



preliminary

technical specifications IRP24 / IRP24FP

general

- In-/on-wall point-source system with ultra-shallow 100 mm / 3.9-inch form factor
- 1:1 non-compressed linear sound reproduction, with up to 90% less distortion
- 120° × 90° constant directivity with rotatable waveguide for vertical or horizontal mounting
- RBN202 2" pro-ribbon HF driver with exceptional intelligibility and very high dynamics
- 6.5 " custom woofers with Active Coil™ technology for further reduced LMF distortion
- Optional trim-flanged flush-mount baffle plate for architectural in-wall integration



description

The Alcons IRP24 is an ultra-shallow, 2.5-way full-range loudspeaker developed for high-performance in-wall and on-wall audio installations. Combining an ultra-slim cabinet depth with natural dynamics, exceptional intelligibility and controlled coverage, it delivers reference-quality sound with discreet architectural integration.

The high-frequency section features the patented Alcons RBN202 pro-ribbon driver, offering 500 W peak power handling and exceptionally high dynamic headroom. With up to 90% less distortion than conventional compression-driver technologies, the RBN202 provides accurate, non-compressed reproduction from 1 kHz to beyond 20 kHz.

Four custom-designed 6.5-inch woofers are arranged around the pro-ribbon driver in a D'Appolito configuration. Alcons Active Coil™ technology ensures

extremely low-distortion low-mid-frequency reproduction and a seamless match with the pro-ribbon mid-high section.

The combination of the D'Appolito arrangement, 2.5-way filtering and extended acoustic length provides enhanced vertical projection control throughout the low-mid frequencies. Patented 120° horizontal by 90° vertical constant directivity up to the highest frequencies creates a wide listening area, coherent direct-field coverage and a consistent reflected diffuse field. The rotatable RBN waveguide allows vertical or horizontal installation while maintaining optimal dispersion.

The ultra-shallow 100 mm / 3.9-inch sealed enclosure fits typical 2-by-4 wall constructions and supports both in-wall and on-wall installation. Optional grilles and Alcons ACO™ colour matching further support discreet integration into the interior.

As integral part of the Alcons eco system, the IRP24 is to be driven by an ALC amplified loudspeaker controller; Through the factory presets with integrated VHIR™ processing, 192kHz AES3 digital inputs and audiophile amplifier stages, the ALC enables the IRP24 to deliver a natural 1:1 sound reproduction with maximum output efficiency and utmost operation reliability.

The Signal Integrity Sensing™ complete cable/connector compensation between the IRP24 and SIS™ featured ALC (system damping factor of 10.000) offers a

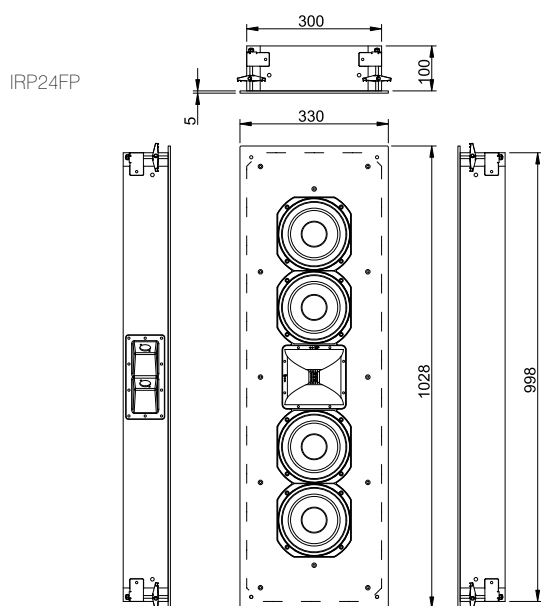
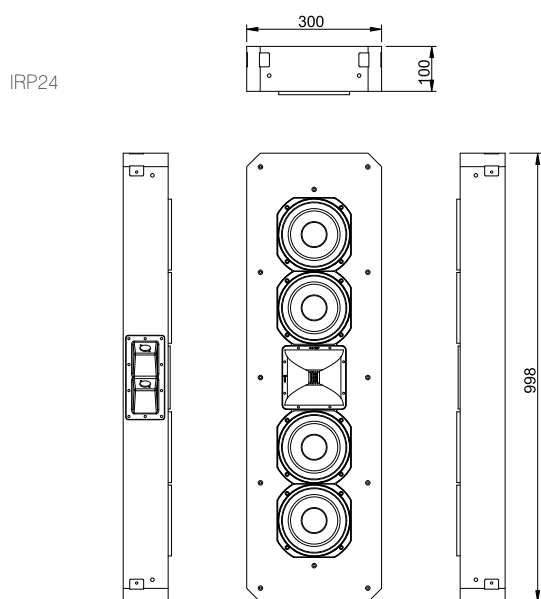
further reduced distortion, regardless of cable length and amplifier impedance load.

The IRP24 can be used for stereo reproduction, as an LCR system in medium-sized rooms, as a compact surround loudspeaker in immersive sound-for-picture systems, or as a full-range solution for permanent installed-audio applications.

The IRP24 is also available as IRP24FP with a trim-flanged flush-mount baffle plate and integrated dogleg clamps, for a clean and secure architectural integration.

technical specifications IRP24 / IRP24FP

dimensional drawings



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technical specifications

Frequency response	62 Hz - 20.000 Hz	(+/- 3 dB)
	48 Hz -	(+/- 10 dB)
Sensitivity nominal	91 dB (200 Hz - 10 kHz)	
Nominal impedance	4 ohms	
Recommended drive	Sentinel3 min.	
Nominal SPL peak	120 dB (Director6 200 Hz - 10 kHz)	
	120 dB (Sentinel3 200 Hz - 10 kHz)	
	125 dB (Sentinel10 200 Hz - 10 kHz)	
Dispersion H x V	120° x 90° (@20kHz)	

physical specifications

System	2,5-way, full-range		
Filtering	passive		
Drivers LF	4x AMB65NDAIC-8 6.5", sealed		
Drivers HF	1x RBN202 2" pro-ribbon driver		
Connectors	2x Speakon NL4 input/link		
IRP24			
Physical dimensions	mm	inches	
	Height	998	39.3
	Width	300	11.8
	Depth	100	3.9
	Weight	14 kg	30.9 lb
IRP24FP			
Physical dimensions	mm	inches	
	Height	1028	40.5
	Width	330	13.0
	Depth	105	4.1
	Weight	19 kg	41.9 lb
Warranty	6 years limited		