

CASE STUDIES

Royal Arena

Location:

Copenhagen, Denmark

Systems:

EN54 certified Aero 12 line array

EN54 certified WR 8826

IP54 Bidriver PLus



SOUND WITH SOUL



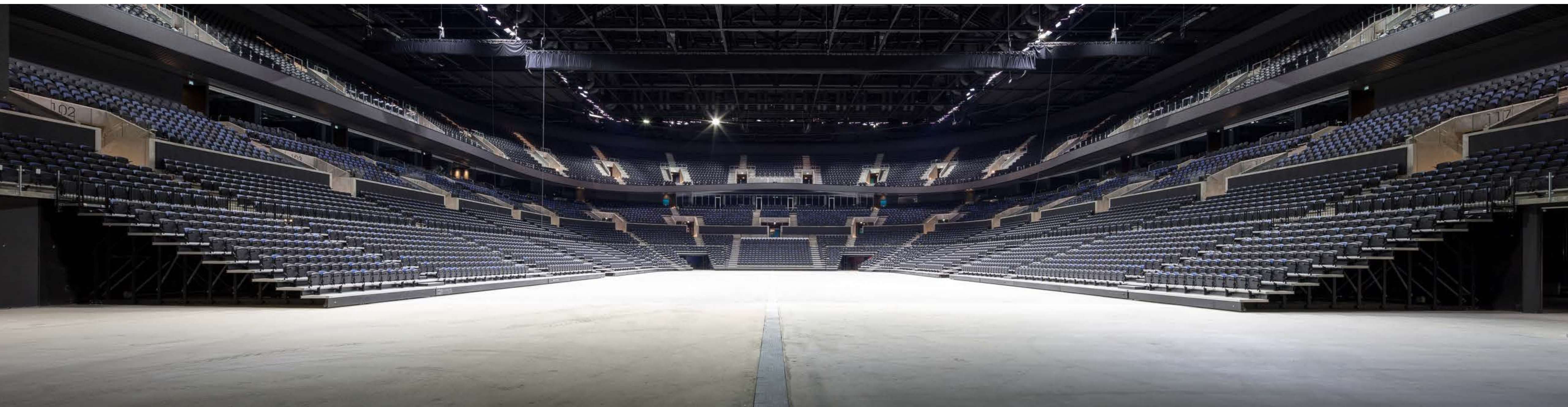
Royal Arena: an ideal neighbour for the city of Copenhagen

The Royal Arena in Copenhagen; 35,000 m² of pure entertainment for 16,000 spectators in the center of the Danish capital.

It is common these days to find large sports facilities placed in the outskirts of the city. However, the Royal Arena in Copenhagen is the exception. Spanning 35,000 m², this multi-purpose sports arena is the impressive neighbor of a quiet residential area in the Danish capital.

The unusual location is by no means the only remarkable feature of this building. Specially designed for national and international concerts and sporting events, the Royal Arena combines two key requirements: to create an attractive and highly versatile facility that can host all types of events and to integrate respec-

tfully into the urban environment. The symbiosis between this stunning stadium and the surrounding neighborhood is evident from the outside. Its podium, with different public meeting points, a wide access staircase and multiple entryways, has been carefully planned for the large crowds that the arena will have to cope with on special events. A capacity of up to 16,000 spectators illustrates perfectly that this stadium, from its conception to the present day, has been designed by and for the people. And this was considered a key factor when installing the DAS Audio systems onsite.





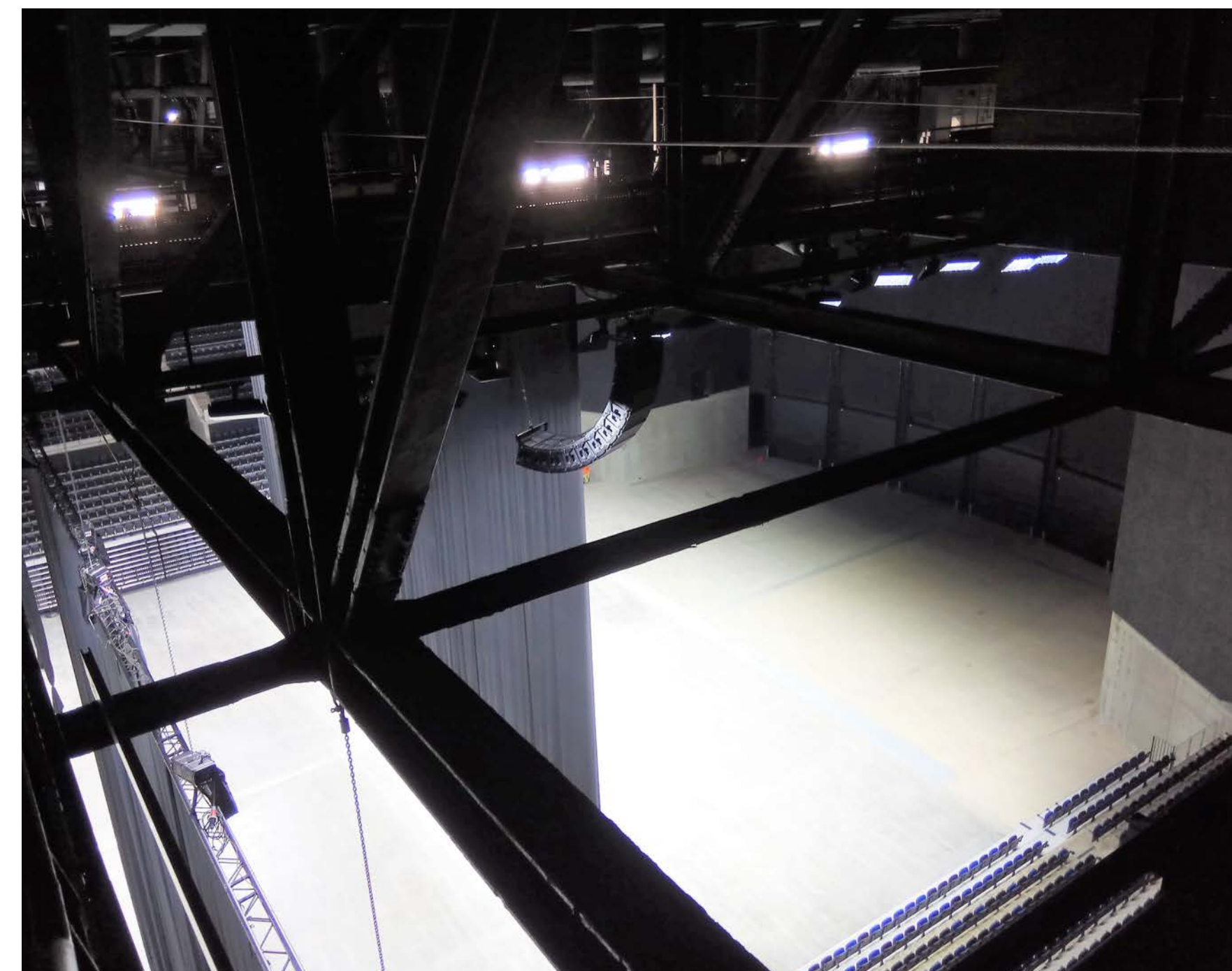
SYSTEMS DEPLOYED

From Metallica to Celine Dion or Cirque du Soleil, the Royal Arena is conceived to host large events of all kinds, as well as high profile sporting events. Taking into consideration the characteristics of the arena and its multi-purpose design, the sound system faced a major challenge: to ensure the intended sound pressure levels requirements, exceptional intelligibility and uniform coverage throughout the stadium. It was critical to ensure that music and speech could be heard without any distortion despite the large size and seating capacity of the Royal Arena.

The distribution of the systems was strategically planned to achieve uniform SPL and tonal balance over all the listening areas where the 16,000 spectators would be located. For this purpose, the Aero Series was elected as the ideal candidate. Fitted to the stadium's roof and positioned to cover the stands, **88 AE-RO-12 were distributed in 11 line arrays.** The Aero-12 is a compact line array system that incorporates a DAS 12LN4C, 12" low frequency transducer and a DAS M-75N compression driver for high frequencies, ideal for use in applications where high SPL and low distortion are a must. In addition, this EN54 certified voice alarm system can be configured for voice alarm applications, which results in significant cost savings. To complete the set-up, **12 DAS Audio WR-8826 systems** were installed perimetrically under the third tier, delivering the extra sound reinforcement for the last rows of the second tier as well as for the safety systems, since the WR-8826 models are also EN54 certified.

12 DAS Audio BiDriver Plus IP54 were also fitted to the stadium's roof. The systems high pressure levels can cover long distances and can reproduce audio with outstanding clarity.

In order to guarantee unparalleled intelligibility in all the listening areas, 8 of these systems were installed aiming the competition track area and 4 systems pointing towards the stage for concerts or other type of events of similar characteristics. Specially designed for open spaces that, due to their dimensions, require long throw systems, the BIDRIVER-PLUS IP54 was the finishing touch for an installation that guarantees uniform and professional sound.





The final result could not be better. For this project, the main challenge for the brand was not only to achieve exceptional sound, but to provide an unforgettable experience to crowds of spectators from all over the world. DAS Audio's full-range systems meet the sophisticated Scandinavian character of the Royal Arena and set the stadium as a national and international reference venue for any kind of show. Professional sound is guaranteed at any type of event, turning the Royal Arena into a high versatile space ideal for hosting a multitude of events, including conferences, concerts, and sporting events of the highest level.

The Royal Arena has been nominated for Sports Building of the Year at the annual World Architecture Festival in Berlin.

And we at DAS Audio are especially proud of this nomination. After all, the installation carried out in the Royal Arena was specially designed to provide an experience to live up to any award.





SOUND WITH SOUL

