L-ISA Channels Eye of the Storm at Chasseurs de Tornades, Futuroscope’s Cutting Edge New Attraction

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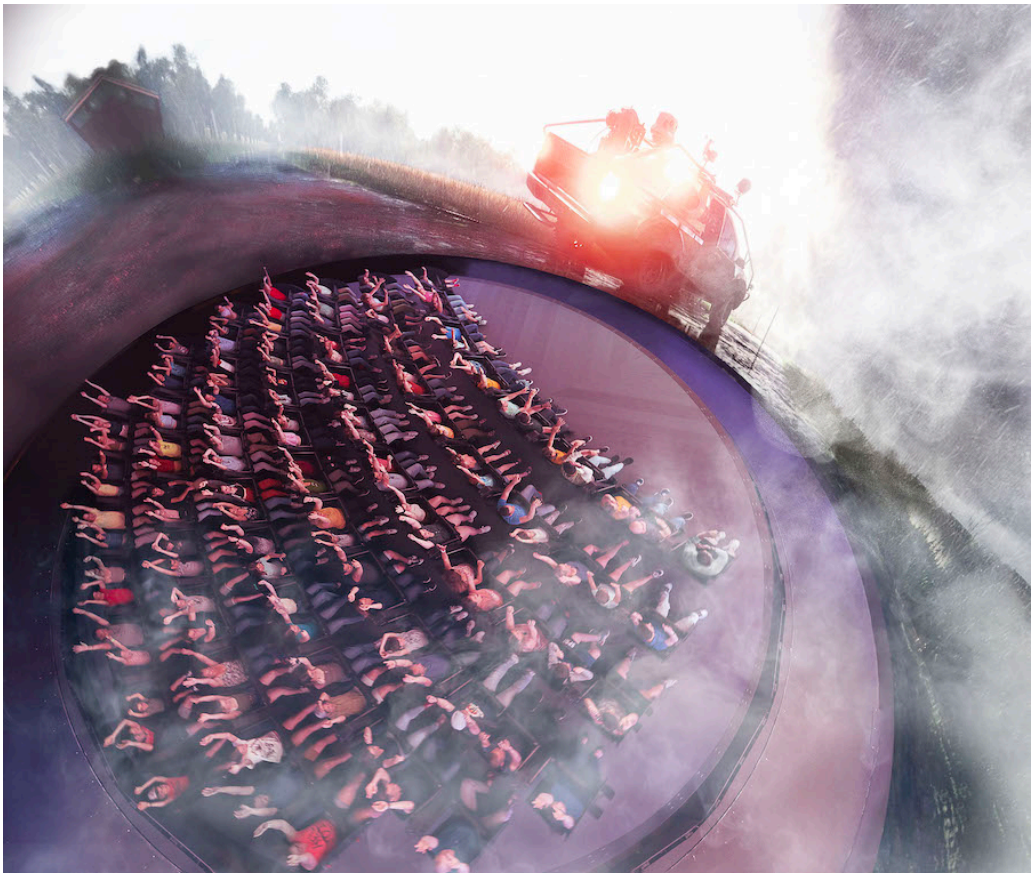

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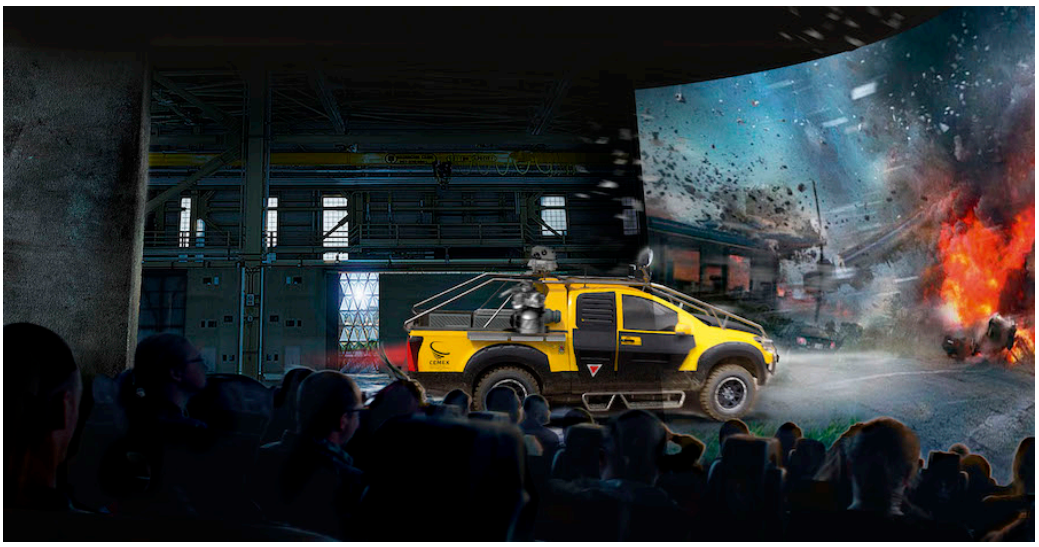
L-Acoustics immersive audio pivotal to success of multi award-winning theme park attraction

POITIERS, France – March 2023 – Launched last summer to worldwide acclaim, the multi award-winning Chasseurs de Tornades attraction at the Futuroscope theme park in Poitiers, France, is a breathtaking 360-degree immersive experience that follows the adventures of a team of tornado hunters. The landmark project, which cost 21 million Euros to build, features the largest circular LED screen in Europe. Hollywood visual effects specialist, François-Xavier Aubague, directed and produced the media content, which is mixed with live action scenes. The new ride is experienced from a moving platform that rises, falls, tilts and turns with the action, accompanied throughout by L-Acoustics ground-breaking L-ISA Immersive Hyperreal Sound technology.

Originally launched in the '90s to showcase futuristic technologies, Futuroscope has evolved into a technology-focussed theme park with state-of-the-art rollercoasters, immersive rides and cinematic experiences. The newest attraction in the park and a unique concept, *Chasseur de Tornades* has garnered multiple industry accolades since its opening, including the prestigious THEA award for best attraction.



The ride comprises a 17-metre diameter spherical auditorium fitted with a 360° floor-to-ceiling

screen. Sections of the screen sink into the floor to reveal a 10m main stage and smaller 5m one that showcase live action for different parts of the storyline. Leading the narrative, a tornado-chasing buggy drives around the auditorium, intermittently disappearing behind the screen which then plays footage of a virtual version of the vehicle, whilst the audience is seated centrally on the rotating platform within the action.

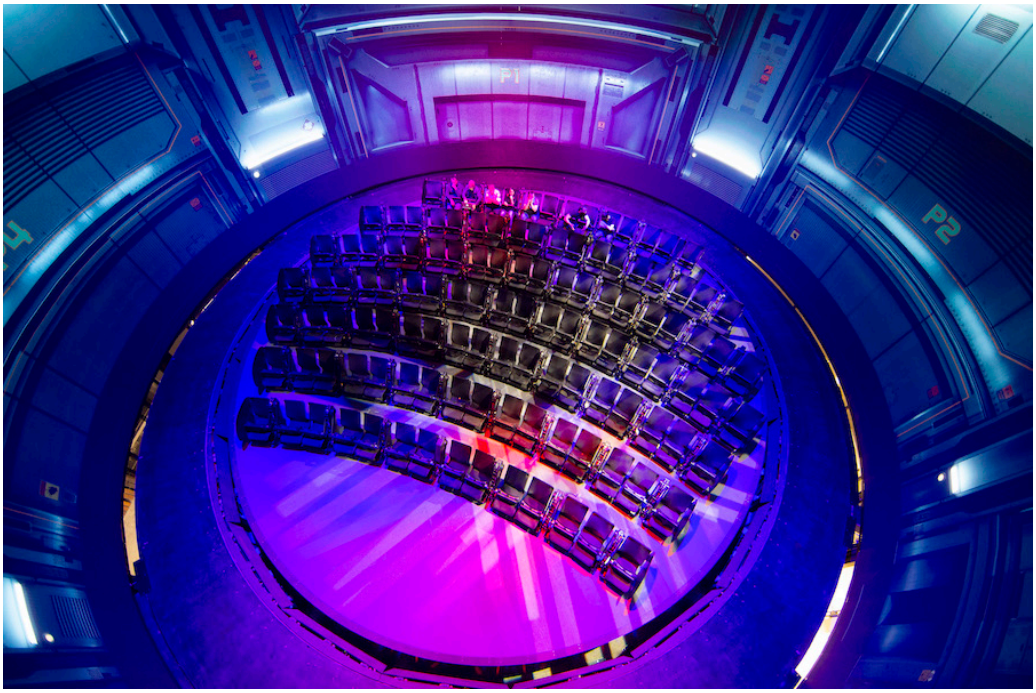
FMD, which manages technical support for the park, specified the AV components of the new ride, including the pivotal choice of audio technology. With experience of L-Acoustics from previous installations, it was the ‘go to’ choice when it came to the new attraction due to L-Acoustics’ innovative product portfolio and exceptional reputation.

“We had L-Acoustics v-DOSC systems installed in the park in 1997, and have worked happily with their systems ever since. We were one of first companies to explore L-ISA technology in 2016, and we were amazed and impressed with what it can do,” explains Yannis Marchet, Development and Project Manager at Futuroscope. “Our research during the early stages of this project highlighted that there were other companies that could deliver similar audio technology, but when the team was conceiving the ride, we immediately thought of L-ISA as the ideal solution. As an atypical and unique attraction, we felt the synchronicity between the technology and the film footage was paramount and adopting L-ISA was the best approach to achieve this. We even visited L-Acoustics HQ with the film’s producer to further the collaboration, and fine tune how the sound objects could move in the same way as the film.”

The audio needed to follow the movement of the buggy. First, an L-ISA mix was established with the stationary buggy, and then, using the L-ISA Processor and DAW plugin, a dynamic and automatic curve was added to represent movement. The producer and sound designer spent several months perfecting the film, and each iteration had its accompanying soundtrack. In the end, 30 different versions of the audio mix were made, with each one tested in the auditorium. The final mix was then recorded, programmed by the mix engineer using L-ISA Studio software suite, and used as playback during the shows.

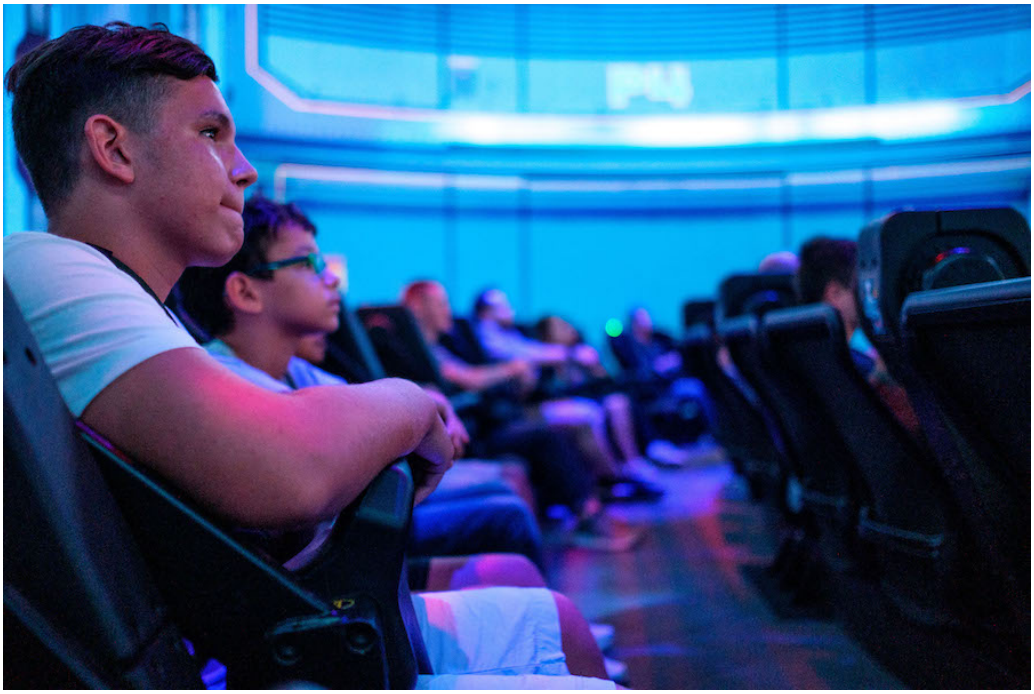
Since the LED screen is not acoustically transparent, the team devised a configuration of 16 compact short throw X8 cabinets, positioned around the top of the LED screen using L-Acoustics Soundvision software to ensure that this would provide maximum coverage to the audience. Four additional X8 speakers form an inner circle, with another X8 in the centre of the inner circle, facing directly down towards the audience. For lower frequency reinforcement, three KS21 subwoofers face down from the ceiling, whilst three X12 speakers are positioned on the big stage

and two on the smaller stage. There are six LA4X amplified controllers to drive the system, which was calibrated using L-Acoustics M1 measurement platform while network management is handled by a P1 Milan AVB processor.



Except for the seating platform, every part of *Chasseurs de Tornades* was conceived and built in France by Futuroscope. However, the audio hardware took just two weeks to install, with all the loudspeaker components, including the amplifiers, rigged on an eight metre-high truss framework, designed by FMD. The system is connected on a Dante network, using a Modulo Pi media server, with the audio soundtrack running on a Mac loaded with Pro Tools.

During the development of *Chasseurs de Tornades*, two of the attraction’s team members trained at L-Acoustics, receiving certified status. This allows Futuroscope to be autonomous in maintaining the ride. “Having certified team members on hand is not a luxury,” explains Marchet. “In the first two months of opening, over 350,000 visitors enjoyed the attraction, so making sure everything works perfectly every time is essential!”.



He concludes, “This is by far the biggest project we’ve ever built, and we were working without a blueprint. The results are stunning; we are 100% happy with it, and with the L-ISA technology. If we had to do it again, we wouldn’t do anything differently!”