



Market Segment:  
**Hospitality**

Country of installation:  
**France**

Year of Installation:  
**2017**

End customer:  
**U-Arena**

Solutions:  
**Sound System,  
Public Address**

Key Products:  
VIPEDIA, D500

Key Technology:  
**Dante™, EN54**

**Integrator:**  
FreeVox and Videlio

## U-Arena streamlines entertainment, security and life safety

**Comprehensive EN54 compliant, multizoned sound system for the arena's public and performance spaces.**

### The Customer/End User

The U-Arena is a multi-use 40,000 capacity domed stadium in the heart of La Défense, a Western suburb of Paris.

The arena is one of the largest indoor arenas in Europe, and provides optimised space for the biggest international shows, sports events and promises visitors an entirely unique atmosphere.

Home to the French Rugby Union club, Racing 92, the newly opened arena held its first live concert performed by The Rolling Stones in October 2017 with the inaugural home match for Racing 92 taking place on 22 December 2017.

### The Requirement

Zenitel partnered with its French distribution partner FreeVox and project integrator Videlio, France, to deliver a comprehensive EN54 compliant, multizoned sound system for the new arena's public and performance spaces.

This project was a technical first for Zenitel as it embraces an entwined Dante™ and fully EN54 compliant, single system solution within the entire venue.

The design, supply and commissioning of the new EN54 compliant system pulled together a number of disciplines Zenitel offers its customers.

### The Solution

A total of five EN54-16 compliant VIPEDIA-PRO routers sit in the heart of the system at U-Arena, providing audio

routing and monitoring simultaneously across sixty audio outputs.

High-quality digital signal processing within VIPEDIA-PRO routers make it possible to provide audio outputs simultaneously to traditional EN54 compliant loudspeakers, for public amenity spaces, whilst providing high-quality audio output to high performance line-array systems within U-Arena's bowl.

Dante™ processing within VIPEDIA-PRO routers is used to time-synchro audio signals between front-of-house equipment and VIPEDIA PRO routers' outputs to twenty two V2000 amplifier mainframe chassis, housing more than one hundred D500 amplifier modules.

Ninety four JBL PD500 horn-loaded, loudspeakers installed across fourteen zones within U-Arena are fitted with audio optimised, wide frequency response 500W transformers, each driven by a single D500 amplifier module.

D500 amplifier modules also provide highly intelligible audio output to a total of one hundred and thirty four JBL Control 16C-VA EN54-24 2-way ceiling loudspeakers located under stands in public concourse zones.

Each V2000 amplifier mainframe chassis, capable of hosting up to ten amplification modules in a single 2U enclosure also incorporates energy-efficient EN54-4 compliant battery charging / back up.

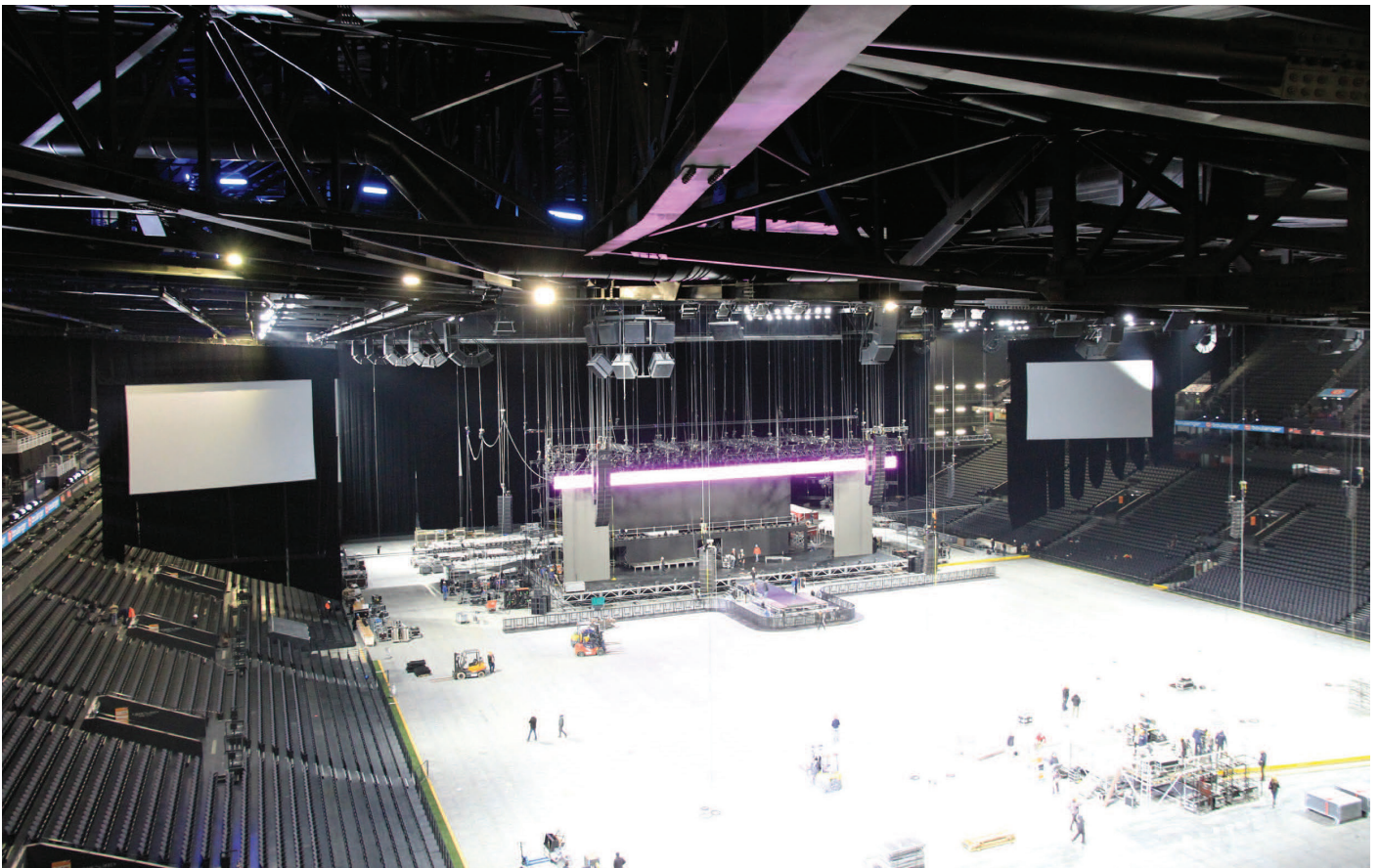
Distributing VIPEDIA-PRO routers across five locations rather than a single location within U-Arena allows costly loudspeaker cable runs to be minimised and improves system redundancy across the entire system as the racks are interconnected by dual redundant fibre optic rings in fire resistant sheaths.

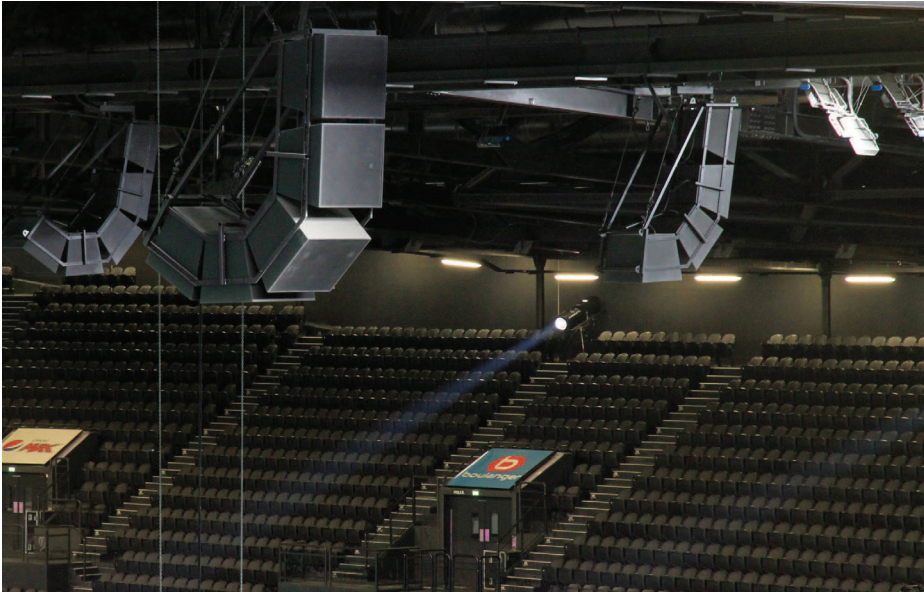
VIPEDIA-PRO routers installed at U-Arena also allow direct connection of microphones, music players and other external audio sources.

Emergency messages are loaded into the VIPEDIA's EN54 compliant monitored audio storage. In the event of emergencies this flexibility allows simultaneous playback of recorded messages within public concourses whilst delivering live/whilst delivering live/spoken audio into the bowl of the arena.

*"Successfully unifying the sound system for comfort and safety is made possible by the quality of the Zenitel PAVA Control amplifiers. While respecting EN54 certification, the Zenitel PAVA equipment allows us, with JBL's Precision Directivity loudspeakers, to offer the dynamics and the power necessary for sporting and cultural events."*

**- Laurent Delenclos  
Technical Director at Freevox**





*“Arenas and Venues have traditionally used two separate systems, one for the main arena, typically a high power line-array system or similar and a separate EN54 compliant voice evacuation system. At U-Arena with VIPEDIA-PRO routers we were able to meet both requirements in a single system solution.”*

**- Henry Rawlings,  
Zenitel Application Manager**

*“The VIPEDIA processor, in addition to its 6 secure IP connections used for security, provides 32 Dante channels that allow us total flexibility for sound reinforcement”.*

**- Laurent Delenclos, Technical Director at Freevox**

An VIPA-WS20 PC based touch-screen system provides complete control and monitoring of the audio system installed at U-Arena, offering comprehensive music control and advanced message scheduling from prerecorded announcements, via an intuitive user interface.

Three MPS-30-GO-AN modular paging and emergency microphones provide live, store-and-forward and recorded message broadcast from strategic locations into user-selectable zones, as required.

With an established reputation for supplying EN54 certified public address and voice alarm systems for life safety in Retail, Rail, Airports, Commercial, Nuclear, Oil & Gas and Roads & Tunnels, VIPEDIA-PRO routers extend Zenitel’s reach into stadium and sports venue performance spaces as well as the traditional public concourse spaces.

## The Result

The successful introduction of VIPEDIA-PRO routers at U-Arena in Paris affords visitors to this exciting, immersive venue the benefit of crystal clear and accurate audio, wherever they are in the arena.

The venue operators can also remain confident, in the event of emergencies, the installed PAVA solution from Zenitel provides messaging and safety announcements with reliability and intelligibility inside and outside the main arena.

## Why Zenitel?

Zenitel is well positioned to drive the future of intelligent critical communication solutions. Through our portfolio of IP products and solutions, with built-in intelligence and a focus on cybersecurity, we provide organisations with superior, scalable security and flexibility. Zenitel is the proven, preferred choice for environments requiring crystal-clear audio to ensure the protection of human life, property, assets and the management of critical activities. With interoperability at all levels, we seamlessly integrate with access control, video management and security platforms-