

D6684 Line Array Sound Field Processor with DSP Function



Description

The line array sound field processor is a product that adjusts the main beam radiation direction of the line array sound field through electronic and digital signal processing (DSP) technology. It enables the adjustment of the main beam direction even when the line array system is vertically installed in a fixed position, overcoming the inherent limitation of conventional line array systems that are difficult to adjust flexibly.

The D6684 features an excellent adjustable line array directivity function, capable of simultaneous adjustment in four directional zones, ensuring listeners within the coverage area experience superior sound quality.

The D6684 line array sound field processor allows flexible adjustment of the directivity (vertical radiation angle) of the connected line array loudspeakers via a web-based operation page. Its built-in digital equalizer effectively enhances overall sound quality.

Features

- Built-in high-performance DSP with proprietary beam-steering and sidelobe suppression algorithms.
- Innovative design projects the acoustic center of the array to up to four distinct listening zones.
- Vertical coverage directivity is adjustable, enabling even downward sound projection to designated areas while significantly reducing upward radiation to minimize ceiling reflections.
- The only digital loudspeaker featuring an anti-reverberation system to enhance speech intelligibility in reverberant environments.
- User interface allows 3D emission pattern modeling and editing based on the speaker array configuration.
- Built-in multi-segment FIR + IIR equalizer.
- Built-in ultra-high-sensitivity input signal detection for flexible noise reduction activation or bypass.
- Suitable for directivity adjustment in conference halls, museums, concert halls, and similar line array

applications.

Specifications

Model		D6684
Signal Processing	DSP	32-bit fixed/floating-point DSP
Audio System Delay	ms	< 0.7ms
Digital-analog Conversion	bit	24-bit
Directivity	Vertical (Adjustable)	±45°
	Focus Offset	1– 100m
Dynamic Range	dB	>100dB
Input & Output	Type (Line)	Balanced (3.81 mm Phoenix Interface)
	Impedance	Input: 470Ω, Output: 470Ω
Voltage		AC 100V–240V 47-63Hz
Temperature Environment		-20°C- 80°C
Package Size (mm)		468× 290× 62.5
Product Size (mm)		438× 270× 42.5
Gross Weight		4.3kg
Net Weight		3.35kg