

B. CONTOUR ARRAY™ SPEAKERS



Fig. 1: CTA 208

1. THE CTA 208 MID/HIGH UNIT

Design and Construction

The CTA 208 Mid/High unit's top and bottom panels slope at an angle of 4.5°. Water-repellent, black PU lacquer coats the enclosure made of 18 mm, 13-ply birch plywood. Your choices of array curving angles (or splay) are 0°, 3°, 6° and 9°. The baffle board cover consists of a metal grille; found behind it are two CD horns equipped with acoustical lens for the four 1" drivers.

The CTA 208 weighs 29 kg. It is 51 cm wide, 52.5 cm high and 34.6 cm deep (including rigging attachments). Two grips on the side panels simplify transport and set-up.

Fully integrated rigging attachments comprising three quick-release pins and three rigging connectors, two mounted on the sides and one in the rear, serve to fly the mid/high units.

Electrical and Acoustical Data

The CTA 208 enclosure features two 8" cone chassis speakers and four 1" B&C high frequency drivers with a front-mounted acoustical lens in a CD horn configuration. An internal passive crossover with a crossover frequency of 2 kHz addresses the drivers via a special acoustic lens. The CTA 208 enclosure's nominal electrical power-handling is 500 watts RMS at 8 ohms impedance. It produces 105 dB (1W@1m) sound pressure, measured under half-space conditions. Maximum SPL measured under the same conditions at one meter is 134 dB at 10% THD. The CTA 208 radiates at a horizontal angle of 100°. Frequency response ranges from 95 Hz to 19 kHz (± 3 dB).

Connections

The ports are out of harm's way on a recessed connector panel on the CTA 208's back. It offers two Speakon® NL 4 connectors. Pin assignments are pin 1+ = mid/high +, 1- = mid/high-. Caution: Please connect just one CT 208 to each CTA 118 Sub enclosure. The second port serves to connect a power amp in parallel (up to two CTA 208 at 4 ohms).

1.1 SPECIFICATIONS, CTA 208

A professional two-way system featuring cylindrical wave technology, this cabinet serves to set up vertical line arrays and project a coherent wavefront across the entire frequency range. The precision-tuned enclosure sports two 8" midrange speakers. Four 1" high-frequency drivers address two constant directivity horns with 100° horizontal directivity via a special acoustic lens. Vertical directivity depends on the number of CTA 208s in use.

The housing is made of 15/18 mm birch plywood coated with black PU varnish. Its fully integrated rigging hardware adjusts to four 0°, 3°, 6° and 9° angles for setting up line arrays. An integrated pole mount offers two tilt angles of 3° and 11°. An impact-resistant steel grille covers the front.

The active CTA 118 Sub system subwoofer with an integrated DDO-Pro™ Controller drives the enclosure. CTA 208's frequency response (± 3 dB) ranges from 95 hertz to 19 kHz. Axial sensitivity is 105 dB, measured under half-space conditions at @ 1W / 1m. Maximum SPL measured under the same conditions with two CTA 208s is 134 dB at 10% THD. Each unit's nominal power handling is 500 watts RMS at 8 ohms.

Connectors: 1 Neutrik NL 4 Speakon®.

Dimensions (W x H x D): 51 x 52.5 x 34.6 cm

Weight: 29 kg

Model: HK AUDIO CTA 208

1.2 THE CTA 208 ENCLOSURES' TECHNICAL DATA

Nominal power handling/program/peak:	500 W RMS /1000 W/ 1500 W
Frequency response -10 dB 3):	80 Hz - 20 kHz
Frequency response +/-3 dB 3):	95 Hz - 19 kHz
Directivity:	100° horizontal
Sensitivity 1W@1m 1):	105 dB
Max. SPL calculated 1):	138 dB 2)
Max. SPL peak 1):	136 dB 3)
Max. SPL 1):	134 dB @ 10% THD (200 Hz- 5 kHz) 3)
Nominal impedance:	8 ohms
Woofer/midrange speaker:	2x 8"
High-frequency driver:	4x 1", 2" voice coil
Crossover frequency:	2 kHz, 12 dB/ octave
Connectors:	2x Speakon® NL 4
Housing (birch):	15/18 mm (1/2"), 9/13-ply
Angles up:	2x 4.5°
Finish:	Black 2-component PU lacquer
Grille:	Metal grille with black acoustic foam
Handles:	Two slot grips routed into the side panels
Rigging hardware:	DualCurve™, integrated with quick-release pins
Pole mount:	HK AUDIO DuoTilt™
Weight:	29 kg/ 63.8 lbs.
Dimensions (W x H x D):	51 x 52.5 x 34.6 cm; 20" x 20 2/3" x 13 2/3"
Accessories:	Touring flight case (2 CTA 208), rigging frame

1) Measured under half-space conditions 2) Based on peak power handling 3) Measured with 2 CTA 208s

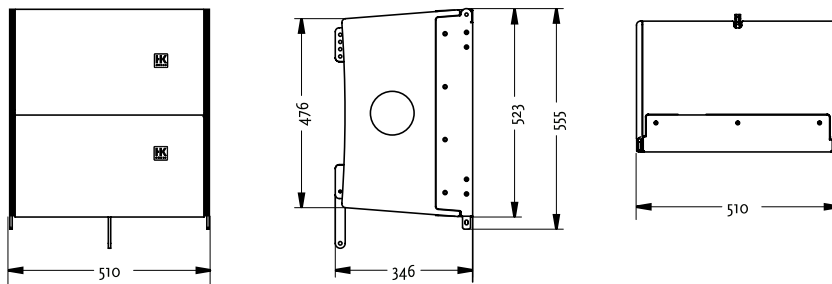


Fig. 2: CTA 208 housing dimensions in mm