



TECHNICAL SPECIFICATIONS ASR690

DESCRIPTION

A biamplified 3-way full range system (passive mid/high crossover) in a rectangular enclosure. Includes 2x 12-in woofers (separated vertically to create a dipolar array), a horn-loaded 10-in MF cone and a 1.4-in exit/44mm voice coil HF compression driver on a 90 x 45 constant directivity horn.

APPLICATION

The ASR690 is engineered for use in permanent installations. Dipolar array technology provides effective vertical pattern control to 200 Hz while maintaining a 22.5-in enclosure height. Excellent for use directly above a microphone position. Includes comprehensive 3/8"-16 mounting/suspension points. Six year warranty.

Applications include:

- Stadiums
- Arenas
- Dance Clubs
- Theaters
- Performing Arts Centers
- Houses of Worship

DESCRIPTIVE DATA

Part Number	999674
Product Group	I
System Configuration	3-way, Full Range
Powering Configuration(s)	Biamplified (passive MF/HF crossover)
LF Subsystem & Loading	2x 12-in, Vented, Dipolar Array
MF Subsystem & Loading	1x 10-in, Horn-Loaded
HF Subsystem & Loading	1x 1.4-in exit/44mm voice coil Compression Driver on Constant Directivity Horn
Recommended High-Pass Frequency (24 dB/Octave)	50 Hz
System Crossover	320 Hz
Cabinet Type (shape)	Rectangular
Enclosure Materials	Baltic Birch Plywood
Finish	Black Polyurethane
Connectors	2 x 2-Terminal Barrier Strip
Suspension Hardware	(12) 3/8"-16 Threaded Mounting/Suspension Points (3 each Top and Bottom, 2 on Sides and Back)
Grill	Powder Coated Perforated Steel
Options	104001 3/8"-16 Eyebolt (FC300B)



NOMINAL DATA

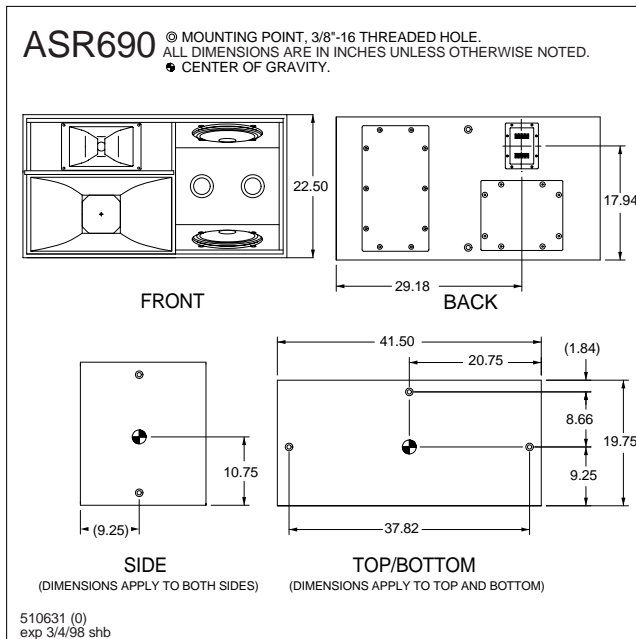
Frequency Response (1 Watt @ 1m)		
±3 dB	58 Hz to 17 kHz	
-10 dB	49 Hz	
Axial Sensitivity (dB SPL, 1 Watt @ 1m)		
Passive MF/HF	105	
LF	102	
Impedance (Ohms)		
Passive MF/HF	8	
LF	4	
Power Handling, AES Standard (Watts)		
Passive MF/HF	360	
LF	800	
Calculated Maximum Output (dB SPL)		
Passive MF/HF Peak	136.6	
LF Peak	135.0	
Passive MF/HF Long term	130.6	
LF Long Term	129.0	
Nominal Coverage Angle/-6 dB points (degrees)		
Horizontal	90	
Vertical	45	
Dimensions		
	inches	millimeters
Height	22.50	572
Width	41.50	1054
Depth	19.75	502
Weights		
	pounds	kilograms
Net Weight	154	70.1
Shipping Weight	172	78.3





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DIMENSIONAL DRAWING



ARCHITECTURAL SPECIFICATIONS

The biamplified 3-way full range loudspeaker systems shall incorporate 2x 12-in LF transducers, a 10-in MF cone and a 1.4-in exit/44mm voice coil HF compression driver.

The LF drivers shall be mounted in slanted baffles and separated to create a dipolar array. The MF driver shall be loaded into a midrange horn constructed of 3mm birch plywood backed with high density polyurethane foam. 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 between the MF and HF sub-systems.

System frequency response shall vary no more than ± 3 dB from 58 Hz to 17 kHz measured on axis. The mid/high section 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 136.6 dB SPL on axis at 1 meter. The low frequency section shall produce a Sound Pressure Level (SPL) of 100 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 135.0 dB SPL on axis at 1 meter. The mid/high section shall handle 360 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 8 Ohms. The low frequency section shall handle 800 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 4 Ohms.

The loudspeaker enclosure shall be rectangular 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 polyurethane. Input connectors shall be 4-terminal barrier strip. Twelve (12) 3/8"-16 threaded mounting/suspension points (3 each top and bottom, 2 on each side and back) shall be provided. The front of the loudspeaker shall be covered with a powder coated perforated steel grill.

The biamplified 3-way full range loudspeaker shall be the EAW model ASR690.

SERVICE ITEMS

LF: Complete Cone Driver	_____
EAW Part No.	804051
MF: Complete Cone Driver	_____
EAW Part No.	804021
HF: Complete Compression Driver/Tweeter	_____
EAW Part No.	803039
LF: Recone Assembly	_____
EAW Part No.	460048
MF: Recone Assembly	_____
EAW Part No.	460010
HF: Diaphragm Assembly	_____
EAW Part No.	806019
Filter/Crossover Network: Complete Assembly	_____
EAW Part No.	255345