



## technical specifications LR18/90i

### general

- High-performance line-array system for small to medium installations
- HiFi sound quality at concert Sound Pressure Levels
- 7" pro-ribbon HF section with exceptional intelligibility and "throw"
- Maximum dynamic headroom reserve with lowest possible distortion
- Fully symmetric and coherent pattern control in horizontal and vertical plane
- SIS™ pre-wired for very high system damping and further reduced distortion



### description

The LR18/90i is a 3-way, compact format line-array sound system, combining the highest sound quality possible with very high SPL capabilities and throw.

By implementing Alcons' pro-ribbon technology for mid and high frequencies, a super-fast impulse response with up-to-90% less distortion is achieved. This enables the LR18 to offer a fully intuitive linear response, with perfect intelligibility and non-compressed identical tonal balance at any SPL.

The all-natural cylindrical wavefront of the multiple-patented, purpose-designed RBN702rs 7" pro-ribbon transducer and the acoustically and electronically symmetrical component configuration bring a unique pattern control in both the vertical as well as the horizontal plane, without any distortion-inducing horn constructions.

The patented 90-degree horizontal dispersion is maintained up to the highest frequencies.

The pro-ribbon's power handling of 1500W and RMS-to-peak ratio of 1:15, caters for a superb intelligibility and throw with maximum dynamic headroom reserve.

The MF-section features a high-efficiency 6.5" midrange transducer with Neodymium motor-structure, coaxially mounted behind the HF driver in a horn-loaded configuration.

The LF section consist of 2 extended-excursion, reflex-loaded 8" woofers with oversized 3" voice-coil Neodymium motor-structure, surpassing the output of even larger drivers, while maintaining an unobtrusive face print.

The LR18/90i is driven by the Sentinel amplified loudspeaker controller, optimising the system's response by LR18-specific drive processing and feedback for each array configuration, including presets for phase-matched low-frequency extensions.

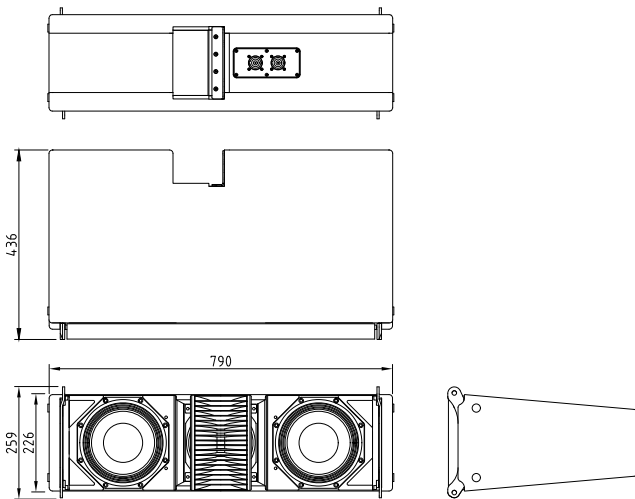
The Signal Integrity Sensing™ pre-wiring ensures dynamic cable/connector compensation between the LR18 and ALC; This offers a 1:1, undistorted natural sound reproduction, regardless of cable length and amplifier impedance load (system damping factor 10.000).

The LR18 is available with a 90° (LR18/90) or 120° (LR18/120) horizontal dispersion; Both models come in a touring version or "i" installation version (LR18/90i, LR18/120i). The install versions come without handles and with a simplified rigging system with a WLL of 12 cabinets under 10:1 safety.

Array configurations can be simulated in the Alcons Ribbon Calculator (ARC), Alcons' high-resolution 3D simulation program.

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### dimensional drawing



### technical specifications

Frequency response	70 Hz - 20.000 Hz	(+/- 3 dB)
	51 Hz -	(+/-10 dB)
Sensitivity nominal	106 dB (200 Hz - 10 kHz)	
Nominal impedance	LF 8 ohms, MHF 8 ohms	
Recommended drive	Sentinel10, max. 3 pcs. per channel (2.7 ohms)	
Nominal SPL peak	140 dB (Sentinel10 200 Hz - 10 kHz)	
Dispersion H x V (array)	90° x depending on array length	
Dispersion H x V (single)	90° x 10° (@10kHz)	

### physical specifications

System	3-way, full-range	
Filtering	2-way active, 2-way passive	
Drivers LF	2x AW8.3ND-16 8", vented	
Drivers MF	1x AM65ND-8 6.5", sealed	
Drivers HF	1x RBN702rs 7" pro-ribbon driver	
Connectors	2x Speakon NL8 input/link	
Physical dimensions	mm	inches
Height	226	8.9
Width	790	31.1
Depth	436	17.2
Weight (approx.)	kg	lb
	27	59,5
Warranty	6 years limited	

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