



TECHNICAL SPECIFICATIONS CH491

DESCRIPTION

A 2-way mid/high system (passive crossover) housed in a trapezoidal enclosure. Includes a horn-loaded 10-in midrange cone and a 1-in exit compression driver on a 90 x 45 constant directivity horn.

APPLICATIONS

The CH491 compact Virtual Array mid/high module works with BH or BV Series LF systems to create true 3-way arrays in permanent installations. 3-way design dramatically improves the quality of vocal reproduction while the cone-driven midrange horn extends pattern control into the lower octaves. Also effective as a stand-alone, voice-only system. Comprehensive 3/8"-16 mounting/suspension points. Six year warranty.

Applications include:

- Stadiums
- Arenas
- Convention Centers
- Large HOW's
- Small HOW's
- Major Malls

DESCRIPTIVE DATA

Part Number	999096
Product Group	I
MF Subsystem & Loading	1x 10-in Horn-Loaded Cone
HF Subsystem & Loading	1x 1-in Exit Compression Driver on Constant Directivity Horn
System Configuration	2-way, mid/high
Powering Configuration(s)	Passive MF/HF Crossover
Recommended High-Pass Frequency (24 dB/Octave)	125Hz
Cabinet Type (shape)	Trapezoidal
Enclosure Materials	Baltic Birch Plywood
Finish	Black Catalyzed Polyurethane
Connectors	4-pin Barrier Strip & 1x Neutrik NL4 Speakon
Suspension Hardware	(20) 3/8"-16 Threaded Mounting/Suspension Points (5 each Top and Bottom, 4 per Side, 2 on rear)
Grill	Vinyl Coated Perforated Steel



NOMINAL DATA

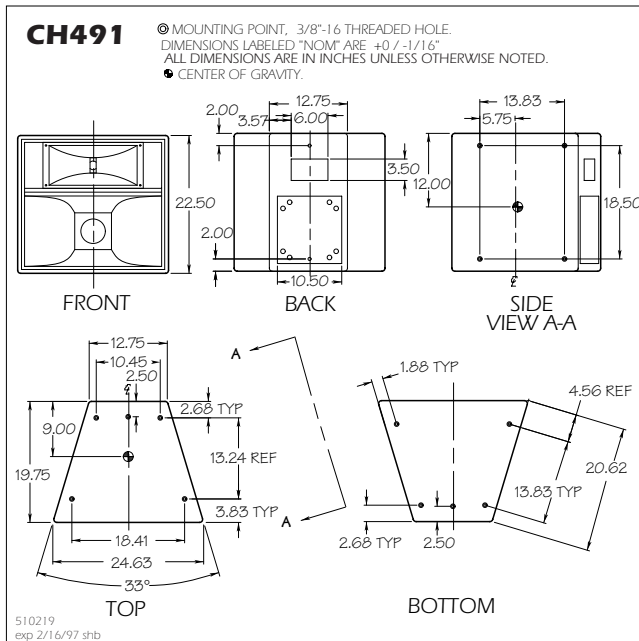
Frequency Response (Hz)	± 3 dB	200Hz to 15kHz
	-10 dB	125Hz
Axial Sensitivity (dB SPL/1 Watt/1m)	105	
	Impedance (Ohms)	
		8
Power Handling (Watts)	Calculated Maximum Output (dB SPL, @ 1m)	
	AES Standard	300
		Peak 135.8
		Long term 129.8
Nominal Coverage Angle / -6 dB points (degrees)		
Horizontal		90
Vertical		45
Dimensions	inches	millimeters
	Height	22.5 572
	Width	24.63 626
	Depth	19.75 502
	Trapezoid Angle	16.5 degrees per side
Weights	pounds	kilograms
	Net Weight	100 45.5
	Shipping Weight	110 50.1





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DIMENSIONAL DRAWING



SERVICE ITEMS

MF: Complete Cone Driver	EAW Part No. 804021
HF: Complete Compression Driver/Tweeter	EAW Part No. 803006
Filter/Crossover Network: Complete Assembly	EAW Part No. 225060

ARCHITECTURAL SPECIFICATIONS

The passive mid/high loudspeaker systems shall incorporate a 10-in MF transducer and 1-in exit compression driver HF transducer.

The MF driver shall be loaded into a constant horizontal coverage horn constructed of 3mm birch plywood reinforced with high density polyurethane foam. The MF horn shall incorporate a phase/displacement plug. The HF driver shall be loaded on a constant directivity horn with a nominal coverage pattern of 90° (h) x 45° (v). An internal passive filter network shall provide fourth order acoustical crossover and system equalization.

System frequency response shall vary no more than ±3 dB from 200 Hz to 15 kHz measured on axis. The loudspeaker shall produce a Sound Pressure Level (SPL) of 105 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 135.8 SPL on axis at 1 meter. The loudspeaker shall handle 300 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 8 Ohms.

The loudspeaker enclosure shall be trapezoidal in shape. It shall be constructed of 15mm thickness void-free cross-grain-laminated Baltic birch plywood and shall employ extensive internal bracing. It shall be finished in black catalyzed polyurethane. Input connectors shall be 4-terminal barrier strip and 1x Neutrik NL4 Speakon. A total of twenty 3/8"-16 threaded mounting/suspension points (5 each on top and bottom, 4 per side, 2 on rear) shall be provided. The front of the loudspeaker shall be covered with a vinyl coated perforated steel grill.

The mid/high loudspeaker shall be the EAW model CH491.