L-ISA is the Perfect Complement to ARTECHOUSE NYC’s Immersive Imagining of Julius Horsthuis’ Geometric Properties

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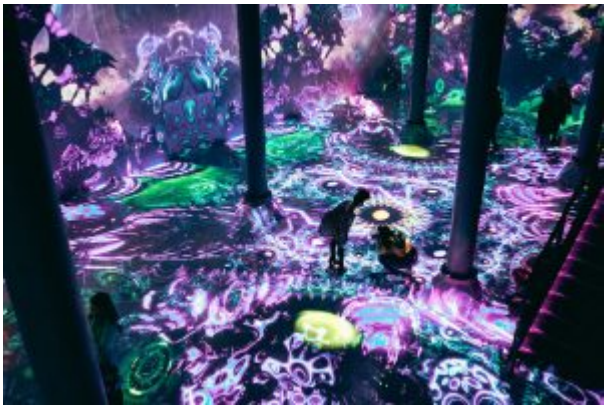
Supplied by See Factor in 2019, the first fixed art-gallery install of L-ISA technology continues to sonically delight artists and audiences alike for new exhibitions

ARTECHOUSE NYC, located in a never previously occupied boiler room beneath the iconic Chelsea Market, is one of the most unique art destinations and experiences in New York City. Despite its century-old confines, ARTECHOUSE rightly presents itself as the art organization for the digital age. It's an innovative space for immersive and interactive art exhibitions dedicated to providing the most advanced platforms for genre-pushing artists experimenting with emerging technologies and new forms of creative expression.

Geometric Properties, which runs through September 2021, is a perfect example. Fractal visuals created by Dutch artist Julius Horsthuis, with original soundtracks by Michael Stearns and David Levy, the gallery's newest exhibition is a 30-minute, eye-popping environment that "explores fundamental mathematical patterns to stimulate existential self-reflection and emphasize the pure wonderment of being," according to the artist's website.



But what makes ARTECHOUSE NYC unique, and what enables artists to push their creativity to new levels, is the implementation of L-Acoustics L-ISA Immersive Hyperreal Sound technology. Designed and installed in the main gallery for the venue's grand opening in September of 2019, L-ISA allows artists to expand their canvases from the visual to the aural.

> "This is ARTECHOUSE's third location, and we wanted it to push the benchmark of the experience," says ARTECHOUSE Executive Creative Director Riki Kim. "When we were looking into the audio element, L-Acoustics and L-ISA stood out from the competition. The appeal was to have an immersive sound system with no 'hot spots' in the room, plus a clear and transparent sound that could express the art's wide range of tone and emotion. But it wasn't just the product; it was also the people at L-Acoustics and how they approach us as partners in artistry. With L-Acoustics, the people and the products are a complete package."

Queens-based See Factor supplied the 31-channel sound system at ARTECHOUSE NYC, which comprises 20 L-Acoustics X8 speakers used as perimeter/outer speakers, ten 5XT speakers deployed as overhead/inner speakers, and two SB15m subwoofers, which function as a single mono channel. The entire sound system is powered by a total of six LA4X amplified controllers, with the immersive mix running through the L-ISA Processor. The sound technology is complemented by Barco-powered, 16K-resolution, 150-megapixel raster laser projection system.

Art-installation composers and sound designers—such as Berlin-based composer Kerim Karaoglu, who provided the sound design for ARTECHOUSE NYC's inaugural installation, *Machine Hallucination*, by Refik Anadol—use the L-ISA Source Control plugin in a Logic Pro session to adapt and localize the installation's score to the immersive environment. Outputs from the processor are then rendered to multitrack files that are played by the in-house media server for video and audio. MADI from the computer is converted via an RME M32 Pro to analog, feeding the LA4X amplified controllers. In effect, L-ISA became an extension of the artistic process during the mixing of the show, enabling artists to create and deliver new multidimensional sound experiences for live and recorded productions.

"ARTECHOUSE was a very fulfilling project to be involved with on many levels," says sound designer Jesse Stevens, who designed and engineered the installation. He worked in conjunction with Kim and the ARTECHOUSE team to develop a system that would give maximum resolution within the necessary design constraints, such as not putting speakers in the projection area. "We were tasked with thinking about a system not only with our usual engineering eye but also from a creative point of view. It needed to adapt to any artistic idea, and even become an extension of the artists' work." Stevens went on to mix sound for *Machine Hallucination*, and he says that implementing the Keraoglu's rich and beautiful score was a "dream come true."

Stevens says that *Geometric Properties* was a unique installation, broken into two distinct halves, delineated by the contrasting musical scores of composers Michael Stearns and David Levy. "They asked me to make the best use of the L-ISA technology and do the live mixes of both scores, as well as to add and

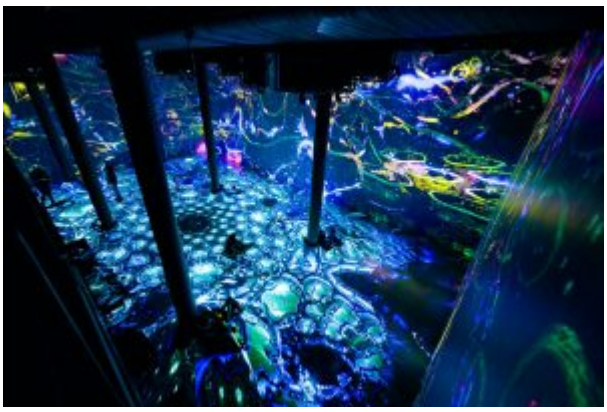
augment sound effects to each piece. So there was quite a bit of work to do from both a mixing standpoint, as well as adding some sound design and sound effects, which would all run as a continuous loop," Stevens explains.

Levy's score occurs first, which Stevens compares to an action movie trailer. "It's very dynamic with a lot of very cinematic elements," he says. "David comes from the video game composing world, so there are very intense hits, sounds, whooshes, crashes, and a lot of dynamics. Literally, the only way to be doing the mix in this sort of space was with L-ISA because we were able to take this very complex score and all of these elements, separate them, and place them in different places around the room. We also had to develop an interaction between elements so the viewer could get a unique mix depending on where they're standing in the room."

Furthermore, Stevens adds, the mix had to be considered from all different angles because the audience is constantly walking around inside the space, experiencing the visuals and the sound from wherever their vantage point happens to be. "There are a lot of very specific placements of objects that create this interaction between elements and work with the dynamics of the pieces," he says. "But we also had to be able to step back to make sure that the perspectives of the audio matched the perspectives of the visuals in the space. Only with L-ISA technology could I have accomplished that."

For Michael Stearns' score, which Stevens characterizes as "much more subdued, more ambient," he created a combination of sound effects and sound design. "It was great for the audience to have a bit of a

break after the adrenaline rush of the first half, but we still wanted to match the tone and energy," he says. "I was able to design and preview the sound effects and music mix in my home studio and then send it to Michael, Julius, and Riki, for input and collaboration. Michael's piece has a lot of sound effects, which required finely detailed editing to synchronize with the visuals. The movement of the effects adds dimensionality and excitement, and it was important for them to work in perfect tandem with the visuals. L-ISA gave me the ability to precisely place all of these elements."



Stevens credits L-ISA with being a creative partner in the process. "What's really unique is that L-ISA technology itself is incredibly intuitive," he contends. "For example, I played all the audio on a Pro Tools system, and we recorded automation for placement and movement in Pro Tools. I then controlled all that using the L-ISA Controller, listened to each single element, and then recorded its position or trajectory in real time. Being able to layer the elements while recording automation allowed total freedom for iteration, which was crucial because it was the only way to tackle this dense, large-scale mix. It's a one-of-a-kind process."

Kim adds the impact of L-ISA technology is evident in the satisfaction of both artists and visitors to the venue and the installations. "They can't always put it into words, but everyone experiences it viscerally," she says. "And the composers and sound designers are always excited to hear that we have L-ISA available. You can tell it makes a difference for everyone involved."