

LA12

3-Way Horn Loaded Line Array Element



TECHNICAL SPECIFICATIONS



- Superior bass impact thanks to horn design
- High SPL and low distortion
- Very smooth and clear sound
- Excellent and highly predictable dispersion control
- Fast, simple Integrated Rigging hardware

OVERVIEW

The Bass Section

The LA12 line array system features a 12" Neodymium high excursion high power bass loudspeaker loaded by a DOUBLE TECHNOLOGY CABINET that perfectly matches the very high efficiency and impact of a horn reproduction with the soft extended bass response of the reflex loading.

The Mid Section

For the mid we use 2 special 6.5" speakers with two PRISMATIC PHASE CORRECTION DEVICE, mounted in a 90° horizontal dispersion wave guide. The prismatic phases devices besides the phase correction also makes the system behave like a four sound sources and so agreeing with the second line arrays condition: The distance between the sound sources must be less than half a wave length of the higher frequency it must reproduce.

The High Section

The HF reproduction is assured by three 1" drivers loaded by a proprietary wave converter with path length equalization, the ICWG, that transforms the spheric waves into cylindrical isophasic waves coupling seamlessly with the others high frequency transducers of the array. The ICWG output directly feed a special 90° horizontal dispersion wave guide.

Technical Data	
Speaker Type:	Horn-Loaded 3-Way Line Array Element
Acoustical Data	
Frequency Response (-6dB):	65Hz - 19.000Hz
Low Frequency Extension (-10dB):	56Hz
Sensitivity (1W@1m) LF:	103dB (Full-Space)
Sensitivity (1W@1m) MF:	106dB (Full-Space)
Sensitivity (1W@1m) HF:	108dB (Full-Space)
Calculated Max. SPL (Cont/Peak):	131dB/137dB (Full-Space)
Calculated Max. SPL (Cont/Peak) LF:	132dB/138dB (Full-Space)
Calculated Max. SPL (Cont/Peak) MF:	133dB/139dB (Full-Space)
Calculated Max. SPL (Cont/Peak) HF:	131dB/137dB (Full-Space)
Coverage Angle -6dB (HxV):	90° (Down to 320Hz) x 8°
Drivers	
Low Frequency:	1 x 12" (300mm)/3" (76mm) VC, Neodymium, B&C custom speaker
Mid Frequency:	2 x 6.5" (170mm)/1.5" (38mm) VC, B&C custom speaker
High Frequency:	3 x 1" (25mm) exit/1.7" (44mm) VC, B&C custom compression driver
Electrical Data	
Program/Peak Power LF:	800W/1600W (10ms)
Program Power/Peak MF:	480W/960W (10ms)
Program/Peak Power HF:	180W/360W (10ms)
Nominal Impedance LF:	8
Nominal Impedance MF:	16
Nominal Impedance HF:	32
Crossover frequency/Type (LF to MF):	400Hz Linkwitz/Riley 24dB/oct
Crossover frequency/Type (MF to HF):	3000Hz Linkwitz/Riley 24dB/oct
Recommended High-Pass Filter:	50Hz, 18dB/oct Butterworth
Connectors:	2 x Neutrik NL8
Enclosure	
Construction:	15mm multi-laminate birch ply
Finish:	Textured black semi-matte coating
Protective grill:	Black perforated steel
Fittings:	Adjustable (0° to 8°) rigging system
Handles:	1 on each side, 2 on the back
Dimensions (WxHxD):	1095 x 394 x 547 mm
Net Weight:	59.6 kg
Shipping Weight:	63.1 kg