



TECHNICAL SPECIFICATIONS DS223e

DESCRIPTION

A 3-way full range system in a vented, slant-baffle enclosure. Includes 2x 12-in woofers, 2x 7-in midrange cones and a 1-in exit compression driver on a Wave Guide Plate™. Powering mode is switchable: passive (3-way crossover) or biamplified (passive MF/HF crossover). The woodframed cloth grill is attached with threaded fasteners.

APPLICATIONS

The DS223e is engineered for exceptional high output performance in the nearfield from overhead mounting positions. True 3-way design dramatically improves the quality of vocal reproduction. A very effective tools in permanently installed distributed systems. Comprehensive 3/8"-16 mounting/suspension points. Six Year Warranty.

Applications include:

- MultiMedia
- Chapel
- Dance Club
- Live Music Club
- Restaurant

DESCRIPTIVE DATA

Part Number	999036
Product Group	I
LF Subsystem & Loading	2x 12-in, Vented
MF Subsystem & Loading	2x 7-in Cones in Separate Sealed Subenclosures
HF Subsystem & Loading	1x 1-in Exit Compression Driver on Wave Guide Plate™
System Configuration	3-way, Full Range, Overhead Mount
Powering Configuration(s)	Switchable: Full Range (passive LF/MF/HF crossover) or Biamplified (passive MF/HF crossover)
Controls (switches, knobs)	Powering Mode Switch
Recommended High-Pass Frequency (24 dB/Octave)	35Hz
Cabinet Type (shape)	Rectangular w/ 20° down slanted baffle
Enclosure Materials	3/4" medium density fiberboard (MDF) and Baltic Birch Plywood
Finish	Black catalyzed polyurethane
Connectors	4-Terminal Barrier Strip plus 1x Neutrik NL4 Speakon
Suspension Hardware	(12) 3/8-16 threaded mounting/suspension points (4 on top, 3 per side, w on back)
Grill	Black Cloth on MDF frame



NOMINAL DATA

Frequency Response (Hz)		
±3 dB	45Hz to 19kHz	
-10 dB	32Hz	
Axial Sensitivity (dB SPL/1 Watt/1m)		
Full Range	99	
Biamped MF/HF	99	
Biamped LF	100.5	
Impedance (Ohms)		
Full Range	4	
Biamped MF/HF	4	
Biamped LF	4	
Power Handling, AES Standard (Watts)		
Full Range Passive	600	
Biamped MF/HF	600	
Biamped LF	700	
Calculated Maximum Output (dB SPL, @ 1m)		
Full Range Peak	132.8	
Biamped MF/HF Peak	132.8	
Biamped LF Peak	135.0	
Full Range Long Term	126.8	
Biamped MF/HF Long Term	126.8	
Biamped LF Long Term	129.0	
Nominal Coverage Angle / -6 dB points (degrees)		
Horizontal	70	
Vertical	100	
Dimensions		
	inches	millimeters
Height	22	559
Width	31.88	810
Depth (Top)	15.34	390
Depth (Bottom)	7.81	198
Baffle Angle	20 degrees	
Weights		
	pounds	kilograms
Net Weight	137	61.7
Shipping Weight	143	64.4

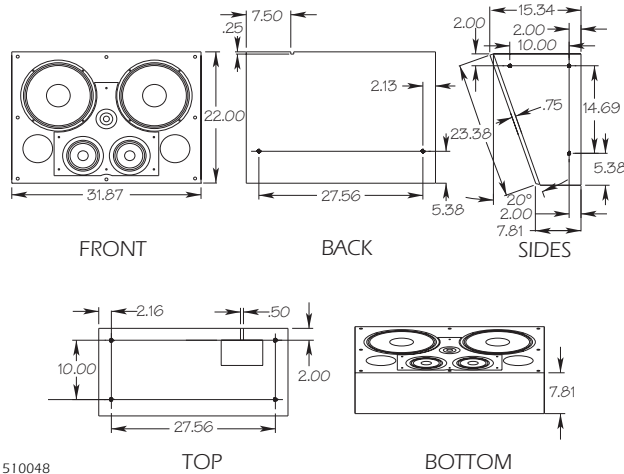




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DIMENSIONAL DRAWING

DS223Hi • MOUNTING POINTS 3/8"-16 NUTS WELDED TO A 2" x 2" STEEL L-PLATE
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.



510048
EXP 4/23/96 SHB

SERVICE ITEMS

LF: Complete Cone Driver

EAW Part No. (2) 804024

MF: Complete Cone Driver

EAW Part No. (2) 804004

HF: Complete Compression Driver/Tweeter

EAW Part No. 803014

Filter/Crossover Network: Complete Assembly

EAW Part No. 225061

ARCHITECTURAL SPECIFICATIONS

The three-way full range loudspeaker systems shall incorporate 2x 12-in LF transducers, 2x 7-in cone MF transducers and a 1-in exit compression driver HF transducer.

The LF driver shall be mounted in a vented enclosure tuned for optimum low frequency response. The MF drivers shall be mounted in separate sealed subenclosures. The HF drivers shall be loaded on axis-symmetrical wave guide plates with a combined nominal coverage pattern of 70° (h) x 100° (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 45 Hz to 19 kHz measured on axis. In passive mode, the loudspeaker shall produce a Sound Pressure Level (SPL) of 99 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 132.8 SPL on axis at 1 meter. It shall handle 600 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 4 Ohms.

In biamped mode, the passive mid/high frequency section shall meet all passive mode performance criteria. In addition, the low frequency section in biamped mode shall produce a Sound Pressure Level (SPL) of 100.5 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 SPL on axis at 1 meter. The low frequency section in biamped mode shall handle 700 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 4 Ohms.

The loudspeaker enclosure shall be rectangular in shape. The loudspeaker enclosure's front baffle shall be slanted 20° to facilitate overhead mounting. It shall be constructed of 3/4-in medium density fiberboard (MDF) with the exception of the baffle which shall be of 15mm thickness void-free cross-grain-laminated Baltic birch plywood. The enclosure shall employ extensive internal bracing. It shall be finished in black catalyzed polyurethane. Input connectors shall be a 2-terminal barrier strip and one Neutrik NL4 Speakon. The system shall include a switch allowing it to be operated in biamp or passive powering mode. A total of twelve 3/8"-16 threaded mounting/suspension points (4 on top, 3 per side and 2 on back) shall be provided. The front of the loudspeaker shall be covered with wood-framed cloth grill.

The three-way full range loudspeaker shall be the EAW model DS223e.