**XLA 3200 feature article outline**

Target Readership: installers, value added resellers, facility managers, acoustic consultants, architects and interior designers
Media: Trade press

**Creating acoustic excellence through advanced technology**

***There are many factors that affect the quality of sound produced by loudspeakers in a public address system. The size and reverberant characteristics of the venue; the presence of objects such as pillars that create acoustic 'shadows'; and the accuracy with which the loudspeaker is mounted. The appearance of the loudspeakers also plays an important role, as does the type of information being broadcast. It is often difficult to find a single loudspeaker type that addresses all these issues, but with the new XLA 3200 line array range from Bosch Security Systems, the search may well be over.***

**An existing principle applied to perfection**
The tapered loudspeaker is an established principle in acoustic theory. This principle has been taken a step further - with variable driver spacing - with the introduction of the new XLA 3200 range of line array loudspeakers from Bosch Security Systems.

The full benefits of this technology are immediately evident when listening to these advanced line arrays. By using advanced filtering and positioning of the loudspeaker drivers (patent pending), greatly improved audio directivity is achieved. Each loudspeaker driver in the array has its own specific acoustic characteristics to ensure the full range of frequencies is present throughout the entire listening area. The drivers are situated close together at the center of the array to enable sufficient output power and a large enough vertical opening for high frequencies. The drivers at each end of the array mainly reproduce lower frequencies to ensure that those frequencies are beamed sufficiently as well. Towards the edge of the array, the spacing can become wider since all drivers in the array emit low frequencies and by their sheer number they already produces a high power output.

**Fewer loudspeakers required**
The application of this technology results in several significant benefits. There is remarkably clear, natural sound that gives excellent intelligibility of both speech and music. Greater coverage is achieved, so more people can be reached with perceptual perfect sound. And there is uniform sound distribution throughout the listening area: not too loud at the front, not too quiet at the back, and all relevant frequencies everywhere. The result is that fewer loudspeakers are required to cover any given area, and therefore less amplifier power is needed. XLA 3200 line array loudspeakers also produce extremely small side lobes, which gives a clearer, less 'colored' sound, even when close to the loudspeakers.

**Line array loudspeaker mounting; no longer a science**

A time- and labor-saving mounting method has been developed for XLA 3200 line array loudspeakers. A chart is supplied with the loudspeaker, which shows the ideal installation height for the area the loudspeaker has to cover. Once the appropriate height has been determined for a given area, the loudspeaker is mounted at a fixed angle marked on the mounting bracket. This simple two-step procedure is very much easier and more accurate than traditional trial-and-error installation methods. XLA 3200 line array loudspeakers can be mounted on a wall or directly onto a floorstand without the need for additional accessories.

**Practical design**
XLA 3200 line array loudspeakers have a modern extruded aluminum housing and silver grille that helps them blend equally well with classical interiors and modern architecture. Their compact dimensions - certain models are just 8 cm wide - make them even more unobtrusive.

This feature article outline gives a few angles of how XLA 3200 line array loudspeakers are of great value for  many different types of indoor and outdoor venues. It also looks in greater depth at the various features that set XLA 3200 loudspeakers apart from conventional columns.