



Product Technical Data Sheet
Model PLS8695v2

Description

The PLS8695v2 is a full-range true line source array column, which produces an extremely tight vertical sound field. Stacking columns will increase throw distances and produce tighter vertical control at lower frequencies.

A true line source array restricts spreading of sound waves in the vertical plane, producing cylindrical wave radiation that delivers a sound field at a constant height represented by the height of the array.

The PLS8695v2 high frequency module features a continuous array of nine high performance PRD500 planar ribbon transducers designed and manufactured by SLS Loudspeakers. The unique design and properties of the planar ribbon driver allows precise acoustical coupling of the array and hence, full utilization of line source (cylindrical waves) benefits. Coupled with eight 6.5" ported woofers, the PLS8695v2 produces full range bandwidth at extremely high sound pressure levels.

Key Features

- Direct radiating planar PRD500 ribbon high frequency line source module delivers unsurpassed sound quality
- True line source behavior due to precise acoustical coupling of individual PRD500 high frequency transducers
- High resolution composite paper cone woofers
- Cylindrical wave radiation:
 - o Produces 3dB loss per doubling of distance as opposed to the 6dB loss of a conventional loudspeaker enclosure. This means increased throw distances with less variation between near and far field.
 - o Greatly restricts vertical spreading of sound field, which significantly reduces ceiling and floor reflections – dramatically improving direct to reverberant ratios – resulting in improved speech intelligibility.
- Column array places sound source on the same plane as performers, creating better localization
- Extremely wide horizontal coverage
- Even and easily predictable coverage
- Incredible feedback immunity compared to conventional loudspeakers
- Internal power amplifier with the following features:
 - o Bi-amplification of low and high frequency components
 - o Selectable 80Hz HPF
 - o Balanced input with adjustable sensitivity
 - o 24-bit digital resolution, 96kHz sampling
 - o DSP filtering, smoothing, and limiting algorithms matched to LS8695v2
- * LED status indication for power, protect, peak, and signal presence



Applications

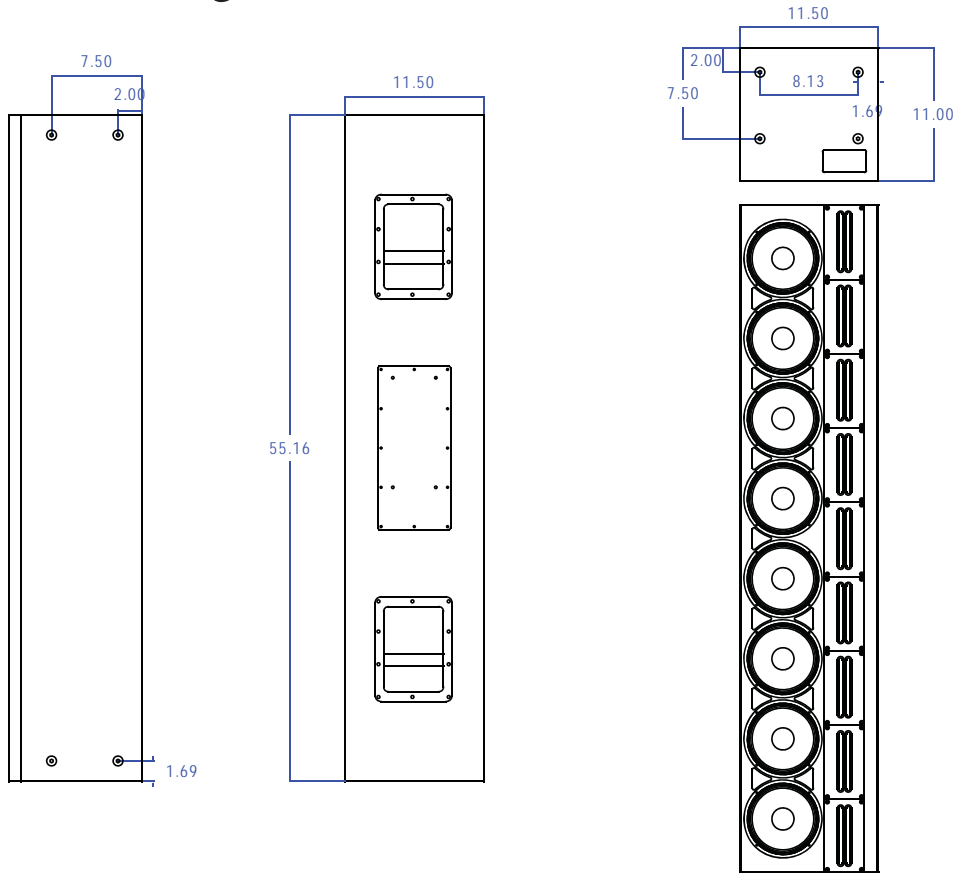
- Developed for a wide range of professional applications where the highest quality and intelligibility of sound is required - especially effective in highly reverberant and/or elongated spaces
- Sound reinforcement in churches and auditoriums
- Portable PA system for a variety of applications
- Stack columns to achieve taller vertical sound field for raked seating applications
- Stacking columns also produces line source behavior at lower frequencies, which increases thrown distance
- Typical system SPL of a stack of two PLS8695v2 columns is 115dB at 60'

Product Specifications	
Operating Range ¹	70Hz - 20,000Hz
Horizontal Coverage Angle -6dB ²	120 Degrees
Vertical Coverage Angle -6dB	Defined by the height of the array
Input Sensitivity	1.88V RMS
Max SPL (calculated) @ 1 Meter ³	130dB Peak
Amplifier Power Low Freq.	1000 Watts
Amplifier Power High Freq.	500 Watts
AC Power Consumption	11 amps at full rated output
Crossover Frequency	Internal DSP
Transducers - Low Freq.	6.5" Woofers x 8
High Freq.	PRD500 Ribbons x 9
Input	XLR with buffered loop through
Dimensions	55.16" (140cm) H 11.5" (29.2cm) W 11" (28cm) D
Enclosure	13ply Baltic Birch
Weight	110lbs (50kg) Shipping 135lbs (61.2kg)
Rigging	16 Points 3/8"/16 threaded inserts
Finish Options	Black Latex White Latex Paintable Natural Finish

1. LF at -10dB, HF -6dB at 40kHz on-axis however response above 20kHz is limited by air absorption and DSP sampling rates in typical PA applications.
2. Averaged from 1000Hz to 10kHz
3. Typical SPL for one box only, for array SPL refer to LASS calculations.



PLS8695v2 Drawings



Horizontal Polars

