



# technical specifications QR24/110

## general

- Modular scalable column array system, for each size venue / application
- 12" pro-ribbon MHF drivers with up to 90% less distortion
- Very high peak power handling for virtually infinite, dynamic headroom
- All Neodymium drivers for excellent performance-to-weight ratio
- SIS™ pre-wired for very high damping and further reduced distortion
- True 110-degree wide dispersion from 1 kHz – 20 kHz

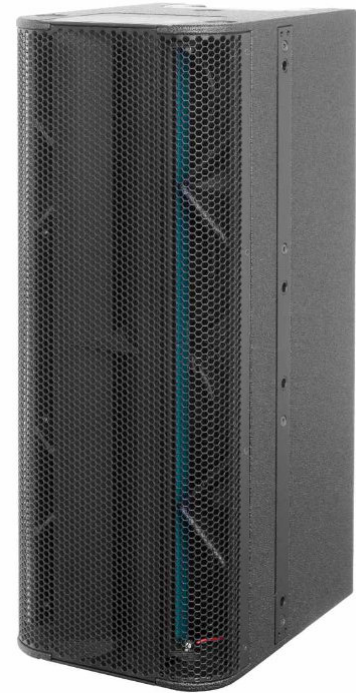
## description

The QR24 is a modular 2-way column loudspeaker to be used as vertical array system, for both permanent and (limited) portable applications.

It combines a perfectly natural, dynamic sound reproduction with superb intelligibility and throw, in even the acoustically most challenging environments.

The symmetrical acoustic design, in combination with the wide, patented horizontal dispersion of the RBN HF drivers, offers a coherent horizontal pattern control with seamless coverage; This widens the "stereo sweet spot" significantly, for the off-axis positioned audience.

By using only 2 RBN drivers, the system's active frontal radiation is close to 90%; The resulting sharply-controlled vertical dispersion offers a superb, SPL-independent,



intelligibility over distance, without the necessity of DSP-based beam-shaping.

This controlled (cylindrical) projection can be extended down to the lower frequencies by enlarging the array length through adding extra QR/QM modules (extending the "near field").

The passive filtering allows multiple modules to be combined on one amplifier channel, up to 3 units.

Each purpose-designed 12" RBN driver has a peak power handling of 2.000W (200 msec), creating a virtually infinite system headroom of 4.000 W from 1 kHz up.

The flat frequency response and the fast transient response of the RBN mid-high frequency transducers, in combination with the sharply controlled dispersion, brings a maximum "gain-before-feedback" up to directly in front of / under the system.

The QR24 is powered and controlled by the ALC amplified loudspeaker controller; Through the integrated processing and feedback, the ALC offers QR24-specific drive processing with optimal response and reliability and utmost user-friendliness.

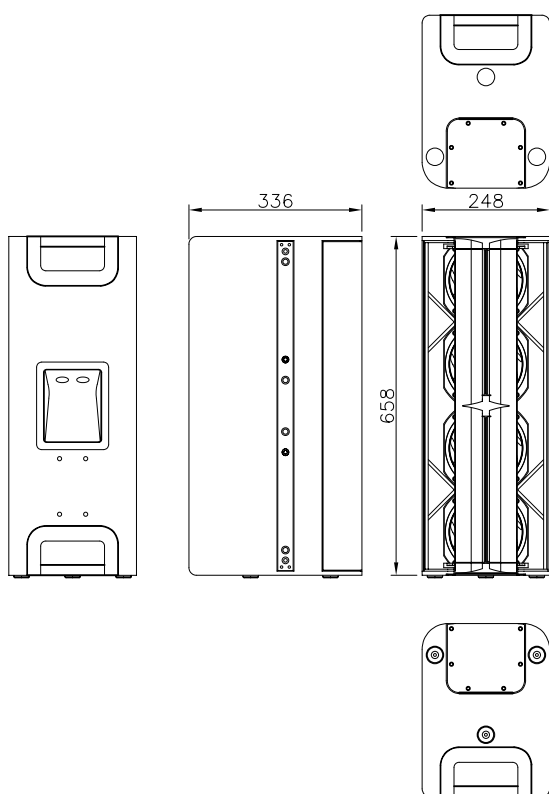
The Signal Integrity Sensing™ pre-wiring ensures complete cable/connector compensation between the

QR24 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 QR24 is available in two versions: 80-degree (QR24/80) or 110-degree (QR24/110) horizontal dispersion.

## technical specifications QR24/110

### dimensional drawing



### technical specifications

Frequency response	74 Hz - 20.000 Hz (+/- 3 dB)
	53 Hz - (+/-10 dB)
Sensitivity nominal	108 dB (200 Hz – 10 kHz)
Nominal impedance	8 ohms
Recommended drive	Sentinel3 min.
Nominal SPL peak	134 dB (Sentinel3 200 Hz – 10 kHz)
	140 dB (Sentinel10 200 Hz – 10 kHz)
Dispersion H x V (array)	110° x depending on array length
Dispersion H x V (single)	110° x 3.6° (@10kHz)

### physical specifications

System	2-way, full-range	
Filtering	passive	
Drivers LF	4x AND65-8 Neodymium 6.5", vented	
Drivers HF	2x RBN1203 12" pro-ribbon driver	
Connectors	2x Speakon NL4 input / link	
Physical dimensions	mm	inches
Height	660	26.0
Width	250	9.8
Depth	337	13.3
Weight (approx.)	22 kg	48 lb
Warranty	6 years limited	

A: Alcons Audio  
De Corantijn 10  
1689 AP ZWAAG  
The Netherlands

E: info@alconsaudio.com  
W: www.alconsaudio.com  
T: +31 (0)229 28 30 90