



## APPLICATION

- For small theaters
- Bi-amplified 3-way screen channel loudspeaker

## PRODUCT INFORMATION

The CB153 full-range screen channel loudspeaker system offers small theaters cost-effective access to the future of cinema audio – 3-way loudspeaker design. Its passive mid/high bi-amplified design lets it replace existing bi-amped two-way systems without requiring new electronic crossovers or amplifiers. (Electronic crossover settings may need to be adjusted.)

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.

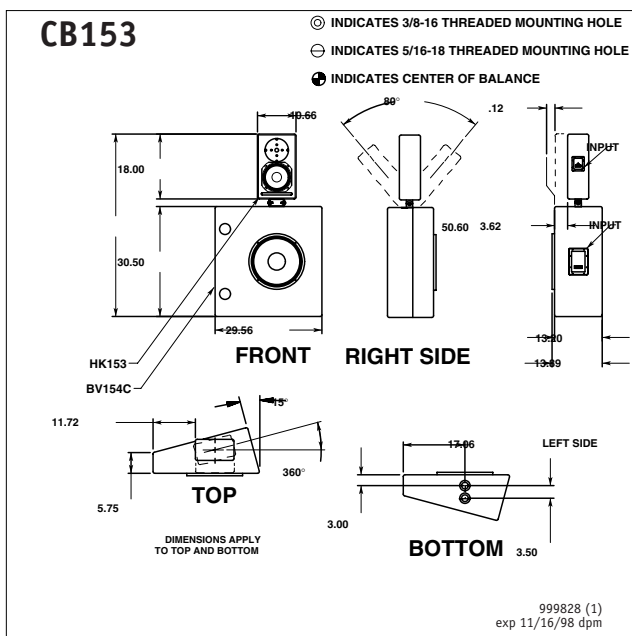
The BV154C's optimally vented enclosure uses the enclosure's resonance to increase LF response while limiting the single 15-in cone transducer's excursion. This method produces less distortion and minimizes driver strain while extending LF response to the lowest octaves.

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.

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 and MF/HF sections include 2-terminal barrier strips which accommodate bare wire, tinned leads or spade lugs. 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 CB153 is a compact, biamplified (passive mid/high), three-way, high-output, full range 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 requires the use of an external active electronic crossover between the LF and mid/high sections with a maximum recommended crossover point of 350 Hz. The mid/high component includes a internal passive crossover/filter network with the crossover set at 1.8 kHz. 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.

Input connectors for both the LF and mid/high sections are 2-terminal barrier strips. Separate input connectors for the LF and mid/high sections are located on the side of the enclosure 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
Type of Audio Bands	Full Range
Powering Mode	Biamplified
System Crossover	350 Hz recommended - EAWCX300-CB153
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

<b>Frequency Response (1 Watt @ 1m)</b>		
±3 dB	40 Hz - 18 kHz	
<b>Axial Sensitivity (dB SPL, 1 Watt @ 1m)</b>		
Passive MF/HF	98	
LF	98	
<b>Impedance (Ohms)</b>		
Passive MF/HF	8	
LF	8	
<b>Power Handling, AES Standard (Watts)</b>		
Passive MF/HF	320	
LF	500	
<b>Calculated Maximum Output (dB SPL @ 1m)</b>		
Passive MF/HF Peak	129	
LF Peak	131.0	
Passive MF/HF Long term	123	
LF Long Term	125.0	
<b>Nominal Coverage Angle/-6 dB points (degrees)</b>		
Conical	90	
<b>Recommended Complementary Systems</b>		
Sub	SB184C, SB185C, SB284C	
<b>Dimensions</b>		
	<b>Inches</b>	<b>Centimeters</b>
Height	50.60	128.5
Width (Front)	29.50	74.9
Width (Rear)	36.13	91.8
Depth	13.90	35.3
<b>Weights</b>		
	<b>Pounds</b>	<b>Kilograms</b>
Net Weight	105.0	47.8
Shipping Weight	115.0	52.3

