



board

Two Princess Cruises ships – Diamond Princess and Sun

Princess – have undergone a major upgrade to their entertainment offerings with a new approach to live sound, bringing L-ISA Hyperreal Sound and Immersive Hyperreal Sound experiences to their guests.

Princess Cruises decided to raise the on-board sound reinforcement to a new standard and has specified L-Acoustics L-ISA configurations, supplied by L-Acoustics Certified Provider, Norwest Productions.

L-ISA is an object-based immersive sound technology that uses placement of sound sources to achieve spatialization, enabling anything from a customisable, ultra-realistic live sound field to fully immersive 360° sound design. Individual audio objects or channels can be independently panned and located anywhere in the soundscape. The main components are the loudspeaker system, the L-ISA Processor, and L-ISA Controller: a software suite that takes care of positioning, movement and visualization of all sound objects in the 3D mixing space in real time.

In seeking to offer exceptional guest experiences, Princess Cruises Entertainment Experience department began exploring implementation of immersive live sound, noting that live performance audiences are increasingly exposed to immersive technologies in other contexts such as cinema, gaming and VR. “Bringing a new level of guest experience is our foremost consideration,” observes Mark Simons, Princess Cruises director of production operation and projects.

The first demo of L-ISA took place at the company’s US offices in Westlake Village, California utilising L-Acoustics purpose-built L-ISA demo facility. The company realized that the technology would contribute to making shows sound more vivid and natural, ultimately making the audience feel more connected to the performance. The final decision to proceed with L-Acoustics L-ISA integration was made during the 2018 InfoComm exhibition in Las Vegas when the opportunity to compare the systems on offer from other manufacturers was extended. The ability of L-ISA to spatialize objects by controlling proximity and distance as well as smooth panning left to right was what made the technology stand out from other options. The company felt the technology could make listeners feel like they were in the heart of the action happening on stage.

The frontal Scene systems for both the Sun Princess and Diamond Princess installations use five arrays of six Kiva II ultra-compact modular line source speakers across the width of the stage. These are augmented with ARCS WiFo cabinets to widen the panorama with an Extension system, along with two SB18 subwoofers.

The Diamond Princess installation takes the system even further into the immersive realm with 12 X8 enclosures to create the surround system. The Sun Princess system was installed in August 2018 and the Diamond Princess installation happened at the beginning of 2019.

The results in both theatres are remarkable, encapsulating the audience in audio that rivals and even surpasses West End and Broadway theatrical standards of production and immersion. “We are proud to be the first cruise

line in the world to offer L-ISA technology on board our vessels,” concludes Simons. “Our early adoption of this transformative audio technology, currently used by world-class events, venues and artists, underscores our commitment to identify and act upon every opportunity to surprise and delight our guests.”

