

Product Technical Data Sheet Model LS9900 / LS9900T

Description

The LS9900 is our flagship full-range tri-amped true line source array module. Its primary application is large venues that require extreme high SPL performance with the ultimate in high fidelity.

The LS9900 high frequency section features two high-performance PRD1000 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.

The midrange section uses four 6 ½" 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 two high-powered Neo 15" drivers carefully matched to compliment output and coverage of the mid and high frequency devices.

Two versions of the LS9900 are offered, LS9900 for permanent installation and LS9900T for touring applications. The touring version comes standard with a wheel tray and advanced rigging for easier array setup and teardown.

Key Features:

- Direct radiating planar PRD1000 ribbon high frequency line source module delivers unsurpassed sound quality
- 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 5 degrees between boxes in ½ degree increments
- Down-fill complimented by using SLS LS9000 modules
- 3/4" 13 ply Baltic Birch cabinet construction

Applications

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

- High SPL Sound reinforcement in churches and auditoriums
- Professional Portable PA system for a variety of applications



Product Specifications	
Operating Range 1	45Hz - 20,000Hz
Sensitivity (1W/1M) Low Freq. ²	99dB ⁵
Mid Freq.	104dB
High Freq.	106dB
Horizontal Coverage Angle -6dB ³	90 Degrees
Vertical Coverage Angle -6dB	Defined by height and configuration of array
Power Handling - Low Freq. 4	1000W (64 Volts) AES/2 5
Mid Freq.	1000W (89 Volts) AES/2
High Freq.	770W (100 Volts) IEC Short Term
	208W (52 Volts) IEC Long Term
	120W (40 Volts) AES/2
Recommended Amp Power for Max Output	
Low Freq.	2000 Watts @ 4 ohms 5
Mid Freq.	2000 Watts @ 8 ohms
High Freq.	800 Watts @ 16 ohms
Max SPL (calculated) 1 Meter - Low Freq.6	129dB Cont. / 135dB Peak 5
Mid Freq.	134dB Cont. / 140dB Peak
High Freq.	129dB Cont. / 135dB Peak
Nominal Impedance - Low Freq.	4 Ohms (two 8 ohm woofers in parallel)
Mid Freq.	8 Ohms
High Freq.	13 Ohms
Crossover Frequency	DSP Settings Provided
Transducers - Low Freq.	15" Woofer x 2
Mid Freq.	6.5" Midrange x 4
High Freq.	PRD1000 Ribbon x 2
Input	NL8 x2
	Pair 1 & 2 = LF Pair 3 = MF Pair 4 = HF
Dimensions	17" (43cm) H (front)
	15" (38cm) H (back)
	50" (127cm) W
	21" (53.3cm) D
Enclosure	13ply Baltic Birch
Weight	212lbs (96kg)
Rigging	All array rigging is included
Optional Accessories	RLA/1-BBS Small Rigging Frame 7
	RLA/1-BBL Large Rigging Frame ⁷
	SCLS Speaker Cover
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.

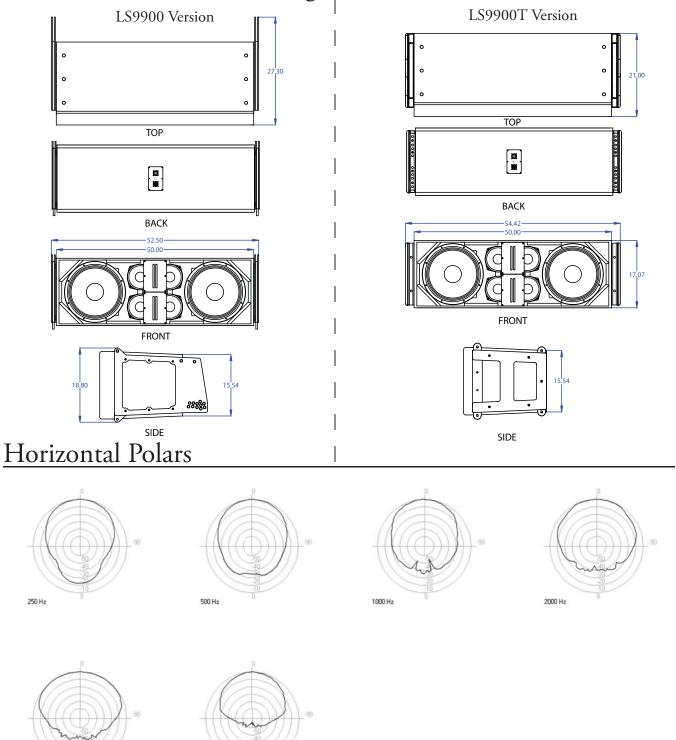
2. Full bandwidth pink noise is applied and amplified to a level and measured at the loudspeaker terminals - corresponding to 1 Watt as referenced to the loudspeakers nominal impedance. SPL is measured in an anechoic environment in the loudspeakers far field. Data is extrapolated to 1 Meters distance from the loudspeaker. 3. Averaged from 1000Hz to 10kHz

 AES established with ambient temperature at 22C in accordance with AES/2-1984 standard. IEC stated in RMS voltage according to IEC 268-5
Both 15" drivers in parallel (NL8 pin pairs 1 and 2).
Typical SPL for one box only, for array SPL refer to LASS calculations.

 Typical SPL for one box only, for array SPL refer to LASS calculations. Ribbon SPL calculated from IEC long term and short term
RLA1/BBS weighs 64lbs (29kg). RLA1/BBL weighs 152lbs (68.95kg)



LS9900 / LS9900T Drawings



8000 Hz

4000 Hz