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SEAMLESS SIGNAL MANAGEMENT WITH LIGHTWARE'S MX2 AT THE LDLC ARENA

Market
Rental & Staging

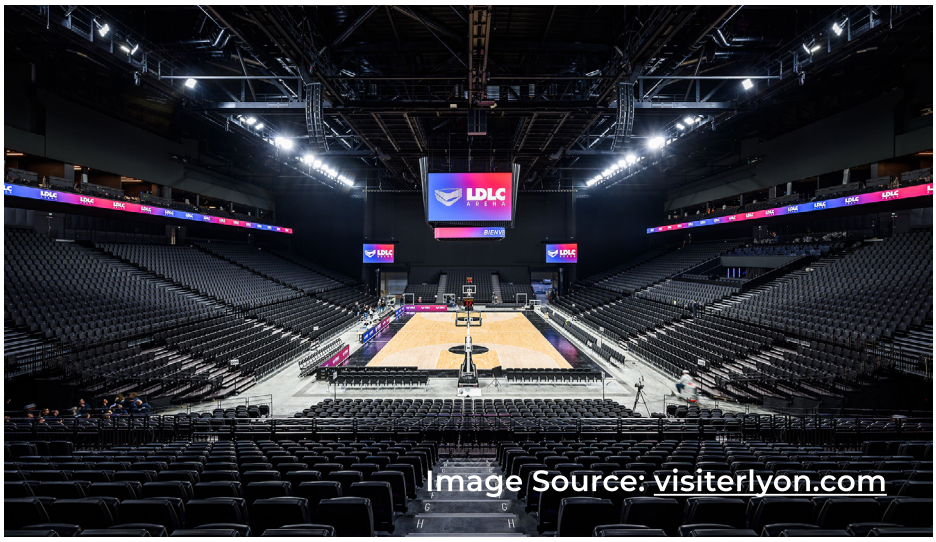
Country
France

Lightware Equipment Used in Project
MX2-8x8-DH-8DPio-A

ALABAMA MEDIA COUNTS ON LIGHTWARE TECHNOLOGY FOR COMPLEX VIDEO TRANSMISSION ON LANDMARK LED-CUBE PROJECT

Opened in November of 2023, the **LDLC Arena in Lyon, France**, is a testament to the colliding worlds of modern entertainment and state-of-the-art technology. This multi-purpose indoor venue, with a seating capacity of 16,000 for concerts and 12,000 for sporting events, is already considered a world-class destination. **Central to the arena's technological framework is Lightware's MX2-8x8-DH-8DPio-A matrix switcher**, a vital component in ensuring seamless integration and operation of the venue's advanced audiovisual systems, notably an eye-catching LED cube.

The LDLC Arena project was overseen by Alabama Media, in collaboration with VINCI, the main contractor. Alabama Media's extensive experience and understanding of live entertainment demands informed their approach to this large-scale installation. **The project required a shift from traditional design concepts to innovative solutions** that would meet the venue's diverse needs, from sports events, such as Euroleague Basketball, to concerts from artists including Eric Clapton and Green Day.



"Initially, the scope was to integrate a classic cube with four sides of LEDs and an LED banner around the balconies, plus LEDs at the edge of the pitch and a broadcast control room," recalls Christopher Dubost, Project Manager at Alabama Media. ***"This scope evolved to transforming the central four-sided cube into a decorative object reminiscent of the LDLC Arena logo, which could be partly dismantled to accommodate productions on the central stage. An LED ring under the cube and two scoring screens were also required."***

The primary challenge was to create a flexible yet robust system capable of handling seamless video playback for a rich variety of events and use cases. **The central feature of the arena is a 17-tonne motorised LED cube**, equipped with four 3.9mm Absen LED panels, each measuring 8m x 4.5m and offering stunning visuals for the audience.

"A motorised ring under the cube, consisting of four 6m x 1m Absen PL3.9 V10 LED panels, adds another layer of dynamic visual engagement," says Xavier Aucagne, Technical Project Manager at Alabama Media. ***"The cube required a sophisticated control system to manage its operations and broadcast capabilities."***

Alabama Media selected Lightware's MX2-8x8-DH-8DPio-A matrix switcher for its unmatched capabilities in handling high-definition video and audio signal transmission. The switcher's support for 4K UHD resolution at 60Hz with RGB 4:4:4 colour space and its ability to down-convert to 4:2:2 were critical features on the LDLC project. Its compatibility with HDMI 2.0 and DisplayPort 1.2 inputs, without the need for adapters, simplified the integration process.

"Lightware technology, combined with its compatibility with Novastar processors, ensures high-quality broadcasting whatever the broadcast scenarios," confirms Christopher Dubost. ***"Lightware's technical support in the French office and at HQ worked with us to ensure that the grid operated correctly with Novastar technology in the specific technical configuration."***



A further benefit to using MX2 is that it ensures redundancy and the ability to switch from one server to another in the event of a technical problem, a critical advantage during live events and broadcasts.

The implementation phase, from April 2023 to September 2023, involved meticulous planning. **The MX2-8x8-DH-8DPio-A's crosspoint switching functions, available via direct keys on the front panel, allowed for flexible and precise control of the signal paths.** This capability was crucial for managing the various display requirements, from the central LED cube to the perimeter LED banner and additional scoring screens.

The deployment of Lightware's MX2-8x8-DH-8DPio-A matrix switcher significantly enhanced the operational efficiency of the LDLC Arena. Advanced features, such as Pixel Accurate Reclocking and Advanced EDID Management, ensure optimal signal quality and compatibility across different devices. The ability to embed and de-embed audio from the signal stream at dedicated analogue audio I/O ports provided additional flexibility for various event setups.

"Lightware's Advanced EDID Management feature helps futureproof this installation," continues Christopher Dubost, ***"We're able to create customised EDID settings tailored specifically to the LED walls. Additionally, the matrix supports HDR and Low Latency Dolby Vision, while also offering audio embedding/de-embedding of PCM, Dolby Digital, and DTS high bitrate audio, so it can handle all kinds of demands."***

Alabama Media's proactive approach, combined with Lightware's full-featured technology, resulted in a successful integration to meet the client's expectations and captivate audiences. The arena now boasts an audiovisual system that adds a 'wow factor' to a wide range of events, from high-profile basketball games to performances from international artists.

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