



CELLO SERIES RR 212h

Compact Design, Massive Impact: Loudspeakers that Deliver

The Cello RR 212h is a bi-amped two-way cabinet designed for power and voice propagation. Its exceptional sound reinforcement uses a pair of customized dual 12" (300 mm) low-frequency transducers with a 3" (77 mm) voice coil. The high-frequency section is reinforced with a powerful 2" (50 mm) compression driver having a 2.5" (65 mm) voice. These are mounted on a constant directivity rotatable 60° x 40° horn.

The RR 212h is made of Baltic birch ply and is intended for touring and high-end installations, particularly where serious SPLs are required while

keeping vocal propagation in mind. A smart design with clever construction contributes to its relatively compact size.

The use of a CSC Maestro MS 26 controller is recommended with the RR 212h. This cabinet is perfect for live applications or a nightclub.

The touring RR 212h is a perfect match with the CR 218s, RRH 218s and the RR 218s sub-woofers.

Flying rails on its side and behind are standard hardware for ease of mounting. It is available in nontoxic black texture paint with a top hat and rubber feet as standard accessories.

KEY FEATURES

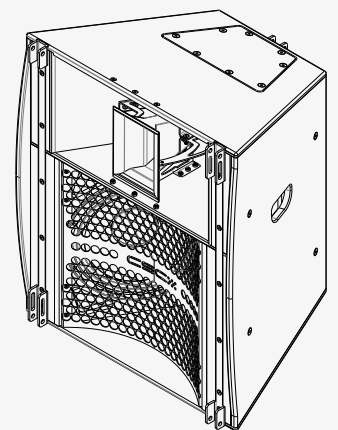
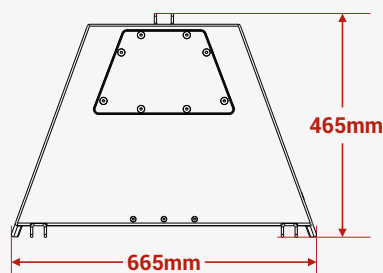
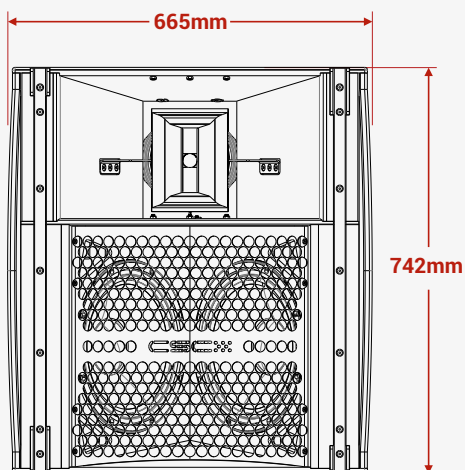
- Compact bi-amped two-way system
- 60° x 40° Dispersion
- Installing rails on its sides & behind

SYSTEM APPLICATIONS

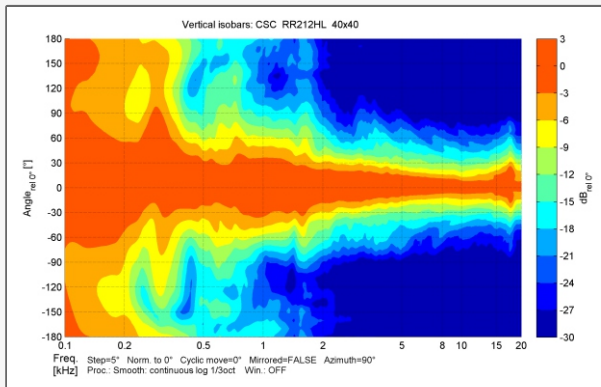
- Concerts & live bands
- Spacious auditoriums
- Worship centers
- Enhancement of club sound
- Main PA for large installations

MODEL NO	RR 212hl-40
Type	Bi-amped, semi horn-loaded, three-way, Long throw, Mid-high
Frequency Response	75 Hz - 20 kHz
Drivers	LF: 2x12" with a 2.56" V C, MF: 8" with a 2" VC and HF:1" with a CD 1.4" VC
Sensitivity (1 W / 1 m)	LF : 103 , HMF : 108 dB
Maximum Spl Continuous/max	LF : 130 , HMF : 130 dB
Maximum Spl Peak	LF : 136 , HMF : 136 dB
Nominal Impedance	LF ; 8 ohms , HMF :8 ohms
Dispersion	40° x 40°
Crossover	LF/HMF active, MF/HF passive
Enclosure	Baltic birch ply
Finish	Non-toxic Textured black paint
Protective Grill	Perforated Powder-coated Steel
Connectors	2 x Neutrik NL8
Pin Connections	Input LF: ± 3 , HF: ± 4 Link through LF ± 3 , HF: ± 4
Standard Colours	Black
Fitting	Side Rails and Flying Frame
Horn	Non Rotatable
Nominal/ AES Power	600/250/60 watts
Maximum/ Continuous/ Program Power	1200/500/120 watts
Peak Power	2400/1000/240 watts
Accessories	Speaker ground stacking separator, felted waterproof covers, flying hardware
Dimensions For Product (in mm)	(W) 665 x (H) 742 x (D) 465
Dimensions Including Packing (in mm)	(W) 755 x (H) 810 x (D) 540
Net Weight (kgs)	41
Shipping Weight (kgs)	46

Mid highs measured on-axis in full space @ one watt/1-meter using band-limited pink noise in the endeavour to continuously improve the product with design refinements introduced into existing products. Any current CSC product may differ in some respect from its published description. However, this will always equal or exceed the original design specifications. Every CSC Product is built to the highest standards and tested to ensure that it meets the performance criteria specified.

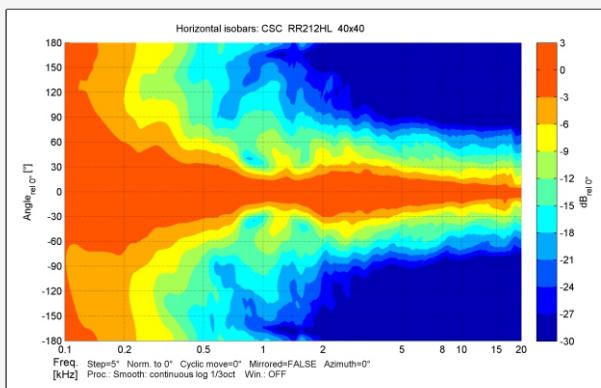


Vertical Polar Coverage (-6 dB)



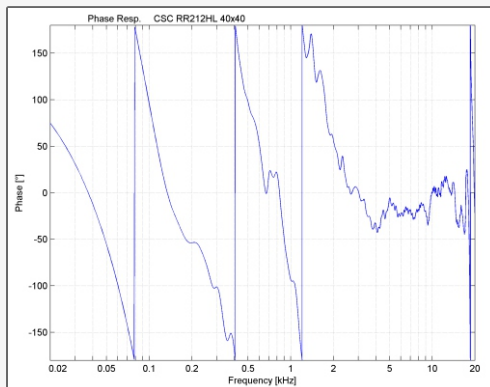
Designed for array configurations, the RR 212hl-40, RR212HL-60 and RR212HL-90 maintain a highly controlled vertical dispersion of 40°, enable tailored vertical coverage in flown or stacked deployments.

Horizontal Polar Coverage (-6 dB)



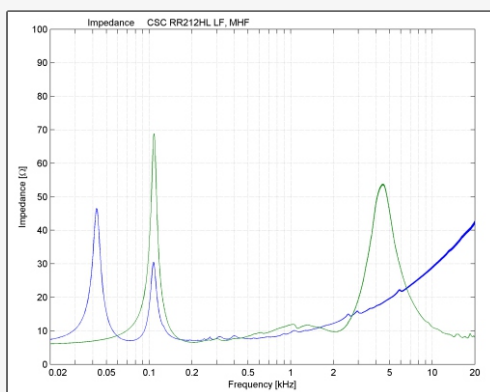
Designed for array configurations, the RR 212hl-40, RR212HL-60 and RR212HL-90 have three horizontal dispersion variations 40, 60 and 90 degrees.

Phase Response



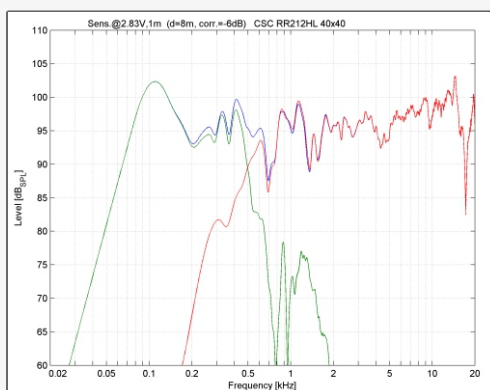
With a minus 50-degree phase angle between 2kHz and 20kHz it ensures accurate midrange propagation. This performance ensures intelligible vocals and instruments in complex acoustic spaces like stadiums or cathedrals.

Impedance Plot



Maintains dual 8-ohm impedance LF and MHF. These plots aid amplifier matching and system protection in high-power installations where speaker arrays present complex loads.

Frequency Response (Crossover Split)



The 3-way system is crossed passive/active crossover topology achieves a smooth response from 70 Hz to 20 kHz.

Plot/Detail**Why It's Important****Beamwidth vs Frequency Plot**

Shows how coverage narrows or widens across different frequencies, helping optimize speaker placement and aiming in acoustically diverse spaces.

Directivity Index (DI) & Q Factor

Useful for acoustic simulation and modeling; helps predict how focused or diffuse the sound will be in complex installations.

Total Harmonic Distortion (THD)

Indicates how clean and linear the speaker remains under real-world operating power, critical for maintaining clarity at high SPL.

SPL vs Input Voltage

Linear scaling across input levels confirms robust gain handling. With peak SPLs up to 130 dB, the RR 212hl delivers impactful output while preserving fidelity, ideal for long-throw PA applications.

Sensitivity Graph

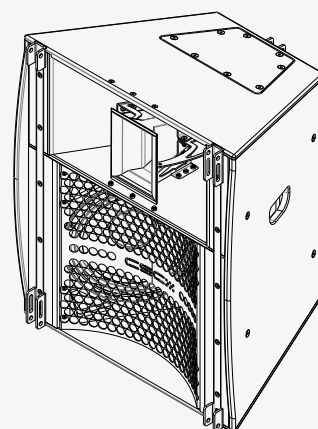
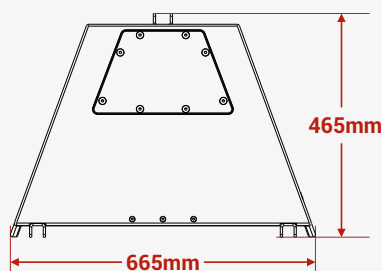
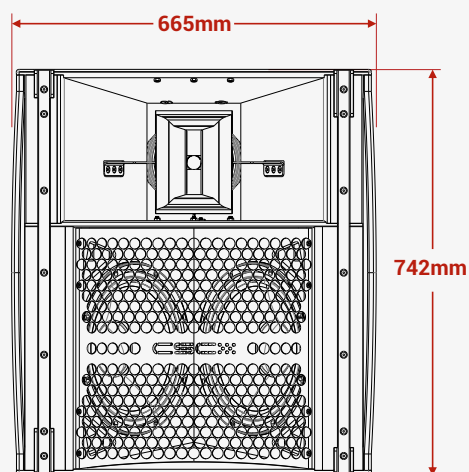
Validates the published 98 dB (1W/1m) sensitivity by frequency, ensuring accurate prediction of coverage and level in simulations.

Polars (1/3 Octave)

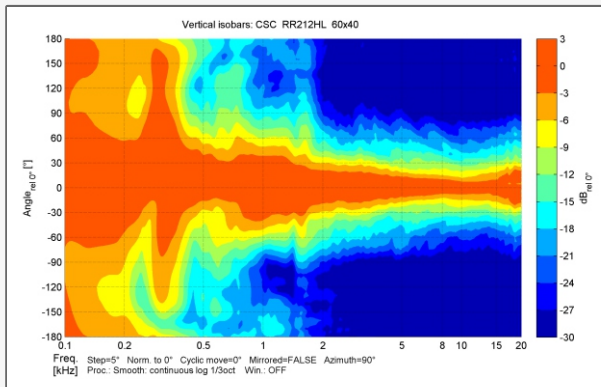
Provides off-axis response details at 500 Hz, 1 kHz, 2 kHz, 4 kHz, and 8 kHz for more accurate prediction in multi-speaker setups.

MODEL NO	RR 212hl-60
Type	Bi-amped, semi horn-loaded, three-way, Long throw, Mid-high
Frequency Response	75 Hz - 20 kHz
Drivers	LF: 2x12" with a 2.56" V C, MF: 8" with a 2" VC and HF:1" with a CD 1.4" VC
Sensitivity (1 W / 1 m)	LF : 103 , HMF : 108 dB
Maximum Spl Continuous/max	LF : 130 , HMF : 130 dB
Maximum Spl Peak	LF : 136 , HMF : 136 dB
Nominal Impedance	LF ; 8 ohms , HMF :8 ohms
Dispersion	40° x 60°
Crossover	LF/HMF active, MF/HF passive
Enclosure	Baltic birch ply
Finish	Non-toxic Textured black paint
Protective Grill	Perforated Powder-coated Steel
Connectors	2 x Neutrik NL8
Pin Connections	Input LF: ± 3 , HF: ± 4 Link through LF ± 3 , HF: ± 4
Standard Colours	Black / White
Fitting	Side Rails and Flying Frame
Horn	Non Rotatable
Nominal/ AES Power	600/250/60 watts
Maximum/ Continuous/ Program Power	1200/400/120 watts
Peak Power	2400/800/240 watts
Accessories	Speaker ground stacking separator, felted waterproof covers, flying hardware
Dimensions For Product (in mm)	(W) 665 x (H) 742 x (D) 465
Dimensions Including Packing (in mm)	(W) 755 x (H) 810 x (D) 540
Net Weight (kgs)	41
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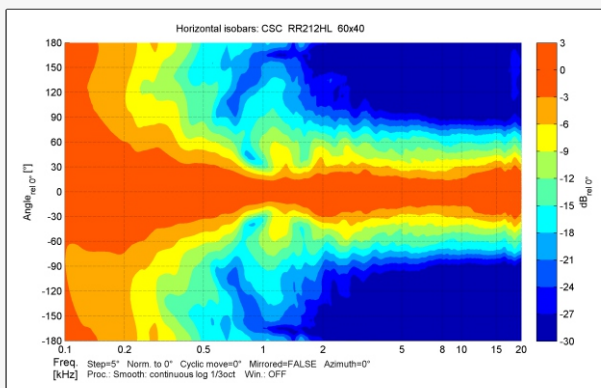


Vertical Polar Coverage (-6 dB)



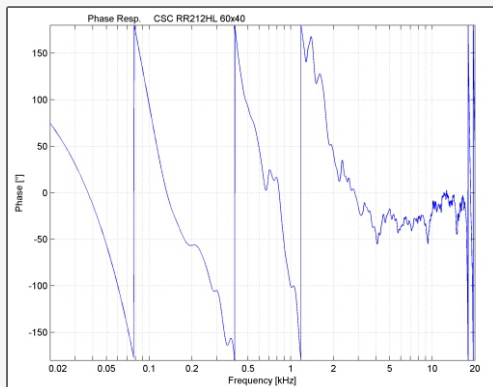
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Horizontal Polar Coverage (-6 dB)



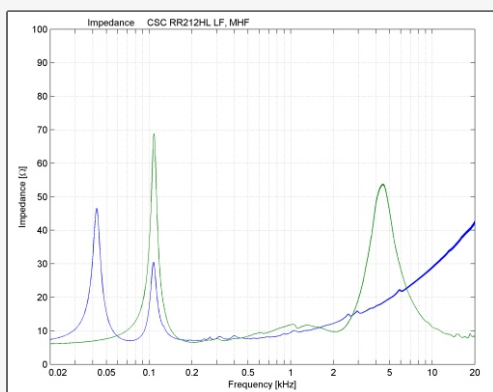
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Phase Response



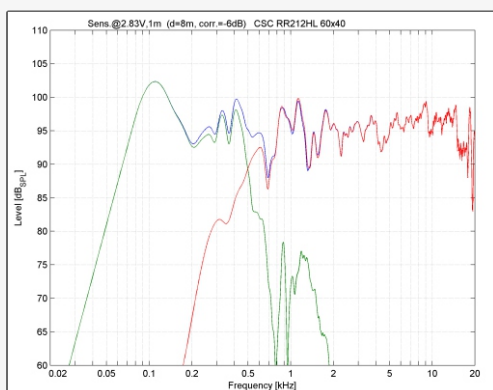
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Impedance Plot



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Frequency Response (Crossover Split)



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Plot/Detail**Why It's Important****Beamwidth vs Frequency Plot**

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Total Harmonic Distortion (THD)

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SPL vs Input Voltage

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Sensitivity Graph

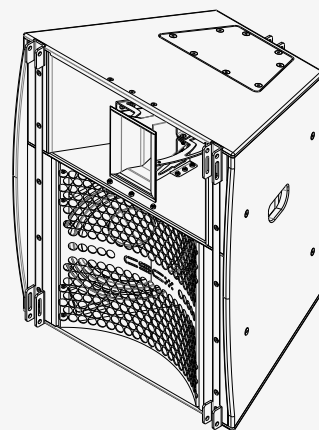
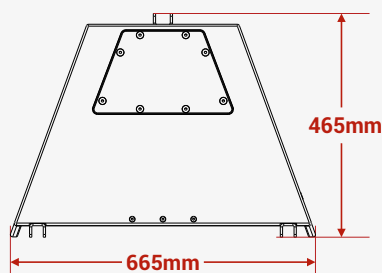
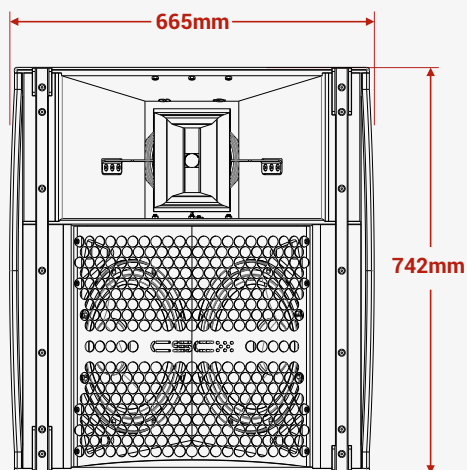
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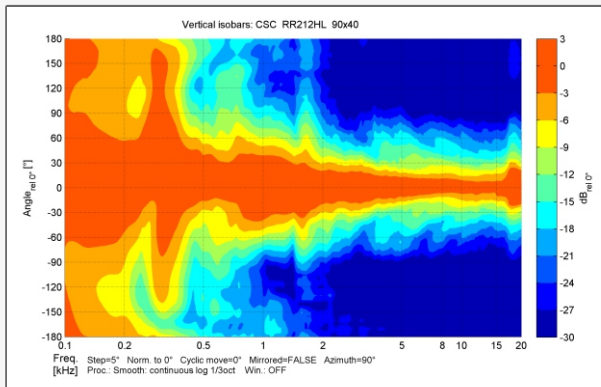
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MODEL NO	RR 212hl-90
Type	Bi-amped, semi horn-loaded, three-way, Long throw, Mid-high
Frequency Response	75 Hz - 20 kHz
Drivers	LF: 2x12" with a 2.56" V C, MF: 8" with a 2" VC and HF:1" with a CD 1.4" VC
Sensitivity (1 W / 1 m)	LF : 103, HMF : 108 dB
Maximum Spl Continuous/max	LF : 130, HMF : 130 dB
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Nominal Impedance	LF ; 8 ohms, HMF :8 ohms
Dispersion	40° x 60°
Crossover	LF/HMF active, MF/HF passive
Enclosure	Baltic birch ply
Finish	Textured black paint
Protective Grill	Perforated Powder-coated Steel
Connectors	2 x Neutrik NL8
Pin Connections	Input LF: ± 3 , HF: ± 4 Link through LF ± 3 , HF: ± 4
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Fitting	Side Rails and Flying Frame
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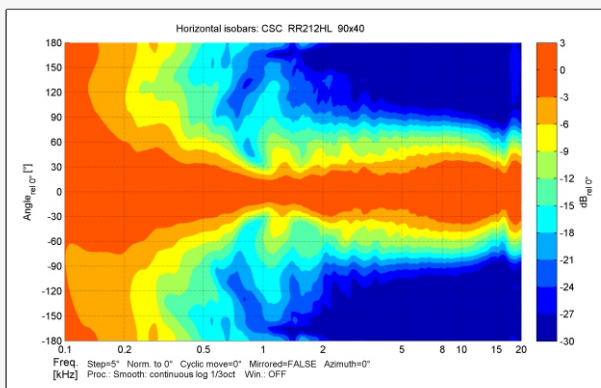


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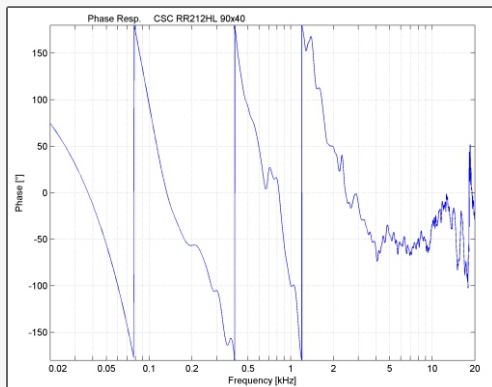
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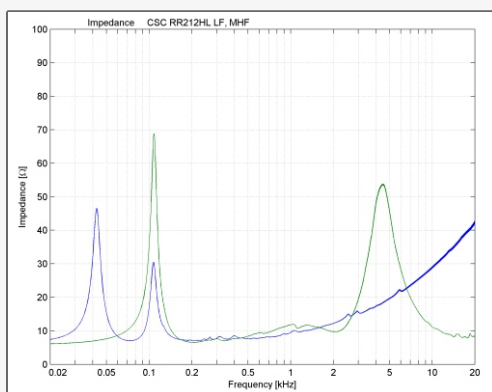
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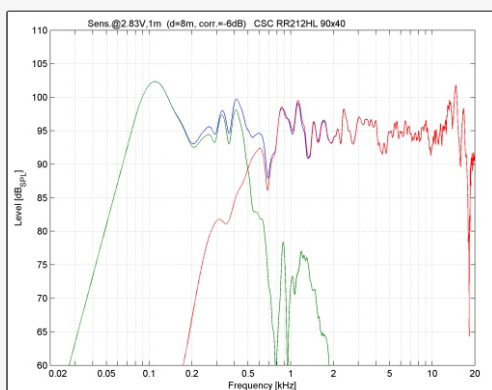
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