



Ed Sheeran at Wembley by Major Tom, London, UK

THE SHOW

In July 2015 Ed Sheeran sold out 3 consecutive dates at 90,000 pax capacity Wembley Stadium. Such large production required the best sound with the highest audio system performance and flexibility.

With a leading roster of artists on its books UK-based rental company Major Tom Ltd was eager to keep its digital audio systems constantly evolving.

The Wembley shows with Ed Sheeran were a major challenge; especially because of the stadium size and delay towers localization. Major Tom idea was to easily run one small optical cable to the delay positions hundreds of meters away with no signal loss and have data control to all of those positions over the same single cable.

SYSTEM REQUIREMENTS

- Transport and routing of multiple audio and control data
- Long distances to the delay towers
- Digital AES/EBU and analog connectivity
- Decreased rack space and power consumption
- Rental flexibility – ability to use system for different shows and customers



"The Optocore system is not only lighter and more compact to run but the fact that it is scalable to each job is also a massive benefit. In stadiums we can easily run one small optical cable to our delay positions hundreds of meters away with no signal loss and have data control to all of those positions over the same single cable."

Andy Banks, Major Tom



SOLUTION

Based on Wembley show requirements Major Tom decided to purchase Optocore system, comprising multiple X6R and V3R converters with Mic In, Line Out and AES boards. Major Tom's Andy Banks was convinced that this was a co-ordinated move from both analogue and AES copper to fibre - it would make FOH runs smaller and lighter and give greater efficiencies, with the requirement for far greater channel capacity over far less cable.

The purchase, which gives them separate V3R and X6R stand-alone systems, can thus be deployed as conventional returns racks while giving the option to combine the systems and run larger delay rings as the site demands.

At Wembley the Optocore system was used to distribute audio and control from Meyer Sound Galileo Callisto 616 array processors to the active loudspeakers under the roof and on delay towers. Such system design had never been tried in the venue before; however, it was a massive success, offering improved coverage for the upper seats. This wouldn't have been possible without the longer cable runs over a fibre network, and it made set up and control of the system really simple.

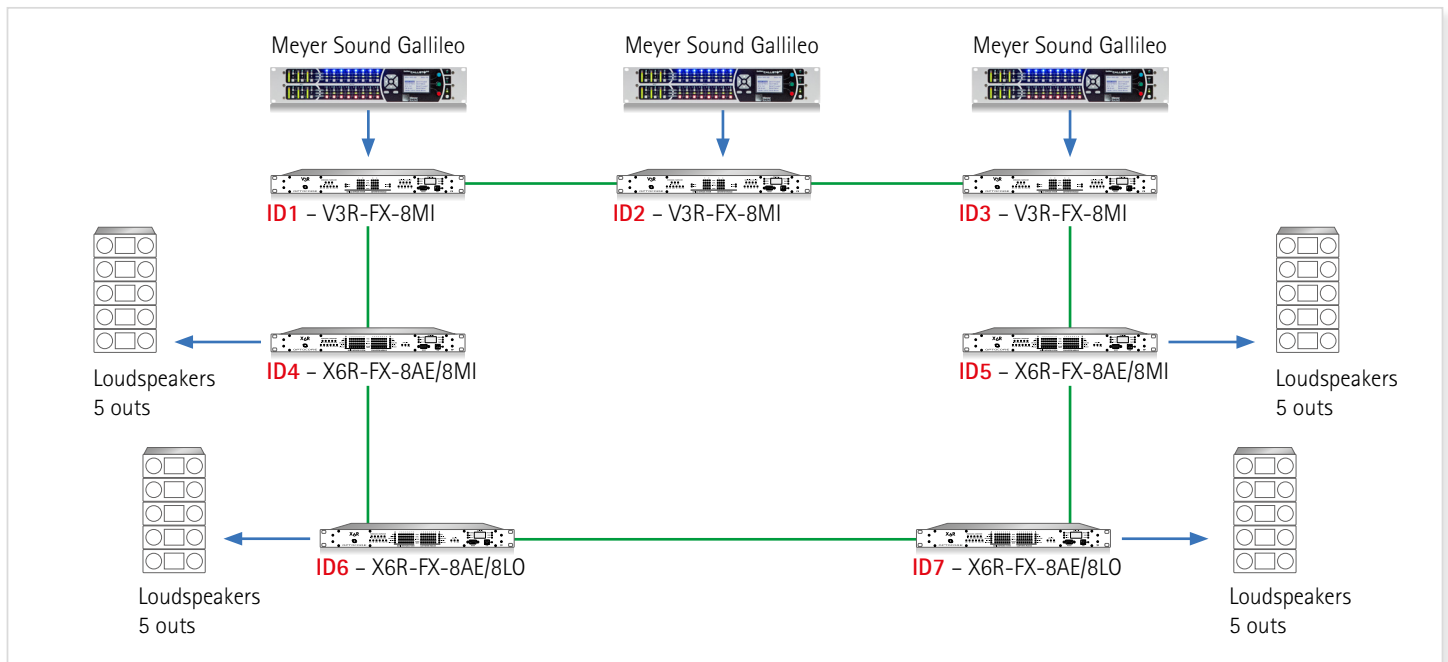
Going forward Andy Banks sees plenty of opportunity for future deployment of the Optocore system – not only on their regular UFC events, but also with other regular acts, including Judas Priest and Iron Maiden, and other exciting projects still under wraps.

KEY ADVANTAGES

- Easy to set up distribution system for any loudspeaker brand
- Longest distances with fiber between locations
- All audio and control on a single redundant fiber
- Highly flexible and expandable for any rental application
- Lightweight and small-sized rack mountable interfaces with redundant power supplies

For more information about OPTOCORE products visit
www.optocore.com

SYSTEM DIAGRAM



SYSTEM COMPONENTS

OPTOCORE Device	ID Number	Localization	Functions
V3R-FX-8MI	1	Galileo 1	Inputs from Loudspeaker Processor
V3R-FX-8MI	2	Galileo 2	Inputs from Loudspeaker Processor
V3R-FX-8MI	3	Galileo 3	Inputs from Loudspeaker Processor
X6R-FX-8AE/8MI	4	Rear L AMP RACKS	AES outputs to loudspeakers and microphone inputs
X6R-FX-8AE/8MI	5	Rear R AMP RACKS	AES outputs to loudspeakers and microphone inputs
X6R-FX-8AE/8LO	6	Ring L AMP RACKS	AES and analog outputs to loudspeakers
X6R-FX-8AE/8LO	7	Ring R AMP RACKS	AES and analog outputs to loudspeakers