



## Product Technical Data Sheet Model LS6593v2

### Description

The LS6593v2 line array module represents a breakthrough in high performance compact line array loudspeaker technology. Utilizing patented ribbon planar drivers this unique design concept provides different options for vertical dispersion allowing versatile system configuration for a variety of applications. This modular concept allows for cost effective design solutions by stacking modules as needed to increase vertical coverage, throw distance and low frequency pattern control. It is one of the most flexible and cost effective tools based on modern technology principles available for your designs.

The LS6593v2 concept is based on a woofer line array with a coaxially positioned ribbon tweeter array. The woofer array consists of 6 x 5.25" drivers, while the tweeter array consists of 10 x 3" proprietary PRD250 ribbon planar drivers.

The new upgraded design features from the original version include dual NL4 inputs with barrier strip, 12 ohm input impedance, configurable passive/active, (10) PRD250 ribbons for improved high frequency coupling, included coupling plates, and optional SLS provided mounting solutions.

### Key Features

- Proprietary planar ribbon high frequency line source module delivers unsurpassed sound quality
- True line source behavior due to precise coupling of transducers
- Cylindrical wave radiation:
  - o Produces loss of 3dB loss per doubling of distance in the critical vocal range and above as opposed to the 6dB loss of conventional loudspeakers
  - 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
- The sealed enclosure is made from extruded aluminum with poly-cone woofers and planar ribbon tweeters for use in extreme weather conditions.
- Wide 100 degree horizontal coverage
- Passive/Bi-amp configurable
- Included box to box coupling plates
- Available with a factory installed 60W, 70V transformer



### 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, auditoriums, ballrooms
- Paging in difficult acoustic environments such as airports and subways
- Theme Parks
- Stack columns to achieve taller vertical sound field for raked seating applications
- Stacking columns also produces line source behavior at lower frequencies

Product Specifications	
Operating Range <sup>1</sup>	80Hz - 20,000Hz
Sensitivity (1W/1M) - Passive <sup>2</sup>	94dB
	Low Freq. 93dB
	High Freq. 107dB
Horizontal Coverage Angle -6dB <sup>3</sup>	100 Degrees
Vertical Coverage Angle	Defined by the height of the array
Power Handling - Low Freq/Passive <sup>4</sup>	300W (60 Volts) AES/2
	High Freq. 245W (70 Volts) AES/2
Recommended Amp Power for Max Output	Low Freq/Passive 900 Watts @ 8 ohms
	High Freq. 900 Watts @ 8 ohms
	Max SPL (calculated) 1 Meter - Passive <sup>5</sup>
Low Freq.	118dB Cont. / 124dB Peak
	High Freq. 131dB Cont. / 137dB Peak
Nominal Impedance - Low Freq/Passive	12 Ohms
	High Freq. 20 Ohms
Crossover Frequency	1,500Hz (Passive Mode)
Transducers - Low Freq.	5.25" Woofers x 6
	High Freq. PRD250 Ribbons x 10
Input	NL4 x 2 Barrier Strip x 1
Dimensions	32.3" (82cm) H
	7.5" (19.1cm) W
	8.05" (20.4cm) D
Enclosure	Extruded Aluminum
Weight	34.5lbs (15.7kg) Shipping 42lbs (19kg)
Rigging	12 Points 6mm threaded inserts
Optional Accessories	TRANS-LS6593v2 70V 60W xfomer
	BRKT-LS6593v2 Wall Mount Bracket
	POLE-LS6593v2 Pole Mount Adaptor
Finish Options	Black Powder Coat
	White Powder Coat

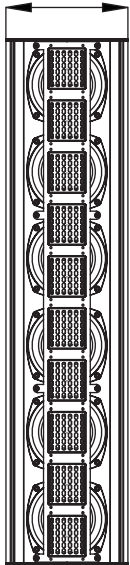
1. LF at -10dB, HF -6dB at 40kHz on-axis however response above 20kHz is limited by air absorption and DSP sampling rates in typical PA applications.  
 2. Full bandwidth pink noise is applied and amplified to a level and measured at the loudspeaker terminals - corresponding to 1 Watt as referenced to the loudspeakers nominal impedance. SPL is measured in an anechoic environment in the loudspeakers far field. Data is extrapolated to 1 Meters distance from the loudspeaker. Predicting SPL at distance using inverse square law calculations will produce inaccurate results. Use our free LASS software to predict system SPL.  
 3. Averaged from 1000Hz to 10kHz  
 4. AES established with ambient temperature at 22C in accordance with AES/2-1984 standard. IEC stated in RMS voltage according to IEC 268-5  
 5. Typical SPL for one box only, for array SPL refer to LASS calculations.



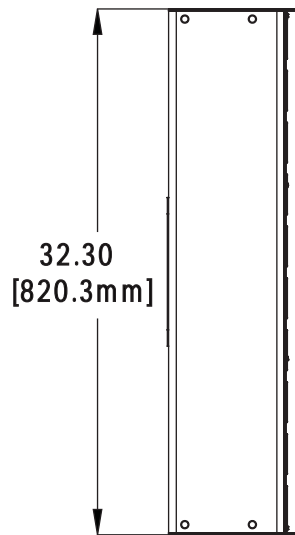
**SUPERIOR LISTENING SYSTEMS**  
AUDIO CLARITY REDEFINED

## LS6593v2 Drawings

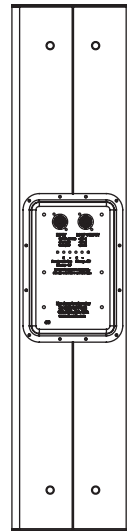
7.50  
[190.5mm]



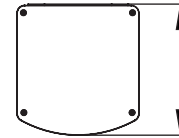
**FRONT**



**SIDE**



**BACK**



8.05  
[204.4mm]

**TOP**

## Horizontal Polars

