



# TECHNICAL SPECIFICATIONS MH242iE

## DESCRIPTION

A 2-way biamp mid/high system in a trapezoidal enclosure. Includes 2x horn-loaded 12-in midrange cones and a 2-in exit compression driver on a 40 x 30 constant directivity horn.

## APPLICATIONS

The MH242iE Virtual Array mid/high loudspeaker is engineered to combine with BH, BV or TD Series LF modules to create true 3-way large format arrays. 3-way design dramatically improves the quality of vocal reproduction while the cone-driven large format midrange horn extends pattern control into the lower octaves. It provides very long throw and very high output in large scale permanent installations. Comprehensive mounting/suspension points. Six year warranty.

Applications include:

- Large Theaters
- Concert Halls
- Stadiums
- Cathedrals
- Large HOW's
- Dance Clubs

## DESCRIPTIVE DATA

Part Number	999090
Product Group	M
MF Subsystem & Loading	2x 12-in Horn Loaded Cone
HF Subsystem & Loading	1x 2-in Exit Compression Driver on Constant Directivity Horn
System Configuration	2-way, Mid/High
Powering Mode	Biamp (MX Series Processor)
Recommended High-Pass Frequency (24 dB/Octave)	80Hz
Cabinet Type (shape)	Trapezoidal
Enclosure Materials	Baltic Birch Plywood
Finish	Black Catalyzed Polyurethane
Connectors	6-Terminal Barrier Strip
Suspension Hardware	(24) 3/8"-16 threaded mounting/suspension points (6 each top, bottom and sides)
Grill	Vinal Coated Perforated Steel



## NOMINAL DATA

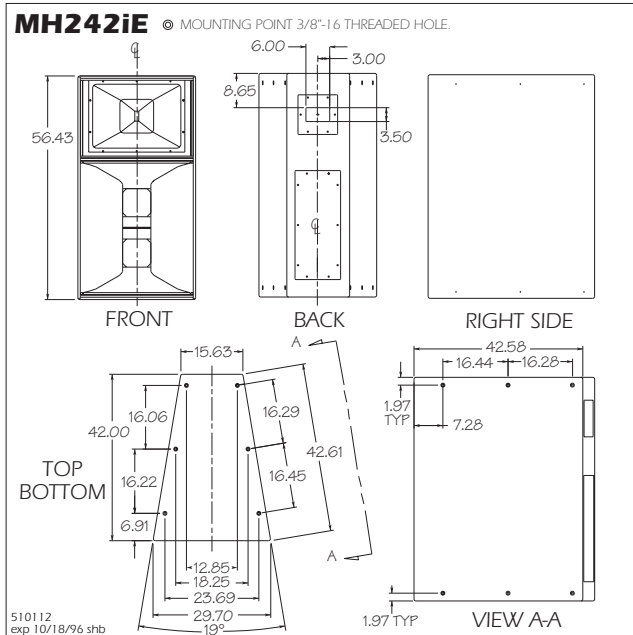
Frequency Response (Hz)	$\pm 3$ dB	120Hz to 17kHz	
	-10 dB	80Hz	
Axial Sensitivity (dB SPL/1 Watt/1m)	MF	113	
	HF	115	
Impedance (Ohm)	MF	4 or 2x 8	
	HF	10	
Power Handling (Watts)	MF AES Standard	800	
	HF AES Standard	200	
Calculated Maximum Output (dB SPL, @ 1m)	MF Peak	148.0	
	HF Peak	144.0	
	MF Long Term	142.0	
	HF Long Term	138.0	
Nominal Coverage Angle / -6 dB points (degrees)	Horizontal	40	
	Vertical	30	
Dimensions	Height	56.43	1433
	Width (Front)	29.75	756
	Width (Rear)	15.625	397
	Depth	42	1067
	Trapezoid Angle	9.5 degrees per side	
	Weights	Net Weight	382
Shipping Weight		387	176.1





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## DIMENSIONAL DRAWING



## SERVICE ITEMS

### MF: Complete Cone Driver

EAW Part No. 804033

### HF: Complete Compression Driver/Tweeter

EAW Part No. 803031

### Filter/Crossover Network: Complete Assembly

EAW Part No. 225073

## ARCHITECTURAL SPECIFICATIONS

The two-way mid/high loudspeaker system shall incorporate 2x 12-in cone MF transducers and a 2-in exit compression driver HF transducer.

The MF drivers shall be loaded in a midrange 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 constant directivity horn with a nominal coverage pattern of 40° (h) x 30° (v). An internal passive filter network shall provide system equalization.

System frequency response shall vary no more than  $\pm 3$  dB from 120 Hz to 17 kHz measured on axis. The midrange frequency section shall produce a Sound Pressure Level (SPL) of 113 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 148 SPL on axis at 1 meter. The high frequency section shall produce a Sound Pressure Level (SPL) of 115 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 144 SPL on axis at 1 meter. The midrange frequency section shall handle 800 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 4 Ohms. The high frequency section shall handle 200 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 10 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 one each male and female AP4. A total of twenty four 3/8"-16 threaded mounting/suspension points (6 each top, bottom and sides) shall be provided. The front of the loudspeaker shall be covered with a vinyl coated perforated steel grill.

The two-way mid/high loudspeaker shall be the EAW model MH242iE.