Line Array Loudspeaker Module Type L212

APPLICATIONS

- Optimized for long-throw applications
- Large scale events
- Touring sound reinforcement
- Large fixed Installations

FEATURES

- Clarity, intelligibility and precision
- Constant tonal balance
- Compact and light
- Seamless acoustic integration with other Lange Loudspeakers products
- Specifically designed wave guide, engineered by Lange Loudspeakers Ltd.
- Double 12" ND drivers with 76mm CU Voice Coil, four high efficiency 5,5” ND MF Drivers and tree high efficiency 1” drivers coupled to a proprietary wave guide
- Robust and easy to use flying system, reduces setup time to a minimum
- Front mounted dolly allows easy transportation

DESCRIPTION

The L212 is a three way speaker designed for curvilinear arraying. Each module has enough power reserve (145 peak SPL @ 1 meter) for high impact, long throw application in large venues. For very large venues the L212 will even be scalable with other Lange Loudspeakers products.

The L212 includes two 12” low frequency ND drivers with 76 mm voice coil. Four high power 5,5” ND MF drivers are placed in close proximity of the HF radiation area, thus allowing excellent horizontal coverage without interferences.

The heart of the L212 line array is its wave guide. Lange Loudspeakers designed a specific wave guide for the L212 that emits isophase wave fronts.

The well proven L208 wave guide has been customized in order to achieve identical performance with increased output thanks to a third HF driver; The L212 line array source provides high SPL, solid LF performance thanks to the high excursion capability (Xmax) of the two high excursion 12” drivers selected and constant tonal balance over distance. Frequencies above 10 KHz are smoothly reproduced morphing a cylindrical wave shape. The vertical coverage angle is defined within 11 different positions, from 0 degrees to 10 degrees.

Careful listening tests enabled the development of a very pleasant sounding device. DSP Intervention is reduced to a minimum. After several years on the market the L208 DSP settlings has been refined and reduced to minimal interventions.

The Lange Loudspeakers L212 line array offers a very attractive price to performance ratio. Cabinets are manufactured with multi-ply Finnish Birch, the wave guide is composed by a CNC milled nylon block while the suspending system is composed by CNC milled Ergal elements, polished and anodized in black.

Estival Jazz - Lugano

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SPECIFICATIONS

Sensitivity (1)	100 LMF, 105 MF, 115 HF dB @ 1 Mt. with 1 watt
Frequency response (2)	48Hz to 20’000Hz
Program power	2000W LF, 640W MF, 360W HF
Continuous power rating	1000W LF, 320W MF, 180W HF
Maximum sound pressure(5)	128dB LF, 131dB MF,142dB HF full power, one unit
Peak sound pressure	134dB LF, 137dB MF, 149dB HF peak, one unit
Horizontal coverage angle (-6dB)	100° from 250Hz to 20KHz
Vertical coverage (-6dB)	Varies with array size & configuration
Power compression	Less than 3 dB
Impedance	16 Ohms LMF, 12 Ohms MF, 20 Ohms HF
Recommended crossover point(3)	>40Hz, 220Hz, 1480Hz
Recommended processing	Dolby Lake ® - BSS FDS366 – XTA226 - Xilica
Connectors	2 x Neutrik NL8MPR(3,4-LMF, 5,6-MF, 7,8-HF)
Box construction	15 mm Finnish birch, 5° side angle, six handles
Horn configuration	Straight, exponential horn 90°V – 7°H
Dimension (W/H/D)	111.3 cm x 38.7 cm x 36.5 cm
Weight, with no dolly	49 Kg
Shipping weight	54 Kg
Accessories	Black front grille and foam with logo, LPH-30.0 flying Push KLP handle (M8x30SS) – Dolly (L212DW)

Extended LF 12” high excursion Driver

High Efficiency 5,5” ND Driver

High Frequency Driver with Annular Diaphragm

L212 DSP pre-sets (BSS FDS366)

The L212 line array has been intensively studied in order to avoid complicated DSP intervention. Finally, a well-made line array should work without the need of extra tuning of the high frequencies, mid frequencies and so on. The main DSP intervention suggested for the L212 is related to common speaker management when active driving of the system is a must. The system will perform with most qualitative Loudspeaker Management Systems on the market. However higher conversion ratios (96KHz) are suggested. All output polarities settled in normal position – See power rating of the speakers and amplifiers for proper limiter threshold match.

L212 Component	Delay (mm)	Polarity	X-over point (high pass)	X-over type (high pass)	X-over point (low pass)	X-over type (low pass)	Relative Gain Settings** (dB)
2 x 12''	0	+	40Hz	24dB BW	220Hz	24dB LR	+0
4 x 5,5''	44 to 70	+	220Hz	24dB LR	1480Hz	24dB LR	+0
3 x 1”	0	+	6000Hz	6dB Butt	OUT		-9

** Assuming amplifiers of identical input sensitivity and gain
Time delays assume fronts of enclosures aligned