

UDA 16

Uniform Dispersion Array Column Speaker

Features:

- Line Array column with 22° uniform vertical dispersion control (1260Hz-16KHz for one column, 630Hz-16KHz for two stacked columns).
- 140° horizontal dispersion.
- Minimum loss when the distance increases (only 3dB each time the listening position doubles).
- Composed of 16 transducers of 2.75".
- Suitable for outdoor applications.
- High speech intelligibility, being adequate for speech and music applications.
- Modular design / possibility to stack units.
- Optional 70/100 V transformer.

UDA 16 is a new concept of modular column with Line array shape. Thanks to an elaborate system of filters and 16 transducers with a wide frequency range placed as a line array system, UDA 16 provides two interesting features:

- Cylindrical waveform (Line Array effect), reducing pressure at only 3dB each time the listening position doubles (minimum loss).
- Beam control or vertical dispersion in all the reproduction band of the column, to control at anytime the presence of undesirable effects induced by wall and ceiling reflections. In addition, it concentrates power on the area that has to be covered (minimizing the secondary lobes effects).

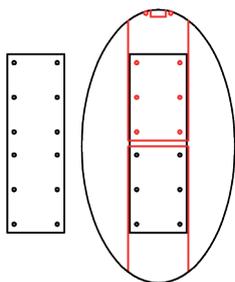
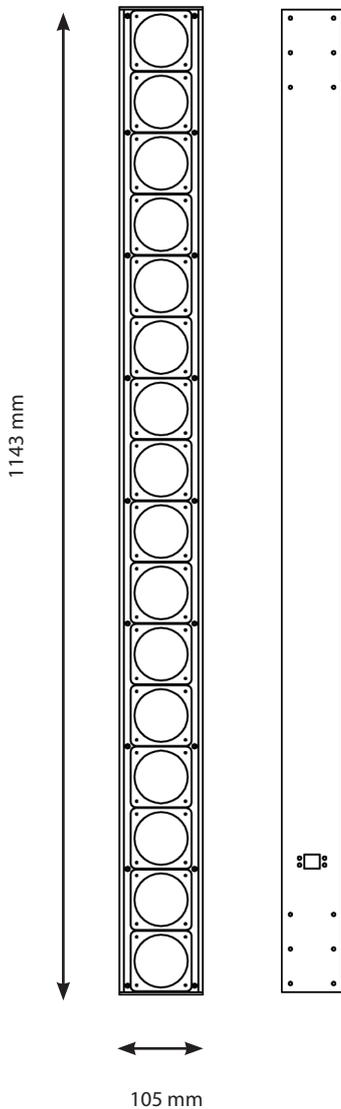
These two features lead to a greater intelligibility at a higher distance which make possible the sound systems with few sources. This minimizes the impact over the installation architecture.

Modular system with stacking capability.

It is possible to stack two columns together to get a higher SPL and controlled bandwidth. Thus, stacking two UDA 16 units, it doubles distance, controlled bandwidth but also low frequency (this means a better control of low frequencies). It is also possible (on-demand) to stack more than two units, being specially useful for large installations.

Beam control to avoid reflections.

The control of the vertical dispersion is interesting for installations with complicated acoustic features, avoiding that uncontrolled beams reflect on surfaces and produce audible interferences (reverb and echos) that make intelligibility more difficult.



Beam control to maintain coherence of frequency response.

Each frequency reproduced by a sound source has its own directivity. Nevertheless, thanks to the Uniform Dispersion Control of the beam, it is possible to maintain constant the frequency response in a wide range of the frequency band, depending of the distance, in the area that has to be covered.

Far reaching coverage thanks to the minimum loss of the Line Array format.

A Line Array system is based on a configuration that narrows the vertical beam of audio to take advantage of the energy which is concentrated in the focus. This leads to minimum loss when the distance increases (50% compared to any conventional system). UDA 16 exclusive design reduces pressure at only 3dB each time the listening position doubles, instead of 6 dB for conventional systems. As a consequence, it is possible to double coverage for a same acoustic pressure, allowing thus to double audience coverage.

Excellent response in music applications.

UDA 16 and Zero 15 subwoofer (soon available) create together a perfect set for music application with excellent response and dynamics. For this reason, UDA 16 has to be considered as a versatile, efficient solution for most demanding installations, from auditoriums to music events.

Elegant and compact design.

Thanks to the use of small dimensions speakers (2.75"), UDA 16 comes with an elegant and compact design, it easily blends in with the decor of almost any installations. It is also a lightweight column, because its housing is made of aluminium. Additionally, its transducers but also any other components are compatible with outdoor applications.

Technical Data:

Elements	16 x 2.75" speakers.
Frequency response (-10 dB)	80 Hz - 20 kHz.
Sensitivity (SPL@1m)	96 dB.
Max SPL	122 dB (1 column) 128 dB (2 columns).
Horizontal dispersion	140°.
Vertical dispersion (1 column)	22°, +/-4°.
Vertical dispersion (2 columns)	11° +/-2°.
Input impedance	8 Ω.
Power Handling (8 Ω)	430 W.
70/100V transformer	70/140 W.
DSP controller	Required.
Connectors	Terminals.
Colour	Black or white.
Mounting	6 nuts (M4) at each end (wall bracket included).
Dimensions (WxHxD)	105 x 1143 x 112 mm.
Weight	10.2 kg.