THE ULTIMATE EXPRESSION OF SOUND



If I were to prioritize what we are bringing to the people out there, it's what goes in their ears. What we're trying to do is make it an experience. I just want them to walk away changed or moved.

- Justin Vernon, Bon Iver

Sound is integral to performance. Sound is integral to art. Sound is integral to almost any experience.

Today's most exciting events create outstanding visual experiences using lights, videos, costumes and pyrotechnics. Even if finding words to describe the aural experience can be difficult, sound is equally important to creating memorable experiences and can even be transformative.

L-ISA immersive sound technology is a new way to design and experience sound in ultra-high-resolution spatial audio, combined with accurate sound placement to bring unprecedented vibrancy and clarity. With L-ISA, artists share their music through extremely natural and detailed sound, ultimately creating a more direct and deeper connection with the audience.

THE HISTORY OF IMMERSIVE SOUND FOR LIVE SHOWS

Since L-Acoustics first broke new ground in the 1990s with the introduction of the line array, live concerts have become increasingly sophisticated, with high-definition video and lighting technologies. Yet professional audio reinforcement still employs stereo - a technology more than 50 years old.

Not satisfied with this approach to sound in live entertainment, L-Acoustics introduced L-ISA Immersive Hyperreal Sound technology in 2016, a new way to design, mix, and experience sound for live performances.

L-ISA delivers stunning, clear, natural audio that is at one with the visuals and action on stage, heightening the intimacy and impact of the show. If the production seeks to deploy audio in a novel format, L-ISA technology allows for the creative use of sound in 3D. Concertgoers have described it as feeling like they are "inside the music" and more emotionally connected to the artist.

With audio quality being vital to a successful live concert, why haven't bands adopted immersive sound before now? The stereo status quo has endured due to a lack of a viable replacement technology, as show production continues to physically separate audio and video delivery. The visual portion of the show occurs primarily on stage equipment placed out of the way to the left and right of the stage, not



unlike home stereo systems. While this configuration may feel comfortingly familiar, it leaves much of the audience hearing only mono sound: sounds emitted on the left get heard on the left, while sounds emitted to the right blanket only the right side of the venue. Other than in the central sweet spot – where only 20% of the audience is seated – no one really gets the full sound image.

Creating spatialized sound required reinventing the live sound mixing ecosystem. Placing and moving sounds horizontally and vertically, or bringing them closer or pushing them further away, and adjusting the size of each "sound object" is an

entirely new approach to mixing. Delivering spatial sound for live concerts requires a new technological platform, software, and hardware tools

High-profile artists have already deployed L-ISA technology across various musical styles, including Adele, Katy Perry, Bon Iver, Mark Knopfler, ODESZA, Lorde, Aerosmith, alt-J, and others. It has also been deployed in installations like Refik Anadol's inaugural exhibition at ARTECHOUSE NYC, SPYSCAPE museum, Puy du Fou history theme park in France, and Coachella 360° Antarctic Dome experience.



Conventional left and right stereo



L-ISA Hyperreal Sound

HOW IT WORKS

Increasing the speaker configuration from the traditional 2.1 stereo set-up to a minimum of 5.1 – or up to 9.1 – speakers stretched across the stage, L-ISA dramatically increases loudspeaker clarity to provide a natural and intelligible soundscape that expands panorama and elevates realism. We call this experience Hyperreal Sound.

Expand the stage speaker set-up to include speakers around, behind and even above the audience for a full 360 degrees, and LISA can further immerse the listener with sound from all directions to provide a sense of being inside the music. This is Immersive Hyperreal Sound.

Because sound is what makes people feel, L-ISA opens up a world of infinite possibilities for how sound can be conceived and designed by songwriters, performing artists, and show production teams.

With L-ISA, what you hear is what you see. It reconnects artist, music, and audience in an emotional experience that sounds and feels intimate, tribal and completely in the moment.

What the Audience Says

"It was like he was whispering in my ear. I can't stop smiling."

"It was the best sound I have ever heard at a live show and it was in an arena. The system they brought in swallowed me up and immersed me in those gargeous tunes."

"By far the best sound of any gig I've ever been to. Unforgettable."

Entrepreneur

66 Everyone wants to get close to their favorite artist. (L-ISA) technology is making tt a reality — but better.

Adele's voice rings powerful, vulnerable and clear, like she's performing for an audience of one rather than The Colosseum's 4,100 — and it doesn't matter where you're sitting. 99

- Weekends with Adele Review

Forbes

above the stage hints at something special. But the casual attendee could never expect the all-enveloping audio, delivered through an embedded L-Acoustics L-ISA Immersive Hyperreal Sound Technology system, that not only enables Perry's voice to resonate crystal-clear in the sound mix but forms a hires hemisphere of sound around the entire audience, regardless of seat selection. ??

Katy Perry 'Play' review

billboard

66 Bon Iver's 'Sincerely Grateful' celebratory shows feature ultra high resolution spatial audio that would make any audiophile grin. 99

- Bon Iver Review

NME

66 From start to finish, the immersive sound quality was clear, for not only those sitting in close proximity to the centre of the stage, but also for fans sitting in seats at the very top of the bleachers. 99

- Bon Iver Review



L-1) A

The Telegraph

With this technology, it sounded as though we were surrounded by the choir, their voices filling the room. It was astonishing. This felt like progress. 99

— alt J Review

UPROXX

66 It might have been the best sounding live event I've ever heard, both pristine during the quiet parts and rumbling when songs exploded.

- Bon Iver Review



Katy Perry PLAY visitors enjoy impeccable sound... showgoers have been talking about, not only the incredible visuals and costumes, but also the crystal clear sound in the theater. ??

- Katy Perry 'Play' review