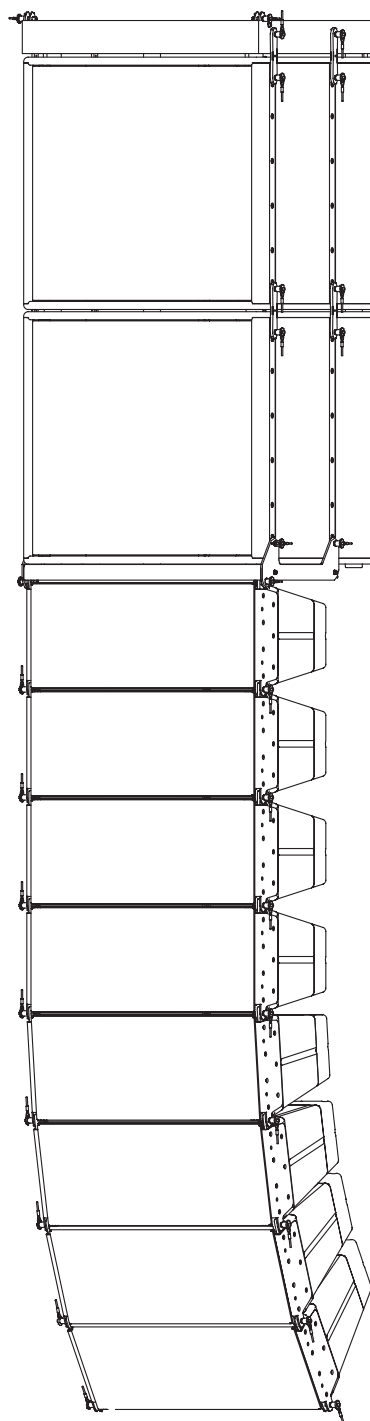
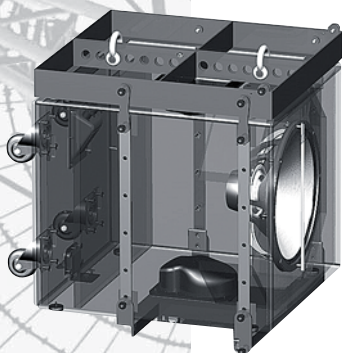




Install
Sound

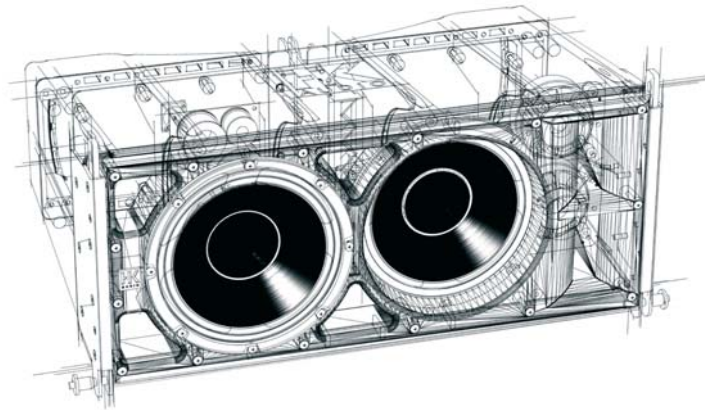
Cadis

Compact ADaptive Installation System



Cadis

Compact ADaptive Installation System



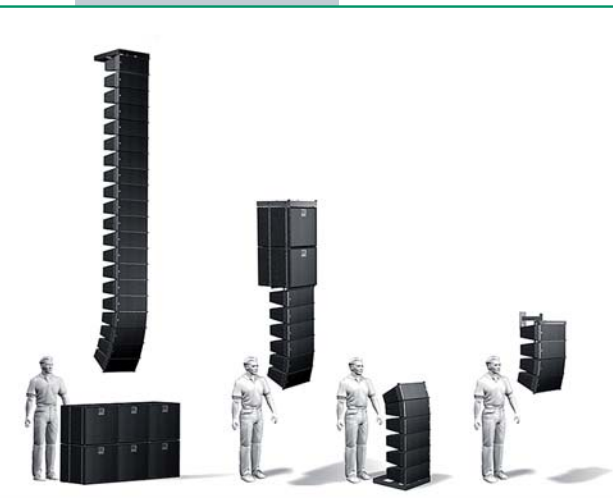
CADIS, the Installation Array from HK AUDIO, was designed first and foremost for versatility. CADIS was developed for installations in theatres, civic and community centers, houses of worship, gymnasiums, conference centers and large meeting halls, as well as outdoor installation projects such as stadiums and theme parks.

The Compact Adaptive Installation System, as it is called by its full name, is noteworthy not only for its extraordinary flexibility and sonic performance, but also for the ruggedness of its components. The CAD 208 mid-/high-range unit's

enclosure is crafted of polyamide reinforced with glass particles, a weather- and UV-resistant material that boasts extraordinary mechanical and acoustical properties. Engineered in its entirety using the BEM (Boundary Element Method), the CAD 208's baffle board is a homogeneous sound source designed to ensure optimum acoustic coupling of components, minimize distortion, and project a tightly focused pattern of throw with precise directivity.

The CAD 208 enclosure is loaded with two 8" low-frequency /midrange woofers, two 1" high frequency drivers

feeding CD horns, and a 2 ½-way crossover. The enclosure radiates sound 100° horizontally and 15° vertically, achieving excellent horizontal and vertical coverage even with just a few mid-/high-range units. The CAD 208 renders speech and syllables with remarkable clarity. Despite its compact dimensions and light weight of 16.6 kg / 36.4 lbs. (in three-way active mode without an internal crossover), it can also serve as a fullrange system, rendering canned music without requiring subwoofer.



For the best possible audio performance and coverage pattern, the CAD 208 mid/high unit can also be driven in 3-way active mode with the HK Audio FirNet™ Controller.

The subwoofer designed specifically for the system, the passive CAD 115 Sub, is loaded with a high-performance 15" neodymium loudspeaker that makes a perfect low-end complement to the CAD 208 mid/high units thanks to the quickness of speaker's response and its impulse accuracy. The CAD 115 is also outfitted with rigging hardware and can be situated either above the mid/high units in a flown array, as a

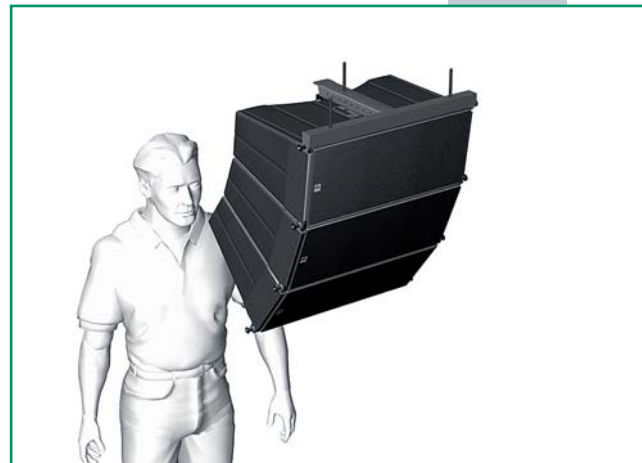
separate flown bass array, or in ground-stacking mode. For additional flexibility, other existing subwoofer models in the HK Audio Installation Line may be combined with the new CADIS CAD 208.

With its unobtrusive yet upscale appearance, the new CADIS system will blend into the interior design of any given structure quite attractively. Black and white models are both kept in stock as standard offerings, and versions in any RAL color can be special-ordered. The cabinets include several features which make installation easy and quick: the same integral 3-point

rigging system as the HK Audio Cohedra Compact Line Array, the low cabinet weight, and the choice of connection terminals. The UV-resistant weather resistant construction and the IP44 classification make CADIS an excellent choice for outdoor installations or other high-humidity locations such as indoor swimming pools. The rigging hardware, which has been safety-tested according to rigorous German standards, permits array sizes of up to twenty CAD 208 mid/high units. This allows extraordinary installation flexibility, as the same system can be configured in the most diverse ways, yet perfectly

appropriately for each individual project.

CADIS comes with all data required for the simulation program EASE (V4.0 and higher) and the aiming software EASE Focus. And of course CADIS is 100% made-in-Germany!



CADIS is optionally available in all RAL colours

CAD 208



Specifications

This professional 2 ½-way speaker system serves to set up vertical arrays that project a wide wave-front across the entire audience area.

Two 8" loudspeakers are mounted in a precision-tuned polyamide housing. Two 1" HF drivers are coupled to two CD horns with 100° horizontal and 15° vertical directivity.

The tough polyamide housing is weather- and UV-resistant. It comes in black or white, though any other RAL colors

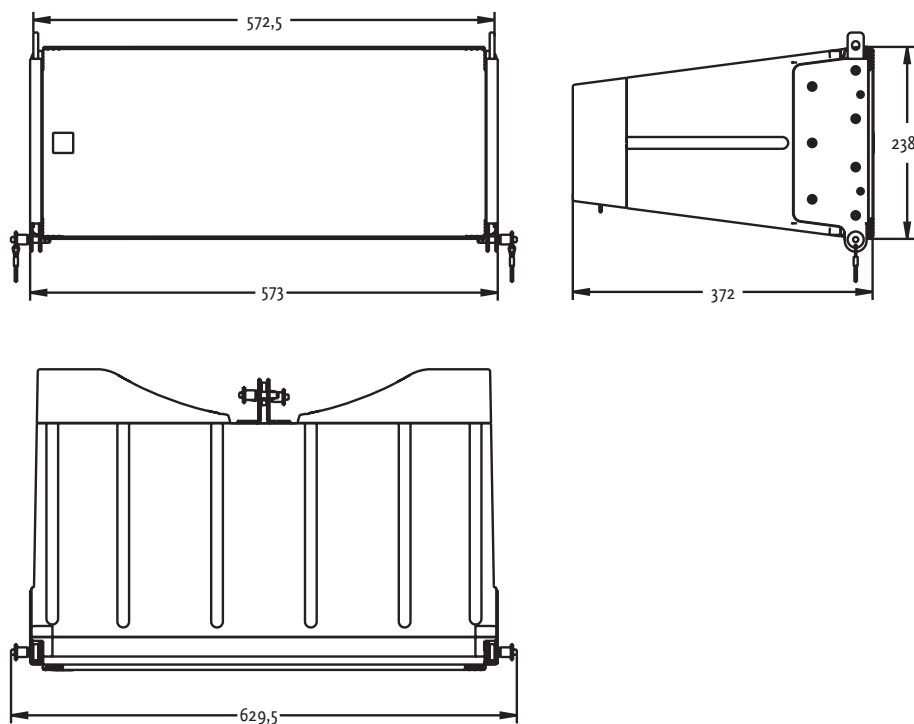
are available on demand. The fully integrated rigging hardware is adjustable from 0° to 15° in 1.5° steps.

The front grille is made of steel. The CAD 208 is certified according to the IP44 standard.

The HK Audio FirNet™ Controller or HK Audio DSM 2060 Controller paired with VX 2400 power amps serve to drive these speakers.

Frequency response ranges from 75 Hz to 18 kHz (+/-3 dB), with 95 dB axial sensitivity (one unit) @ 1W/1 m under fullspace conditions and 130 dB maximum SPL at 10% THD.

Power handling is 250 watts RMS per unit; nominal impedance is 8 ohms.



Connectors

Optionally either two NL4s for the passive or NL8s for the triamped version, Barrier-strips, or PG glands with terminals inside

Dimensions (W x H x D)

57,8 cm x 23,8 cm x 37,3 cm
22-3/4 x 9-3/8 x 14-11/16"

Weight

17.5 kg / 38.6 lbs.
with passive x-over,
16.5 kg / 36.4 lbs.
without internal x-over

Accessories

Rigging/stacking frame, connector frame for flying mid/high units in an array with subwoofers on top, wall mount, ceiling mount

Type

HK AUDIO
CADIS CAD 208
mid/high unit



CADIS is optionally available in all RAL colours

CAD 115 Sub



Specifications

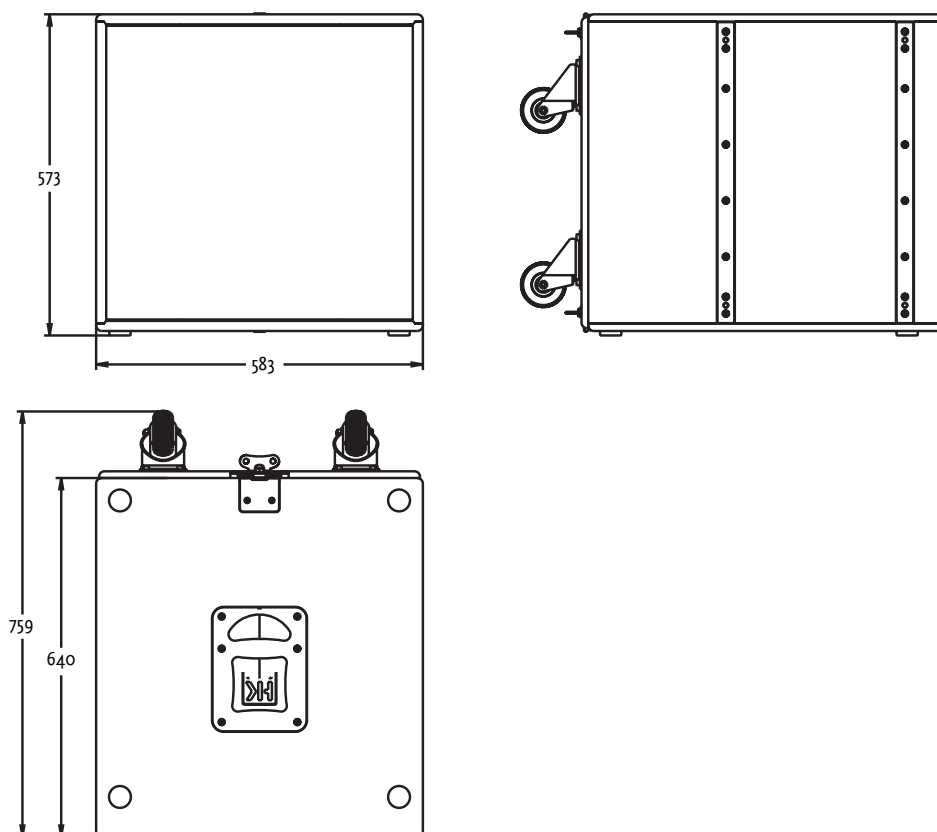
Loaded with a 15" neodymium speaker in a precision-tuned bass reflex housing, this professional-grade subwoofer delivers powerful, direct and remarkably dynamic response.

The cube-shaped enclosure is made of 18-mm birch plywood coated with black or white lacquer. Any other RAL colors are optionally available.

A rugged steel grille backed with laminated acoustic foam rubber protects the front.

Embedded rails attach the enclosure to a rigging frame and accept a connector frame for use with CAD 208 mid-/high-range units.

Frequency response ranges from 47 Hz to 150 Hz (+/- 3 dB), with 102 dB axial sensitivity @ 1W/1 m under half-space conditions and 131 dB maximum SPL at 10% THD under half-space conditions. Power handling is 600 watts RMS.



Connectors

Two NL4 Speakon

Dimensions (W x H x D)

58,3 cm x 57,3 cm x 64 cm
22-15/16 x 22-9/16 x 2-1/2"

Weight

38 kg / 83.8 lbs.

Accessories

Rigging/stacking frame,
connector frame, sub
connector set, dolly with four
100 mm casters, protective
covers

Type

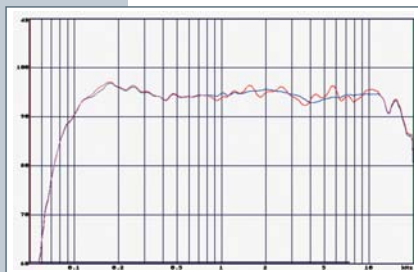
HK AUDIO
CADIS CAD 115 Sub



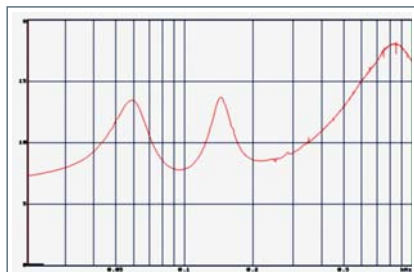
CADIS is optionally available in all RAL colours

Diagramms

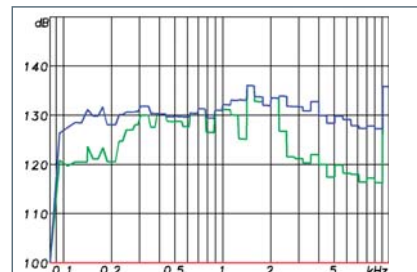
CAD 208



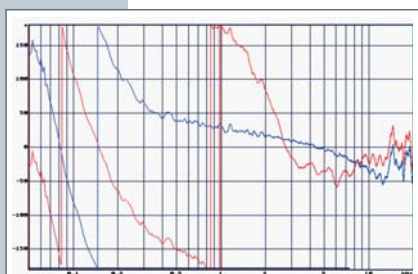
CAD 208 Freq.



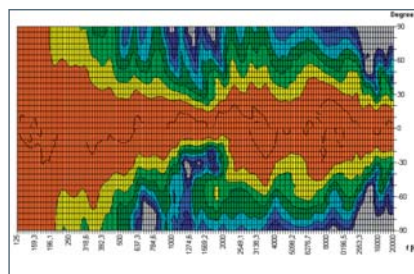
CAD 208 Impedance



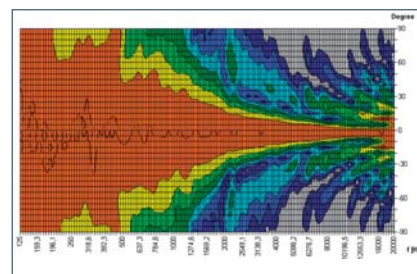
4 x CAD 208 Max SPL



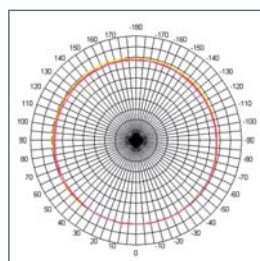
CAD 208 Phase Response



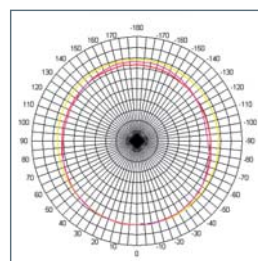
CAD 208 Directivity vertical 2D



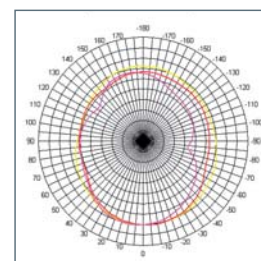
CAD 208 Directivity horizontal 2D



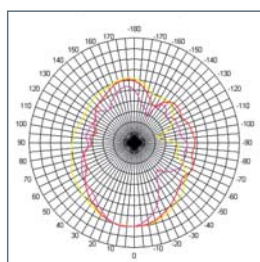
125 Hz Oct.



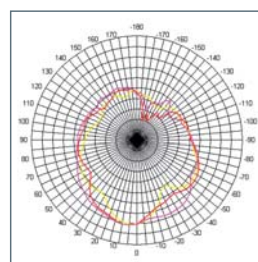
250 Hz Oct.



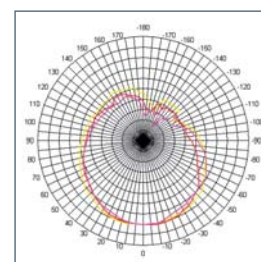
500 Hz Oct.



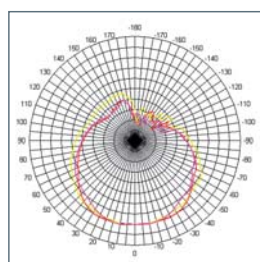
1000 Hz Oct.



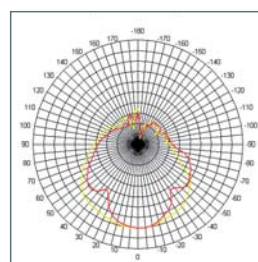
2000 Hz Oct.



4000 Hz Oct.

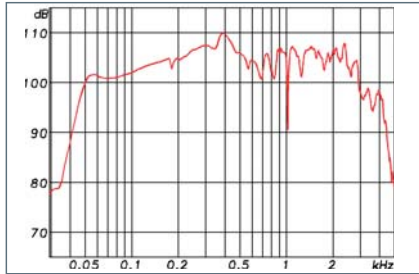


8000 Hz Oktav

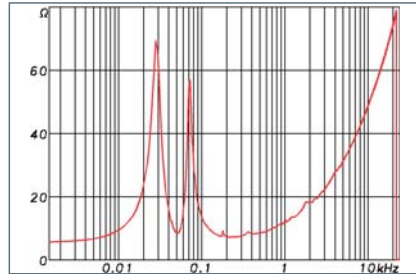


16000 Hz Oktav

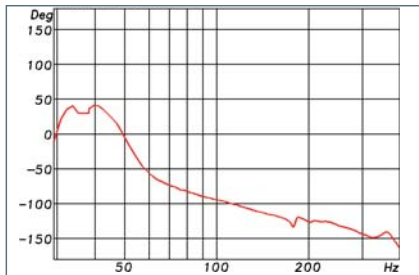
CAD 115 Sub



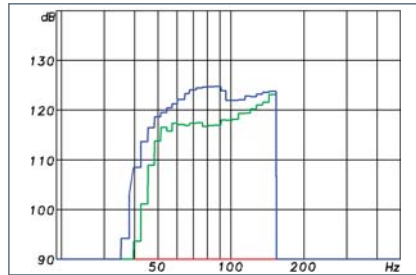
CAD 115 Sub FQ Halfspace



CAD 115 Sub Impedance



CAD 115 Sub Phase Response



CAD 115 Sub Max SPL



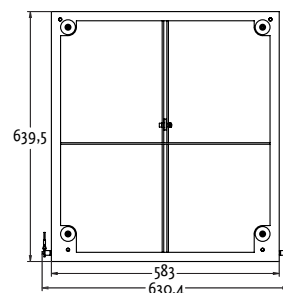
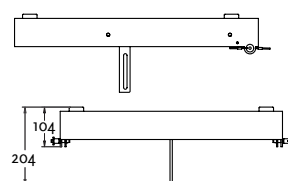
Accessories



Rigging/stacking frame

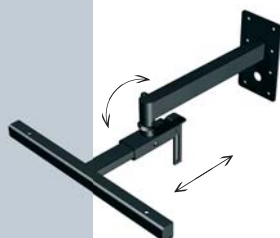
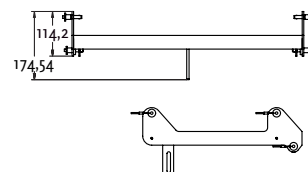
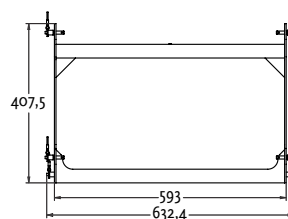
The rigging/stacking frame accepts up to 20 CAD 208 units in flown configurations or in combination with the flown CAD 115 Sub enclosure. It also serves as the base for stacked mid/high units or full-range configurations comprised of CAD 115 subwoofers and CAD 208 mid/high units.

The entire stack may be tilted forward or back to best align the system to the audience area.



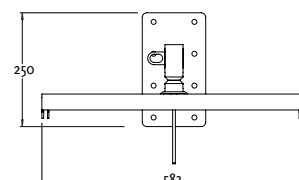
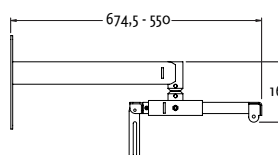
Connector Frame

The lightweight connector frame lets you rig up to ten CAD 208s under no more than two CAD 115 subwoofers.



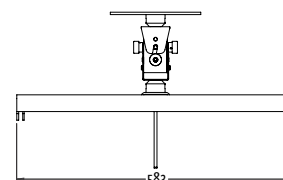
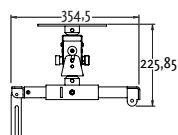
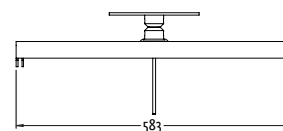
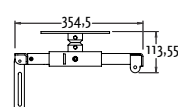
Wall mount

The CADIS wall mount consists of a T-shaped yoke and a mounting bracket. Up to four 4 mid/high units may be mounted to walls at different angles to provide the best possible alignment.



Ceiling Mount

With the CADIS ceiling mount, up to three CAD 208 mid/high units be be mounted directly to a ceiling.



Sub Connector Set

The Sub Connector Set attaches stacked CAD 115 subwoofers to the standard rigging frame in both flown and groundstacked configurations.

It stabilizes stacked arrays. A Connector Set consists of four metal plates with quick-release pins.



Technical Data

CAD 208

Power-handling nominal	250 W RMS, 500 W Prog.
Frequency response +/- 3dB	75/ 100 Hz – 18 kHz (depending on controller & length)
Axial sensitivity, 1W@1m	95 dB Fullspace 101 dB Halfspace
Max. SPL@1m	130 dB@10% THD Fullspace* 136 dB@10% THD Halfspace*
Nominal impedance	8 ohms
Speaker	2 x 8" speaker
HF drivers	2 x 1"
Directivity	100° horizontal 15° vertical
Crossover frequency	1,8 KHz, 12 dB/ octave
Connectors	- 2 x Speakon NL 4 (standard) - External terminal (optional) - PG gland, internal terminal (optional)
Housing	Polyamide
Crossover	2 ½-way passive
Filter	Crossover Controller
Finish	Black or white, on demand available in every RAL colour
Grille	Metal
Rigging hardware	Integrated 3-point
Adjustable curving angles	0°, 1.5°, 3°, 4.5°, 6°, 7.5°, 9°, 10.5°, 12°, 13.5°, 15°
Weight	17.5 kg / 38.6 lbs. passive, 16.5 kg / 36.4 lbs. tri-amped (without internal passive Xover)
Dimensions (WxHxD)	57,8 cm x 23,8 cm x 37,3 cm 22-3/4 x 9-3/8 x 14-11/16"
Accessories	Rigging/stacking frame, connector frame, wall mount, ceiling mount
Max. number of enclosures per array	up to 20 x CAD 208 cabinets

* with 4x CAD 208

CAD 115 Sub

Power-handling nominal	600 W
Frequency response +/- 3 dB	47 Hz- 150 Hz
Axial sensitivity 1W@1m	96 dB (50 Hz- 200 Hz) Fullspace 102 dB (50 Hz- 200 Hz) Halfspace
Max.SPL@1m	122 dB@10% THD, Fullspace (60Hz-150Hz) 128 dB@10% THD, Halfspace (60Hz-150Hz)
Max. SPL peak	125 dB@10% THD, Fullspace (70Hz-90Hz) 131 dB@10% THD, Halfspace (70Hz-90Hz)
Max. SPL@1m calculated	129 dB, Fullspace (2400 W Peak) 135 dB, Halfspace (2400 W Peak)
Nominal impedance	8 ohms
Crossover	via external controller
Speaker	1x 15" neodymium woofer
Connectors	2 x Speakon NL 4
Housing	18 mm birch multiply
Finish	Black or white on demand available in every RAL color
Grille	Metal
Rigging hardware	4 integrated rails
Weight	38 kg / 83.8 lbs.
Dimensions (WxHxD)	58,3 cm x 57,3 cm x 64 cm 22-15/16 x 22-9/16 x 2-1/2"
Accessories	Rigging/stacking frame, connector frame for one CAD 115 Sub and eight CAD 208 units. Set with four flying adapters and Quick Release pins for mounting up to two CAD 115 Subs and till eight CAD 208 units. Dolly with four 100 mm casters.



MUSIC & SALES GmbH • Postfach 1509 • 66595 St. Wendel • Tel. 0 68 51 - 905-0 • Fax 0 68 51 - 905 100 • install@hkaudio.de

www.hkaudio.com