

# LET'S GET LOUD!

Outdoor PA systems can make or break a show. Here are some of the hottest systems on the market with testimonials from those who have taken a leap of faith and trusted in the quality of sound produced by leading brands. Now you too can have high-quality sound to match your high-quality skills!

## L-ACOUSTICS: K2



A K2 line source utilizes the unrivalled characteristics of Wavefront Sculpture Technology. Inter-element angles can be set with laser like accuracy up to a generous 10°, allowing the optimization of the vertical coverage with SPL smoothly spread across the audience. The K2 also features the PANFLEX technology, a unique solution for adjusting the horizontal coverage pattern to any audience or room geometry. For applications demanding extreme LF impact (contour mode), or maximized LF projection (throw mode), K2 can

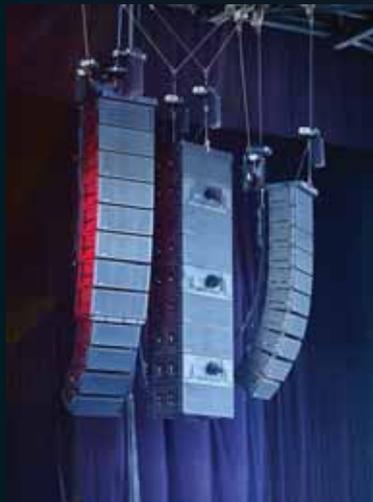
be arrayed with its dedicated and flyable K1-SB LF extension. The K2 system can also address applications with demanding infrasonic reproduction when combined to the SB28 subwoofer.

**"The flexibility of the dispersion patterns allowed us to keep energy off the venue walls. Previously troublesome venues were improved through the use of the asymmetric settings. The weight of the box is a huge advantage as we played a number of venues where rigging capacities were limited and even so, we still managed to fly 12 boxes per side to maintain full coverage of the venue."**

*- Ian Nelson, Placebo FOH*

[www.l-acoustics.com](http://www.l-acoustics.com)

## Meyer Sound: LEO



Meyer Sound LEO embodies a fully integrated approach to sound system design and engineering, achieving unprecedented headroom and sonic accuracy in the most demanding arena, stadium, and festival applications. LEO provides a highly linear and neutral response, allowing FOH engineers to use digital processing tools to create any sound desired, without being limited by the peculiar characteristics of one type of system. In doing so, LEO

achieves high sound pressure levels with extremely low distortion across the full audible bandwidth.

**"LEO is a great system to listen to and mix on with such a big, beefy, dominant, coherent sound. Other systems just don't have the focus and the clarity that comes with the linearity of LEO. It also has a wonderfully smooth high end. If a typical sweet high end is like table sugar, then LEO is clarified honey."**

*- Gordon Reddy, FOH Engineer, Fun*

[meyersound.com](http://meyersound.com)

## Outline: GTO (Grand Touring Outline)



According to some of the world's most respected FOH engineers, no other system is able to guarantee such natural "full-range" sound coverage over such long distances, allowing them leave their delay systems at home. When coupled in

an array, GTO's V-shaped front baffle allows individual sound sources to be positioned closer together than in conventional line-source systems. This facilitates superior acoustical coupling between high-frequency modules, producing a smooth yet extended HF response. This also allows for an 'unbroken baffle' shape through an array which

minimizes diffraction and deterioration of the mid-high frequencies, contributing to the far-field performance of the system. Each cabinet offers 10 loudspeakers housed in a compact case with a large surface area of sound-producing elements, designed to increase phase coherence between component groups at the exit point of the cabinet.

**"The GTO was already a winner on paper, due to the box containing superior components. However, it was only when I worked with the system for the first time in front of a 700,000-strong audience that I realised that the GTO was not only far superior on paper, but also compared with anything else I had ever worked with. It really rocked, providing long-throw coverage never heard before".**

*- Andrea Taglia, FOH engineer, Andrea Bocelli*

[www.outline.it](http://www.outline.it)

## Martin Audio: MLA (Multi-cellular Loudspeaker Array)



MLA delivers unerring accuracy of consistent sound coverage for the audience whilst applying unprecedented control for noise spillage and pollution. Every other sound system

focuses on sound exiting the speaker itself, with very little control on what actually hits the audience or beyond. MLA takes the opposite approach. The user specifies the required sound levels to occur at various points within the venue and beyond the perimeter and then intelligent software automatically determines the speaker configuration and individual speaker cells within to produce that result. MLA's unique optimisation software lets production companies plan and visualise coverage and then achieve those exact results, right from switch on. No more lengthy and pressurised tuning sessions – just program what needs to be achieved and MLA delivers, regardless of the unique acoustic properties of the venue itself.

Finally, the outdoor live event conundrum is solved: optimal sound experience for the audience, with greater control of noise pollution.

**"We decided on the MLA investment because the promoters of summer outdoor festivals are increasingly demanding the absence of delay towers from festival sites and a need to solve offsite noise issues. We also like the fact that its calculation ability is extremely accurate. The benefit of this is that we can get a result that corresponds with what we have planned in the simulation."**

*- Ryoichi Hashimoto, Managing Director, Hibino Sound Japan*

[www.martin-audio.com](http://www.martin-audio.com)

## Electro-Voice: X-Line



X-Line, XLC compact line arrays have a proven record of performance and reliability. These units excel in pattern control and predictability, and are easy to install in a variety of system designs. The popularity of line-array systems is due to the response and pattern control possible when the array is well executed.

A key component for the outstanding performance and success of EV line arrays is the unique design of the planar wave generator – "Hydra". The signal from one HF driver is divided into discrete paths arriving with same amplitude and phase at the waveguide as a plane wave. In effect, the Hydra isolates each cabinet's HF section from the other in order to minimize interference.

**"The system operated flawlessly and exactly as we had envisioned. Factory presets are supplied as standard with the controllers and the FIR filters for the XLDs and we were able to download them free-of-charge for IRIS-Net. This made our work considerably easier. These are sensible and extremely useful features."**

*- Pino die Constanzo, Managing Director, Backstage PA*

[www.electro-voice.com](http://www.electro-voice.com)

## NEXO: STM Series



The STM Series is completely modular and is comprised of 4 elements – M46 main cabinet, M28 omnipurpose main or downfill cabinet, B112 bass cabinet and S118 subbass cabinet. There is total flexibility to configure a system that is suitable for audiences between 1000 and 100,000 although Nexo has received reports from events where the crowd was 200,000+. The rental company can use all 4 elements to create one of the most powerful line array systems currently

available, or it can use part of its inventory to handle small shows and corporate events. Even the mix of elements can be varied: jazz or orchestral material can be handled with just Main and Subbass cabinets, which can be boosted for rock and metal performances by the incorporation of Bass cabinets and extra Subbass.

**"We're gradually building up our STM system to an arena-sized rig which can be broken down into many smaller PAs. I always really liked the sound of Nexo's Alpha and when I first heard of STM I liked the concept from the start. The fact that it is modular and scalable is brilliant. We will have a big pile of STM cabinets and will be able do various jobs by adding more or less to the order."**

*- Matt Dufty, Monitor City, Australia*

[www.nexo-sa.com](http://www.nexo-sa.com)

## D.A.S Audio: AERO 40A



Aero 40A Advanced Line Array System is a 3-way powered line array system which incorporates connectivity for remote monitoring and control. The unique configuration of the Aero 40A employs a rear-loaded 12" transducer in a bass-horn configuration for low-end reproduction. The mid-range is handled by a new 8" transducer developed specifically for the Aero 40A. High frequency reproduction relies on two D.A.S. M-75N compression drivers attached to a new BPS-2912 waveguide.

The three channel, high efficiency Class D design is equipped with a switch mode power supply and a comprehensive protection package for both the amplifier as well as the components. The signal treatment incorporates the latest in digital signal processors. Brick wall FIR filters have been used to provide perfect alignment between ways achieving exceptionally uniform coverage all the way down to the crossover point. Top-of-the-line AD/DA converters are employed allowing for significant improvements in dynamics, lower distortion and ultra-low noise levels.

**"The Aero 40A is one of the best balanced 3-way systems I have worked with. It has got lots of headroom and very good definition in the mid-highs but yet a solid presence in the lows. I never had to push the system to reach the pressure I wanted. Overall, it was a real pleasure and a great experience working with Aero 40A."**

*— Luis Irrizary, FOH Engineer, Calle 13*

[www.dasaudio.com](http://www.dasaudio.com)

## EAW: Anya

Anya is the first product in EAW's Adaptive Performance Series and it is the only line array cabinet that can fly flat. EAW considers this approach "Adaptive Performance" because it goes far beyond "beam steering".

Any product with Adaptive Performance possesses the following four fundamental capabilities:

- The ability of a system to assess the required three-dimensional coverage area of a space, determine the processing needed to achieve that three-dimensional coverage pattern and tonal balance, and then implement this processing in DSP hardware to achieve the needed performance across the entire audible spectrum.
- The ability to achieve criterion #1 at show speed and without any physical reconfiguration.
- The ability to continually analyze system output for faults. If a fault occurs, the ability to analyze the location of the fault and adapt processing to maintain optimal performance to the extent possible.
- The ability to autonomously determine the configuration of the system (i.e. quantity of modules, their respective orientation to one another, horizontal and vertical angles, etc.) and present this to the user as unified entities (i.e. arrays) in software.



**"To be honest I was skeptical about the extent to which Anya's pattern control would live up to the hype. The audio at the mainstage on day one was excellent. But the really impressive thing was that for the first time ever, we did not receive a single noise complaint during its running time and we didn't make the slightest compromise on volume or sound quality in the venue."**

*— Dave Schenk, Event Director, Easter Fest (Australia)*

[eaw.com](http://eaw.com)