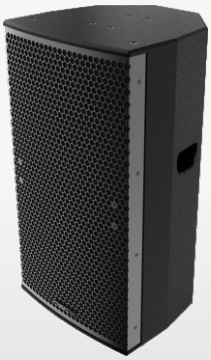


CELLO SERIES CF 12h

Compact Design, Massive Impact: Loudspeakers that Deliver

The Cello CF 12h is a powerful, versatile, bi-amped two-way mid-high cabinet perfectly designed for installation and aimed at the high end live band market. The cabinet is un-coloured and transparent. Crafted in Baltic Birch. It has the flexibility to suit even the most demanding applications.

It features a powerful 12" (300 mm) low frequency driver and a 2" (50 mm) compression driver with a 3" (77 mm) voice coil mounted on a constant directivity 60° x 40° horn. Depending on the application, the cabinet can be used in either its vertical or horizontal orientation.

The Maestro MS 26 controller is configured to perform with it's EQ and limiter functions are pre-loaded in the controller. Contrabass CB 215s, CR 18s, RRH 218s, RR 218s, CR 218s and RR 215s are a perfect match for CF 12h. ST 18s, RR 212s.

KEY FEATURES

- Compact, bi-amped and two way system
- 60° x 40° horn
- Mounting points behind and on top of the cabinet
- Large port behind the cabinet
- Top Hat

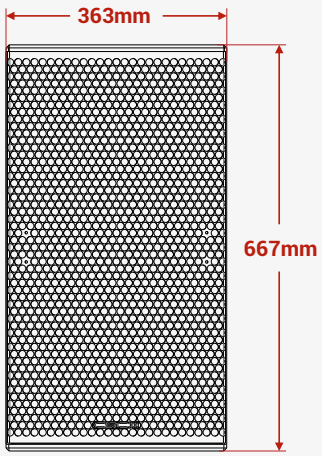
SYSTEM APPLICATIONS

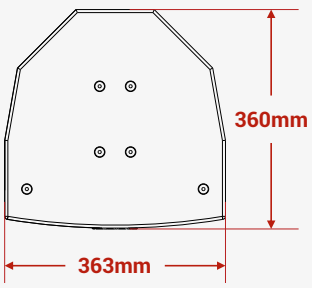
- Live performances
- Clubs
- Main PA for large installs
- Stadiums and large convention centers
- Auditoriums
- Places of Worship

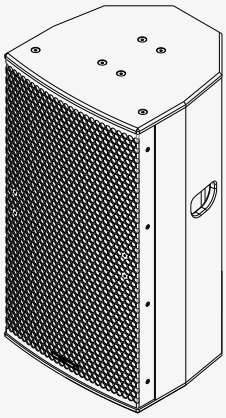
CREATIVE SOUND CONCEPTS

MODEL NO	CF 12h
Type	Bi-amped, two way mid high
Frequency Response (1)	65 Hz-17.5 kHz ± 3 dB
Drivers	LF: 12" (300 mm) with a 3" (77 mm) voice coil, HF: 2" (50 mm) compression driver with a 3" (77 mm) voice coil
Sensitivity (1 W / 1 m)	98/109 dB
Maximum SPL (9)	125/129 dB continuous, 131/ 135 dB Max
Nominal Impedance	8/8 ohms
Dispersion	60° x 40°
Crossover	HPF 55 Hz full range / 100 Hz with sub
Enclosure	Baltic birch ply
Finish	Non-toxic Textured black paint
Protective Grill	Perforated steel
Connectors	2 x Neutrik NL4
Pin Connections	Input: LF:± 1, HF: ± 2; Link through LF:±1, HF:±2
Standard Colours	Black
Fittings	Rear / Top standard mounting points, Top hat
Horn	Rotatable
Nominal/ AES Power	500 watts / 100 watts
Maximum/ Continuous/ Program Power	1000 watts / 200 watts
Peak Power	2000 watts / 400 watts
Accessories	Wall / ceiling mount bracket, Extension pipe
Dimensions - Product (in mm)	(W) 363 x (H) 667 x (D) 360
Dimensions - Including packing (in mm)	(W) 430 x (H) 725 x (D) 430
Net weight (kgs)	29
Shipping Weight (kgs)	31

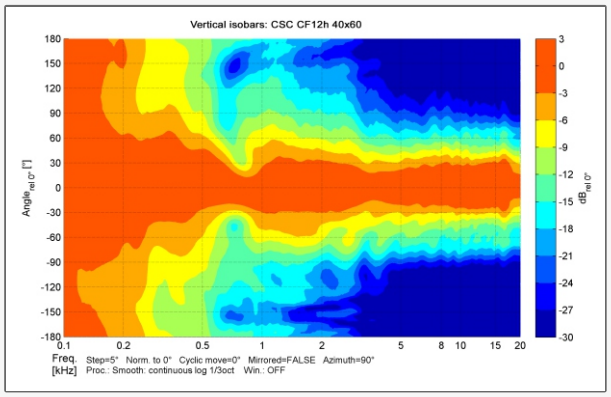
Mid highs measured on-axis in full space @ one watt/1-meter using band-limited pink noise in the en-devour to continuously improve the product with design refinements introduced into existing products. Any current CSC product may differ in some respect from its published description. However, this will 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.

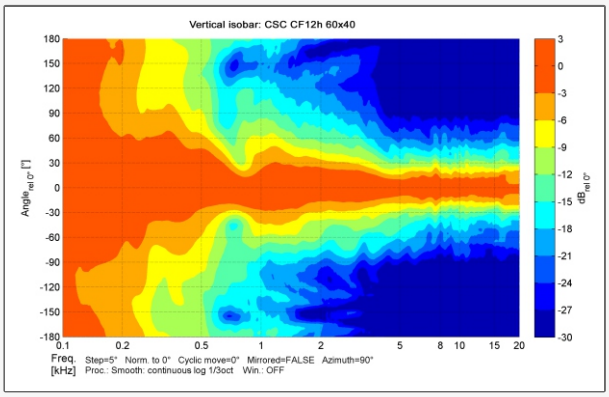






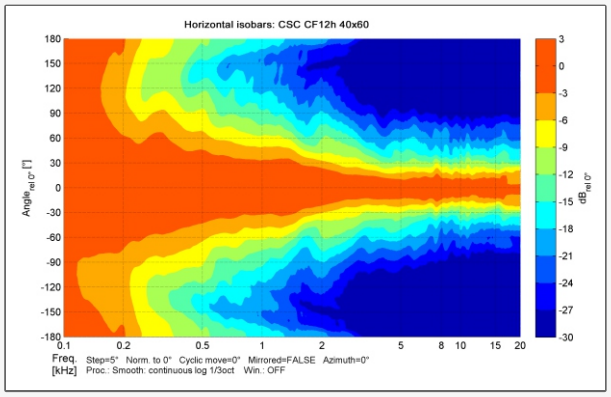
Vertical Polar Coverage (-6 dB)

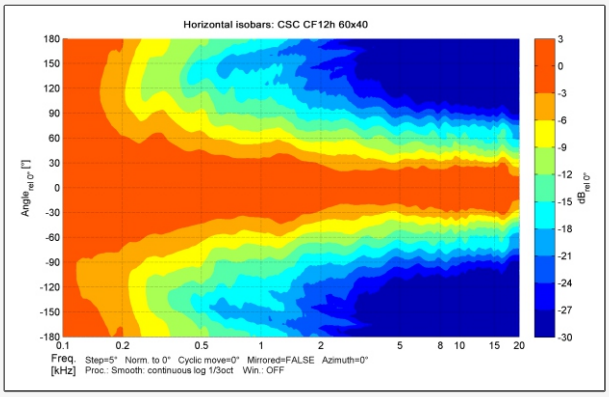




The CF 12h delivers stable vertical dispersion of 40-degrees. These isobar contours are smooth and consistent tonal clarity across all audience elevations.

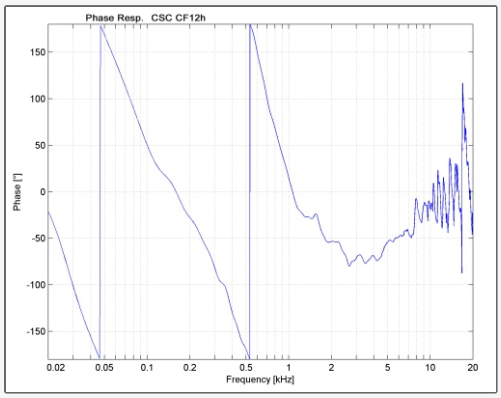
Horizontal Polar Coverage (-6 dB)





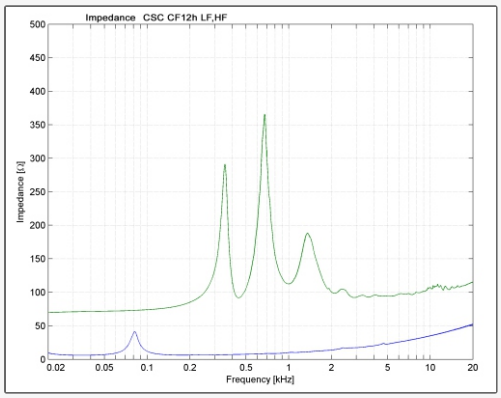
With its constant directivity horn, the CF 12h has a stable and smooth 60-degree horizontal coverage. This helps maintain consistent sound quality across seating rows.

Phase Response



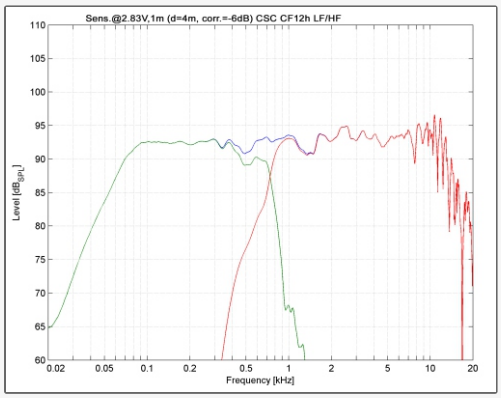
CF 12h has a smooth phase from 600 onwards up to 10k shift. This contributes to excellent vocal clarity. The coherent midrange phase response ensures tight imaging,

Impedance Plot



The CF 12h maintains an 8-ohm nominal impedance for the LF section.

Frequency Response (Crossover Split)



Extending from 68 Hz to 17.5 kHz, the CF 12h offers clean full-range reproduction. The defined bi-amp crossover region ensures that both LF and HF drivers operate optimally, eliminating harshness at transition points.

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	This chart confirms a steady increase in SPL as input voltage scales, maxing around 122 dB. Ideal for setting system limiters and matching the cabinet with appropriate amplifier.
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.