Dolby® CS131MH Mid-/High-Screen Channel Speaker

Exceptional coverage, and amazing detail.

Utilizing our exceptional asymmetrical dual-entrant horn design, the new Dolby CS131MH mid-/ high-frequency screen speaker delivers all the subtle detail and nuance expected in today's immersive cinematic experience.

The asymmetrical coverage pattern –50° vertical with horizontal transitions from 55° at the top to 100° at the bottom of the waveguide –ensures optimized volume and throws to the rear seats with gradual widening and softening coverage for the closer seats. Very articulate, uniform dialog and soundtrack can now be enjoyed in every seat in the auditorium, rather than in just a select few.

The preassembled CS131MH horn unit utilizes an advanced input plate that features a high-current, spring-loaded terminal block allowing quick, tool-free connection during installation, as well as unique flip-card PCB electrical routing for simple passive or bi-amped module selection. When coupled with the CS136LF low-frequency module, the CS131MH works in concert to form the Dolby System 131, a new cinema screen channel system capable of highly effective screen channel performance in large auditoriums of approximately up to 111 feet (34 meters) in depth.

Key features

- Dual-entrant asymmetrical horn design allows for close driver proximity which yields improved pattern control around the crossover frequency and provides even coverage and volume shading for all the seats in the auditorium
- Quality 2" HT polymer high-frequency compression driver exhibits superb performance in the articulation ranges
- Advanced input plate featuring high-current, spring-loaded terminal block and unique flip-card PCB electrical routing, allows quick, tool-free connection during installation and easy selection of passive or bi-amp module configuration
- Composite diaphragm, 2" mid-frequency compression driver couples in close vertical proximity to the high-frequency driver, enhancing sensitivity, intelligibility, and power-handling
- Preassembled horn design simplifies setup while reducing freight costs
- Intuitive tilt and pan mechanisms can be used with laser aiming sights in the speaker horn. This provides quick and accurate aiming of the horn using a common laser pointer.
- Optional BKT.FLR floor-bracket kit (sold separately) facilitates the mechanical connection of the speaker stack to the auditorium mounting surface*

This documentation applies to CID1029

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

*BKT.FLR - Floor-bracket kit must be used (sold separately) to secure the entire speaker system to the auditorium mounting surface.
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.

Dolby CS131MH Mid/High Screen Channel Speaker

Specifications**

Frequency Range[1]	400Hz - 20kHz
Coverage Window (Asymmetrical)[2]	55° Top Horizontal 100° Bottom Horizontal 50° Vertical
Passive Mode Rated Impedance	8 Ohms
Bi-amp mode rated impedance	MF 8 ohms / HF 8 ohms
Passive mode sensitivity @ 1 watt[3]	103dB
Bi-Amp mode sensitivity @ 1 watt[4]	MF 109dB / HF 105dB
Passive mode power handling[5]	300W @ 49Vrms
Passive mode power draw[6]	123W
Passive mode maximum voltage peak[7]	94.8Vpk
Bi-Amp mode power handling[8]	MF 80W @ 25.3Vrms / HF 70W @ 23.7Vrms
Bi-amp mode power draw[9]	MF 54W / HF 50W
Bi-amp mode maximum voltage peak[10]	MF 50.6Vpk / HF 94.8Vpk
Passive mode maximum continuous SPL @ 1 meter[11]	128dB
Passive mode measured acoustic peak SPL @ 1 meter[12]	140dB
Bi-amp mode maximum continuous SPL @ 1 meter[13]	130dB (MF 128dB + HF 124dB)
Bi-amp mode measured acoustic peak SPL @ 1 meter[14]	141dB (MF 140dB + HF 135dB)
Transducers:	MF - 2" Composite | HF - 2" HT Polymer
Input	Advanced input plate w/high-current spring loaded terminal block)
Enclosure	Asymmetrical Dual-entrant horn
Accessories	BKT.FLR Floor Bracket Kit (sold separately)
Dimensions (Unit)	30.11"H x 30.22"W x 23.21"D (76.5 x 76.8 x 59 cm)
Weight (Unit)	52 lb. (23.5 kg)
Dimensions (Shipping)	33.25" x 33.50" x 27.37"D (84.5 x 85.1 x 69.5 cm)
Weight (Shipping)	77.5 lb (35 kg)

1. +3dB/-6dB in half space conditions using required processing
2. Horizontal Top and Vertical -6dB averaged to on-axis response. Horizontal Bottom -9dB averaged to on-axis response for near-field proximity compensation
3. Measured with 12 dB crest IEC 60268-1 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. Measured with 12 dB crest pink-noise @ 2.83 Vrms in whole-space conditions. MF used required HPF and LPF. HF used required HPF and 48 dB BW LPF @ the rated system frequency range
5. 12 dB crest IEC 60268-1 noise for two hours with required HPF, calculated power based on rated impedance
6. Measured average power over 5 seconds at the rated Vrms using 12 dB crest IEC 60268-1 noise with required HPF and LPF. This measured power draw from the amplifier is useful for estimating amplifier sizing in overall system design
7. 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.
8. Calculated from rated sensitivity and power
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 at the maximum excursion frequency of the system. This data is useful for setting peak stop limiters and amplifier selection
11. Calculated from rated sensitivity and power
12. Measured peak SPL over 5 seconds at rated Vrms using 12 dB crest IEC noise with required HPF
13. MF and HF calculated from rated sensitivity and power. Total SPL is a noncoherent summation
14. MF and HF measured peak SPL over 5 seconds at rated Vrms using 12 dB crest pink noise. MF used required HPF and LPF. HF used required HPF and a 48 dB BW LPF at the rated frequency range of the system. Total peak SPL is presented as a noncoherent summation

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**Specifications are subject to change without notice.

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