

# LA Series

## 2-Way, Self-Powered Loudspeakers LA121/123 & LA151/153

- ▶ 1500W of Class-D Amplification
- ▶ High quality transducers for best-in-class acoustic performance
- ▶ Lightweight and durable resonant free enclosure
- ▶ EAW Focusing for unmatched clarity and accuracy
- ▶ Linear conical waveguide optimized for pole mount and monitor applications

### OVERVIEW

The LA Series delivers EAW signature performance in a portable and lightweight package. Each enclosure in the series is first designed around high quality HF and LF transducers. The unique and intelligent features of the series include EAW Focusing which provides unmatched musical clarity and tonal accuracy. The conical horn featured in the LA series provides consistent high frequency performance throughout coverage area. The asymmetric pattern of the horn maintains high frequency directivity where it is required and eliminates unwanted reflections.

The lightweight and durable enclosure has been meticulously designed to eliminate any enclosure resonance and houses on-board bi-amplified electronics (1500W) featuring signature EAW DSP including Focusing and DynO. Our Resolution software platform is a powerful and easy-to-use simulation software that accurately predicts the performance of one or multiple LA Series enclosures within a venue or performance.

### APPLICATIONS

- ▶ Live Production/Regional Rental Houses
- ▶ Live Music and Dance Clubs
- ▶ Corporate AV Houses
- ▶ Houses of Worship
- ▶ Dry Hire



LA121 / LA123



LA151 / LA153

### EAW TECHNOLOGIES



**Beamwidth Matched Crossovers** Introduced over a decade ago for our MK series loudspeakers, EAW Engineers use carefully-designed HF horns and crossovers to eliminate polar irregularities through the crossover point.



**Focusing™** Use of advanced digital signal processing to perfect the impulse response of a loudspeaker in the time domain. Eliminating horn "honk" and splashiness, this makes the loudspeaker sound like a wicked studio monitor instead of a "PA" speaker.



**DynO™** Dynamic Optimization actively tracks input spectrum and power delivery, continually maximizing output and fidelity at any drive level.

## TECHNICAL SPECIFICATIONS

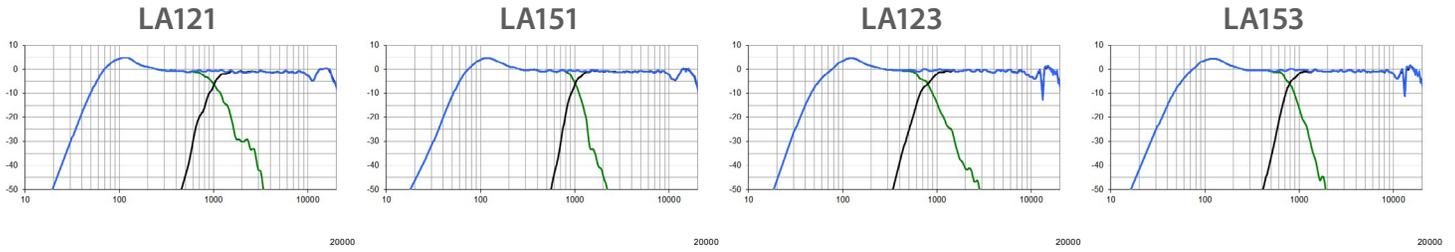
### 2-WAY SELF-POWERED LOUDSPEAKER 90° CONICAL



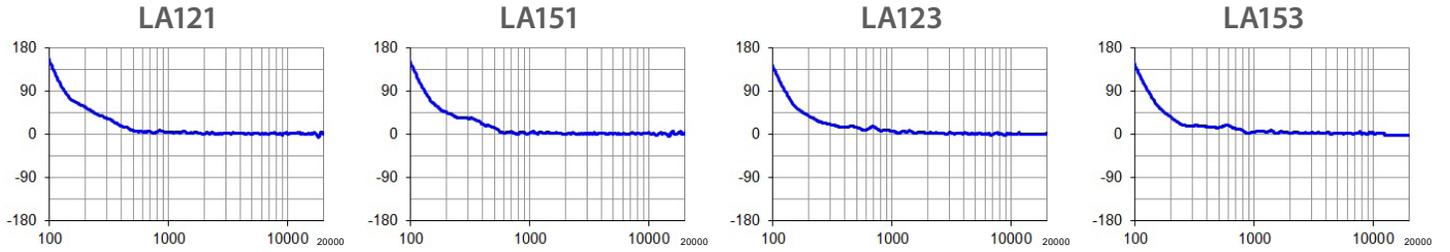
PERFORMANCE	LA121	LA123	LA151	LA153
<b>Max SPL</b>	135dB	137dB	136dB	137dB
<b>Operating Range</b>	47 Hz to 20 kHz		43 Hz to 20 kHz	
<b>Nominal Beamwidth</b>	90° Conical, Vertically Asymmetric (+40, -50)			
CONFIGURATION	LA121	LA123	LA151	LA153
<b>LF Transducer, Loading</b>	12in Cone, Vented	12in Cone, 2.5in Voice Coil, Vented	15in Cone, Vented	15in Cone, 3in Voice Coil, Vented
<b>HF Transducer, Loading</b>	1in Exit, 1.4in voice coil compression driver, Linear Conical Waveguide	1.4in Exit, 3in voice coil neodymium compression driver, Linear Conical Waveguide	1in Exit, 1.7in voice coil compression driver, Linear Conical Waveguide	1.4in Exit, 3 in voice coil neodymium compression driver, Linear Conical Waveguide
<b>Operating Mode</b>	Bi-Amp LF, HF			
<b>Signal Processing</b>	DSP with EAW Focusing and DynO			
<b>Modes</b>	Main / Monitor, Mic/Line			
ELECTRICAL	LA121	LA123	LA151	LA153
<b>Input Type</b>	Electronically Balanced XLR / TRS			
<b>Loop Type</b>	Electronically Balanced XLR			
<b>Amplifier</b>				
<b>Type</b>	Class D			
<b>Max Output LF / HF (Peak)</b>	1500W			
<b>AC Mains (nominal)</b>				
<b>Connector</b>	IEC Connector	Neutrik PowerCON®	IEC Connector	Neutrik PowerCON®
<b>Input</b>	100-120V or 200-240V, 50-60Hz			
PHYSICAL	LA121	LA123	LA151	LA153
<b>Material</b>	Acoustically Enhanced Polypropylene			
<b>Dimensions (HxWxD)</b>	25.2 x 15 x 14.4in (640 x 380 x 365mm)		27.6 x 17.3 x 16.9in (700 x 440 x 430mm)	
<b>Net Weight</b>	43lb (19.5kg)		58lb (26.4kg)	
<b>Shipping Weight (approx)</b>	50lb (23kg)		66lb (30kg)	

## PERFORMANCE GRAPHS

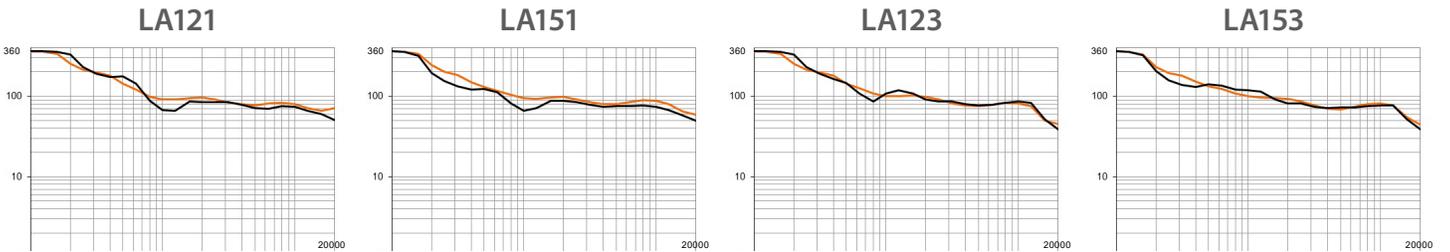
FREQUENCY RESPONSE ■=LF ■=HF ■=OVERALL



## PHASE LINEARITY



BEAMWIDTH ■=HORIZONTAL ■=VERTICAL

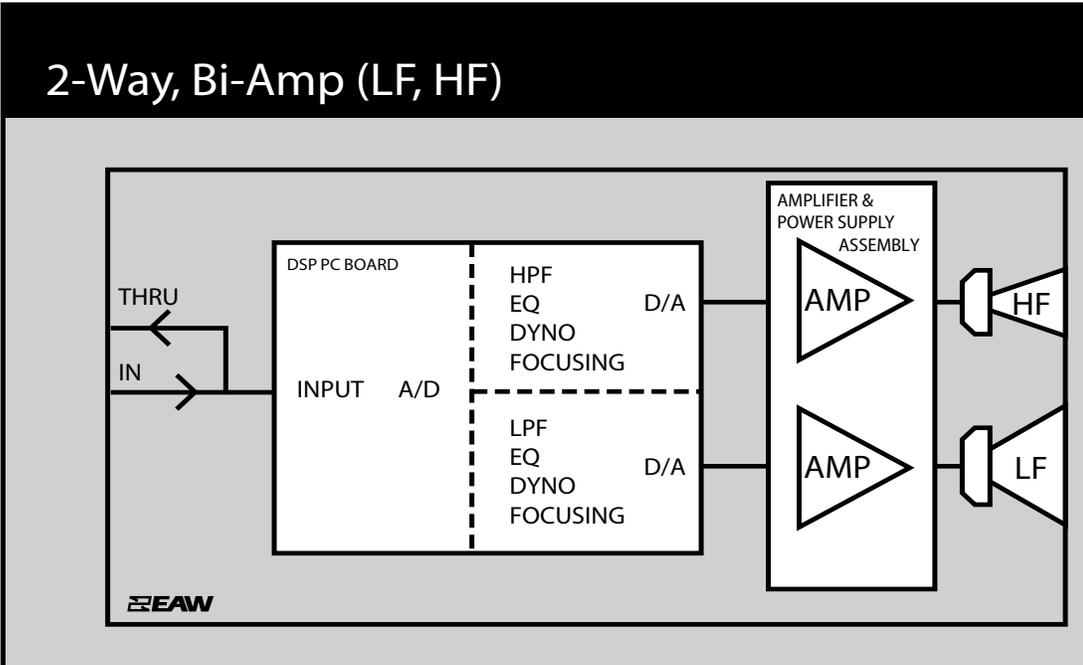


## ACCESSORIES

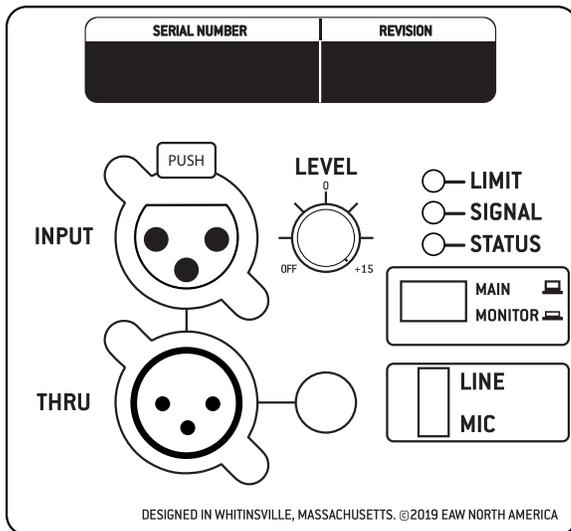
DESCRIPTION	RS121/123	RS151/153
Transport Cover	2070538	2070539
M20 Positive Thread Pole	2047634	



## SIGNAL DIAGRAM



## INPUT PANEL



<b>HPF</b>	EAW High Pass Filter for Digital Signal Processing capable of high pass filtering EAW Focusing™
<b>LPF</b>	Low Pass Filter for crossover
<b>LF/MF/HF</b>	Low Frequency / Mid Frequency / High Frequency
<b>AMP</b>	User Supplied Power Amplifier –or– Integral Amplifier
<b>XVR</b>	Passive LPFs, HPFs, and EQ integral to the loudspeaker
<b>EAW DynO™</b>	Digital Signal Processor capable of implementing EAW DynO™ processing