FORSYTHE SERIES

MH & CH Series

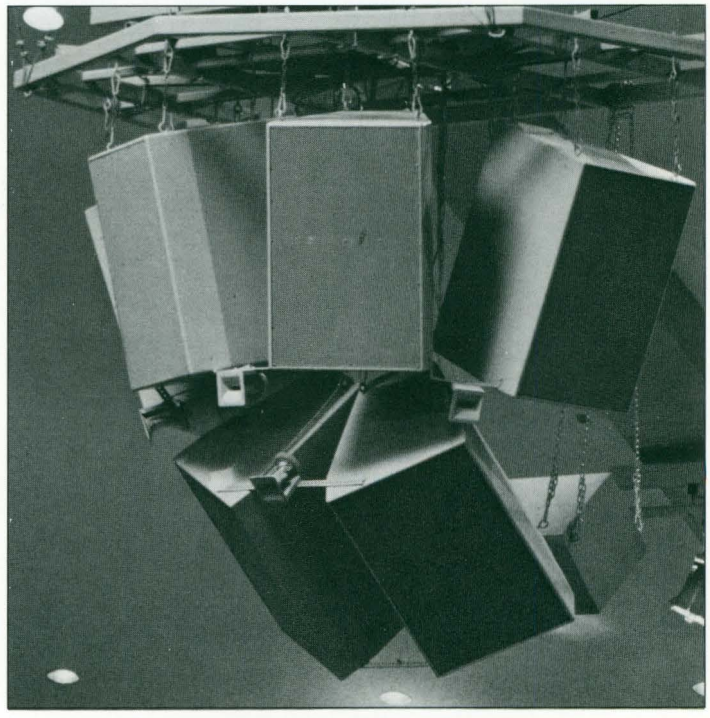
Mid/High Virtual Array® Installation Systems

VA® Technology Redefines The Architecture Of Acoustic Design

Upgrading conventional two-way, large-format CD-horn-based engineered sound system designs to true three-way systems using MH or CH Series components will result in dramatically improved music reproduction. Distortion at high output levels is significantly reduced without losing predictable coverage and intelligibility.

MH and CH Series Mid/High Systems are designed to be utilized with EAW's SB, BV and BH Series Low Frequency systems and/or subwoofers to build precision arrays for large scale permanently installed sound reinforcement systems. CH Series systems can also be used as stand-alone speech-only reinforcement, since they produce usable output to 100 Hz without additional LF systems.

MH and CH Series mid and high frequency horns have large vertical mouths. This improves vertical pattern control as compared with most other packaged systems. Like all EAW Virtual Array Technology systems, MH and CH Series systems provide exceptional control of horizontal coverage. Tightly controlled dispersion in both the vertical and horizontal planes facilitates the construction of idealized arrays that provide high intelligibility and coherent music reproduction throughout the venue, in even the most difficult auditoriums, arenas, etc.



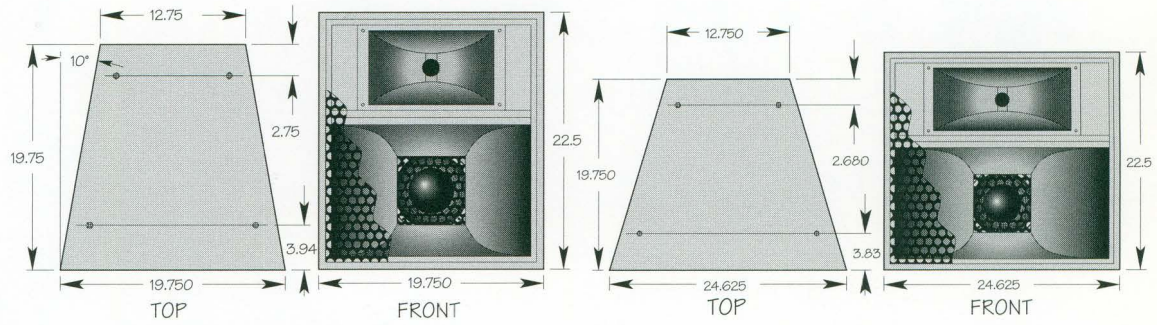
MH Series Array Installed At
Trinity Pentecostal Church, Lubbock, TX
Acoustic Dimensions, Consultant

MH and CH Series systems are available in 60° and 90° (horizontal) by 45° (vertical) versions. EAW's new CD5001 HF compression driver, standard in the MH662E, MH660E and MH690E, is a high-performance option for all MH and CH Series systems. Midrange subsections have either one or two 10" cone drivers, loaded with Kenton Forsythe's unique midbass horn/displacement plug technique. The wood veneer midbass horns are reinforced with high density polyurethane foam for structural rigidity and acoustical damping. MH and CH Series systems are designed to be used together in three or four way configurations with EAW low frequency and/or subwoofer systems. For best results, specially configured versions of EAW's MX300i and MX800i CCEP™ signal processing units should be used as the system crossovers.

EAW
EASTERN ACOUSTIC WORKS

EASTERN ACOUSTIC WORKS, INC. One Main Street, Whitinsville, MA 01588 ▪ 508/234 - 6158 ▪ FAX 508/234 - 8251

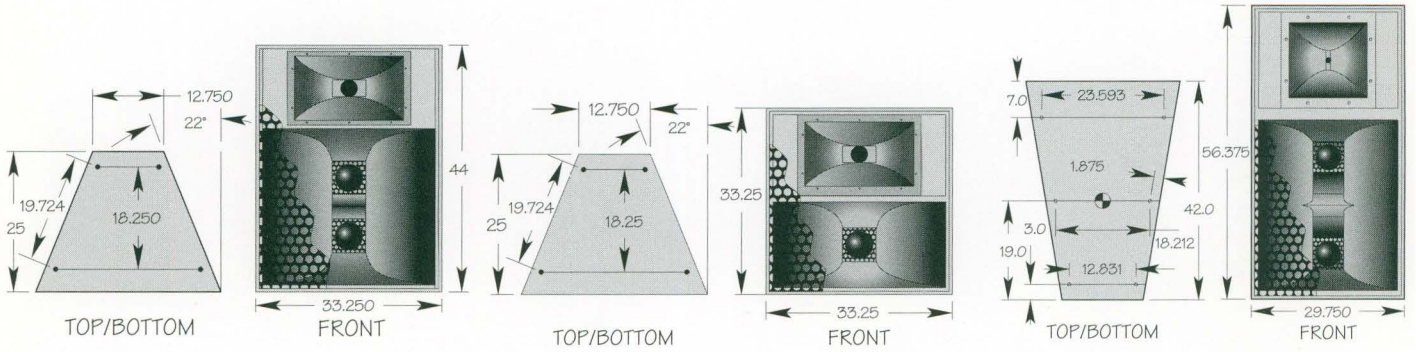
CH Series Compact Mid/High Frequency Horn Loaded Systems



Model	CH461	CH491
Description:	Single 10-in 60°	Single 10-in 90°
Frequency Response		
+-3 dB:	220 to 19k Hz	220 to 19k Hz
- 10 dB:	100 Hz	100 Hz
Efficiency / Axial Sensitivity		
SPL 1W @ 1m:	106 dB SPL	105 dB SPL
Power Handling		
MF AES:	350 Watts	350 Watts
MF 100 Hr Sine Wave:	150 Watts	150 Watts
HF AES:	125 Watts	125 Watts
HF 100 Hr Sine Wave:	50 Watts	50 Watts
Nominal Impedance		
Full Range Passive:	8	8
Maximum Output		
Peak:	131 dB SPL	130 dB SPL
Long Term:	128 dB SPL	127 dB SPL
Nominal Coverage Angles (-6 dB)		
Horizontal:	65 °	90 °
Vertical:	45 °	45 °
Sub System Data		
Mid Frequency:	1x 10-in Horn Loaded	1x 10-in Horn Loaded
High Frequency:	1-in Exit Horn	1-in Exit Horn
Crossover Data		
Powering Mode:	Passive Internal MF/HF	Passive Internal MF/HF
Lowest System Xover:	200 Hz	200 Hz
MF/HF Xover:	1.8k Hz	1.8k Hz
Additional Descriptive Data		
Finish:	Black Catalyzed Polyurethane Chemical Coating	
Connectors:	Banana Test Points, 4-Pin Barrier Strip & Neutrik NL4MPR	
Grill:	Vinyl Coated Perforated Steel	
Hanging Hardware:	4x Steel Plate Backed Bolts for Forged Eye Bolts on Top/Bottom & Sides	
Dimensions & Weights		
Height:	22.500 in (572 mm)	22.500 in (572 mm)
Max Width:	19.750 in (502 mm)	24.625 in (625 mm)
Depth:	19.750 in (502 mm)	19.750 in (502 mm)
Back Width:	12.750 in (324 mm)	12.750 in (324 mm)
Net Weight:	80.0 lbs (36.4 kg)	100.0 lbs (45.5 kg)
Shipping Weight:	90.0 lbs (40.9 kg)	110.0 lbs (50.0 kg)

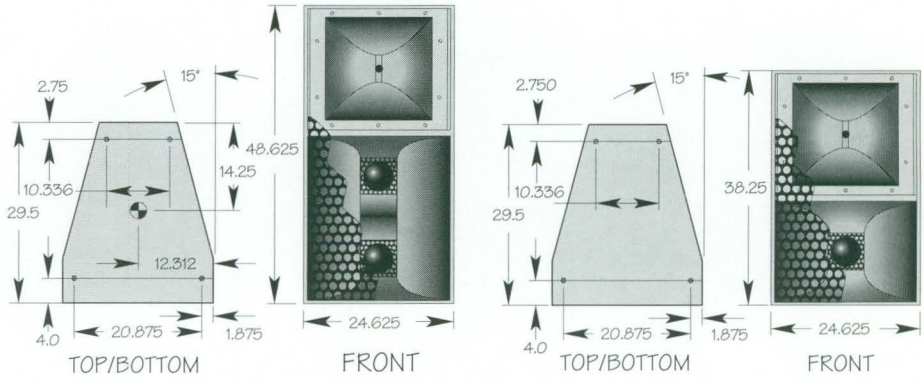
Pub # MHCHXX V2 10/93
Printed In USA

Product Specifications



MH692	MH690E	MH242
Dual 10-in 90°	Single 10-in 90°	Dual 12-in 40°
160 to 19k Hz	200 to 19k Hz	120 to 19k Hz
120 Hz	140 Hz	80 Hz
111 dB SPL	108 dB SPL	115 dB SPL
800 Watts	400 Watts	800 Watts
350 Watts	175 Watts	350 Watts
200 Watts	200 Watts	200 Watts
80 Watts	80 Watts	80 Watts
MF: 4 / HF: 12	MF: 8 / HF: 12	MF: 6 / HF: 12
140 dB SPL	134 dB SPL	144 dB SPL
136 dB SPL	130 dB SPL	140 dB SPL
90 °	90 °	40 °
45 °	45 °	30 °
2x 10-in Horn Loaded	1x 10-in Horn Loaded	2x 12-in Horn Loaded
2-in Exit CD5001 Driver	2-in Exit CD5001 Driver	2-in Exit CD5001 Driver
Bi-amp (MX Series)	Bi-amp (MX Series)	Bi-amp (MX Series)
160 Hz	200 Hz	150 Hz
1.2k to 1.6k Hz	1.2k to 1.6k Hz	1.2k to 1.6k Hz
Black Catalyzed Polyurethane Chemical Coating		
Banana Test Points, 4-Pin Barrier Strip & Neutrik NL4MPR		
Vinyl Coated Perforated Steel		
4x Steel Plate Backed Bolts for Forged Eye Bolts on Top/Bottom & Sides		
44.000 in (1,118 mm)	33.250 in (845 mm)	56.375 in (1,432 mm)
33.250 in (845 mm)	33.250 in (845 mm)	29.750 in (756 mm)
25.000 in (635 mm)	25.000 in (635 mm)	42.000 in (1,067 mm)
12.750 in (324 mm)	12.750 in (324 mm)	15.625 in (397 mm)
205.0 lbs (93.2 kg)	137.0 lbs (62.3 kg)	367.0 lbs (166.8 kg)
220.0 lbs (100.0 kg)	152.0 lbs (69.1 kg)	382.0 lbs (173.6 kg)

MH Series Mid/High Frequency Horn Loaded Systems



Specifications	MH662E	MH660E
Description	Dual 10-in 60°	Single 10-in 60°
Frequency Response		
+-3 dB:	160 to 19k Hz	200 to 19k Hz
- 10 dB:	120 Hz	140 Hz
Efficiency / Axial Sensitivity		
SPL 1W @ 1m:	112 dB SPL	109 dB SPL
Power Handling		
MF AES:	800 Watts	400 Watts
MF 100 Hr Sine Wave:	350 Watts	175 Watts
HF AES:	200 Watts	200 Watts
HF 100 Hr Sine Wave:	80 Watts	80 Watts
Nominal Impedance		
	MF: 4 / HF: 12	MF: 8 / HF: 12
Maximum Output		
Peak:	141 dB SPL	135 dB SPL
Long Term:	137 dB SPL	131 dB SPL
Nominal Coverage Angles (-6 dB)		
Horizontal:	65 °	65 °
Vertical:	45 °	45 °
Sub System Data		
Mid Frequency:	2x 10-in Horn Loaded	1x 10-in Horn Loaded
High Frequency:	2-in Exit CD5001 Driver	2-in Exit CD5001 Driver
Crossover Data		
Powering Mode:	Bi-amp (MX Series)	Bi-amp (MX Series)
Lowest System Xover:	160 Hz	200 Hz
MF/HF Xover:	1.2k to 1.6k Hz	1.2k to 1.6k Hz
Additional Descriptive Data		
Finish:	Black Catalyzed Polyurethane Chemical Coating	
Connectors:	Banana Test Points, 4-Pin Barrier Strip & Neutrik NL4MPR	
Grill:	Vinyl Coated Perforated Steel	
Hanging Hardware:	4x Steel Plate Backed Bolts for Forged Eye Bolts on Top/Bottom & Sides	
Dimensions & Weights		
Height:	48.625 in (1,235 mm)	38.250 in (968 mm)
Max Width:	24.625 in (625 mm)	24.625 in (625 mm)
Depth:	29.500 in (749 mm)	29.500 in (749 mm)
Back Width:	12.750 in (324 mm)	12.750 in (324 mm)
Net Weight:	197.0 lbs (89.5 kg)	146.0 lbs (66.4 kg)
Shipping Weight:	212.0 lbs (96.4 kg)	161.0 lbs (73.2 kg)