



APPLICATION

- Approved for use in THX®-certified theaters
- For small to medium-sized theaters
- Triamplified 3-way screen channel loudspeaker

PRODUCT INFORMATION

The CB423M triamplified three-way full-range screen channel loudspeaker system has been approved for use in THX-certified theaters.

Three-way design dramatically advances cinema audio quality by improving the naturalness and intelligibility of dialog, eliminating distortion from excessive driver excursion and extending pattern control into the lower octaves.

The two component system includes a BV423 15-in low frequency enclosure and an HK523M mid/high section.

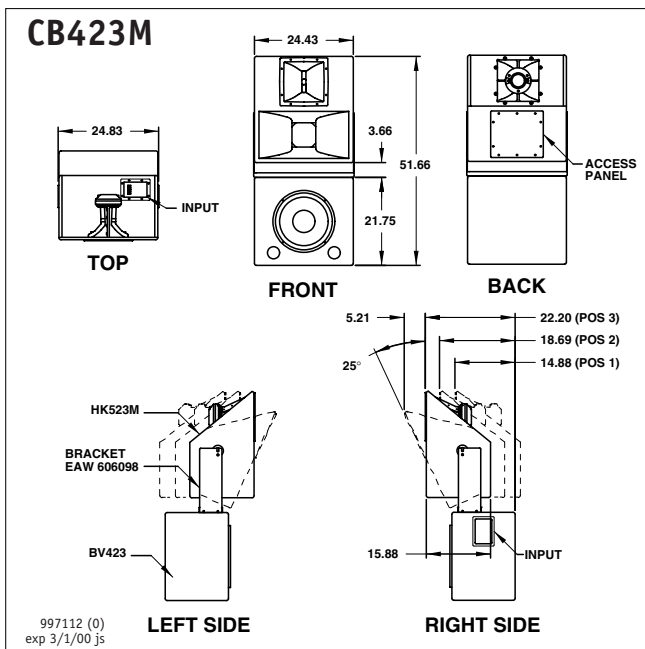
The low frequency enclosure uses optimally tuned enclosure venting to increase LF response while limiting driver excursion. This method produces less distortion and minimizes driver strain while extending LF response to the lowest octaves. The enclosure's shallow dimension allows convenient placement behind the screen.

The HK523M MF/HF section features a horn-loaded 10-in cone and a high power 1.4-in exit compression driver loaded with a 90° x 45° coverage pattern constant directivity horn.

The adjustable steel bracket attaching the MF/HF section to the LF enclosure can be positioned at one of three mounting points for optimum front/rear placement. The bracket allows the MF/HF section to be aimed independently of the LF section in both the horizontal and vertical planes and can be locked once it is positioned.

Input connectors for the LF and MF sections are two-terminal barrier strips that accommodate bare wire, tinned leads or spade lugs. Bind posts for the high frequency section are located directly on compression driver. The input panels are located on the side and top of the enclosures for convenient access in cramped installation areas.

All external components feature a non-reflective, textured black finish to eliminate the reflection of light through perforated cinema screens.



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COMPONENTS & CONSTRUCTION

The CB423M is a THX-approved, triamplified three-way, high-output, full range loudspeaker system intended for use in behind-screen cinema applications. The two component system includes a BV423 15-in low frequency enclosure and an HK523M mid/high system.

The system requires the use of external active electronic crossovers to integrate all sections.

The BV423 low frequency component features a 15-in woofer mounted in a vented enclosure for excellent bass extension and high output level capability.

The HK523M mid/high component features a horn-loaded 10-in midrange driver and a 1.4-in exit compression driver mounted to a medium format 90° x 45° constant directivity horn.

Two-terminal barrier strip input connectors that accommodate bare wire, tinned leads or spade lugs are included for the low- and mid frequency sections. Bind posts for the high frequency section are located directly on compression driver.

The LF cabinet is constructed of 3/4-in Medium Density Fiberboard (MDF). The HK523M mid/high section is constructed of 3/4-in MDF with the exception of the mid frequency flare which is void-free, 18-ply-to-the-inch, Baltic birch plywood backed with high density polyurethane foam. Both enclosures are coated with a non-reflective, textured black finish and the HF horn is constructed of flat black structural foam plastic.

DESCRIPTIVE DATA

LF Subsystem & Loading	1x 15-in, vented
MF Subsystem & Loading	1x 10-in, horn loaded
HF Subsystem & Loading	1x 1.4-in exit compression driver on CD horn
Number of Audio Bands	3-way
Powering Mode	Triamp
Recommended Crossover	EAW CX300-CB423M or THX® Specified Unit
Cabinet Type (shape)	Rectangular
Enclosure Materials	LF-3/4-in MDF; 15mm Birch plywood baffle — MF/HF-MDF
Finish	Textured Black
Connectors	2x 2-Terminal Barrier Strips (LF and MF) plus 2x Bind Posts (HF)

NOMINAL DATA

Frequency Response (1 Watt @ 1m)		
±3 dB	42 Hz - 19 kHz	
Axial Sensitivity (dB SPL, 1 Watt @ 1m)		
LF	98	
MF	108	
HF	112	
Impedance (Ohms)		
LF	8	
MF	8	
HF	12	
Power Handling (Watts)		
LF	500	
MF	325	
HF	200	
Calculated Maximum Output (dB SPL @ 1m)		
LF Peak	131.0	
MF Peak	139.1	
HF Peak	137.0	
LF Long Term	125.0	
MF Long Term	133.1	
HF Long Term	131.0	
Nominal Coverage Angle/-6 dB points (degrees)		
Horizontal	90	
Vertical	45	
Dimensions & Weights		
	Inches	Centimeters
Height	51.66	1312
Width	24.83	631
Depth	22.20	564
Weights		
	Pounds	Kilograms
Net Weight (approx)	150	68.1
Shipping Weight (approx)	165	74.1

