

The GSL System.

More art.

Less noise.

SL-Series.

**d&b
audiotechnik** 

The get up and go.

The SL-Series is born from a dream: to design the ultimate large-scale line array. A System with unparalleled performance, accuracy and state-of-the-art features, all carefully packaged in the d&b way for easy, intuitive operation. This ambition sees broad-ranging techniques and strategies employed to satisfy a demand for the highest degree of dispersion control over the entire audio bandwidth.

This ultimately delivers exceptional sound with impeccable attributes, enriching reinforcement quality, consistency and efficiency from performance to performance to performance.





Blood, sweat and years.

All for nothing?

From the dream to reality, the SL-Series is a giant leap in the evolution of the d&b system; a bound towards keeping sound and silence where both should be.

Driven by knowledge gained from events, and honed with development within the ArrayCalc simulation and NoizCalc immission modelling software, the performance targets became obvious. Of course, the SL-Series is not just about loudspeakers. It is a complete system where all aspects of application design, transportation, deployment and operation are carefully considered, integrated and optimized for simplicity and ease of use.

This Series conquers a new system scale within the d&b range. With performance to satisfy any demand, the GSL System is intended for the largest applications and events around the world. It produces the maximum performance and efficiency, while maintaining precise horizontal directivity control over the entire audio spectrum, delivering all and nothing.



Special loudspeakers showing the way.

The GSL loudspeakers are the largest line array modules developed by d&b, but size isn't everything.

The GSL8 and GSL12 produce a full-range constant directivity behaviour, using a combination of technologies which include cardioid techniques in the lower range. This behaviour rejects energy towards the rear, significantly reducing excitation of the reverberant field, which results in minimized reflections indoors, a superior working environment onstage and lower sound emissions to unnecessary areas outdoors.

The GSL System is completed by the SL-SUB and SL-GSUB cardioid subwoofers. The loudspeakers are driven in 2-Way Active mode from two channels of a D80 amplifier, adhering to the established system approach and fitting easily into the d&b workflow. The sonic performance and efficiency of the SL-Series is matched with usability through effective transport, handling and cabling – all intended for high-speed deployment.



The National, Sydney, Australia

Photography courtesy of Daniel Boud

Wacken Open Air, Germany





Rise Against, Sporthalle Hamburg, Germany

Gorillaz, O2 Arena, London, United Kingdom

Photography courtesy of Mark Allen



Filling the road.

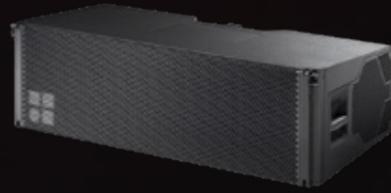
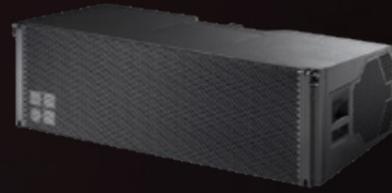
The GSL8 and GSL12 are the only modern large-scale line array modules that maintain accurate horizontal pattern control all the way down to 45 Hz. This is achieved using a unique cabinet geometry. Two 14" LF drivers, coupled with two side-facing 10" LF drivers, develop an extended response and extreme low frequency output – so much so that subwoofers do not always have to be flown with the main hangs.

Mid-range is delivered by a high-sensitivity horn loaded with a 10" driver, while the utilization of three custom designed 1.4" exit HF drivers with 3.4" voice coils brings HF resolution and output. Powered in 2-Way Active mode by the D80 amplifier, one channel drives both 14" drivers while all other components are passively crossed over and driven by a second amplifier channel.

The SL-SUB and SL-GSUB produce cardioid subwoofer behaviour with exceptional performance to size ratio, handling, storage and transportability. Two 21" high-excursion drivers face forwards, while a further 21" radiates to the rear. These are driven in 2-Way Active mode from two channels of the D80 amplifier. The two subwoofers differ only in rigging hardware: the SL-SUB can be flown, while the SL-GSUB is designed for ground stacked applications only.



The GLS8, GSL12 and SL-SUB, SL-GSUB.



GSL System	GSL8	GSL12	SL-SUB	SL-GSUB
Components	2 x 14" Front LF 2 x 10" Side LF 1 x 10" MF 3 x 1.4" exit HF 3.4" coil	2 x 14" Front LF 2 x 10" Side LF 1 x 10" MF 3 x 1.4" exit HF 3.4" coil	3 x 21" driver	3 x 21" driver
Output (1 m)¹	150 dB SPL	149 dB SPL	144 dB SPL	144 dB SPL
Power rating² Front LF	800 / 3200 W	800 / 3200 W		
Power rating² Side LF/MF/HF	800 / 3200 W	800 / 3200 W		
Power rating² Front/Rear			1000 / 4000 W ³ , 500 / 2000 W ⁴	1000 / 4000 W ³ , 500 / 2000 W ⁴
Frequency response (-5 dB)	45 Hz-18 kHz	45 Hz-18 kHz	33 Hz-84 Hz	33 Hz-84 Hz
Dispersion (H)	80° ⁵	120° ⁵	cardioid	cardioid
Splay angle settings	0° - 7° (1° increments)	0° - 7° (1° increments)		
Cabinets per D80 (2-Way Active)	2	2	2	2
Dimensions mm (H x W x D)	391 x 1300 x 627	391 x 1300 x 627	585 x 1300 x 975 ⁶	585 x 1300 x 975 ⁶
Weight kg	80	80	138	132
Dimensions inch (H x W x D)	15.4 x 51.2 x 24.7	15.4 x 51.2 x 24.7	23 x 51.2 x 38.4 ⁶	23 x 51.2 x 38.4 ⁶
Weight lb	176	176	304	291

¹SPLmax: Broadband signal IEC 60268, test signal: pink noise with crest factor 4 ²RMS / peak ³Front drivers

⁴Rear driver ⁵≥150 Hz ⁶Dimensions without wheels

Ready to motor.

The GSL System rigging and transportation have all been optimized to incorporate solutions for every eventuality. The patented GSL System flying hardware and method enables rapid deployment of GSL8 and GSL12 arrays directly from the Touring cart in either tension or compression rigging modes. The tension mode uses the well-established d&b three-point rigging approach, while the compression mode needs a smaller footprint and is faster and safer for large arrays. Loudspeakers are flown as straight arrays, then compressed to produce the coverage defined by the splay angle settings. Mounted directly on the GSL Flying frame, the d&b ArraySight laser inclinometer contains temperature and humidity sensors, this information is relayed to the R1 Remote control software via the OCA/AES70 protocol.

Designed to be easily accommodated in standard truck widths and shipping containers, the Touring cart transports four GSL TOP loudspeakers. The Flying frame remains attached for transportation allowing the loudspeakers to be lifted directly from the cart. A cart is also available for three SL-SUBs or SL-GSUBs as are covers to protect the systems during transportation.



Encore.

The full functionality of any d&b system is instantly inherited from the software suite for planning, modelling and control. This includes ArrayCalc, ArrayProcessing, NoizCalc, Dante audio transport via the DS10 Audio network bridge, OCA/AES70, and the R1 Remote control software. At the heart is the D80 Touring rack which houses six amplifiers and utilizes the new MC24/LKA25 loudspeaker multicore solution. This provides twelve channels per cable to power an array of twelve GSL loudspeakers from one amplifier rack via two loudspeaker multicore cables.

The d&b SL-Series is a complete package guaranteeing consistency in transport, cabling, amplification, rigging and operation, with all the performance and reliability advantages of the d&b System reality. This package approach is intended to make the d&b GSL System the most rider friendly option across the globe, streamline cross-hire between rental companies and dependably deliver, from performance to performance.



