



APPLICATION

- For small theaters
- Full range passive 3-way screen channel loudspeaker
- Requires no external electronic crossover

PRODUCT INFORMATION

The CB153x full-range screen channel loudspeaker system offers small theaters cost-effective access to the future of cinema audio – 3-way loudspeaker design. Its full range passive design lets it be powered by a single amplifier channel with no external electronic crossover.

The two component system consists of a BV154C low frequency enclosure and an HK153 passive mid/high system.

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 HK153 features an 8-in MF cone transducer and a 1-in exit high frequency compression driver loaded with EAW's patented WGP® waveguide.

The BV154C's optimally vented enclosure uses the enclosure's resonance to increase LF response while limiting the single 15-in cone transducer's excursion. This method produces less distortion and minimizes driver strain while extending LF response to the lowest octaves.

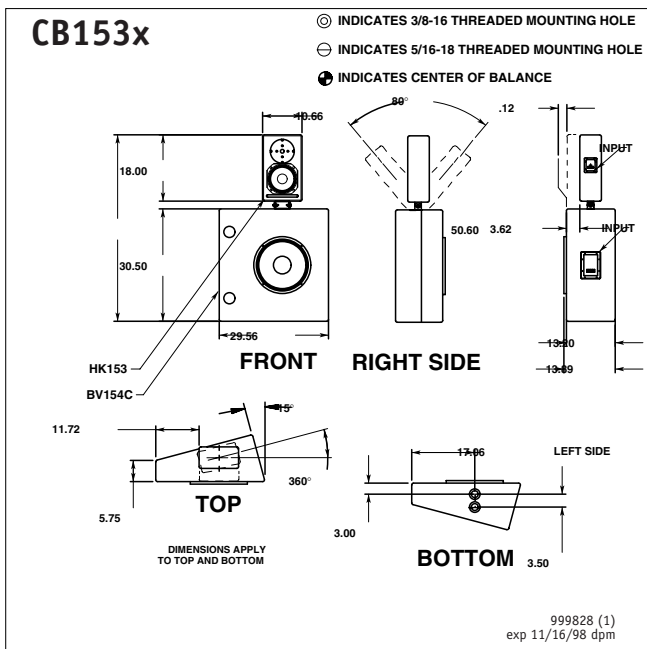
Its asymmetrical enclosure design smooths response in the LF component's upper register and minimizes the potential for standing waves inside the enclosure. Left and right side enclosures can be placed flush to a back wall while still focusing their output to the audience area. The enclosure can be inverted to provide a right or left-handed angle.

All sections are integrated via an internal passive crossover/filter network. EAW's complex, computer-designed passive filter networks are tightly aligned to the loudspeakers they control and go beyond merely dividing the signal, performing critical equalization functions.

The LF enclosure has 2 mounting points to allow optimum front/rear positioning of the mid/high component. The adjustable steel bracket attaching the mid/high component to the LF enclosure allows the mid/high section to be aimed independently of the LF section in both the horizontal and vertical planes and can be locked once it is positioned.

The LF section's input plate includes a 4-terminal barrier strip which accommodate bare wire, tinned leads or spade lugs. Two terminals serve as inputs and the other two serve as outputs for the "jumper cable" which connects to another 2-terminal barrier strip on the the mid/high section. The input panels are located on the sides of the enclosures for convenient access in cramped installation areas.

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



COMPONENTS & CONSTRUCTION

The CB153x is a compact, three-way, high-output, full range passive loudspeaker system intended for use in behind-screen cinema applications. The two component system consists of a BV154C low frequency enclosure and an HK153 passive mid/high system.

The system can be powered by a single amplifier channel and requires no external electronic crossovers. EAW's complex, computer-designed passive filter networks are tightly aligned to the loudspeakers they control and go beyond merely dividing the signal, performing critical equalization functions.

The BV154C low frequency component features a single 15-in low frequency driver mounted in an asymmetrical, vented enclosure for excellent bass extension and high output level capability with low distortion.

The HK153 mid/high component features a 1-in exit compression driver loaded with EAW's proprietary WGP® (Wave Guide Plate) and a direct radiating 8-in mid frequency cone transducer.

The LF cabinet is constructed of 3/4-in Medium Density Fiberboard (MDF) with the exception of the baffle, which is constructed of 15mm void-free, 18-ply-to-the-inch Baltic birch plywood. The mid/high enclosure is constructed entirely of the MDF. Extensive internal bracing is provided for both the LF and mid/high sections to minimize panel resonances resulting from the large acoustical energies generated within the enclosure while maximizing acoustical energy transfer into the audience area. The enclosures and all external parts are coated with a textured black finish.

The LF section's input plate includes a 4-terminal barrier strip which accommodate bare wire, tinned leads or spade lugs. Two terminals serve as inputs and the other two serve as outputs for the "jumper cable" which connects to another 2-terminal barrier strip on the the mid/high section. The input panels are located on the sides of the enclosures for convenient access in cramped installation areas.

The adjustable steel bracket attaching the mid/high component to the LF enclosure allows the mid/high section to be aimed independently of the LF section in both the horizontal and vertical planes and can be locked once it is positioned. The LF enclosure has 2 mounting points to allow optimum front/rear positioning of the mid/high component.

DESCRIPTIVE DATA

LF Subsystem & Loading	1x15-in vented
MF Subsystem & Loading	1x 8-in vented
HF Subsystem & Loading	1x 1-in compression driver on WGP
Number of Audio Bands	3-way
Powering Mode	Passive
Recommended High-Pass Frequency (24 dB/Octave)	30 Hz
Cabinet Type (shape)	rectangular (LF), trapezoidal (MF/HF)
Enclosure Materials	3/4-in MDF, 15mm baltic birch plywood baffle (LF); 3/4-in MDF (MF/HF)
Finish	Textured Black
Connectors	2x 2 terminal barrier strip

NOMINAL DATA

Frequency Response (1 Watt @ 1m)		
±3 dB	40 Hz - 18 kHz	
Axial Sensitivity (dB SPL, 1 Watt @ 1m)		
Passive	98	
Impedance (Ohms)		
Passive	8	
Power Handling, AES Standard (Watts)		
Passive	320	
Calculated Maximum Output (dB SPL @ 1m)		
Passive Peak	129.0	
Passive Long term	123.0	
Nominal Coverage Angle/-6 dB points (degrees)		
Horizontal	90	
Vertical	90	
Recommended Complementary Systems		
Sub	SB184C, SB185C, SB284C	
Dimensions		
	Inches	Centimeters
Height	50.60	128.5
Width (Front)	29.50	74.9
Width (Rear)	36.13	91.8
Depth	13.90	35.3
Weights		
	Pounds	Kilograms
Net Weight	105.0	47.8
Shipping Weight	115.0	52.3

