pounded violently in front of you, and explosions radiate into the room with palpable force. The sound truly immerses you. It is captivating.

We hope that you find this to be true.

-Ryan Winberg