Dolby System 131

Screen Channel Speaker

Dolby System 131

Screen Channel Speaker System

Utilizing our exceptional **Asymmetrical Dual-Entrant Horn Design**, the new Dolby CS131MH mid/high-frequency screen speaker delivers all the subtle detail and nuance now expected in today's immersive cinematic experience.

Coupled with the **CS136LF** low-frequency module, the **CS131MH** completes the **Dolby System 131**, a new cinema screen channel system capable of extremely effective and accurate performance in large auditoriums of approximately up to **111 feet (34 meters) in depth**.

CS131MH

CS136LF

Dolby System 131

Screen Channel Speaker System

Exceptional coverage, and amazing detail

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

Echoing the primary design features of the System 133, the System 131 utilizes advanced input plates that feature high-current, spring-loaded terminal blocks allowing quick, tool-free connection during installation. **Unique Flip-Card Electrical Routing** enables quick and easy passive, or bi-amped module selection, as well as individual or parallel low-frequency configuration.

CS131MH

Dolby System 131
CS131MH Components

High frequency driver:

Pro Audio Industry, HT Polymer, high-frequency compression driver – exhibits **superb performance** in the **articulation ranges**

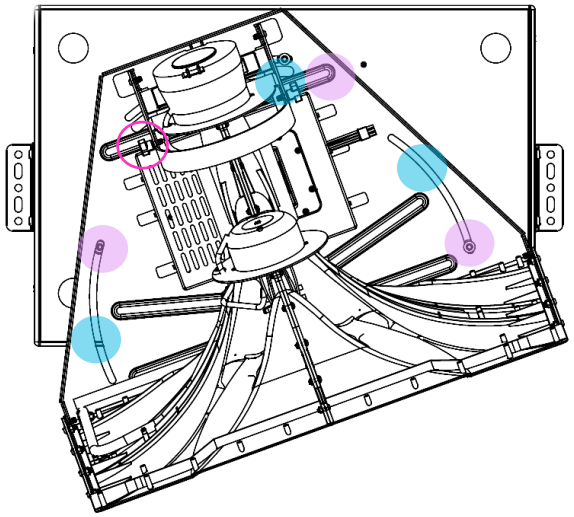
Mid frequency driver:

Neodymium magnet, 2”mid-frequency compression driver couples in close vertical proximity to the high frequency driver, enhancing sensitivity, intelligibility and power handling

Composite diaphragm, is a departure from typical metal or plastic diaphragm material exhibiting smoother “paper-cone” midrange driver behavior

Dolby System 131
CS131MH Components

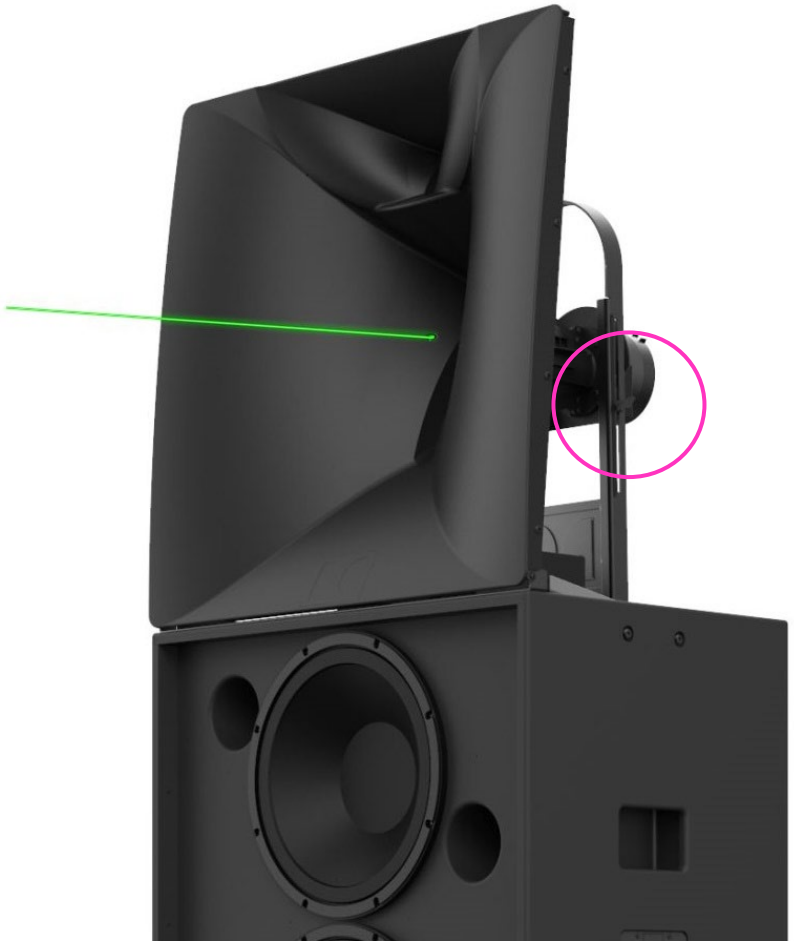
Laser-Aiming Mechanism – provides accurate aiming of the CS131MH to the reference listening position with a common laser pointer. Entire horn assembly mounts directly to the LF unit and features independent tilt & pan



(HORN TO CS136LF) MOUNTING SCREWS

3-TRACKS ALLOW FOR PANNING

TILT MECHANISM



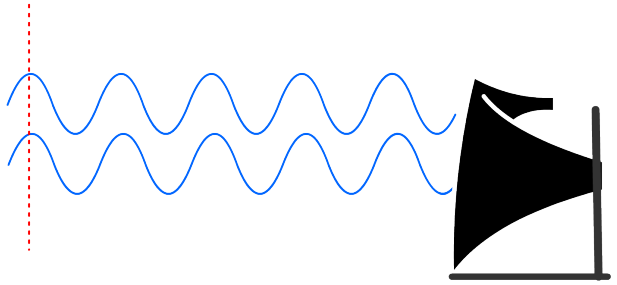
Dolby System 131
CS131MH Components

Screen Orientation – the complex geometry of the horn, combined with its curved front edge and smaller footprint allows **closer orientation to the screen** compared to traditional horn designs

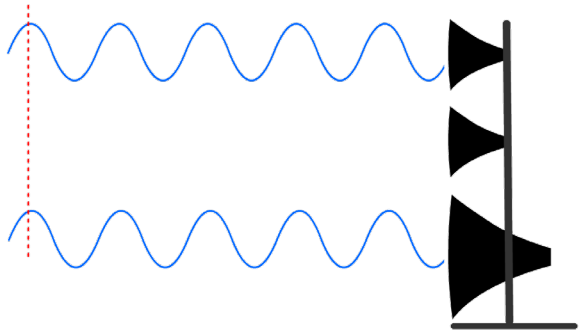
Dolby System 131

CS131MH Components

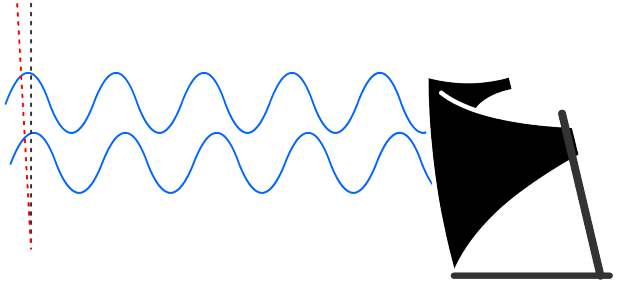
Screen Orientation –by integrating the HF and MF drivers into a single horn exit, our design allows a tighter positioning of the HF & MF drivers, which improves the **acoustical summation** of the two drivers in the critical crossover band, **reducing delay-induced frequency cancelations.**

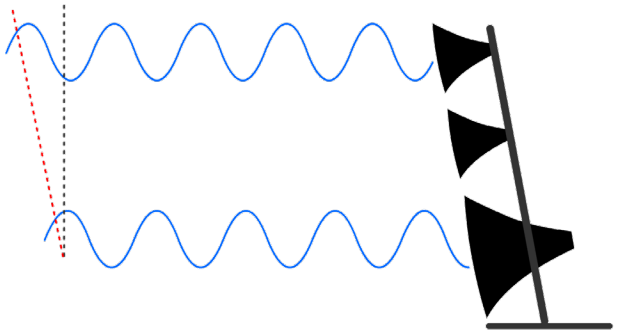


System 131 Horn



Conventional Horn



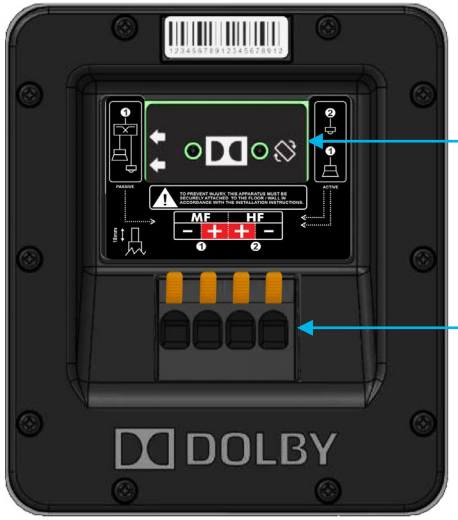


Dolby System 131
CS131MH Components

Preassembled Horn Design – simplifies setup while reducing freight costs - **Advanced input plate** featuring high-current, spring-loaded terminal block and **unique flip-card PCB** electrical routing, allows quick, tool-free connection and easy selection of CS131MH passive or bi-amp configurations.

Wiring is made simpler with a new design that does not require any tools for connection during installation. Push the lever to open, insert the stripped back wire, then release, locking the wire securely in place. **No spade lugs or crimping tool required**.

See manual for complete wiring details.



Flip-Card-PCB

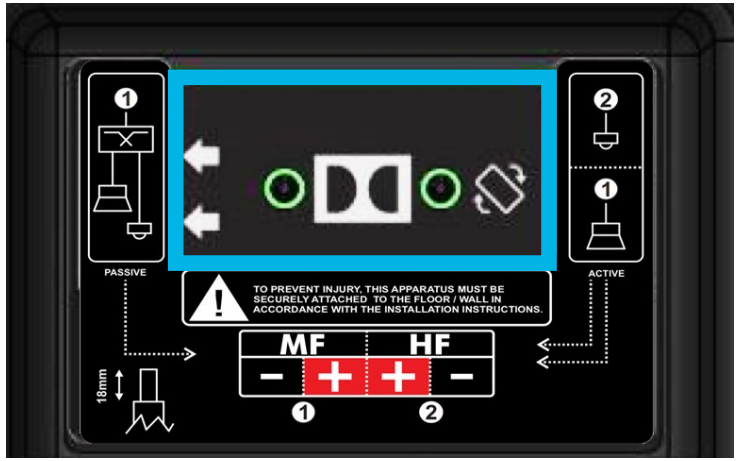
Spring-Loaded Terminal Block

Dolby System 131
CS131MH Components

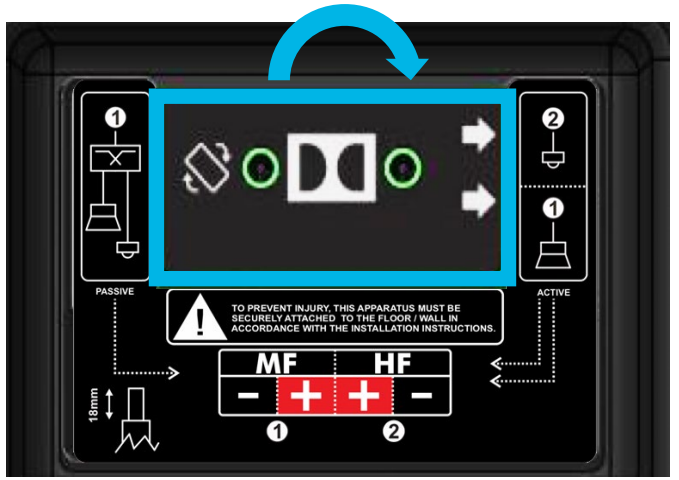
CS131MH utilizes an **advanced input design** allowing users to easily select between two optional drive configurations: (1) **Active bi-amp mode** using two amplifier, or (2) **Passive mode** using a single amplifier

Selection of these two modes is achieved **by inserting the flip-card into one of two positions**

OPTION 1: Passive Mode (single amplifier)



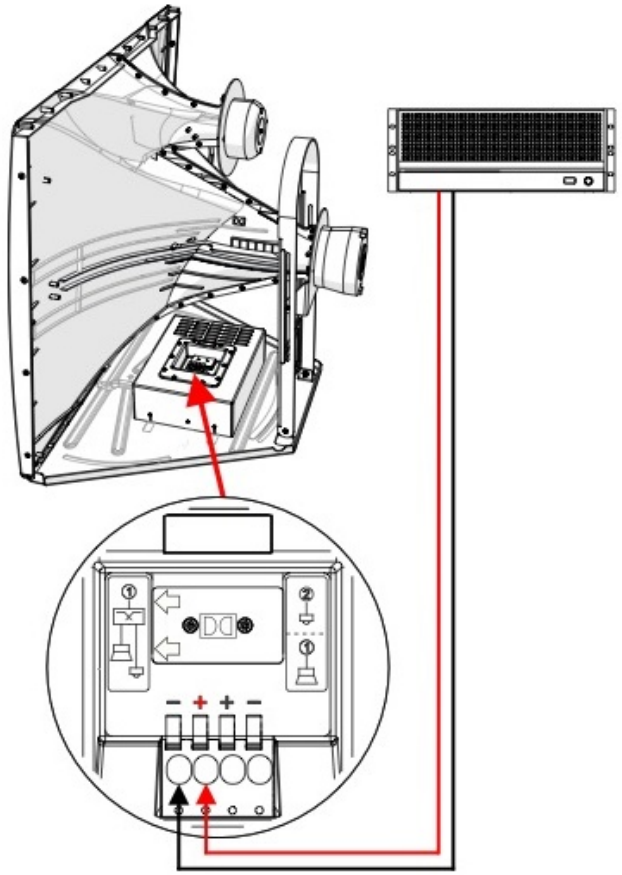
OPTION 2: Active Mode (two amplifiers)

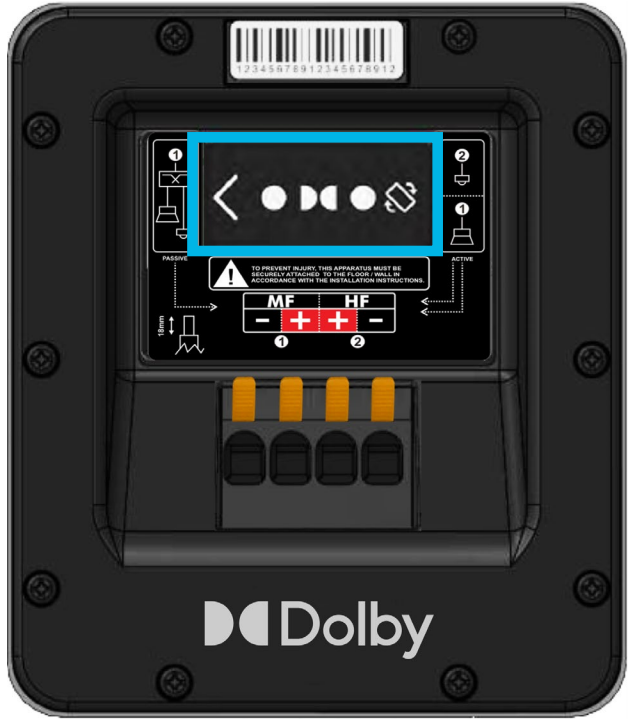


Dolby System 131

CS131MH Components

CS131MH – PASSIVE MODE
(Single amp)

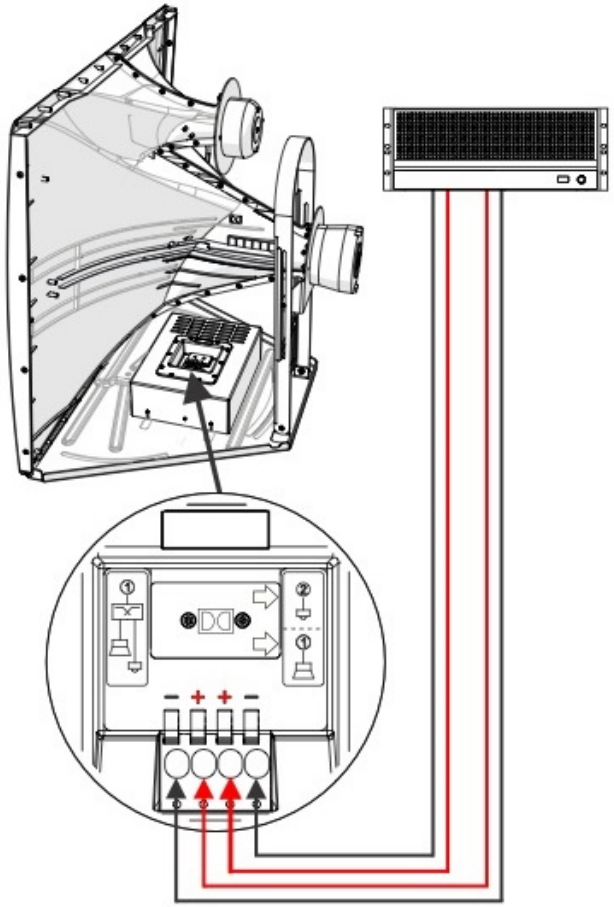


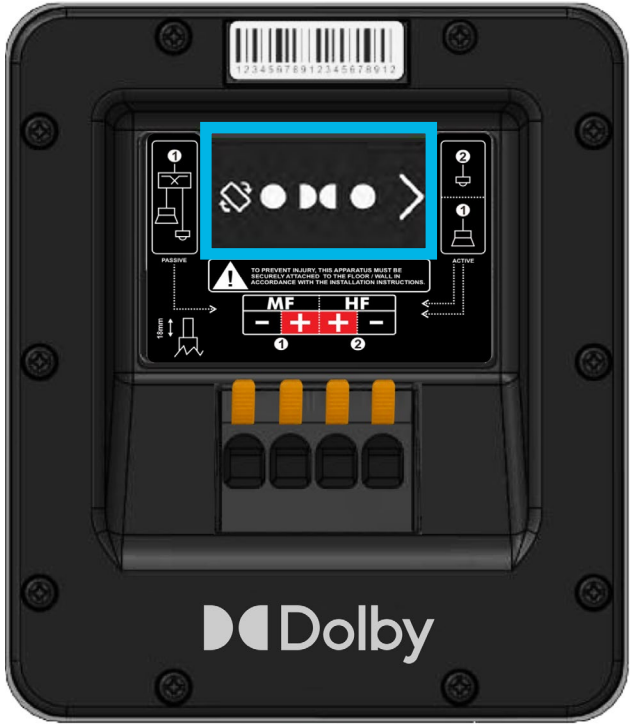


Dolby System 131

CS131MH Components

CS131MH – ACTIVE MODE
(Bi-amp)





Dolby System 131

CS136LF Components

Quality wood cabinet construction – and exceptional bracing, coupled with **individual acoustic chambers** and a finely tuned port design, deliver unparalleled low-frequency extension and articulation

Dolby System 131
CS136LF Components

(2) **15" high performance transducers** - that were designed using advanced **Finite Element Modeling (FEM)** and feature massive magnetic motors and robust cast aluminum baskets.

- **Larger voice-coil design** than other cinema speakers
- Massive magnetic structure with high B-field providing **excellent sensitivity**
- Ruggedized suspension to ensure good motional control and **long product lifespan**
- Vented motor assembly to allow **good voice-coil cooling** and **high power handling**
- Stronger **cast-aluminum basket** compared to stamped designs used on some competing products

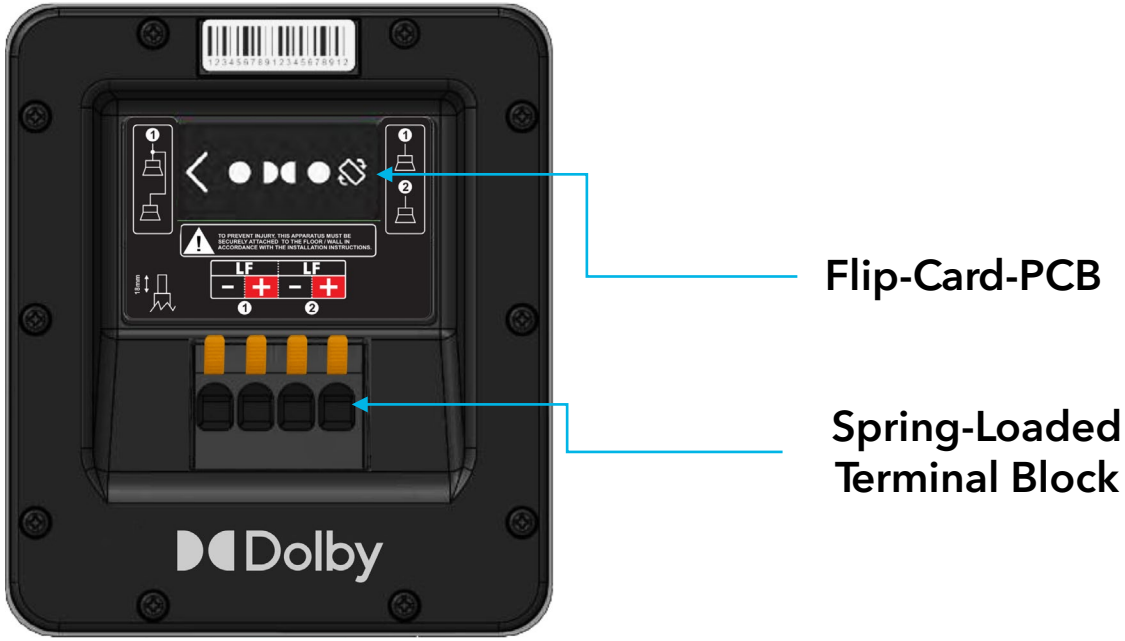
Dolby System 131
CS136LF Components

Like the CS131MH, the CS136LF is equipped with an Advanced Input Plate featuring a high-current, spring-loaded terminal block and **unique flip-card PCB** electrical routing, allowing for quick, tool-free connection and easy selection of CS136LF Parallel (4 Ohm) or Individual (8 Ohms x 2) configurations

Wiring is made quicker and simpler

Push the lever to open, insert the stripped back wire, then release, locking the wire securely in place. No spade lugs or crimping tool required during connection

See manual for complete wiring details.

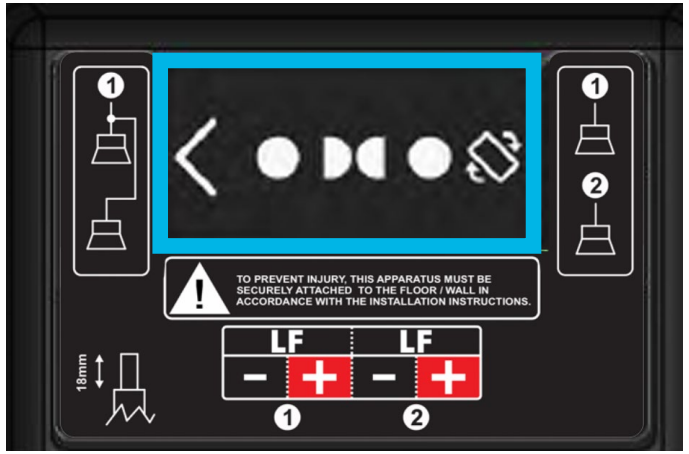


Dolby System 131
CS136LF Components

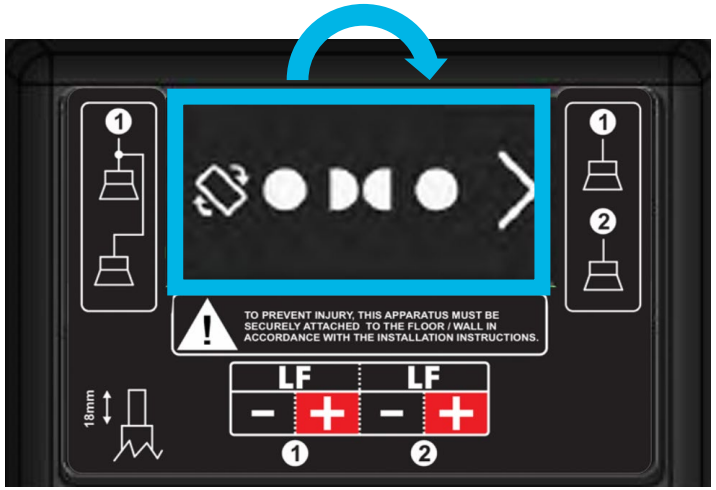
The LF input plate includes a similar flip-card PCB. Changing the orientation of the card will select either parallel (4 Ohms), or direct to individual driver (8 Ohms) connection.

Selection of these two modes is achieved **by inserting the flip-card into one of two positions**

OPTION 1: Parallel Mode (single amplifier)



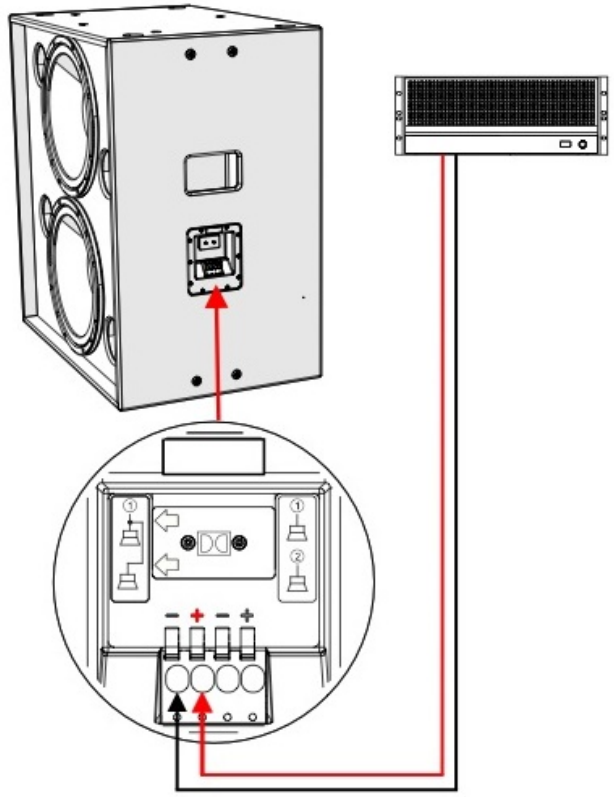
OPTION 2: Individual Mode (two amplifiers)

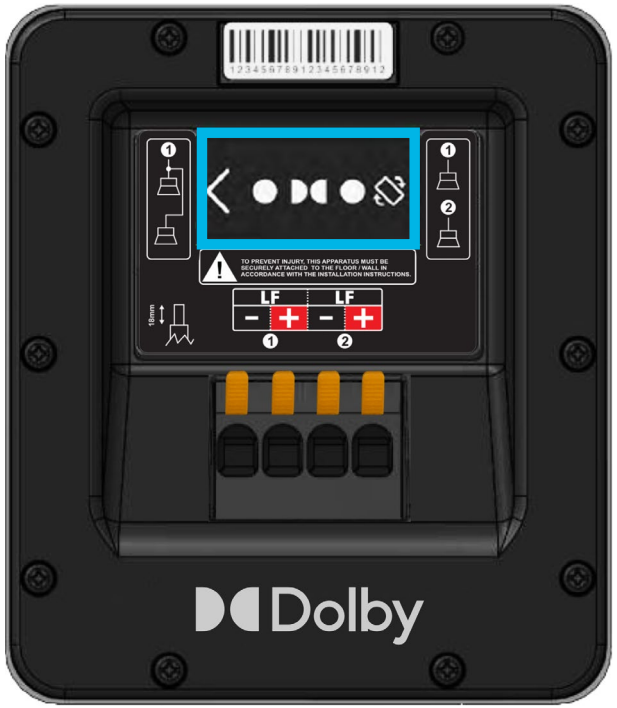


Dolby System 131

CS136LF Components

CS136LF –
PARALLEL DRIVER MODE

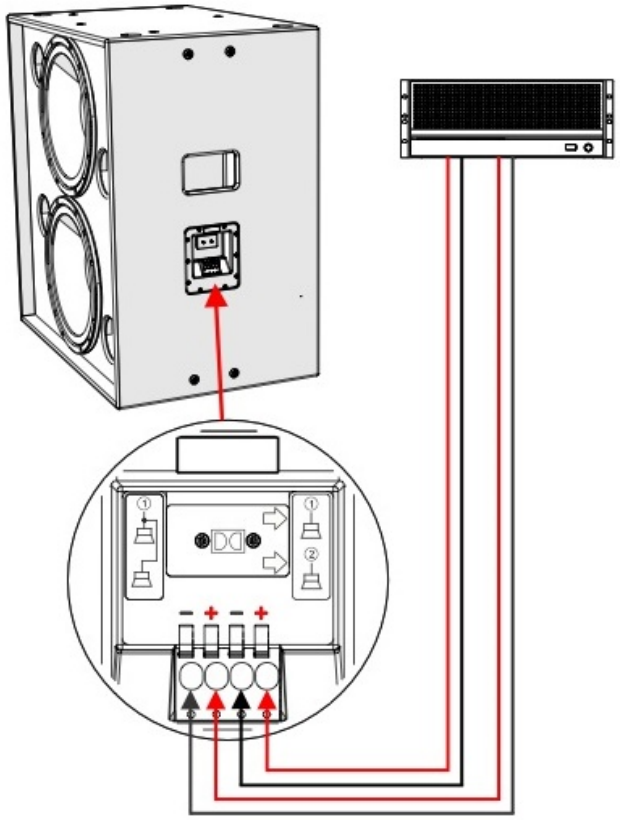


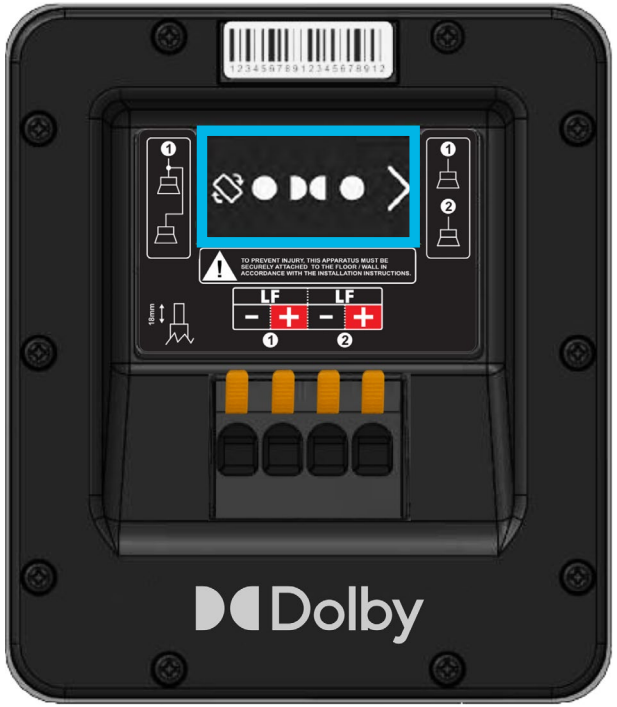


Dolby System 131

CS136LF Components

CS136LF –
INDIVIDUAL DRIVER MODE

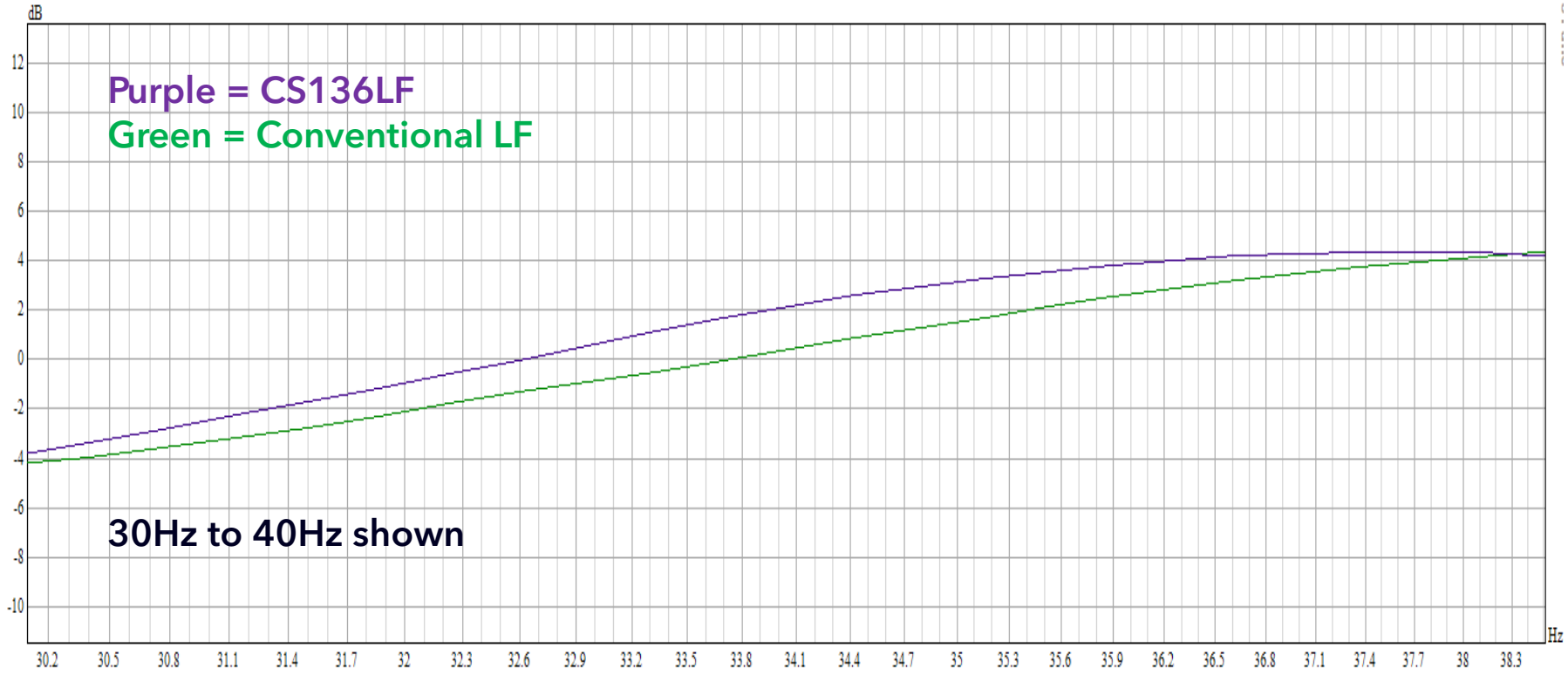




Dolby System 131

CS136LF Performance

Extended low frequency response (enclosure & port design)

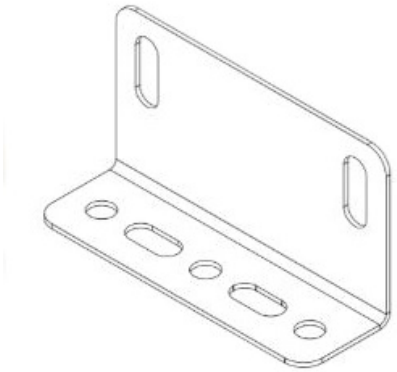


Dolby System 131
Ergonomics

Balance-Centered Handles – eases unpacking, handling and placement of the CS136LF low-frequency enclosures during installation and service

Dolby System 131
Ergonomics

BKT.FLR Floor-brackets (sold separately) – allow for surface connection of the entire system stack, to the auditorium.*

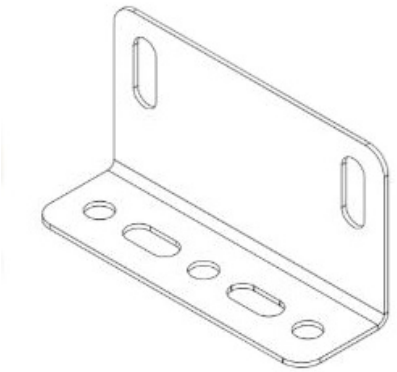


BKT.FLR Floor-brackets

Dolby System 131
Ergonomics

<u>*NOTE</u>: BKT.FLR - Floor-brackets (sold separately) must be used to secure the entire speaker system to the auditorium mounting surface.

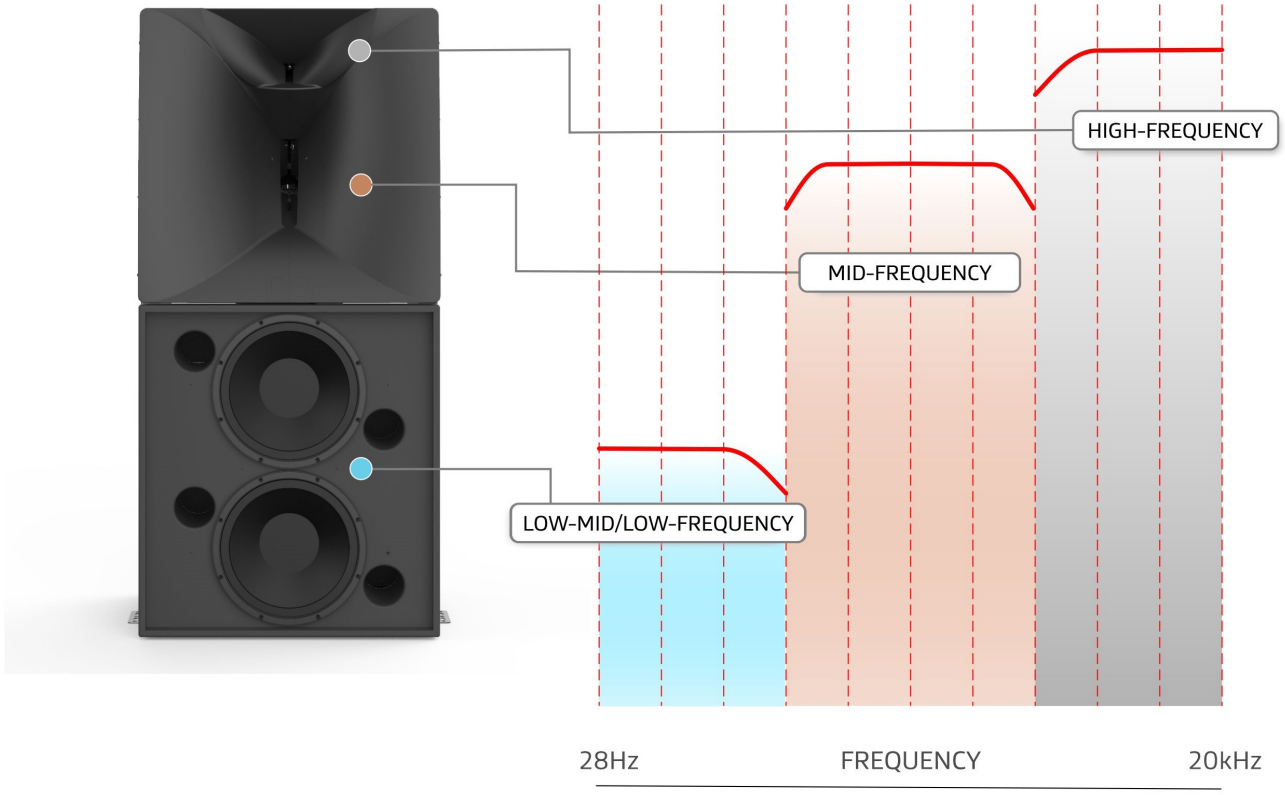
Sound and vibration from this type of speaker system is high and may cause cabinets to shift. Failure to secure the bottom speaker cabinet to the mounting surface may result in a tip/fall of the entire system which may cause damage or injury. Proper selection of mounting hardware is not included and 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 System 131
Performance

Tri-Amp Operation (System 131)

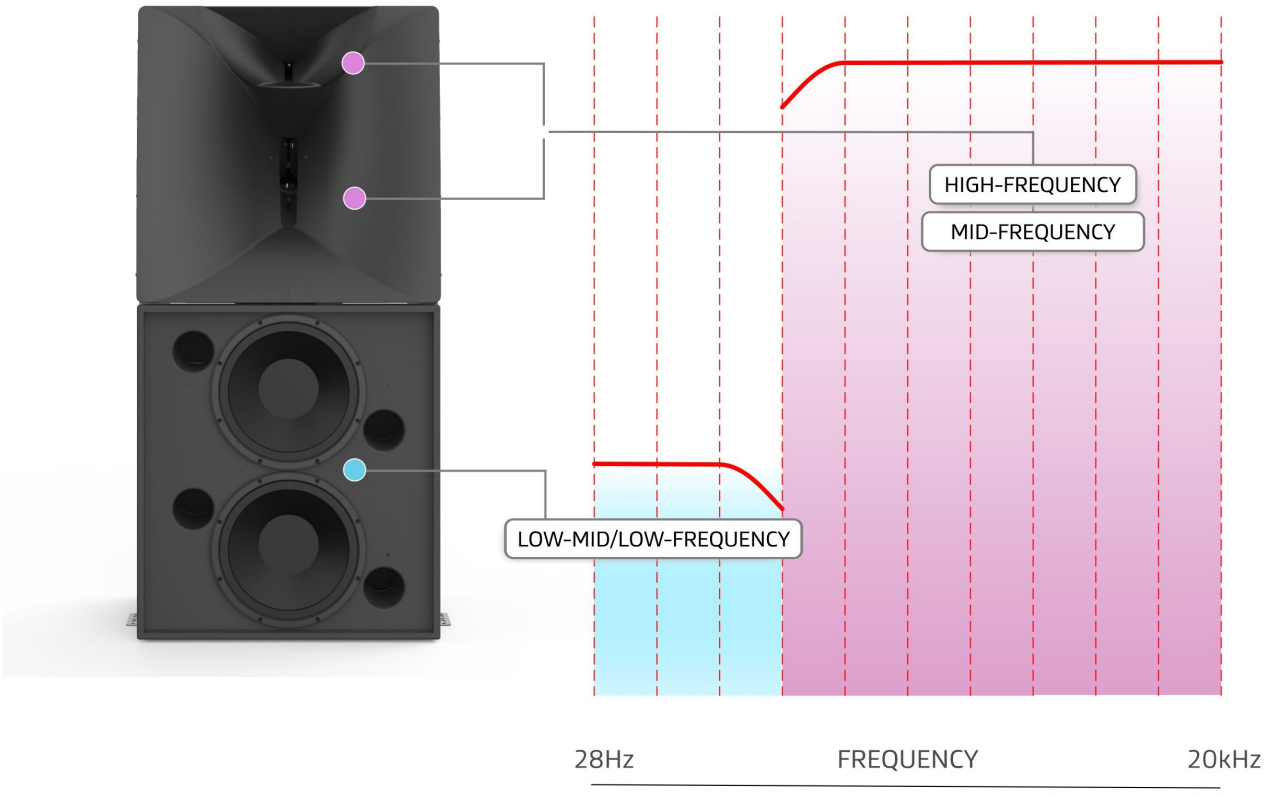
- CS131MH mid and high-frequency drivers receive separately processed signals from (2) independent amplifier channels
- CS136LF single module delivers low-mid and low information using either one amp channel at 4 Ohms powering both woofers, or two amp channels at 8 Ohms powering individual woofers
- The crossover frequencies marked in red are derived from the Dolby Cinema Processor, or a 3rd party processor.



Dolby System 131
Performance

Bi-Amp Operation (System 131)

- CS131MH mid and high-frequency drivers utilize the on-board passive crossover that is sent a single signal from one amplifier channel
- CS136LF single module delivers low-mid and low information using either one amp channel at 4 Ohms powering both woofers, or two amp channels at 8 Ohms powering individual woofers
- The crossover frequencies marked in red are derived from the Dolby Cinema Processor, or a 3rd party processor.



Dolby System 131

Specifications

Frequency Range[1]	31Hz - 20kHz
Usable LF response[2]	28Hz
Coverage window (asymmetrical)[3]	55° top horizontal, 100° bottom horizontal, 50o vertical
CS131MH passive mode rated impedance	8 ohms
CS131MH bi-amp mode rated Impedance	MF 8 ohms / HF 8 ohms
CS136LF rated impedance	4 ohms / 8 ohms independent drive
CS131MH passive mode sensitivity @ 1 watt[4]	103dB
CS131MH bi-Amp mode sensitivity @ 1 watt[5]	MF 109dB / HF 105dB
CS136LF sensitivity @ 1 watt[6]	102dB
CS131MH passive mode power handling[7]	300W @ 49Vrms
CS131MH bi-Amp mode power handling[8]	MF 80W @ 25.3Vrms / HF 70W @ 23.7Vrms
CS136LF power handling[9]	1400W @ 74.8Vrms
CS131MH passive mode maximum continuous SPL @ 1 meter[10]	128dB
CS131MH bi-amp mode maximum continuous SPL @ 1 meter[11]	130dB (MF 128dB + HF 124dB)
CS136LF maximum continuous SPL @ 1 meter[12]	133dB
System 131 maximum summed continuous SPL @ 1 meter[13]	134dB
Transducers:	LF 15" x 2 | MF - 2" Composite | HF - 2" HT Polymer
Input	Spring terminal block (Advanced Input Plate w/flip card)
Enclosure	Wood
Accessories	BKT.FLR Floor Bracket Kit (sold separately)
Dimensions	63.56"H x 30.22"W x 23.21"D (161.5 x 76.8 x 59 cm)
Weight (System Stack)	207 lb (93.8 kg)

Dolby System 131

Specifications

1. +3dB/-6dB in half space conditions using required processing
2. -10dB in half space conditions
3. Horizontal top and vertical -6dB averaged to on-axis response. Horizontal bottom -9dB averaged to on-axis response for near-field proximity compensation
4. Measured with 12 dB crest IEC 60268-1 noise @ 2.83 Vrms in wholespace conditions with required high-pass filter (HPF) and 48 dB bandwidth (BW) low-pass filter (LPF) @ the rated system frequency range
5. 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
6. Measured with 12 dB crest pink noise @ 2 Vrms in half-space conditions with required HPF and LPF
7. 12 dB crest IEC 60268-1 noise for two hours with required HPF, calculated power based on rated impedance
8. 12 dB crest pink noise for two hours with required HPF and LPF, based on AES2-2012 standard, calculated power based on rated impedance. MF used required HPF and LPF. HF used required HPF and 48 dB BW LPF at the rated system frequency range
9. 12 dB crest pink noise for two hours with required HPF and LPF, based on AES2-2012 standard, calculated power based on rated impedance
10. Calculated from rated sensitivity and power
11. MF and HF calculated from rated sensitivity and power. Total SPL is a noncoherent summation
12. Calculated from rated sensitivity and power
13. LF, MF and HF summed individually as a noncoherent summation. LF max SPL reduced 1dB for content spectrum system power balancing

This documentation applies to CID1029 and CID1025

The English version of this document is the only legally binding version.
Translated versions are not legally binding and are for convenience only.

**Specifications are subject to change without notice.

Dolby System 131

Frequently asked questions

What is the System 131?

• The new Dolby System 131 is the newest addition to the growing family of Dolby-branded speakers for cinema. It is a point-source screen speaker designed for large auditoriums up to approximately **111 feet (34 m)** in depth.

Why did Dolby develop the System 131?

• Dolby is continually striving to bring the best immersive experiences to audiences. With that in mind we endeavored to apply all of our engineering knowledge to creating best-in-class screen speakers that would be worthy of the Dolby brand. These speakers bring exceptional performance combined with measurable value to customers seeking to **elevate** their customers' **audio experience**.

Dolby System 131

Frequently asked questions

Why should I buy these over any other competing screen speaker?

- The System 131 delivers more consistent audio coverage; has less distortion in critical frequencies; has more low-end; and is easier to install than other speakers in its class

When can I buy a System 131

- Product availability is currently targeted for Winter 2021

Why is this a DOLBY speaker, and not an SLS speaker?

- We have engaged our industrial design, engineering, product management and support teams to evolve the current SLS speaker portfolio into an even more performant, ergonomic and aesthetic Dolby branded speaker solution that is reflective of the quality and innovation shown in the rest of our professional cinema product line

Dolby System 131

Frequently asked questions

What are the main features?

- Patented **asymmetrical horn design** with front-to-back volume shading for more concise coverage
- Pro audio industry quality hi-frequency compression driver with **lower distortion**
- Neodymium powered, 2” mid-frequency compression driver coupled in close vertical proximity to the high frequency driver, yielding improved pattern control
- **Advanced input plates** with unique flip-card electrical routing and “no-tool” connection
- Exceptionally rigid bracing and stringent vibration & drop testing
- Integrated **balanced handles** for easier handling and installation
- **Shallow**, **23.21” (59 cm) depth** and laterally mounted input plate enable both easy installation and service access in challenging spaces

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