

Mazowsze National Ensemble Unveils State-of-the-Art 360° L-ISA Immersive Hyperral Sound Experience Using the New L-Acoustics L Series



Mazowsze National Ensemble installs an L-Acoustics L-ISA Hyperreal Immersive sound system with L series

Poland's premier folk ensemble bridges tradition and innovation with Audio Plus-integrated advanced performance technology

WARSAW, POLAND – February 2025 – In a bold fusion of cultural heritage and cutting-edge technology, the renowned Mazowsze National Folk Song and Dance Ensemble has transformed its 600-seat concert hall into a fully immersive 360-degree performance space, Poland's first to combine L-ISA technology with L-Acoustics' newest L Series progressive ultra-dense line array loudspeakers. The transformation, themed "New Sound of Tradition," centers on the installation of an L-Acoustics L-ISA Immersive Hyperreal Sound system – a sophisticated solution that surrounds audiences with sound from every direction, including overhead, creating an unprecedented three-dimensional acoustic experience that brings Poland's rich musical traditions to life with extraordinary clarity and depth.



The 600-seat concert hall has been transformed into a fully immersive 360-degree performance space with L-Acoustics L-ISA technology

Founded in 1949 and celebrated globally as an ambassador for Polish culture, Mazowsze has consistently balanced preservation with innovation in its mission to share Poland's folk heritage. While the ensemble's intricate costumes, traditional choreography, and authentic musical arrangements honor centuries of cultural legacy, Mazowsze has fearlessly embraced technological advancement to amplify the impact of its artistry. The 2024 sound system upgrade marks another significant milestone, introducing the innovative L Series speaker system in combination with L-ISA immersive technology. The extensive audio upgrade encompasses both the main concert hall and the venue's lobby spaces, ensuring a seamless, high quality sound experience throughout the entire facility. This state-of-the-art configuration creates an enveloping sound environment that brings new dimension to traditional folk performance, while maintaining the authenticity that is central to Mazowsze's mission.



Fifteen L-Acoustics 5XT coaxial speakers are spread across the stage lip provide spatial in-fill

The visionary project emerged from a comprehensive technology audit led by Sound Director & Engineer Krzysztof Polesinski in collaboration with Mazowsze's Creative Sound Director, Piotr Przedbora. After extensive research into L-Acoustics newly launched L2 progressive ultra-dense line source array, including detailed auditions in Italy, and a rigorous tender process, Poland's L-Acoustics distributor Audio Plus was selected to bring this project to life.



Mazowsze National Ensemble is Poland's first venue to combine L-ISA

technology with L-Acoustics L series loudspeakers

“Our mission was to create a sound system worthy of Mazowsze’s extraordinary artistic legacy, while honoring the sound design principles established by the late Ewa Wi?ckowska-Kosmala, who we had the honour to work with many times.” says Pawel Kuhn, Marketing Director at Audio Plus. “L-ISA technology doesn’t just break traditional audio boundaries – it eliminates them entirely, offering an acoustic experience that wraps around the audience in a complete sphere of sound, bringing them closer to the heart of Polish folk tradition than ever before. And of course, this is Poland’s first installation using the newest L-Acoustics product – the innovative progressive line source L2D. This, in conjunction with L-ISA immersive technology, brings Mazowsze’s sound to a new level.”



The L-Acoustics L-ISA Hyperreal Immersive sound system is a sophisticated solution that surrounds audiences with sound from every direction

The installation presented formidable technical challenges, including the modification of a 4-ton ceiling sound barrier to accommodate the sophisticated speaker array. Using L-Acoustics Soundvision software, Krzysztof Polesinski designed an intricate audio architecture that precisely maps sound throughout the three-dimensional space. The venue’s folding seat system, which compacts into two towers, provided crucial flexibility during the complex three-month installation process.



The main concert halls sound design creates a true 360-degree soundscape through a precisely orchestrated network of L-Acoustics technology

The main concert hall sound design creates a true 360-degree soundscape through a precisely orchestrated network of L-Acoustics technology. Seven individual L2D line source arrays provide detailed Scene System coverage, while fifteen 5XT coaxial speakers spread across the stage lip provide spatial front-fill. Six KS21 subwoofers in a cardioid configuration ensure controlled, low frequency coverage throughout. Twenty-one X8 and seven X15 coaxial speakers are placed around the audience, one X15 and four X8 on each of the sides, five X15 in the back and a further thirteen X8 overhead to complete the three-dimensional sound field, allowing sound designers to place individual instruments and voices anywhere within the sonic canvas. Onstage, A10, X12 and X8 speakers provide monitoring for the performers. The system is powered by an L-ISA Processor II and P1 processor, ten LS10 switches, and eleven LA7.16 amplified controllers.



The state-of-the-art L-Acoustics sound configuration creates an enveloping sound environment that brings new dimension to traditional folk performance.

The venue's lobby spaces are also fitted with an L-Acoustics system designed for optimal coverage and aesthetic integration. The upper lobby features six 5XT, two X8, and an SB6i subwoofer, while the lower lobby is equipped with eight X6i and an SB10i subwoofer. All components were chosen in white to blend seamlessly with the architecture, with the X6i speakers are near invisible thanks to L-Acoustics mounting solutions. The lobby system is powered by LA4X amplified controllers and managed through a comprehensive DiGiCo control system, ensuring precise sound management throughout these hospitality spaces.



The L-Acoustics sound system upgrade was themed “New Sound of Tradition”

“This immersive sound environment represents a transformative moment in how traditional folk music can be experienced,” said Conductor and General Manager Jacek Boniecki. “While technology can never replace the soul of artistry, it can dramatically amplify its emotional impact. With L-ISA technology, every nuance of each musician’s performance is perfectly clear within the soundscape. The ability to place sounds precisely in three-dimensional space creates an unprecedented intimacy between performers and audience, allowing us to touch hearts and minds in ways we never could before.”



The system is powered by two L-ISA Processor II, two P1 processors, twelve LA7.16 and eight LA4X amplified controllers. Managed through a comprehensive Digico control system

“With this technology, the listener can be a part of the event, while for production it opens up completely new possibilities. We can be more creative. We can work even better on each instrument, because suddenly we can hear more details,” says Polesinski.



The L-Acoustics sound system encompasses the main concert hall and the venue's lobby spaces, ensuring a seamless, high quality sound experience throughout the entire facility.

“We’ve moved beyond a simple technological upgrade into a new realm of artistic possibility,” added Przedbora. “By surrounding our audience in a complete sphere of sound, we’re not just moving beyond stereo – we’re creating a three-dimensional sonic environment where every voice, every instrument, and every musical gesture can be precisely placed and moved throughout the space. With Mazowsze, we’ve created a venue where Poland’s rich musical heritage can be experienced with unprecedented immediacy and emotional impact. The only limit now is our imagination.”



All L-Acoustics speakers for the lobby were chosen in white to blend seamlessly with the architecture

Spectators describe the experience as “revolutionary,” “breathtaking,” and “unlike anything in traditional folk performance.” Many note how the immersive sound system creates an intimate connection with the performers while maintaining the grandeur and spectacle that has made Mazowsze legendary.



The lower lobby is equipped with eight L-Acoustics X6i wideband speakers and an SB10i W subwoofer