**FEATURES**
- Acoustic simulation software for all Outline systems (line arrays, subs and point-sources)
- Precise prediction of the acoustic response in a full three-dimensional environment
- Fast simulations: projects can be updated and edited very quickly
- Loudspeaker’s data based on real acoustic measurements
- Highly reliable, as shown by results obtained from several shows and installations
- Can easily import complex venue designs - in the form of .DXF files (standard CAD-type files format)
- Proprietary design

**APPLICATIONS**
For optimization of all Outline systems within a defined performance space. It is to be used by PA-technicians to evaluate the placement and acoustic response of their chosen loudspeaker system. The generated simulations can also be supplied to prospective clients and local authorities to show the expected acoustic effects in other areas where difficult or challenging environments are to be monitored. OpenArray comprises of the relevant products from the Outline range: all the line-array systems with associated subwoofers, and the most popular point source systems.

**DESCRIPTION**
OpenArray is Outline’s acoustic simulation software, providing full three-dimensional emulation programs that will accurately predict the acoustic response from a wide selection of Outline products, including all line-source products and associated subwoofers, as well as Outline’s most popular point source systems.

A proprietary design, OpenArray is a vital tool for both fixed and mobile applications and facilitates optimisation of various Outline loudspeaker systems. OpenArray can import DXF files, for those complex venue layouts in order to simulate as precisely as possible the behaviour of the system when used in a real world environment.

**FIG. 1** is an example of a sound reinforcement design for a multi-level outdoor amphitheatre utilising two GTO arrays (FOH system) and two Butterfly arrays (side-fill duties). The software enables users to view the predicted SPL (sound pressure level) for each individual frequency. It also allows users to check the frequency response selected at any point within the listening zone.

OpenArray also ensures accurate low frequencies simulations in various configurations. The example in **FIG. 2** shows the SPL produced by 16 subwoofers in a “cardioid” configuration at a frequency of 50 Hz. If line array systems are used, OpenArray checks their mechanical feasibility, creating a printable report (**FIG. 3**). Riggers are thus provided with all the geometric and mechanical data necessary, without worrying about committing any serious mistakes.