

# The GSL12 loudspeaker



## GSL12 loudspeaker

The GSL12 is a large format line array loudspeaker specifically designed for use at bigger events, particularly in significantly sized arenas, stadiums and festivals. It houses two 14" LF drivers in a large cabinet volume for unprecedented low frequency headroom, two side firing 10" LF drivers, a single horn loaded 10" MF driver. Three custom designed 1.4" exit HF drivers with a 3" voice coil in a compact 2" format mounted onto a waveguide provides increased HF resolution and output.

The side firing 10" LF drivers couple towards the front to increase the LF output while cancelling towards the rear, producing 120° constant directivity control over the whole bandwidth. This cardioid behaviour produces the same response off axis, and reduces the excitation of the reverberant field over the entire audio spectrum.

The GSL12 is acoustically and mechanically compatible with the GSL8 loudspeaker. These large format line array loudspeakers can be flown in columns of up to 24 cabinets using the compression mode rigging system, in which the complete array is flown straight and requires a small footprint, or in the conventional tension mode.

The cabinets are constructed from marine plywood and have an impact and weather protected PCP (Polyurea Cabinet Protection) finish. The front and side panels of the cabinets incorporates a rigid metal grill backed by an acoustically transparent and water repellent fabric. Each side panel incorporates a handle while two additional handles are provided at the rear. A single NLT4 F connection is provided at the rear.

## d&b amplifiers

The d&b audiotechnik loudspeaker range is designed exclusively for operation with d&b amplifiers. These provide power as well as comprehensive control and protection functions tailored to achieve the performance, reliability and longevity associated with the d&b System approach. The d&b D80 amplifier is required to drive the GSL12. This large format line array loudspeaker is driven in 2-Way Active mode and requires two amplifier channels per loudspeaker.

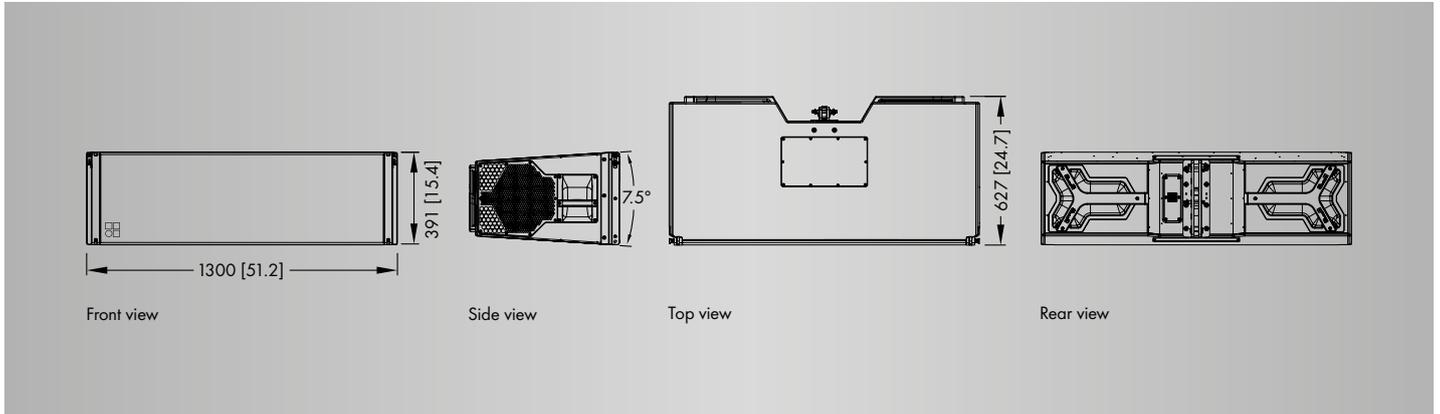
## System data

Frequency response (-5 dB standard) .....	45 Hz - 18 kHz
Frequency response (-5 dB CUT mode) .....	70 Hz - 18 kHz
Max. sound pressure (1 m, free field) .....	149 dB
with D80 .....	(SPLmax: Broadband signal IEC 60268)

## Loudspeaker data

Nominal impedance front LF .....	4 ohms
Nominal impedance side LF/MF/HF .....	4 ohms
Power handling capacity front LF (RMS/peak 10 ms) .....	800/3200 W
Power handling capacity side LF/MF/HF (RMS/peak 10 ms) .....	800/3200 W
Nominal dispersion angle (horizontal) .....	120°
Splay angle setting .....	0 - 7° (1° increment)
Components .....	2 x 14" front LF driver
.....	2 x 10" side LF driver
.....	1 x 10" MF driver
.....	3 x 1.4" exit compression driver with 3.4" coil
.....	Passive crossover network
Connection .....	1 x NLT4 F
Weight .....	80 kg (176 lb)

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GSL12 cabinet dimensions in mm [inch]

## Features and benefits

- Cardioid behaviour over the entire operating range
- Compression mode rigging system for fast and safe deployment with a small footprint
- Requires only two amplifier channels; one channel drives the front facing 14" LF drivers, while the other amplifier channel drives the passively crossed over 10" side firing LF drivers, the 10" MF section and 3 x HF drivers
- ArrayProcessing optimizes the level and tonal balance over the complete audience listening area and requires no additional amplifier channels
- Exceptional system headroom
- Efficient cabling system and amplifier rack assemblies
- Effective transport solutions

## Applications

- Large scale sound reinforcement applications
- Festivals
- Stadiums
- Arenas

The loudspeaker shall be the GSL12 by d&b audiotechnik GmbH & Co. KG.

