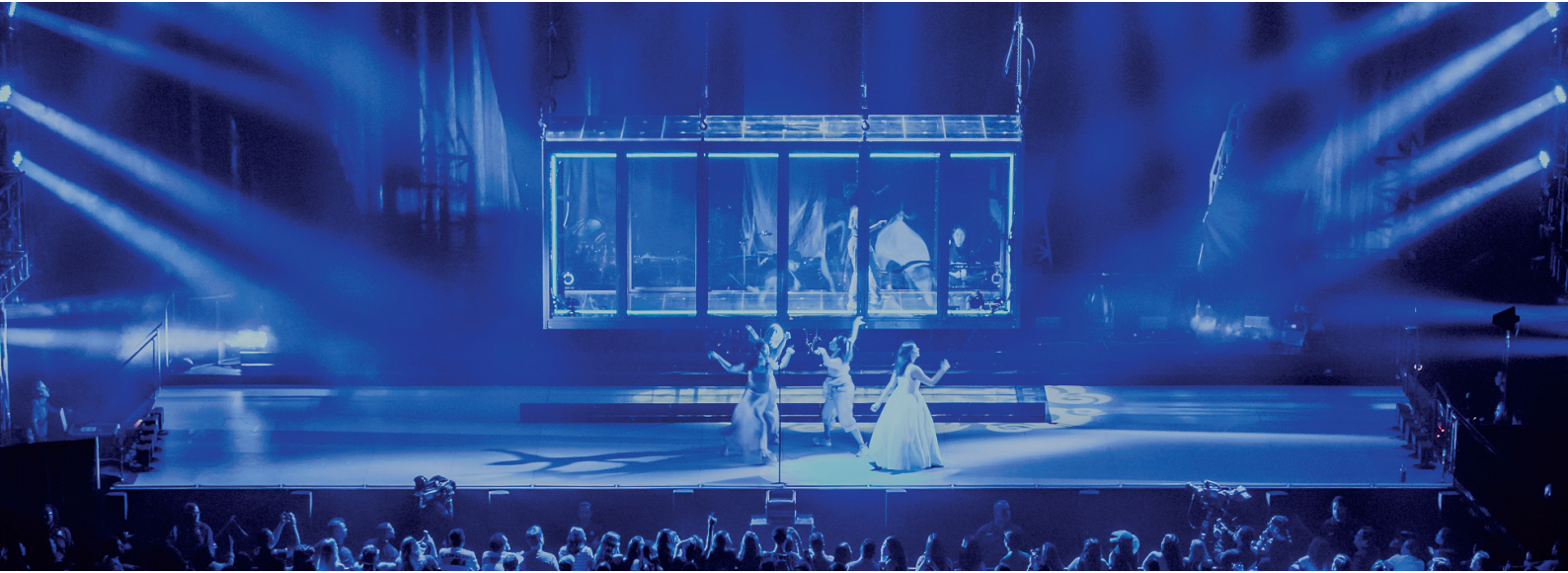


LISA
IMMERSIVE HYPERREAL SOUND



“ We’re beginning to see what can be done with L-ISA and immersive technologies. It’s a whole new palette and creative canvas for artists and sound engineers to paint with. ”

Fred Vogler, Grammy Award-winning Recording and Mixing Engineer
FOH Engineer, LA Philharmonic, Hollywood Bowl

“ For me it was the first time I had really felt I was inside the music. ”

Eric Serra, César-winning composer of *Le Grand Bleu*

“ The improvement in sound and ease of system management are important, but are not the only advantages. L-ISA will allow us to continue to surprise, impress, and delight our audience. ”

Maria Lenarskaya, Head of Sound,
Rossiya Moscow Musical Theatre

“ More than ever before, there was a clear feeling of being enveloped by the music. ”

Ennio Morricone

“ In prep on the day before the show, I still wasn’t quite prepared for what it was going to do and how it was going to feel. It covered the venue better than anything I’ve ever heard. The whole stadium was the immersion zone. It was mind-blowing. ”

Lance Reynolds, FOH Engineer, altJ

“ Life-changing experience. ”

Noah Cyrus, recording artist, on attending Bon Iver,
Santa Barbara Bowl

RECLAIMING REALITY

Sound surrounds us. We are born that way. Immersive, multidimensional audio is our natural habitat. If life doesn’t happen in stereo, why should music? Stereo flattens and diminishes authenticity and thus represents an unsatisfying vehicle for rich content delivery.

L-ISA Immersive Hyperreal Sound technology enables artists to reclaim that glorious reality, and even augment reality to a degree that magnifies the intensity of those magical moments that only live music can bring.



MEET L-ISA

L-ISA Immersive Hyperreal Sound is a smart audio technology developed to serve the music industry by rethinking the audience experience for live performance and experiential environments. L-ISA captures and conveys the original sound sources—whether vocals, spoken word, instruments, or effects—in their most detailed and genuine form, making sound a central element of show design. L-ISA allows the audience to forget about the loudspeakers entirely and enjoy the essential: the unforgettable emotions of becoming deeply involved in the show.

L-ISA was developed by L-Acoustics, the worldwide leader in premium professional sound systems, known

for pioneering the modern-day line array technology in the 1990s that remains the industry standard today in live events and touring.

L-ISA can be seen as a major evolution of stereo sound, the conventional and familiar technique for home listening.

“ I was quite emotional when we listened back to the first show we did using L-ISA. It was like listening to the songs for the first time again. It was amazing: a new dimension. ”

Gus Unger-Hamilton, alt-J

WHY L-ISA?

Because sound can be so much more than just good. L-ISA helps artists achieve the exceptional: sound that is truthful, extremely natural, incredibly detailed, highly intelligible, and, above all, perfectly matched to the artistic vision of how the music should sound.

Because hearing is feeling. Sound is the vehicle that transports emotion from the stage to the audience. Sound, more than any other facet of show design, is vital to the live music experience. When audio is delivered in high resolution and directly connected to the performance, engagement deepens, hearts soar, and memories are made.

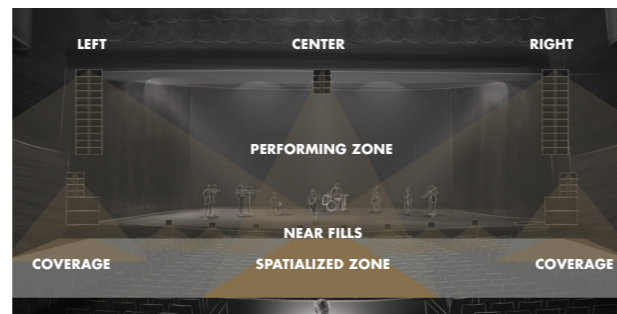
Because L-ISA blends absolute creative freedom with creative control. L-ISA offers a toolbox that lets artists paint the impossible in hyperreality while providing their show design and technical teams with an easy-to-use ecosystem that makes translating their creativity to reality feasible, portable, and reliable show after show.

There has never been a better time in the history of live music than right now. And now there is technology available that enables true sound—and the feelings that result—to finally become central to the concert experience. L-ISA represents a reinvention of the art that will connect performers and spectators in thrilling ways yet to be imagined and explored. **Goosebumps guaranteed.**

THE SHORTCOMINGS OF STEREO

Stereo sound is familiar and ubiquitous. It can be comfortable and enjoyable, such as at home, when the listener is ideally positioned between two loudspeakers or listening through headphones.

At live events, however, stereo audio has merely become a habit, and not a good one at that. When loudspeakers are placed off to the left and right sides of the stage, problems arise. First and foremost, spectators hear sound coming from a place "over there," far removed from the heart of the action occurring on stage. This disconnect between sight and sound engenders an emotional distance as well, not unlike having a conversation by phone instead of in person.



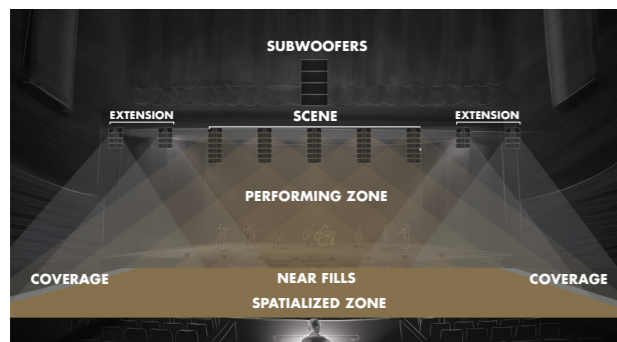
Stereo sound configuration provides sub-optimal coverage

Furthermore, only a fraction of the audience located in a central "sweet spot" benefits from true stereo sound. Even "VIP" seating close to the stage, yet not centrally positioned, receives a lopsided mix. Yet stereo remains the industry standard that has always been considered "good enough," especially when manufacturers like L-Acoustics have consistently improved the quality of sound solutions over time. This has established a status quo where both creative teams and audience members view sound as a commodity: something that needs to work but has no real added value.

Nothing could be further from the truth.

“ This is a solution to a very old problem. It's a big move into bringing down sound levels so you're not smashing people in the face, but you're still producing something that excites and intoxicates the audience. This technology is amazing, it's not going away, and it can only become more popular. ”

Russ Miller, FOH Engineer, Johnny Marr



L-ISA Hyperreal Sound technology optimizes audience coverage



Johnny Marr, Earth (Evolutionary Arts Hackney), London, UK

L-ISA BASICS

L-ISA [pronounced el EE-zuh] borrows the "L" from L-Acoustics and "ISA" stands for Immersive Sound Art. L-ISA stems from the conviction that music is an artistic discipline—like fine art—that can be deployed in two ways:

- a playback format: Immersive Sound Art;
- a live performance format: Hyperreal Sound or Immersive Hyperreal Sound.

Hyperreal Sound creates a heightened sense of proximity and connection with the artist through a high-resolution frontal sound system. With L-ISA, the music teems with detail and sounds are physically connected to their source. **What you hear is what you see.** The music seems magnified, larger than life, raw, and real. In a word - hyperreal.

Immersive Hyperreal Sound draws the audience further inside the musical performance through a **360° panorama of surround and overhead sound.**

Since launching in 2016, **L-ISA has been enjoyed by over five million people at more than 1500 shows**, large and small, from touring to permanent installations. Early adopters include Ennio Morricone, alt-J, Lorde, Childish Gambino, Aerosmith, Christine and the Queens, Eric Serra, Puy du Fou theme park, and Earth, the first permanent installation of L-ISA Immersive Hyperreal Sound in a live music venue. **Shows in L-ISA have garnered high praise, 5-star reviews, and achieved a 100% success rate.**

HOW DOES L-ISA WORK?

L-ISA provides audio professionals with streamlined tools and methodologies to create and mix a widescreen panorama of sound with high spatial resolution in any live setting.

The technology uses a dedicated multi-object processor located downstream of the mixing desk in the familiar live audio production flow.

The L-ISA Processor is piloted through the L-ISA Controller software with a PC, Mac or from the console via plug-in or firmware integration. This lean and simple L-ISA ecosystem processes and dispatches object-based outputs to a multi-array L-Acoustics loudspeaker configuration designed and certified in L-Acoustics Soundvision modeling software.

With this new ecosystem comes newfound freedom to take full creative control of this spatialized sonic environment. Show designers can choose to convey reality, magnify and reshape that reality, or defy convention altogether.

For the first time, sound and visuals can truly become one, dynamically tracking moving performers in tandem, augmenting and stretching reality to cinematic proportions, to enthrall and immerse audiences in a 3D space like never before.

Even the perceived acoustics of the venue can be modified to suit the mood and message, and then faithfully reproduced from show to show, thanks to L-ISA's powerful room engine.



L-ISA Controller in use at Ennio Morricone concert, Milan, Italy

OBJECT-BASED MIXING

Traditional audio mixing is the art of enhancing and combining multiple sound inputs into left and right loudspeaker sends. Object-based mixing adds a multidimensional layer to that art.

In addition to traditional mixing tools, each sound object, as defined by position and size, can be manipulated anywhere within the 3D framework provided by the multichannel, multi-array loudspeaker configuration.

An object-based mix enables sources to be localized, scaled, and moved to their actual location or wherever the imagination desires.

Within a multi-array loudspeaker configuration, the distinct positions and separation of each source translate naturally so that a listener can perceive subtle compositions in the mix without the need for frequency tailoring or constant level riding. The graphic interface of the L-ISA Controller provides real-time feedback about the spatial balance of the mix.

Given that sound objects are mixed to locations, not to loudspeakers or busses, the properties of each sound object are independent from the specific loudspeaker layout. This enables portability from show to show as the existing source spatialization can be rendered to the new sound system configuration regardless of scale.



L-ISA Controller software and L-ISA Processor hardware



Bon Iver L-ISA Frontal configuration, Santa Barbara Bowl, CA, USA

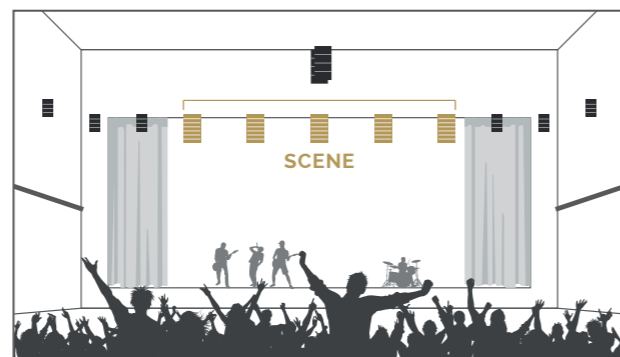
MULTI-ARRAY LOUDSPEAKER CONFIGURATIONS

The loudspeaker configuration is a critical component in delivering an Immersive Hyperreal Sound experience. The objectives of the production, the program material, and the venue all play crucial roles in defining the system design. Hyperreal Sound is achievable through a Frontal loudspeaker configuration that includes Scene, Extension, and subwoofer systems.

Immersive Hyperreal Sound is achieved with the addition of surround and overhead systems.

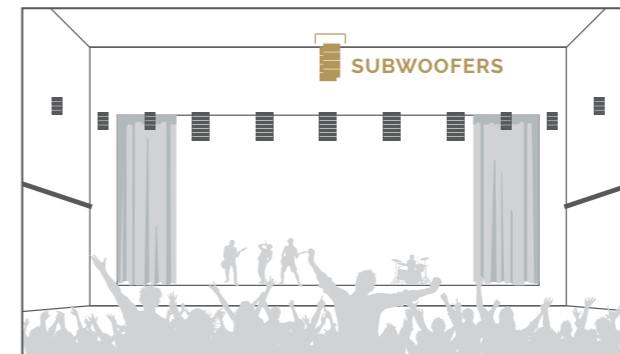
Scene system

The main system is the high-resolution Scene system of speaker arrays that matches the width of the performing zone. The Scene system allows for accurate localization and separation of sound sources and motion tracking of performers. The recommendations for the Scene system vary according to program content and power needs. The Scene system is calibrated to provide at least as much SPL as a left-right stereo configuration.



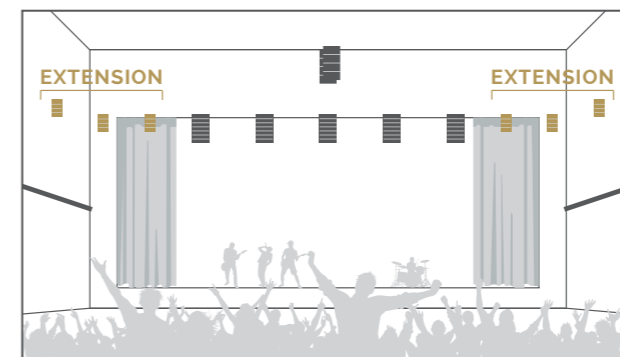
Subwoofer system

A centrally flown subwoofer configuration maximizes the efficiency, consistency, and dynamic impact of low and sub-low frequency content.



Extension system

The Extension system expands the sound panorama as far as the side walls of the venue to widen the performing zone and provide additional envelopment.

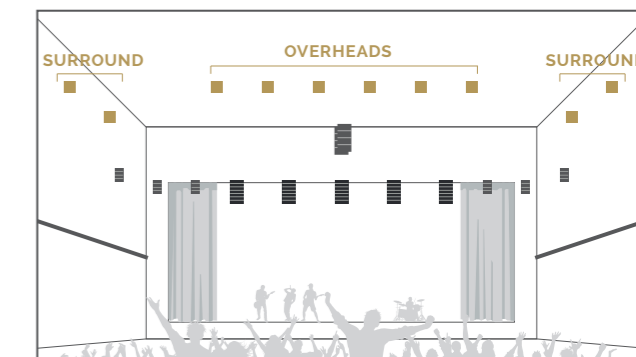


“ With each sonic element having its own distinct identity in the wider soundscape, I had several moments during the concert where I noticed things that I’d never noticed before. As a mix engineer, being able to identify elements to operate on with speed and precision made mixing this complex band easier, faster and even more fun. The performance was easily my favorite Bon Iver show in the past three years. We accomplished a beautiful, huge, wide, immersive, engaging presentation of the band’s music, and it turned out magnificent! ”

Xandy Whitesel, FOH, Bon Iver

Overhead and surround systems

If the production requires Immersive Hyperreal Sound, the Frontal system can be augmented with surround and overhead loudspeakers to more fully envelop the audience.



Electronic music artist MOLECULE records tracks in the Arctic for a unique LISA show that occurs in total darkness.



CREATIVITY UNLEASHED: BEYOND REALITY TO HYPERREALITY

With LISA, artists can present their music to audiences in ways that are more natural, authentic and realistic than ever before. But it doesn't stop there. LISA is the technology that allows artists to showcase the aspect of their art that they care about the most: the music and how it touches their fans. **Sound becomes a medium in itself, a whole new set of paints, brushes and a canvas upon which to create.**

Audio can be deeply layered, shifted and stretched in every direction, and manipulated in a multitude of ways that were not possible until now. Sound—the carrier of the musical message—can now be just as spectacular as visuals and lighting.

SOUND BECOMES SPECTACULAR

Live concerts have transformed into a feast for the eyes. Elaborate set designs, sophisticated lighting, and high definition video content dazzle the spectator.

What about sound? Concertgoers come to shows to listen to music they love performed by artists they admire. No one would argue that the single most vital element to enjoying a live concert is being able to hear the music. Sound is the force that creates and maintains a connection between artist and audience.

Sound is what makes people feel.

LISA opens up a world of infinite possibilities of how sound can be conceived and designed by songwriters, artists and show production teams.

With LISA, what you hear is what you see. It's the sonic equivalent to direct eye contact, reconnecting artist, music and audience in an emotional experience that sounds and feels as wide as it looks. At the same time it feels intimate, tribal, and completely in the moment.

Finally, sound and sight reunite to delight audiences.



“ This is the way it was meant to be heard. This is the first time in history that fans get to come here and ‘Sweet Emotion’ surrounds them. ”

Steve Dixon, Producer of Aerosmith: Deuces are Wild

The Telegraph

Exhilarating triumph

“ 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. ”

DIY

“ Helps to highlight the intricacies of their textured sound. **The stunning acoustics ring loud and clear** from speakers around the sides of the famous venue, making the trio’s immersive sound even more all-encompassing. ”

London Evening Standard

A joyous extravaganza of dazzle

★★★★★

OWN THE ROOM

L-ISA literally allows production teams to “own the room” by gaining complete control of the venue environment and the soundscape that they present to the audience. Mixing and placing sounds across the entire space of the room instead of to just two channels vastly improves how clear, natural, and detailed every instrument, note, and lyric sounds.

Furthermore, the listening “sweet spot” in the room expands dramatically in comparison to a conventional system, bringing excellent sound to the entire space to the delight of all in attendance, not just a happy few.

Listeners may not realize that L-ISA is what makes such a difference, but **production teams and artists will reap rewards in the form of glowing press reviews, audience engagement, and “life-changing gig” comments rippling through social media.**

BUILD EXCITEMENT, EXCEED EXPECTATIONS

Create a pre-show buzz with a unique selling point. Surf the wave of positive press and social media word of mouth after a successful concert.

L-ISA is the technology that enables promoters to build excitement and then exceed expectations at every show, spurring a virtuous cycle of artist recognition, high demand, and improved ticket sales.

What's more, these impressive results can be achieved cost-effectively: sound is a line item on present-day production budgets where there is potential to add value, and even overdeliver, thanks to L-ISA. Integrating L-ISA design early into the show planning process ensures that optimal solutions can be implemented with respect to both artistic impact and cost control.

Connection. Intimacy. Engagement.

The list of memorable and magnificent L-ISA shows and superlatives continues to grow.

IT'S REAL. IT'S HYPERREAL.



“ We’ve had massive advancements in lighting technology. It’s so good to see a new step forward in audio presentation. This is game-changing. ”

Adam Rhodes, FOH, Angus & Julia Stone

“ A wall of atmospheric noise, a rich mix of synths, strings, percussion and guitars that hung like a cloak over the crowd. The effect was spellbinding, transcendental even. ”

Marilyn Kingwell, *The Times* review of Ben Howard, O2 Academy Brixton in L-ISA

“ The fact that everything has got super clarity means the audience can hear all the words and feel like the artist is addressing them personally. It’s like listening along in their own room with 12,000 of their mates. ”

Richard Young, Production Director for Lorde

“ It was like he was whispering in my ear. I can’t stop smiling. ”

“ Powerful and involving. ”

“ By far the best sound of any gig I’ve ever been to. Unforgettable. ”

Audience comments, shows in L-ISA



I've spent many extraordinary moments at concerts. When seated close to the front of house engineer, I was able to experience something that few people in the venue can actually hear—the best sound in the house. Yet each time, after those initial few minutes of being greatly moved by the sheer power of live music, I was distraught to watch talented engineers deploy every technique and trick they know to deliver ample and great sound that still didn't quite fully connect with the audience.

This is why I assembled a team to create L-ISA: to restore live music's full and glorious impact by giving production professionals the right tools to reunite sight, sound, and emotion in new and thrilling ways.

Dr. Christian Heil,
President & Founder of L-Acoustics



For more information about the award-winning technology, L-ISA Immersive Hyperreal Sound, please contact us at info@lisa-immersive.com.

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L-ISA

Immersive Sound Art

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