

FULLY OPERATIONAL AUDIO NETWORK

BORUSSIA-PARK Stadium

Q-SYS Scores Big Win at BORUSSIA-PARK Stadium

📍 Mönchengladbach, Germany

The [BORUSSIA-PARK](#) soccer stadium, which was established in 2004, is a notable venue in Germany with a seating capacity of 54,010, making it one of the largest stadiums in the country. The stadium's reputation extends beyond soccer, as it has hosted various prestigious events. Notably, BORUSSIA-PARK was one of the venues for the 2011 FIFA Women's World Cup, showcasing its ability to host international tournaments. BORUSSIA-PARK has become a popular spot for internationally acclaimed musicians such as Elton John and Bruce Springsteen, who have performed at the stadium during their tours. This has solidified its reputation as a premier sports and entertainment venue, attracting fans from all over the world.



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Henry Bleß

Project Manager, Wärtsilä FUNA International

Challenges

Tight Timeframe

BORUSSIA-PARK was scheduled to be retrofitted with a completely new audio system. The retrofit needed to be complete before the start of the new soccer season, which only allowed a tight six week schedule for the entire installation, from decommissioning the old system to handing over a fully operational audio network. Systems designers were met with several strict requirements for the project.



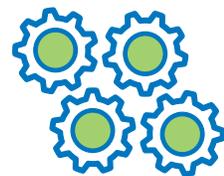
Complete Reliability

With over 54,000 fans watching in the stadium and potentially millions watching around the world, a complete audio system failure is NEVER an option.



Monitoring & User Control Interfaces

With a system this large and complex, it was imperative that the system had excellent monitoring capability, and a scalable user control interface that was easy-to-use.



Future Proof

Putting the stadium out of commission for upgrades is costly, so the new audio systems needed to have enough processing and options for future expansion.



Solutions

System Control and Power

During the project planning stage, the [Q-SYS Platform](#) quickly became the obvious choice for Henry Bleß, the project manager at prime contractor [Wärtsilä FUNA International](#). He remarks, “Q-SYS offers everything within one single platform, while other designs would require different components from different manufacturers.” Not only does this singular platform allow for an easier design process, this key advantage also dramatically improves reliability across the entire system. “Q-SYS covers all requirements within a single system including routing, DSP, networked amplifiers, monitoring as well as media players and user control interface.”

Control: Keeping A Clear Overview

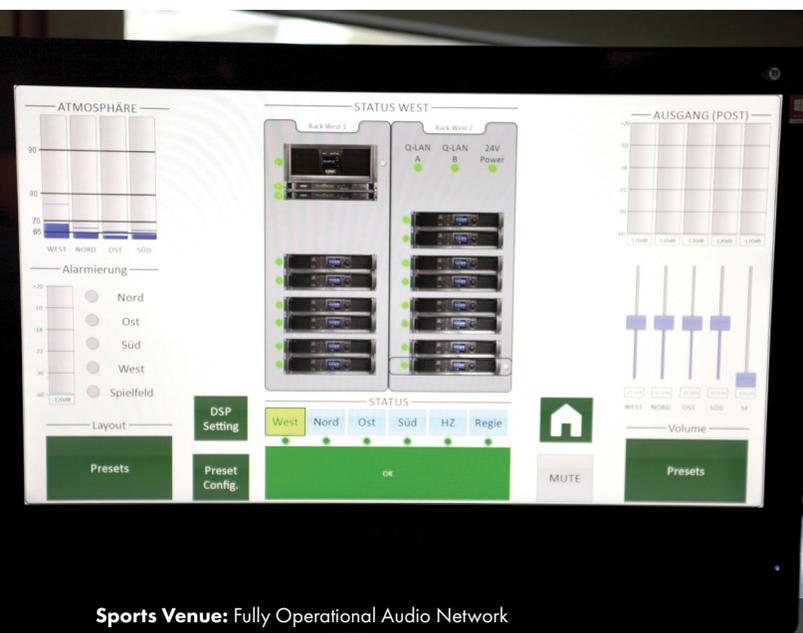
Despite the enormous complexity of the system, the [user control interface \(UCI\)](#) reflects the need for simplicity for the operators with an emphasis on excellent usability and a clear overview of the entire system. The intelligent design of the user control interfaces within the Q-SYS Platform quickly becomes clear when personnel start to use the system and know exactly how to use it – without first needing extensive product training. “The easy-to-use graphic user interface within Q-SYS lets you access all parameters in real-time,” explains Bleß. “When the system is operating normally, the user only sees the important parameters, such as volume levels and component status across the network. But the operator always has access to deeper functional levels [in the event of a problem],” Bleß continues.

Full Redundancy for Complete

Every element of the audio network within the stadium was designed and implemented with full back-up redundancy. This included a double ring network structure, redundant Q-SYS Core processors and fully mirrored mixing consoles in the control room. The system also included a backup solution which would switch over to stand-by Q-SYS CXD-4.3Q or CXD4.5Q networked amplifiers.

Room to Grow

Q-SYS Core processors offer enormous performance headroom to accommodate future extensions to the system, like additional speaker booths or PA systems, or delivering audio to other systems such as mobile relay units for TV or radio broadcasts. Bleß says, “The Q-SYS Platform allows you to access or feed in any audio stream or source without any difficulty.”



Solutions

Even Distribution

The system was handed over to stadium management in time for the first match of the season, and first impressions were outstanding, and not just by system users and fans visiting the stadium. A quality evaluation performed by Professor of Engineering Anselm Götz revealed an even distribution of loudness levels, and that the system also delivers the desired clarity levels for announcements. "The fans enjoy the atmosphere at the games, the operators have a simple, intuitive and reliable system, while the stadium administrators take comfort in the high level of safety and security we have implemented with the Q-SYS network," says Bleß.



Q-SYS is a globally recognized manufacturer of audio, video and control (AV&C) solutions for huddle rooms to stadiums—and everything in between. Our systems make it easy for your team to design and integrate flexible, scalable solutions and deliver the native IT integration and standards-based technology your customers expect.

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