



Product Technical Data Sheet

Model LS6500 / LS6500-I

Description

The LS6500 is a full-range bi-amped true line source array module. The lightweight compact unit can be used in a wide variety of venues where compact size is a requirement. Typical generated listening area SPL will be up to 106dB.

The LS6500 high frequency section features a high performance PRD500 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 woofer section uses a single high definition 6 1/2" driver with parameters calculated to offer a seamless transition to the PRD500 ribbon in typical arrays.

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
- Open and clear sound at high SPL due to advanced transducer technology
- 110 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
- Same great performance of our popular LS8695v2 but with the additional capability of splaying the units thereby increasing vertical coverage possibilities



Product Specifications	
Operating Range ¹	85Hz - 20,000Hz
Sensitivity (1W/1M) - Low Freq. ²	91dB
High Freq.	101dB
Horizontal Coverage Angle -6dB ³	110 Degrees
Vertical Coverage Angle	Defined by height and configuration of the array
Power Handling - Low Freq. ⁴	100W (28 Volts) AES/2
High Freq.	145W (32 Volts) IEC Short Term 46W (18 Volts) IEC Long Term 35W (15.6 Volts) AES/2
Recommended Amp Power for Max Output	
Low Freq.	200 Watts @ 8 ohms
High Freq.	150 Watts @ 8 ohms
Max SPL (calculated) 1 Meter - Low Freq. ⁵	111dB Cont. / 117dB Peak
High Freq.	118dB Cont. / 123dB Peak
Nominal Impedance - Low Freq.	8 Ohms
High Freq.	7 Ohms
Crossover Frequency	DSP Settings Provided
Transducers - Low Freq.	6.5" Bass/Midrange
High Freq.	PRD500 Ribbon
Input	NL4 x2 (Pair 1 = LF, Pair 2 = HF) Barrier strip for I version
Dimensions	7.25" (18.4cm) H (front side) 5.5" (14cm) H (rear side) 14" (35.6cm) W 10" (25.4cm) D
Enclosure	13ply Baltic Birch
Weight	20lbs (9kg) Shipping 26lbs (11.8kg)
Rigging	All array rigging is included
Optional Accessories	RLA/3-BB - Rigging Frame RC-LS6500 Road Case (holds 8 LS6500s)
Finish Options	Black Latex White Latex (w/ white rigging) Paintable Natural Finish (w/ black rigging)

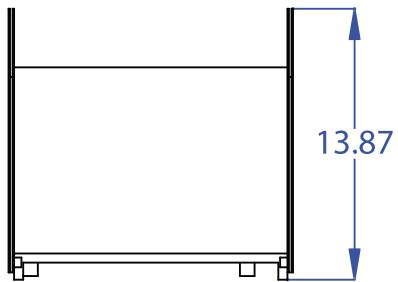
Applications

- 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
- Professional Portable PA system for a wide variety of applications

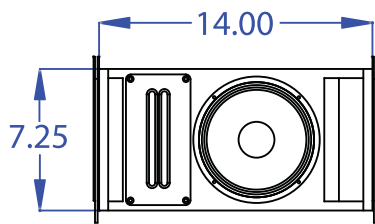
1. LF at -10dB, HF -6dB at 40kHz on-axis however response above 20kHz is limited by air absorption and DSP sampling rates in typical PA applications.
 2. Full bandwidth pink noise is applied and amplified to a level and measured at the loudspeaker terminals - corresponding to 1 Watt as referenced to 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.
 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. Ribbon SPL calculated from IEC long term and short term



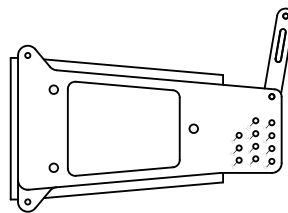
LS6500 / LS6500-I Drawings



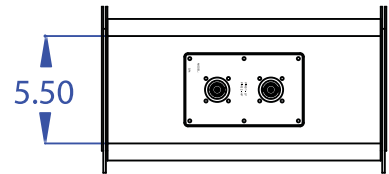
TOP



FRONT



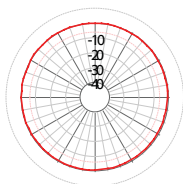
SIDE



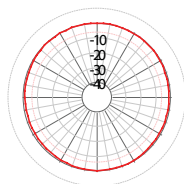
BACK

Polars

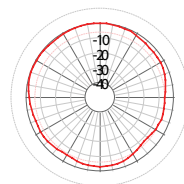
Horizontal Axis 



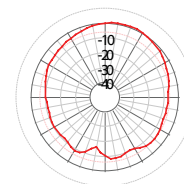
125Hz



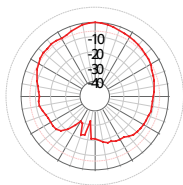
250Hz



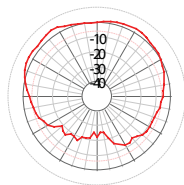
500Hz



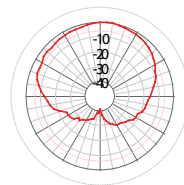
1000Hz



2000Hz



4000Hz



8000Hz