## technical specifications RR12

#### general

- Unique seamless arrayability up to/beyond 20kHz
- A-symmetric patented 60° dispersion in the noncoupling plane
- 1:1 non-compressed sound reproduction, with up to 90% less distortion
- Pro-ribbon HF driver with exceptional intelligibility and 1:16 dynamic output
- Very high acoustical power output with wide frequency response
- SIS pre-wired for very high damping and further reduced distortion
- All Neodymium drivers for excellent performance-to-weight ratio

#### description

The RR12 is a point-source array element, developed as "building block" to create tight packed arrays for controlled sound coverage in the widest variety of audience areas.

The system features the Alcons-proprietary RBN602rs 6" pro-ribbon driver and a custom-designed 12" woofer with 4" voice coil, dual-spider suspension with forced-venting; while both transducers have Neodymium motor structures, the RR12 has a very high performance-to-weight ratio.

The purpose-designed 6" pro-ribbon driver is based on Alcons' all-new "RBN02" pro-ribbon platform; This platform dramatically raises the bar in power handling and efficiency of pro-ribbon transducer technology. The RBN602rs is coupled to an asymmetric "Morph-Max<sup>™</sup>" wave-guide, designed using the latest, stateof-the-art development tools: Proprietary-programmed analysis/simulation software in combination with 3Dprototyping and special manufacturing techniques, resulted in this non-compressing, resonance-free multi-cell guide with wide-band razor-sharp directivity control up to beyond 20kHz..

The trapezoidal cabinet is fitted with integrated mounting hardware, enabling array assembly with just a single operation from the rear of the cabinet.

Tight-packing the RR12 in horizontal or vertical arrays for stacked or flown applications, dispersion patterns are formable in increments of  $30^\circ$ ;  $30^\circ$ ,  $60^\circ$ ,  $90^\circ$ ,  $120^\circ$  in the coupling plane, by asymmetric  $60^\circ$  ( $+20^\circ$ / $-40^\circ$ ) in the non-coupling plane.



The RR12 is driven by the Sentinel amplified loudspeaker controller; The system's response is optimised by factory presets for each array configuration, including presets for phase-matched low-frequency extensions.

The Signal Integrity Sensing<sup>™</sup> pre-wiring ensures complete cable/connector compensation between the RR12 and Sentinel, resulting in a fast and tight mid and bass response, while reducing distortion even further. Utmost reliability is one of the main essentials for Alcons systems: Each transducer/processing design has to pass a rigorous 1000 hour test at maximum (clip) levels. This is a key element in Alcons' system development.

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

# technical specifications RR12

## dimensional drawing







## technical specifications

Frequency response	69 Hz - 20.000 Hz	(+/- 3 dB)
	51 Hz -	(+/- 10 dB)
Sensitivity nominal	105 dB (200 Hz - 10 kHz)	
Nominal impedance	8 ohms	
Recommended drive	Sentinel10, max. 3 pcs. per channel	
	(2.7 ohms)	
Nominal SPL peak	135 dB (Sentinel10 2	00 Hz - 10 kHz)
Dispersion H x V (single)	H 30° x V +20°/-40° (	@ 20 kHz)

### physical specifications

System	2-way, full range	
Filtering	passive	
Drivers LF	1x AW12.4ND-8 12", vented	
Drivers HF	1x RBN602rs 6" pro-ribbon driver	
Connectors	2x Speakon NL4 input/link	
Physical dimensions	mm	inches
Height	770	30.3
Width	347	13.7
Depth	462	18.2
Weight (approx.)	kg	lb
	29,5	65,0
Warranty	6 years limited	

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