



## **CELLO SERIES HARMONICA 210**

Powerful Performance Meets Perfect Dispersion.

The Harmonica 210 is a compact, two-way, biamplified line array loudspeaker designed for professional applications, featuring an innovative isophasic horn design for precise wavefront control.

The unique design results in an almost seamless connection of the horn openings in the high frequency response range. This design also makes it possible to centralize the sound sources in the mid-range. Result: Improved dispersion characteristics delivering exceptional performance, clarity, and versatility for large concerts, clubs, stadiums, and demanding touring or installation environments. This line array element is engineered to deliver high output, and precise coverage for professional sound reinforcement applications. It combines the power and punch of dual 10" low-frequency drivers with the articulate high-frequency reproduction of a large 1.4" exit compression driver with a 77mm voice coil, resulting in a versatile and potent building block for scalable line array systems. The design of the hardware makes it possible to cover all applications of a line array with minimum effort. A frame can be used for both ground stacking and rigging. Operation is intuitive and simple. This new design language leads to new visual aesthetics and application optimization capabilities. The generous

dimensioning of the components leads to many years of unproblematic functionality.

## **KEY FEATURES**

- Precision-engineered waveguide geometry to minimize inter-cabinet interference.
- Perfectly tune diso-phasicwave guide for flat wave front and optimal phase response
- · Long wave guide length for wide frequency control
- Extreme directivity control in HF section

## SYSTEM APPLICATIONS

- · High-end permanent installations
- · Demanding touring applications Concert venues
- Theatres
- Auditoriums
- Outdoor events



TypeTwo-way bi-amped line array elementFrequency Response (1)55 Hz - 20 kHz ± 3dBDriversLF: 2 x 10" neodymium drivers with a 3" voice coil HF: 1.4" neodymium compression driver with a 3" voice coil HF: 1.4" neodymium driver with a 3" voice coil HF	MODEL NO	HARMONICA 210
Interfact of the EnvironmentDriversLF.2 x 10" neodymium drivers with a 3" voice coil HE 1.4" neodymium compression driver with a 3" voice coil mounted on a iso-phasic waveguide.Power handling AES800/100 WattsSensitivity (1 W / 1 m)LF. 101dB, HF. 110 dBSPL Nominal (single line array element)LF. 130 dB,Nominal ImpedanceLF. 8 Ohms, HF. 8 OhmsDispersion80° (H) x 15° (V)CrossoverDepending on array size (presets available)EnclosureBaltic birch plyFinishNon Toxic Black Textured PaintProtective GrillTreated and coated alloy steel grill with acoustic transparent fabricConnectors2x Neutrik NL8Pin ConnectionsLF±1, Link through LF±2Rated Power handling (AES)900 wattsMaximum/ program power1600 wattsPeak power3200 wattsAccessoriesFlying frame felt waterproof covers, Flying	Туре	Two-way bi-amped line array element
Compression driver with a 3" voice coil mounted on a iso-phasic waveguide.Power handling AES800/100 WattsSensitivity (1 W / 1 m)LF: 101dB, HF: 110 dBSPL Nominal (single line array element)LF: 130 dB,Nominal ImpedanceLF: 8 Ohms, HF: 8 OhmsDispersion80° (H) x 15° (V)CrossoverDepending on array size (presets available)EnclosureBaltic birch plyFinishNon Toxic Black Textured PaintProtective GrillTreated and coated alloy steel grill with acoustic transparent fabricConnectorsLF: 1, Link through LF: 2Rated Power handling (AES)900 wattsMaximum/ program power1600 wattsPeak power3200 wattsAccessoriesFlying frame felt waterproof covers, Flying	Frequency Response (1)	55 Hz - 20 kHz ± 3dB
Sensitivity (1 W / 1 m)LF: 101dB, HF: 110 dBSPL Nominal (single line array element)LF: 130 dB,Nominal ImpedanceLF: 8 Ohms, HF: 8 OhmsDispersion80° (H) x 15° (V)CrossoverDepending on array size (presets available)EnclosureBaltic birch plyFinishNon Toxic Black Textured PaintProtective GrillTreated and coated alloy steel grill with acoustic transparent fabricConnectors2x Neutrik NL8Pin ConnectionsLF±1, Link through LF± 2Rated Power handling (AES)900 wattsPeak power3200 wattsAccessoriesFlying frame felt waterproof covers, Flying	Drivers	
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CrossoverDepending on array size (presets available)EnclosureBaltic birch plyFinishNon Toxic Black Textured PaintProtective GrillTreated and coated alloy steel grill with acoustic transparent fabricConnectors2x Neutrik NL8Pin ConnectionsLF±1, Link through LF±2Rated Power handling (AES)900 wattsMaximum/ program power1600 wattsPeak power3200 wattsAccessoriesFlying frame felt waterproof covers, Flying	Nominal Impedance	LF: 8 Ohms, HF: 8 Ohms
EnclosureBaltic birch plyFinishNon Toxic Black Textured PaintProtective GrillTreated and coated alloy steel grill with acoustic transparent fabricConnectors2x Neutrik NL8Pin ConnectionsLF±1, Link through LF± 2Rated Power handling (AES)900 wattsMaximum/ program power1600 wattsPeak power3200 wattsAccessoriesFlying frame felt waterproof covers, Flying	Dispersion	80° (H) x 15° (V)
FinishNon Toxic Black Textured PaintProtective GrillTreated and coated alloy steel grill with acoustic transparent fabricConnectors2x Neutrik NL8Pin ConnectionsLF±1, Link through LF±2Rated Power handling (AES)900 wattsMaximum/ program power1600 wattsPeak power3200 wattsAccessoriesFlying frame felt waterproof covers, Flying	Crossover	Depending on array size (presets available)
Protective GrillTreated and coated alloy steel grill with acoustic transparent fabricConnectors2x Neutrik NL8Pin ConnectionsLF±1, Link through LF±2Rated Power handling (AES)900 wattsMaximum/ program power1600 wattsPeak power3200 wattsAccessoriesFlying frame felt waterproof covers, Flying	Enclosure	Baltic birch ply
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Pin ConnectionsLF±1, Link through LF± 2Rated Power handling (AES)900 wattsMaximum/ program power1600 wattsPeak power3200 wattsAccessoriesFlying frame felt waterproof covers, Flying	Protective Grill	Treated and coated alloy steel grill with acoustic transparent fabric
Rated Power handling (AES)900 wattsMaximum/ program power1600 wattsPeak power3200 wattsAccessoriesFlying frame felt waterproof covers, Flying	Connectors	2x Neutrik NL8
Maximum/ program power1600 wattsPeak power3200 wattsAccessoriesFlying frame felt waterproof covers, Flying	Pin Connections	LF±1, Link through LF± 2
Peak power 3200 watts   Accessories Flying frame felt waterproof covers, Flying	Rated Power handling (AES)	900 watts
Accessories Flying frame felt waterproof covers, Flying	Maximum/ program power	1600 watts
	Peak power	3200 watts
Wave Guide Iso-phasic horn	Accessories	Flying frame felt waterproof covers, Flying
	Wave Guide	Iso-phasic horn
Standard Color Black	Standard Color	Black
Fittings All internal hardware	Fittings	All internal hardware
Dimensions - Product (in mm) (W) 732 x (H) 320 x (D) 665	Dimensions - Product (in mm)	(W) 732 x (H) 320 x (D) 665
Dimensions - Including packing (in mm)	Dimensions - Including packing (in mm)	
Net weight(kgs) 55	Net weight(kgs)	55
Shipping Weight(kgs) 8	Shipping Weight(kgs)	8

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.





