



APPLICATION

- For medium-sized theaters
- Bi-amplified 2-way screen channel loudspeaker

PRODUCT INFORMATION

The CB259 high power, full range 2-way screen loudspeaker system fills medium-sized theaters with all the high-impact, full-range sound encoded on today's digital soundtracks while reproducing voices clearly and naturally.

The two component system includes a BV253C vented dual 15-in low frequency unit and a HK294 high frequency system – a medium format 90° x 40° HF horn loading a large diaphragm 2-in exit compression driver.

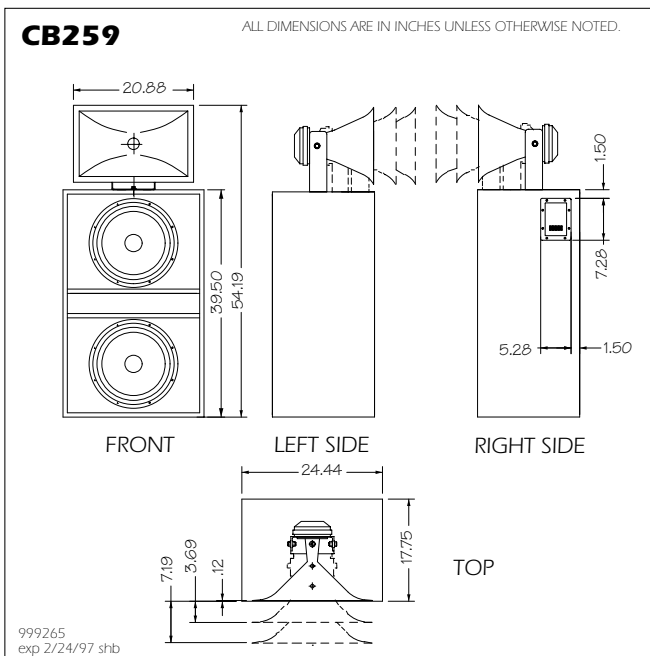
The HK294's constant directivity horn assures even distribution of high frequency information to every seat in the house. Its shortened horn throat minimizes horn throat distortion, eliminating the 700 Hz "honk" that has plagued cinema HF horns.

The BV253C's optimally vented enclosure uses enclosure resonance 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 adjustable steel bracket attaching the HF horn to the LF enclosure can be positioned at one of three mounting points for optimum front/rear HF horn placement. The bracket allows the HF horn 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 includes a two-terminal barrier strip that accommodates bare wire, tinned leads or spade lugs. The HF component uses heavy duty spring-loaded push button type connectors. Input connectors for the LF section are located on the side of the enclosure for convenient access in cramped installation areas. HF input connectors are directly on the compression driver.

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



COMPONENTS & CONSTRUCTION

The CB259 is a biamplified, two way, high-output, full range loudspeaker system intended for use in cinema applications. It features dual 15-in low frequency transducers mounted in a compact, vented enclosure and a titanium diaphragm compression driver mounted to a large, 2-in throat, 90° x 40° coverage pattern, constant directivity horn.

The CB259 requires use of an external active electronic crossover. The recommended crossover point is 800 Hz.

Input connectors for the HF section are dual spring loaded push-button type, designed to accommodate bare or tinned leads, with a 2-terminal barrier strip for the LF section. Separate input connectors are provided for each section.

The low frequency enclosure is constructed of 3/4-in thick Medium Density Fiberboard (MDF) with the exception of the baffle which is 15-mm void-free, cross-grain-laminated birch plywood. Extensive internal bracing is employed to minimize panel resonances resulting from the large acoustical energies generated within the enclosures.

The high frequency horn is constructed from a specially formulated compound which is non-resonant, lightweight and non-reflective. The adjustable steel HF section bracket can be locked once it is positioned.

The LF enclosure has 3 mounting points to allow optimum front/rear positioning of the HF component. The adjustable steel bracket attaching the HF horn to the LF enclosure allows the HF horn to be aimed independently of the LF section in both the horizontal and vertical planes and can be locked once it is positioned.

DESCRIPTIVE DATA

| | |
|--|---|
| LF Subsystem & Loading | 2x 15-in vented |
| HF Subsystem & Loading | 1x 2-in exit compression driver on CD horn |
| Number of Audio Bands | 2-way |
| Type of Audio Bands | Full Range |
| Powering Mode | Biamplified |
| System Crossover | Active (500 Hz minimum, 800 Hz recommended, 24 dB/octave) - EAW CX300-CB259 |
| Recommended High-Pass Frequency (24 dB/Octave) | 30 Hz |
| Cabinet Type (shape) | Rectangular with externally mounted horn/driver assembly |
| Enclosure Materials | 3/4-in MDF with 15mm Baltic birch baffle |
| Finish | Textured Black |
| Connectors | LF- 2 terminal barrier strip; HF - spring-loaded pushbutton (accepts bare wire) |

NOMINAL DATA

| | | |
|--|------------------------|--------------------|
| Frequency Response (1 Watt @ 1m) | | |
| ±3 dB | 42 Hz | -17 kHz |
| Axial Sensitivity (dB SPL, 1 Watt @ 1m) | | |
| LF | 101 | |
| HF | 111 | |
| Impedance (Ohms) | | |
| LF | 4 | |
| HF | 12 | |
| Power Handling, AES Standard (Watts) | | |
| LF | 1000 | |
| HF | 100 | |
| Calculated Maximum Output (dB SPL @ 1m) | | |
| LF Peak | 137.0 | |
| HF Peak | 137.0 | |
| LF Long Term | 131.0 | |
| HF Long Term | 131.0 | |
| Nominal Coverage Angle/-6 dB points (degrees) | | |
| Horizontal | 90 | |
| Vertical | 40 | |
| Recommended Complementary Systems | | |
| Sub | SB184C, SB185C, SB284C | |
| Dimensions | | |
| | Inches | Centimeters |
| Height | 54.19 | 137.6 |
| Width | 24.44 | 62.1 |
| Depth (min.) | 17.75 | 45.1 |
| Depth (max.) | 24.94 | 63.3 |
| Weights | | |
| | Pounds | Kilograms |
| Net Weight | 160.5 | 73.0 |
| Shipping Weight | 177.5 | 80.8 |

