



Architectural Specification

The Optima 12 is a medium format vertically arraying loudspeaker enclosure. It is designed to be used in flown vertical columns, of up to 18 cabinets. The cabinet combines two off 12" bass cone drivers, with a horn loaded 8" midrange cone driver. An integral HF horn structure and composite 'Vector Guide', planar wave is loaded with three 1" exit compression drivers. The horn structure has a nominal dispersion of 90° horizontally by up to 8° vertically. All components use neodymium magnet structures.

The enclosure is manufactured from 15 & 18 mm birch plywood and coated in a heavy duty polyurea finish. The cabinet front has a protective steel grill coated in a water-resistant powder coat finish, which has an acoustically transparent polyester cloth bonded to its rear surface. Optima 12 incorporates a fully integrated fly system which permits box to box angle selection in 1° increments. Box to box connection is via four Kwik lock pins. To assist transit each cabinet has a handle on each end panel and a further pair of handles on the rear panel, which also help when selecting inter box angles. Rear angle selection bars are damped for controlled movement and allow pin selection for either a dead hang or a dual motor compression hang.

Electrical connection to the cabinet is via two parallel linked Neutrik NL4 MP connectors. The mid and HF section of the Optima 12 use a low insertion pad free passive network, enabling the Optima 12 to be driven as a bi-amplified unit. All Inspired Audio products are designed as an integrated solution complete with system amplifier options from the Eflex range. The Eflex units provide DSP preset functions, networked software control of operating parameters and output drive power. An Eflex Q20 will drive three Optima 12 enclosures per channel pair,

Optima 12 is designed to provide a full range audio response in the air and is commonly used with ground stacked sub bass enclosures, to extend sub frequency system response. The Reflex B218, is the recommended enclosure for this application and can be powered from a channel of an Eflex Q20 system amplifier.



Optima 12

Bass:	2 off 12" cone drivers
Mid:	1 Off 8" closed basket
HF:	3 off Vector guides
Frequency response:	58 Hz - 20 kHz
Sensitivity: 2.8 V/1m (Peak):	Bass - 104 dB (138 dB) Mid - 107 dB (137 dB) HF - 118 dB (147 dB)
Power: RMS (Peak):	Bass - 1400 w (5600 w) Mid - 250 w (1000 w) HF - 210 w (840w)
Impedance:	Bass - 8 ohms Mid - 8 Ohms HF - 24 ohms
Directivity:	90° h x 0 - 8° v
Operation mode:	Bi-amplified
Connection:	2 off Neutrik NL4 MP
Wiring protocol:	1+/1- = Bass 2+/2- = Mid/HF
Weight (Packaged):	62 kg (65 kg)
Dimensions (mm):	748 w x 442 h x 615 d
Packaged in pairs (mm):	775 w x 480 h x 660 d
Options:	<ul style="list-style-type: none"> ○ Transit dolly ○ Optima 12 Fly frame

(Peak SPL measurements are taken with a crest factor x4)

Inspired Audio products are designed and manufactured in England. For technical support:

E: chris.scott@inspired-audio.co.uk

or visit the website

W: www.inspired-audio.co.uk

Revision: 4 - (10/06/2021)