

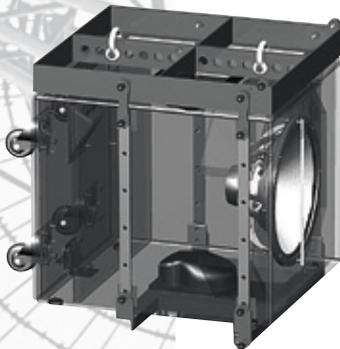
Preliminary

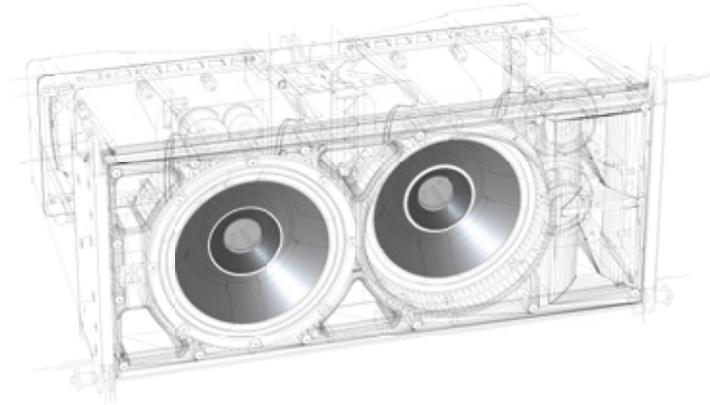


Install
Sound

Cadis

Compact ADaptive Installation System



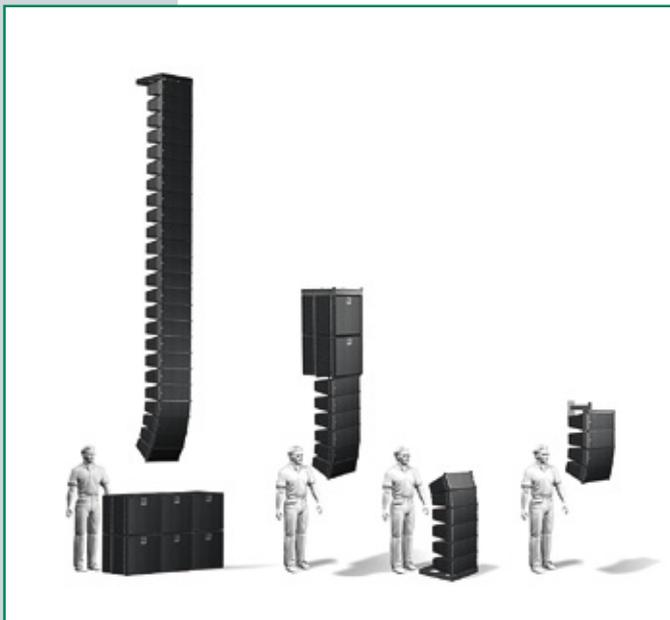


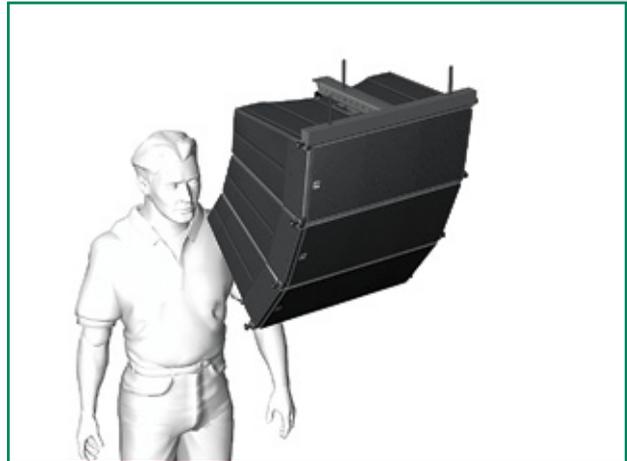
CADIS, the new Installation Array from HK AUDIO, was designed first and foremost for versatility. CADIS was developed for installations in theatres, civic and community centers, houses of worship, gymnasiums, conference centers and large meeting halls, as well as outdoor installation projects such as 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 passive CAD 208 mid-/high unit is loaded with two 8" midrange speakers, two 1" high-frequency drivers with a concentric double horn and a 2.5-way crossover network. Since the horns have a dispersion angle of $100^{\circ} \times 15^{\circ}$, it is possible to achieve an excellent horizontal and vertical coverage pattern with just a few units. Sonically, the CAD 208 produces a high degree of speech intelligibility down to the last





syllable, yet in spite of its compact size and low weight of barely 16.5 kg it can also be used as a full-range system for background music even without a 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 COHEDRA COMPACT Line Array, the low cabinet weight, and the choice

of connection terminals. The UV-resistant weather resistant construction and the IP 44 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-four 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. Simulation software as well as all necessary data for acoustic simulations with EASE or Ulysses are included with the CADIS system. And of course CADIS is 100% made-in-Germany!

CAD 208



Specifications

This professional 2 1/2-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 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 HK Audio FirNet Controller or HK AUDIO

DSM 2060 Controller paired with VX2400 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 full-space 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, Barrierstrips, or PG glands with terminals inside

Dimensions (W x H x D):
57.8 x 37.3 x 23.8 cm

Weight:

17.5 kg with passive x-over,
16.4 kg 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

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 multiply coated with black or white lacquer. 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 x 55.3 x 64 cm

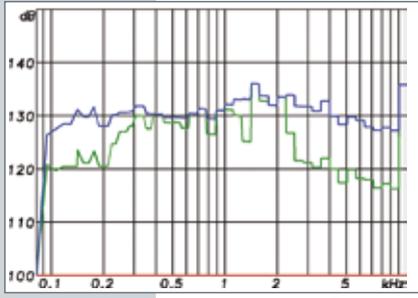
Weight: 38 kg

Accessories: Rigging/
stacking frame, connector
frame, dolly with four
100mm casters

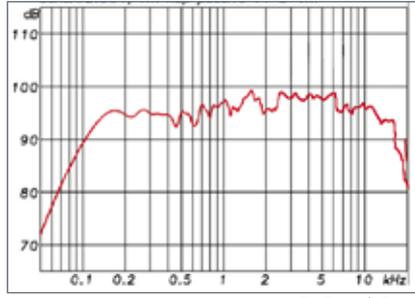
Type:
HK AUDIO
CADIS CAD 115 Sub

Diagramms

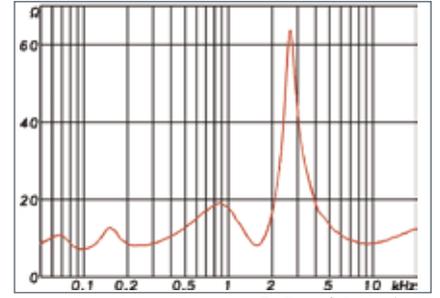
CAD 208



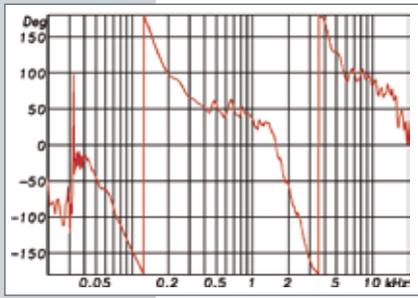
4 x CAD 208 Max SPL



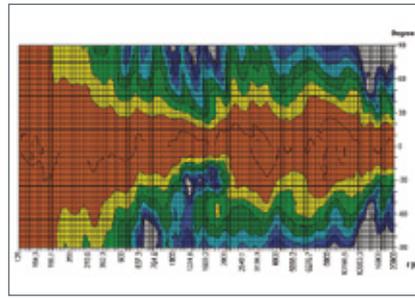
CAD 208 Freq.



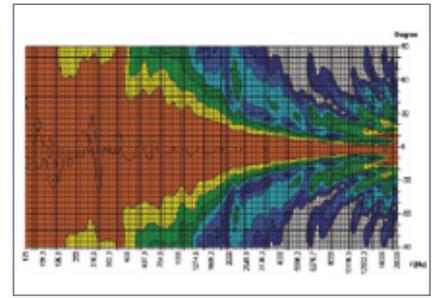
CAD 208 Impedance



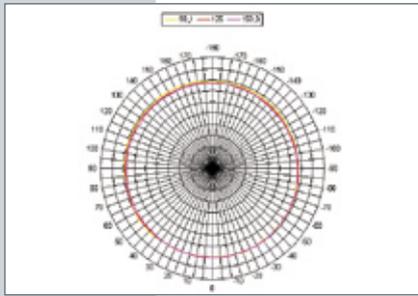
CAD 208 Phase Response



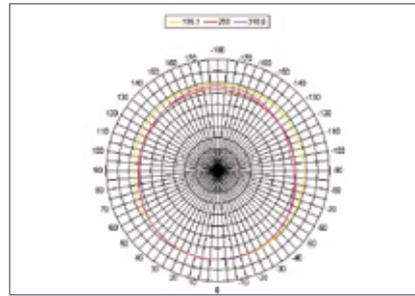
CAD 208 Directivity vertical 2D



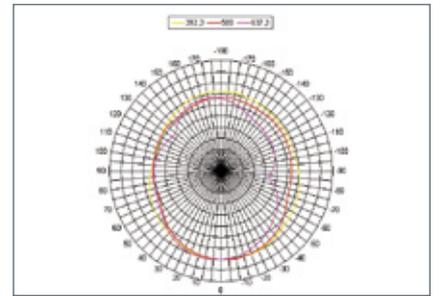
CAD 208 Directivity horizontal 2D



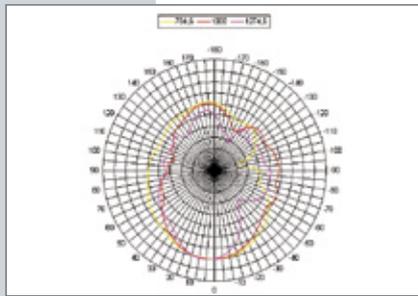
125Hz Oktav



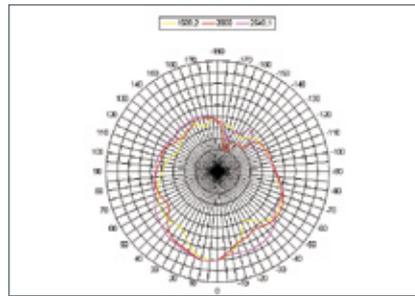
250Hz Oktav



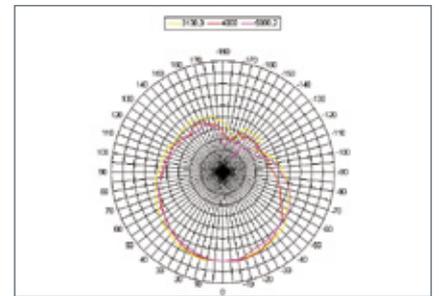
500Hz Oktav



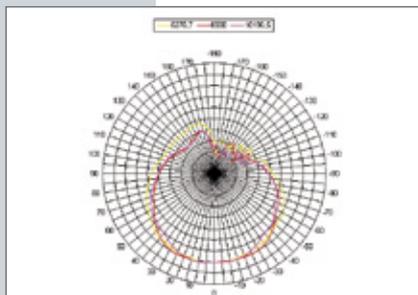
1000Hz Oktav



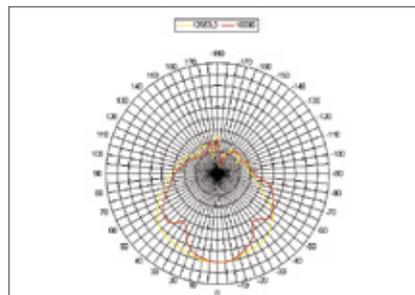
2000Hz Oktav



4000Hz Oktav

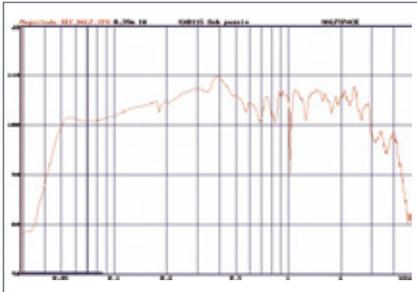


8000Hz Oktav

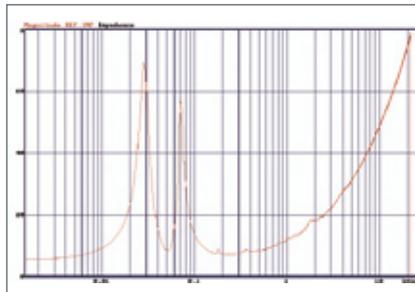


16000Hz Oktav

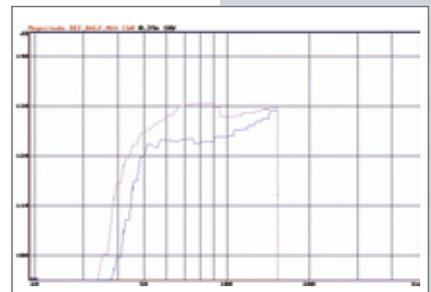
CAD 115 Sub



CAD 115 SUB FQ-Halfspace



CAD 115 SUB Impedance



CAD 115 SUB Max SPL

Accessories



Rigging/stacking frame:

The rigging/stacking frame accepts up to 24 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

fullrange 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 connector frame attaches CAD 208 mid/high units to CAD 115 subwoofers.

Up to ten mid/high units may be installed below a flown CAD 115 Sub bin.



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 mounted directly to a ceiling.

Technical Data CAD 208

Frequency response +/- 3dB	- 75/ 100 Hz – 18 kHz (depending on controller & length)
Axial sensitivity, 1W@1m	95 dB Full space 101 dB Half Space
Max. SPL@1m**	130 dB@10% THD Fullspace 136 dB@10% THD Half Space
Nominal impedance	8 ohms
Power-handling nominal	250 W RMS, 500 W Prog.
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 (35.35 lbs) passive, 16.4 kg tri-amped (without internal passive Xover)
Dimensions (WxHxD)	57.8 cm x 23.8 cm x 37.3 cm
Accessories	Rigging/stacking frame, connector frame, wall mount, ceiling mount
Max. number of enclosures per array	up to 24 x CAD 208 cabinets

** with 4x CAD 208

Technical Data CAD 115 Sub

Frequency response +/- 3 dB	47 Hz- 150 Hz
Frequency response - 10 dB	42 Hz- 150 Hz
Axial sensitivity 1W@1m	96 dB (50 Hz- 200 Hz) Full space 102 dB (50 Hz- 200 Hz) Half space
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
Power handling	600 W RMS
Speaker	1x 15" neodymium woofer
Connectors	2 x Speakon NL 4
Housing	18 mm birch multiply
Crossover	via external controller
Finish	Black or white on demand available in every RAL color
Grille	Metal
Rigging hardware	4 integrated rails
Weight	38 kg (76.76 lbs)
Dimensions (WxHxD)	58.3 x 57.3 x 64 cm
Accessories	Rigging/stacking frame, connector frame for up to two CAD 115 Sub and ten CAD 208 units, Dolly with four 100 mm casters

