

Dolby® System 126 Screen Speaker

Optimized coverage with bi-amp or single-amp-channel operation for small-to-medium-sized auditoriums

Designed to meet the needs of today's small-to-medium-sized immersive venues, Dolby's new System 126 screen speaker not only features a patented asymmetrical waveguide delivering exceptional audio coverage, but also offers both bi-amplified* or passive, single-amp-channel operation.

Built for auditoriums of up to approximately 49.9 feet (15.2 meters) in depth, the System 126 consists of (1) CS126MH mid/high loudspeaker and (1) CS128LF low-frequency loudspeaker, and with the simple addition of the optional (PXO.126) plug-in crossover, the System 126 can be operated as a passive, single-amp-channel speaker system in applications where amplifier channels may be limited.

With Dolby's intuitive ergonomic design features like a side-mounted input plate, and a shallow 13.4" (340 mm) depth, the Dolby System 126 makes installation easy in auditoriums where space might be limited. Built on the foundation of Dolby's industry-leading system design and support philosophy, the Dolby System 126 helps simplify speaker integration while offering many of the same features and benefits found in the Dolby flagship PLF speaker designs.



Key features

- Patented advanced asymmetrical waveguide design provides even coverage and volume shading for the entire auditorium
- Low-distortion 44.4 mm polyimide dome high-frequency driver delivers smooth and faithful response up to 20 kHz
- High-sensitivity, 10" mid-frequency driver incorporates motor and suspension technology that optimizes cooling
- Two 15" low-frequency woofers for exceptional low-range audio can be configured to be powered either individually or in parallel mode by using a unique input flip-card PCB
- Advanced side-mounted input plates featuring high-current, spring-loaded terminal blocks
- Passive, single-amp-channel system operation possible with (optional) PXO.126 plug-in crossover (sold separately)
- Quality-constructed wood enclosure with exceptional bracing delivers unparalleled low-frequency extension and articulation, tuned port cutouts also function as handles during unpacking and installation
- Shallow, 13.4" (340 mm) depth and laterally mounted input plate enable both easy installation and service access in challenging spaces
- Optional BKT.FLR Floor-bracket kit (sold separately) allows for mechanical connection of the speaker stack to the auditorium mounting surface**

Dolby System 126 Screen Speaker

Industry standard technical data***

Frequency range ¹	39 Hz – 20 kHz
Usable LF response ²	32 Hz
Coverage window (asymmetrical) ³	70° top H, 130° Bottom H, 60° V
Passive, single-amp-channel mode rated impedance	4 Ohms
CS126MH Rated impedance	8 Ohms
CS128LF Rated impedance	4 Ohms parallel/ 8 Ohms x 2 (independent drive)
Passive, single-amp-channel mode sensitivity @ 1 Watt ⁴	98 dB
CS126MH Sensitivity @ 1 Watt ⁵	100 dB
CS128LF Sensitivity @ 1 Watt ⁶	101 dB
Passive, single-amp-channel mode power handling ⁷	400 W @ 40 Vrms
CS126MH Power handling ⁷	200 W @ 40 Vrms
CS128LF Power handling ⁸	600 W @ 49 Vrms
Passive, single-amp-channel mode power draw ⁹	250 W
CS126MH Power draw ⁹	170 W
CS128LF Power draw ⁹	420 W
Passive, single-amp-channel mode maximum voltage peak ¹⁰	160 Vpk
CS126MH Maximum voltage peak ¹⁰	160 Vpk
CS128LF Maximum voltage peak ¹¹	138 Vpk
Passive, single-amp-channel mode maximum continuous SPL @ 1 meter ¹²	124 dB
CS126MH Maximum continuous SPL @ 1 meter ¹²	123 dB
CS128LF Maximum continuous SPL @ 1 meter ¹²	129 dB
Bi-amp mode summed continuous SPL @ 1 meter ¹³	128 dB
Passive, single-amp-channel mode measured acoustic peak SPL @ 1 meter ¹⁴	135 dB
CS126MH Measured acoustic peak SPL @ 1 meter ¹⁴	135 dB
CS128LF Measured acoustic peak SPL @ 1 meter ¹⁴	139 dB
Bi-amp mode summed acoustic peak SPL @ 1 meter ¹³	139 dB
Input MF/HF	Advanced input plate w/high-current spring-loaded terminal block (optional crossover for passive, single-amp-channel system operation)
Input LF	Advanced input plate w/flip card and high-current spring-loaded terminal block
Enclosure	Wood
Accessories	Mounting yoke (included) PXO.126 Crossover module (sold separately) BKT.FLR Floor bracket (sold separately)
Dimensions	68.31" H x 33.5" W x 13.4" D (173.5 x 85.1 x 34.0 cm)
Weight (system stack – without PXO.126)	174.7 lb (79.2 kg)
Weight (system stack – with PXO.126)	176.5 lb (80 kg)



Dolby System 126 Screen Channel Speaker

Industry standard technical data***

1. +3 dB/-6 dB in half-space conditions using required processing.
2. -10 dB in half space conditions.
3. Horizontal top and vertical -6 dB averaged to on-axis response. Horizontal bottom -9 dB averaged to on-axis response for near-field proximity compensation.
4. Measured with 12 dB crest pink noise in half space conditions for LF; whole space for MF/HF equaling the rated system frequency range @ 2Vrms. Total SPL is a noncoherent summation.
5. 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.
6. Measured with 12 dB crest pink noise @ 2 Vrms in half-space conditions with required processing.
7. 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.
8. 12 dB crest pink noise for two hours with required processing, based on AES2-2012 standard, calculated power based on rated impedance.
9. 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.
10. 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.
11. Measured Vpk over 100 hours using a Hann shaped sine-wave burst at the maximum excursion frequency of the system. This data is useful for setting peak stop limiters and amplifier selection.
12. Calculated from rated sensitivity and power.
13. Total SPL is a noncoherent summation. LF max SPL reduced 3dB for content spectrum system power balancing.
14. Measured peak SPL over 5 seconds at rated Vrms using 12dB crest pink noise with required HPF and LPF.

This documentation applies to **CID1026** and **CID1027**

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.

