

TECHNICAL SPECIFICATIONS

ID2.208-99

Product Group: iDESIGN Installation Group
System Type: 2-Way, 1" x Dual 8", 90°x90°



FEATURES & ADVANCES

- Rotatable Waveguide
- 14 Reinforced 3/8-16 threaded hang points
- Omni-mount locations on 4 sides
- U-Bracket factory hardware available
- Combines with other iDESIGN modules to form arrays

PRODUCT DESCRIPTION

The ID2.208-99 is a 2-way full range loudspeaker designed for permanent installations. This high output foreground module features a direct radiating 8" cone loudspeaker and a 1" exit compression driver mounted to a user rotatable 90°x90° waveguide. By combining iDESIGN modules in pre-engineered arrays, systems can be configured for larger venues.

MOUNTING & RIGGING

Mounting locations are distributed across 5 surfaces of the enclosure. Omni-mount™ compatible locations are available on 4 sides of the enclosure, while an additional 14 reinforced 3/8-16 threaded locations are available for other mounting options. iDESIGN iDB™ Series array frames are available to facilitate assembly and suspension of multiple modules as a single cluster. U-bracket hardware is also available for single unit wall and ceiling mount installation.

CONSTRUCTION

The enclosure is constructed of 12-ply void-free birch hardwood plywood and is coated with a weather and wear resistant ProCoat™ polyurea hybrid finish. All rigging components are weather protected with a heat cured epoxy powder coat finish. Components in the front of the enclosure are protected by a curved grill made from perforated steel that is coated with heat cured epoxy powder, and lined with acoustically transparent foam.

AMPLIFICATION & PROCESSING

Three channels of discrete amplification and signal processing are required for this module. The preferred signal processors for all iDESIGN products are the McCauley M Series family of digital processing units. The System Design Group can help in creating a complete amplification and signal processing solution.

APPLICATIONS

- Houses of Worship
- Performing Arts Centers
- Dance Clubs
- Theme Parks
- Auditoriums
- Theatrical Sound Design
- Live Clubs
- Sports Facilities



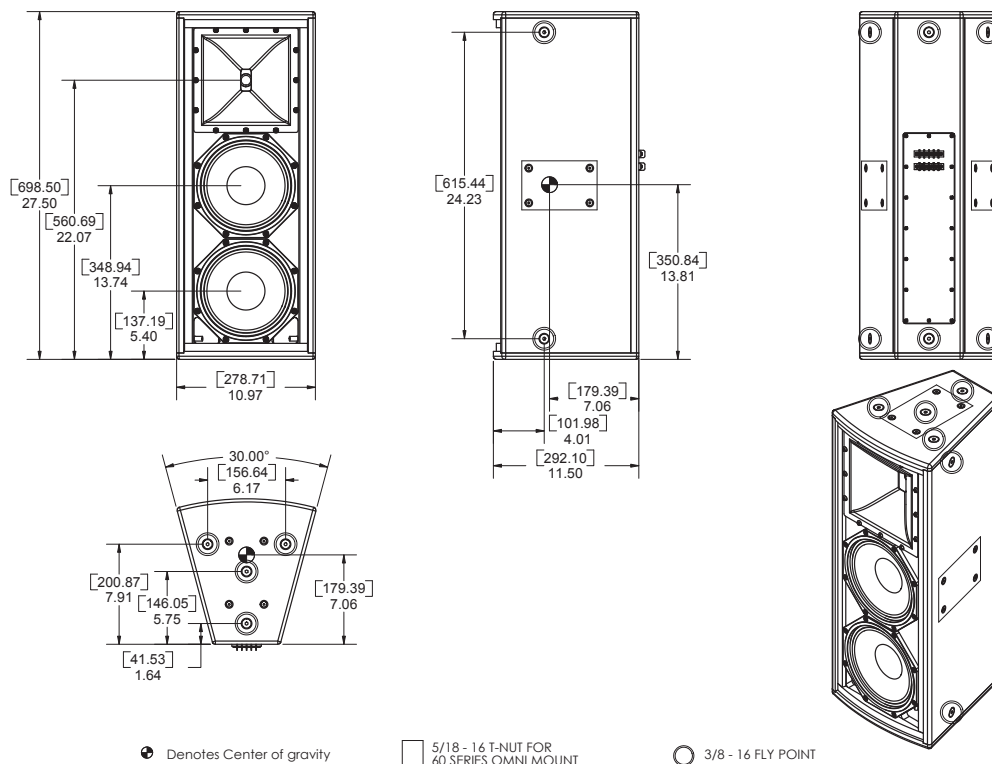
PERFORMANCE PARAMETERS

System Type	90°x90°, 2-Way, Full Range
Frequency Response	
-10dB	50Hz - 20kHz
+/- 3dB	55Hz - 18kHz
Sensitivity	
Passive	96dB @ 2.83V 1 m
LF	96dB @ 2.83V 1 m
HF	106dB @ 2.83V 1 m
Maximum SPL	
LF	(cont. / peak) 127dB / 133dB
HF	126dB / 132dB
Crossover Data	1800Hz @ 24dB per octave
Power Ratings	
LF 1 - AES	200w @ 16Ω
LF 2 - AES	200w @ 16Ω
HF - AES	50w @ 16Ω
LF 1 - Program	400w @ 16Ω
LF 2 - Program	400w @ 16Ω
HF - Program	100w @ 16Ω

PHYSICAL PROPERTIES

Weight	45lbs / 22.2kgs
Dimensions	
inches	27.5 H x 10.9 W x 11.5 D x 5.1 T
centimeters	69.8 H x 27.8 W x 29.2 D x 12.9 T
Enclosure Material	5/8" 12 ply Birch Laminate
Suspension	(14) 3/8-16 reinforced hang points (4) Omni-Mount™ compatible mounting locations (3) Horizontal U-Bracket mounting locations (1) Vertical U-Bracket mounting location
Finish	Procoat™ Polyurea-Hybrid Weatherproofing (Black is standard, White and / or Custom Colors Available)
Transducers	(2) 8" LF Transducer (1) 1.75" Diaphragm, 1" Exit Compression Driver
Connectors	Barrier terminal strip
Compatible Array Frames (for building clusters)	IDB.88-AF, IDB.828-AF, IDB.282-AF, IDB.888-AF, IDB.858-AF
Compatible U-Brackets (for deploying individually)	IDB.208-H, IDB.208-V

DIMENSIONAL ILLUSTRATIONS



ARCHITECTS AND ENGINEERS SPECIFICATIONS

The two-way full range loudspeaker system shall incorporate two 2" (51 mm) voice coil, 8" (204 mm) diameter LF transducers and a 1" (25 mm) exit, 1.75" (45 mm) diaphragm compression driver HF transducer. The LF drivers shall be mounted in an optimally vented enclosure tuned for maximum low frequency response. The high frequency transducer shall be mounted to a true constant directivity acoustic horn with a nominal horizontal coverage pattern of 90°. The vertical coverage pattern of the horn shall be 90° and shall also provide true constant directivity. The HF horn shall feature a square mounting flange, allowing the horn to be rotated by 90°.

The system frequency response shall vary no more than ± 3 dB from 55 Hz to 18 kHz measured on axis. The low frequency transducer shall produce a Sound Pressure Level (SPL) of 99 dB SPL at a distance of 1 meter with an electrical power input of 1 Watt, and shall be capable of producing a maximum peak output of 133 dB SPL on axis at 1 meter. The high frequency transducer shall produce an acoustic Sound Pressure Level (SPL) of 107 dB SPL on axis at 1 meter with an electrical power input of 1 Watt, and shall be capable of producing a peak output of 132 dB SPL on axis at 1 meter.

Each low frequency transducer shall handle 200 Watts of amplifier power (per AES ref Standard AES2-1984-r2003) and shall have a nominal impedance of 8 Ohms. The high frequency transducer shall handle 50 Watts of amplifier power (per AES ref Standard AES2-1984-r2003) and shall have a nominal impedance of 16 Ohms.

The loudspeaker enclosure shall have a maximum weight of 45 lbs.(20.5 kg) and shall measure 10.97" (279 mm) wide at front, 5.31" (135 mm) in width at rear, 27.5" (699 mm) in height, and 11.5"(292 mm) in depth. The enclosure sides shall taper at 15° from a maximum frontal width, narrowing to the rear. The structure of the enclosure shall be constructed of 12-ply void-free birch hardwood plywood and shall have a weather and wear resistant ProCoat(tm) polyurea hybrid finish.

Input connectors shall be two, six-terminal barrier strips, wired together in parallel. For two-way operation, the LF transducers shall be wired in parallel at the terminal strips. To reach the absolute maximum SPL, the loudspeaker may be wired in a three-way configuration to facilitate individual signal processing of each LF transducer.

A total of fourteen 3/8"-18 UNC threaded mounting/suspension points (four on top, four on bottom, two per side and two rear) shall be provided. Four additional mounting points shall be provided on the top, bottom, and each side configured to accept an OmniMount brand, Series 60 bracket.

Components in the front of the enclosure are to be protected by a curved grill made from perforated steel that is coated with heat cured epoxy powder, and lined with acoustically transparent foam.

The 2-way full range loudspeaker shall be the McCauley Sound model iD2.208-99.