



Product Technical Data Sheet

**Model LS9000**

**Description**

The LS9000 is a full-range tri-amped true line source array module. Its primary application is for use as a downfill module with the larger LS9900 series. It is also well suited as a primary module in stand-alone line array designs for systems in medium to large venues. SPL levels of 115dB to 120dB can be obtained in the listening areas with LS9000 arrays.

The LS9000 high frequency section features a high performance PRD1000 planar ribbon transducer 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.

The midrange section uses two 6 1/2" drivers that are the same midrange drivers used in the highly acclaimed S1065 and S1266 critical high-output studio monitors. The low frequency section uses four high-powered 8" drivers utilizing a demodulation ring magnet system providing a third less harmonic distortion and reducing inductance modulation by 50 percent. This provides an open and clear sound despite loud listening levels. Both drivers feature a die-cast basket with patented Intercooler system.

**Key Features**

- Direct radiating planar PRD1000 ribbon high frequency line source module delivers unsurpassed sound quality
- True line source behavior due to precise acoustical coupling of individual PRD1000 high frequency transducers
- Open and clear sound at high SPL due to advanced transducer technology in all bandwidth sections
- 90 degree wide horizontal coverage
- Even and easily predictable coverage using our free LASS prediction software
- All array rigging is included
- Splay options from 1 to 10 degrees between boxes
- 3/4" 13 ply Baltic Birch cabinet construction

**Applications**

Developed for a wide range of professional applications where the highest quality in sound reinforcement is required

- Sound reinforcement in churches and auditoriums
- Professional Portable PA system for a wide variety of applications
- Downfill for LS9900 System



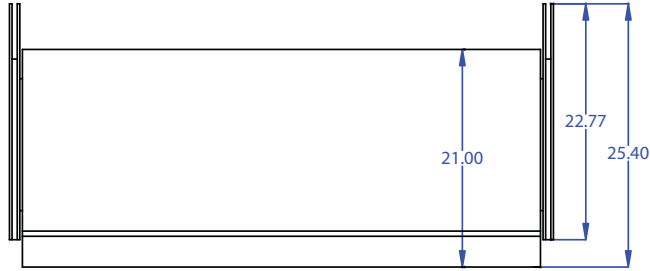
Product Specifications		
Operating Range <sup>1</sup>	65Hz - 20,000Hz	
Sensitivity (1W/1M) Low Freq. <sup>2</sup>	101dB <sup>5</sup>	
	Mid Freq.	100dB
	High Freq.	103dB
Horizontal Coverage Angle -6dB <sup>3</sup>	90 Degrees	
Vertical Coverage Angle -6dB	Defined by height and configuration of array	
Power Handling - Low Freq. <sup>4</sup>	1000W (64 Volts) AES/2 <sup>5</sup>	
	Mid Freq.	500W (64 Volts) AES/2
	High Freq.	385W (50 Volts) IEC Short Term
		104W (26 Volts) IEC Long Term
Recommended Amp Power for Max Output	Low Freq.	2000 Watts @ 4 ohms <sup>5</sup>
	Mid Freq.	1000 Watts @ 8 ohms
	High Freq.	400 Watts @ 8 ohms
Max SPL (calculated) 1 Meter - Low Freq. <sup>6</sup>	131dB Cont. / 137dB Peak <sup>5</sup>	
	Mid Freq.	127dB Cont. / 133dB Peak
	High Freq.	123dB Cont. / 129dB Peak
Nominal Impedance - Low Freq.	4 Ohms <sup>5</sup>	
	Mid Freq.	8 Ohms
	High Freq.	6.5 Ohms
Crossover Frequency	DSP Settings Provided	
Transducers - Low Freq.	8" Woofer x 4 (wired in two parallel pairs)	
	Mid Freq.	6.5" Midrange x 2
	High Freq.	PRD1000 Ribbon
Input	NL8 x2	
	Pair 1 & 2 = LF Pair 3 = MF Pair 4 = HF	
Dimensions	9.63" (24.4cm) H (front)	
	6.56" (16.67cm) H (back)	
	50" (127cm) W	
	21" (53.3cm) D	
Enclosure	13ply Baltic Birch	
Weight	142lbs (64.5kg)	
Rigging	All array rigging is included	
Optional Accessories	RLA/1-BBS Small Rigging Frame <sup>7</sup>	
	RLA/1-BBL Large Rigging Frame <sup>7</sup>	
	RC-LS9000 Road Case (holds 2 modules)	
Finish Options	Black Latex	
	Paintable Natural Finish	

1. LF at -10dB, HF -6dB at 30kHz 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.  
 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. Both pairs of 8" drivers in parallel (NL8 pin pairs 1 and 2).  
 6. Typical SPL for one box only, for array SPL refer to LASS calculations. Ribbon SPL calculated from IEC long term and short term  
 7. RLA1/BBS weighs 64lbs (29kg). RLA1/BBL weighs 152lbs (68.95kg)

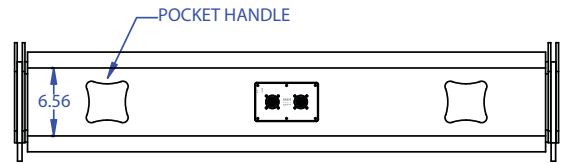


**SUPERIOR LISTENING SYSTEMS**  
AUDIO CLARITY REDEFINED

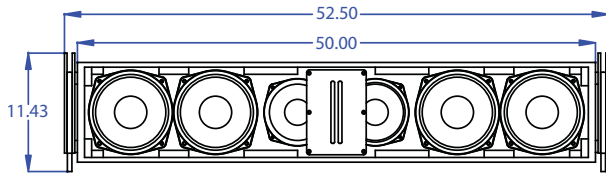
## LS9000 Drawings



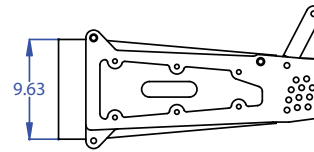
TOP



BACK



FRONT



SIDE

## Horizontal Polars

