

# The GSL12 loudspeaker



## GSL12

The GSL12 is a line array module specifically designed for large-scale sound reinforcement. Up to twenty-four GSL12 loudspeakers can be flown in vertical columns producing a 120° constant directivity dispersion pattern in the horizontal plane. The GSL12 houses two 14" neodymium forward facing LF drivers and two side firing 10" neodymium LF drivers. A coaxial mid-high section contains an MF horn with a 10" driver and three 1.4" exit, 3.4" voice coil HF compression drivers mounted to a dedicated wave shaping device.

Splay angles between cabinets can range from 0° to 7° in 1° increments. The loudspeakers are driven actively by two channels of an appropriate d&b amplifier, one channel powering the 14" LF drivers, the second channel powers all other components, these are passively crossed-over.

This component geometry allows for a smooth crossover design with well-defined overlaps between adjacent bands providing consistent, even and very accurate horizontal dispersion. Due to the arrangement of the front and side firing LF drivers, accurate directivity control is maintained from 45 Hz to above 18 kHz.

The cabinets are constructed from marine plywood and have an impact and weather protected PCP (Polyurea Cabinet Protection) finish. The front and side panels incorporate rigid metal grills backed by an acoustically transparent and water repellent fabric. Each side panel incorporates a recessed handle, with additional handles are 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.

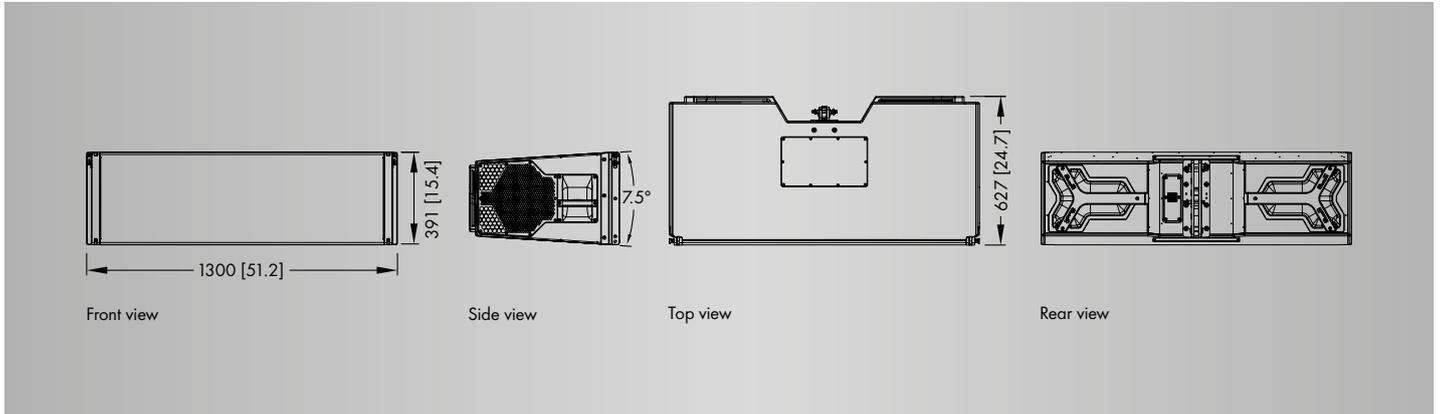
## System data

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

- Constant directivity behaviour over the entire operating range using cardioid techniques in the lower range
- Patented GSL System flying hardware and method enables rapid deployment of GSL8 and GSL12 arrays directly from the Touring cart in either compression or tension rigging modes
- 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

