

# Dolby® CS126MH Mid/High Screen Speaker

## Optimized asymmetrical coverage for small-to-medium-sized auditoriums

Operating as the mid/high component of our new System 126, the Dolby CS126MH is a passive 10", two-way mid/high speaker featuring Dolby's patented asymmetrical waveguide coupled to a 44.4 mm polyimide dome high-frequency driver. Together they produce a very innovative coverage pattern specifically designed for the seating areas of most commercial cinema auditoriums. The asymmetrical coverage pattern transitions from 70° at the top, to 130° at the bottom of the waveguide ensuring consistent volume by pushing louder audio to the rear seats while gradually widening and softening the coverage for the seats closer to the screen. The result is an articulate and uniform dialog and soundtrack experience for all the seats in the auditorium.

The CS126MH utilizes an advanced input plate that features a high-current, spring-loaded terminal block allowing quick, tool-free connection during installation, and when mounted atop the new Dolby CS128LF low-frequency cabinet, completes the Dolby System 126. With the use of the optional PXO.126 full-range crossover, the System 126 is transformed from a bi-amplified\* system, to a passive, single-amp-channel system.



### Key features

- Patented asymmetrical waveguide design provides even coverage and volume levels for the entire auditorium
- Low-distortion, 44.4 mm polyimide dome high-frequency driver delivers smooth and faithful response up to 20 kHz
- Advanced input plates featuring high-current, spring-loaded terminal block allows quick, tool-free connection during installation
- Quality-constructed wood enclosure employs natural convective cooling vents for the HF driver and crossover
- Custom, high-sensitivity, 10" mid-frequency driver incorporates motor and suspension technology that optimizes cooling
- When used in the System 126, the optional PXO.126 full-range crossover (sold separately) transforms the system from a bi-amp system, to a passive, single-amp-channel system.
- Shallow, 10.9" (27.7 cm) depth and laterally mounted input plate enable both easy installation and service access in challenging spaces
- Mounting yoke with horizontal and vertical alignment decal (included)
- BKT.FLR floor bracket kit (sold separately)\*\*

# Dolby CS126MH Mid/High Screen Channel Speaker

## Specifications\*\*\*

|   |  |
|---|--|
| Frequency range <sup>1</sup>                      | 255 Hz - 20 kHz  |
| Coverage window (asymmetrical) <sup>2</sup>       | 70° top horizontal<br>130° bottom horizontal<br>60° vertical   |
| Rated impedance                                   | 8 Ohms   |
| Sensitivity @ 1 Watt <sup>3</sup>                 | 100 dB   |
| Power handling <sup>4</sup>                       | 200 W @ 40 Vrms  |
| Power draw <sup>5</sup>                           | 170 W  |
| Maximum voltage peak <sup>6</sup>                 | 160 Vpk  |
| Maximum continuous SPL @ 1 meter <sup>7</sup>     | 123 dB   |
| Measured acoustic peak SPL @ 1 meter <sup>8</sup> | 135 dB   |
| Transducers                                       | MF - 10" woofer with 3" copper voice coil and optimized cooling<br>HF - 44.4 mm polyimide dome high-frequency driver                             |
| Input   | Side-mounted advanced input plate  |
| Enclosure   | Wood   |
| Accessories                                       | Mounting yoke (included)<br>PXO.126 full-range crossover (sold separately)<br>BKT.FLR floor bracket kit, includes (2) brackets (sold separately) |
| Dimensions (unit)                                 | 24.25" H x 15.47" W x 10.9" D (61.6 x 39.3 x 27.7 cm)  |
| Weight (unit)                                     | 54.74 lb (24.83 kg)  |
| Dimensions (shipping)                             | 32.4" H x 20" W x 15.87" D (82.3 x 51 x 40.3 cm)   |
| Weight (shipping)                                 | 62.96 lb (28.56 kg)  |

1. +3 dB/-6 dB in whole-space conditions using required processing.

2. Horizontal Top and Vertical -6 dB averaged to on-axis response. Horizontal Bottom -9dB averaged to on-axis response for near-field proximity compensation.

3. Measured with 12 dB crest pink noise @ 2.83 Vrms in wholespace conditions with required highpass filter (HPF) and 48 dB bandwidth (BW) low-pass filter (LPF) @ the rated system frequency range.

4. 12 dB crest pink noise for two hours with required HPF and 48 dB bandwidth (BW) low-pass filter (LPF) @ the rated system frequency range, calculated power based on rated impedance.

5. Measured average power over 5 seconds at the rated Vrms using 12 dB crest pink noise with required HPF and LPF. This measured power draw from the amplifier is useful for estimating amplifier sizing in overall system design.

6. Measured Vpk over 100 hours using a Hann shaped sine-wave burst spaced at 1/3rd oct intervals within the rated passband. This data is useful for setting peak stop limiters and amplifier selection.

7. Calculated from rated sensitivity and power.

8. Measured peak SPL over 5 seconds at rated Vrms using 12 dB crest pink noise with required HPF.

This documentation applies to **CID1026**

The English version of this document is the only legally binding version.

Translated versions are not legally binding and are for convenience only.

\*The term "bi-amplified" used in this document refers to the required mode of operation where a minimum of two external amplifier channels are required. These are unpowered loudspeakers and do not have built-in amplification.

\*\*Sound and vibration from this type of speaker system is high and may cause cabinets to shift. Failure to secure the bottom speaker cabinet to the mounting surface may result in a tip/fall of the entire system which may cause damage or injury. Proper selection of mounting hardware is not included and proper assembly and installation of mounting hardware, including, but not limited to, selection of appropriate weight-bearing support and bracket use is the exclusive responsibility of the installer. Dolby disclaims any liability, including damage or injury, for the selection of i) non-Dolby manufactured mounting hardware or ii) third-party manufactured mounting hardware not previously approved in writing by Dolby, and/or bracket installation. Any modification to the speaker system hardware provided by Dolby (i.e. mounting by drilling holes into the speaker system) will result in a null and void product warranty.

\*\*\*Specifications are subject to change without notice.

