



HK AUDIO

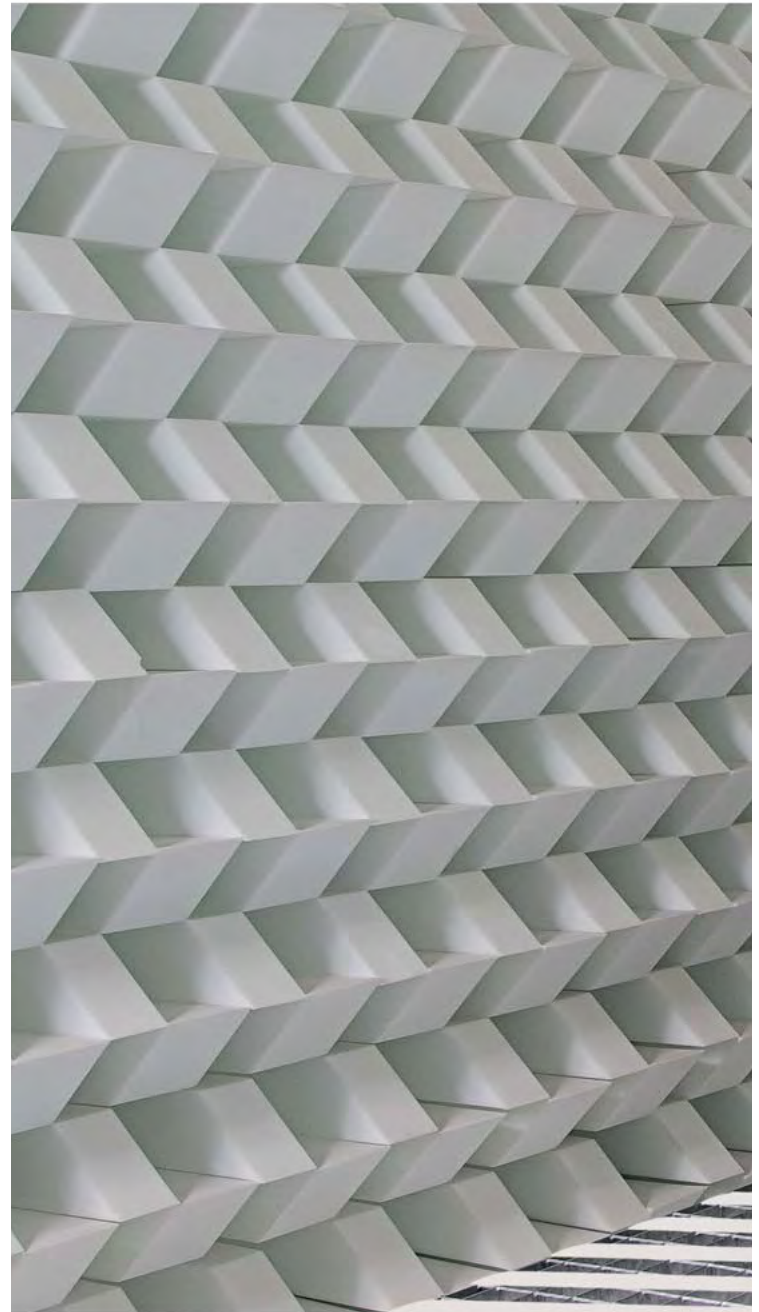


Passion & Innovation

For more than 30 years, we have been on a quest for perfection. We want to put into your hands a PA tailored to fit you and your demands, a sound system that is easy to handle and treats your audiences to a memorable audio experience.

But your demands continue to evolve, and so do our aspirations. Fascinating new technologies, measurement methods and materials beg to be explored, understood and put to use. This journey into the unknown pushes the boundaries of our collective imagination, ignites our engineers' passion and inspires us to aim for the seemingly impossible. And the payoff is enduring, with products that continue to delight you and amaze your audiences.

This passion for engineering and HK AUDIO's trademark natural sound quality is built into all our products. Witness the probably best example, LUCAS NANO 300, perhaps the most eminent addition to the product family. It incorporates everything that made LUCAS a universal synonym for smart sound reinforcement – and then some.



Lothar & Hans Stamer (Founders & CEOs)







Passion for Engineering

We're particularly proud of LUCAS NANO 300. The idea was to get smaller, leaner and lighter without sacrificing spatial depth and volume. We looked to the automotive industry for inspiration, where engineers are squeezing more from less – higher performance and greater efficiency from smaller engines with less HP. The trick is to combine technologies, some of which have been around for decades, in smart, new ways to achieve the performance of a far larger powerhouse.

Our developers followed a similar roadmap to arrive at NANO 300. Everything we learned about acoustics over the decades, combined with state-of-the-art measuring and design methods, flowed into its development. The result is an ultra compact system that weighs a paltry 10 kilograms, yet delivers shockingly persuasive audio performance. Seeing and hearing LUCAS NANO 300 in action is a surreal experience. You won't believe your ears and eyes because they're telling you different stories!

You will also be amazed to discover how easy NANO 300 is to transport with one hand. Even the subwoofers' housing is a bit of an engineering marvel: It accommodates a mixing console and power circuitry, provides a transport bay for tucking away the satellites, and even offers a choice of two generously sized, ultra comfortable grips!

And with that, LUCAS NANO embodies everything HK AUDIO has been about from day one – passion and innovation.

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LUCAS



The Revolution

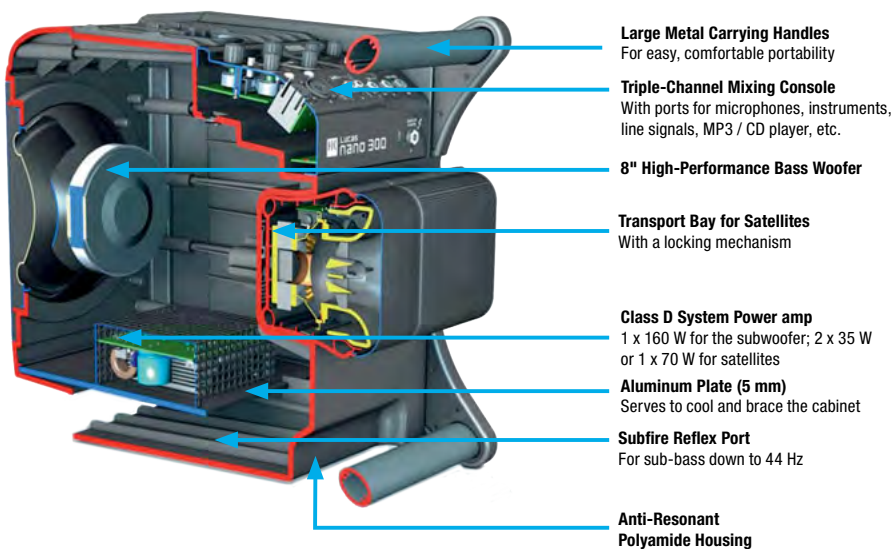
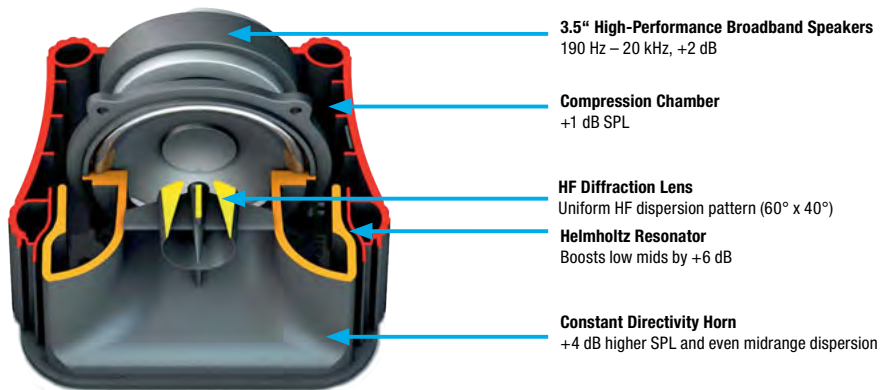
Lightweight Ultra Compact Active System

LUCAS NANO 300

Pool our entire R&D crew's collective expertise and what do you get? LUCAS NANO 300, a system that is more compact, efficient and flexible than any LUCAS to date. In fact, it's probably the world's smallest, lightest and pound-for-pound loudest PA! Use it a fullrange PA

for small gigs, a keyboards or e-drums monitor or as a compact rig for DJs. But what whatever you do, know this: LUCAS NANO 300 always delivers clear, assertive sound and takes up minimum space. And handling is a cinch with the including mixer.





Compact Mono



Extended Mono



Stereo



Twin Set Stereo



LUCAS NANO Twin Satellite

The Easy-Click connector links two satellites to create a single powerful mono unit. A built-in filter circuit is activated automatically. It voices the two satellites to respond as one, thereby eliciting the acoustics and performance of a single larger enclosure.



Acoustic Guitar

LUCAS NANO 300 gets you and your guitar heard in glorious audio quality. Simply place the satellites on the pole and the gig is off to a flying start. Dial in the right balance of guitar and mic signals on the integrated mixing console and capture your performance for posterity via the recording output.



Keyboard

Opt for LUCAS NANO 300 to entertain audiences of up to 50. The best way to go about this entertaining business is with Add-On Package One, which lets you align the satellites perfectly to the audience. Or you can use LUCAS NANO 300 as your personal monitor. And the LUCAS NANO 300 Twin Set is the perfect package for audiences of up to 100.



Presentation

LUCAS NANO 300 is just what the doctor ordered for every presentation. In most cases, you will need only the basic system. Simply place the satellites on the subwoofer and you're good to go. Or you can use Add-On Package One to mount the satellites on a pole or tripod for on-target system-to-audience alignment.





DJ/Party

LUCAS NANO 300 provides sweet sound for smaller soirees. You can join the two satellites to create a compact mono system with higher sound pressure or separate the two in a stereo rig. If the party turns out to be a somewhat larger affair, simply connect two LUCAS NANO 300 systems using a simple stereo cord.



Desktop Recording/Gaming

LUCAS NANO 300 pumps up the volume of your PC's multimedia content. It also makes a wonderful 2.1 monitoring system. Add-On Package Two's tabletop tripods provide the perfect pedestals for the satellites on your desk, while the subwoofer can be tucked away in an inconspicuous spot below the desk.



Home Cinema

LUCAS NANO 300 is an excellent alternative to the loudspeakers built into your TV set. You can place the satellites right next to the screen or mount them wherever you wish on walls using the combined tabletop tripod/ wall-mount in Add-On Package Two.

Accessories



Add-On Package One

This tripod set consists of two mounting poles, a tripod and two speaker cables.



Add-On Package Two

These two dual-purpose tabletop tripods/wall mounts let you set mid/high units on a horizontal surface and mount them on walls. Two speaker cords are included.



Roller Bag

The handy roller bag carts your LUCAS NANO 300 to its destination in style. The integrated covers protect it against moisture, dirt and damage.

Technical Specifications

Satellite	Single	Double
Power output	35 W @ 8 Ω	70 W @ 4 Ω
Frequency response	190 Hz – 20 kHz	190 Hz – 20 kHz
Max. SPL @ 10% THD*	112 dB	116 dB
Max. SPL Peak*	116 dB	120 dB
Mid/high unit dispersion pattern, horizontal/vertical	60° x 40°	60° x 40°
Dimensions (W x H x D)	13 x 13 x 11.5 cm	13 x 26 x 11.5 cm
Weight	1 kg	2 kg
Subwoofer		
Power output	160 W @ 2 Ω	
Frequency response	44 Hz – fx	
Max. SPL @ 10% THD*	116 dB	
Max. SPL Peak*	118 dB	
Dimensions (W x H x D)	30 x 39 x 42 cm	
Weight	8.3 kg	

* half-space

LUCAS



LUCAS SMART

Our ultra compact power-pack, it's portable enough to tote on your own and inconspicuous enough to fit anywhere. It makes your presentation an impressive event and your performance as an entertainer an amazing experience in big, bold sound.



LUCAS PERFORMER

From soothing background music for mingling and dining to big floor-filling beats, this rig does it all with style. Offering everything that made its forebear the entertainer's best friend, it's truly a plug & play proposition, sparing you hassles and saving time.



LUCAS IMPACT

The perfect solution for small to mid-sized venues, it features compact components, handling ease and big, bold sound at every volume. Equipped with state-of-the-art speakers and digital power amps, this latest generation comes in an even lighter, smaller package.





LUCAS MAX

As compact as the inceptive LUCAS, MAX delivers the audio quality and headroom of a far larger PA system.



LUCAS ALPHA

LUCAS ALPHA combines the LUCAS line's phenomenal handling ease with a big rig's bold performance. And that makes it the powerhouse of choice for today's bands and DJs.

Accessories



LUCAS SMART Add-On Package

These two custom-designed aluminum speaker stands come in a practical gig bag, along with two 7m cords for connecting satellites to the subwoofer.



LUCAS SMART Trolley

Designed for fast, safe transport, the trolley rolls the system easily and conveniently to and from venues, and breaks down into two parts to fit in cars.



LUCAS SMART Wall Mount

There is no easier way to install a LUCAS SMART system. And its ball joint enables perfect satellite-to-audience alignment.



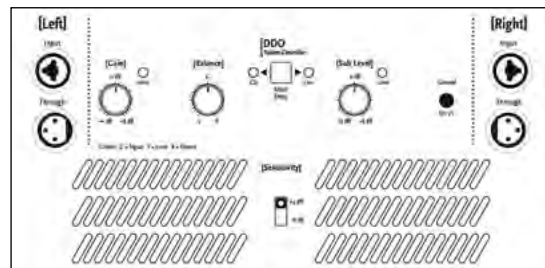
LUCAS Speaker Add-On

The Speaker Stand Add-On Package includes two aluminum tripods, two 7m speaker cords with Speakon connectors, and a handy nylon carrying bag

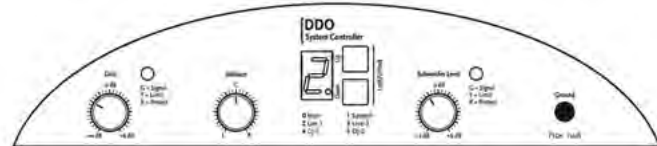


LUCAS Protective Covers

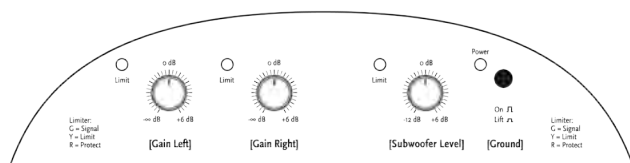
Made of water-repellant, extremely tear-resistant nylon and tailored to fit your LUCAS system, these thickly padded covers afford excellent protection during transport to and from gigs.



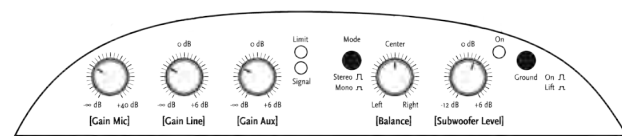
LUCAS ALPHA's panel



LUCAS MAX's, LUCAS IMPACT's panel



LUCAS PERFORMER's panel



LUCAS SMART's panel



Technical Specifications

Satellite	LUCAS ALPHA	LUCAS MAX	LUCAS IMPACT	LUCAS PERFORMER	LUCAS SMART
Power handling, nominal	400 W RMS	400 W RMS	250 W RMS	200 W RMS	80 W RMS
Frequency response ± 3 dB**	85 Hz – 19 kHz	120 Hz – 19 kHz	130 Hz – 19 kHz	130 Hz – 19 kHz	100 Hz – 19 kHz
Axial sensitivity 1 W @ 1m*	105 dB	104 dB	103 dB	102 dB	97 dB
Max. SPL @ 10% THD*	129 dB	126 dB	125 dB	124 dB	115 dB
Nominal impedance	8 Ω	8 Ω	8 Ω	8 Ω	4 Ω
Connectors	1 x Speakon NL 4	1 x Speakon NL 4	1 x Speakon NL 4	1 x Speakon NL 4	1 x Speakon NL 4
Midrange woofer	1 x 12"	1 x 10"	1 x 8"	1 x 8"	1 x 6,5"
Tweeter/ driver	1.4"	1"	1"	1"	1" dome tweeter
Directivity	60° x 40° BEM CD horn	60° x 40° CD horn	60° x 40° CD horn	60° x 40° CD horn	80° x 50°
X-over frequency	1.2 kHz, 12 dB/ octave	2.2 kHz, 12 dB/ octave	2.2 kHz, 12 dB/ octave	2.4 kHz, 12 dB/ octave	3 kHz, 12 dB / octave
HF protection (passive)	-	Dyn. protective circuit	Dyn. protective circuit	Dyn. protective circuit	Dyn. protective circuit
Pole mount	DuoTilt 3°/7°, 36 mm	DuoTilt 3°/7°, 36 mm	DuoTilt 3°/7°, 36 mm	MonoTilt 10°, 36 mm	MicroTilt 10°, 15 mm
Dimensions (W x H x D)	40 x 54.5 x 37 cm	31.5 x 49 x 32 cm	26 x 38.5 x 28.5 cm	26 x 38.5 x 28.5 cm	18.5 x 27.5 x 21.5 cm
Subwoofer	LUCAS ALPHA	LUCAS MAX	LUCAS IMPACT	LUCAS PERFORMER	LUCAS SMART
Frequency response ± 3 dB	37 Hz – 130 Hz	40 Hz – 130 Hz	45 Hz – 130 Hz	47 Hz – 130 Hz	43 Hz – 100 Hz
Axial sensitivity 1 W @ 1m*	100 dB	101 dB	101 dB	101 dB	97 dB
Max. SPL @ 10% THD*	130 dB	130 dB	128 dB	126 dB	118 dB
Subwoofer amp	1 x 1,200 W Class-D	1 x 1,200 W Class-D	1 x 700 W Class-D	1 x 500 W Class-D	1 x 250 W Class-D
Satellite (mid/high) amp	2 x 400 W Class-D	2 x 400 W Class-D	2 x 250 W Class-D	2 x 200 W Class-D	2 x 80 W
Active protective circuits	DDO Controller	DDO Controller	DDO Controller	Multiband limiter	Multiband limiter
	Multiband limiter	Multiband limiter	Multiband limiter	Subsonic filter	Subsonic filter
Connectors	2 x XLR In Combo 2 x XLR Through	2 x XLR In Combo jack	2 x XLR In Combo jack	2 x XLR Combo jack	1 x Mic In, 2 x XLR In, 2 x Cinch In
	1 x XLR External Subwoofer out	2 x XLR Through	2 x XLR Through	2 x XLR Through	2 x XLR Through 2 x Cinch Mix Out
	2 x Speakon Satellite Out	2 x Speakon Satellite Out	2 x Speakon Satellite Out	2 x Speakon Satellite Out	2 x Speakon Satellite Out
Bass woofer	1 x 18"	1 x 15"	1 x 15"	1 x 15"	1 x 10"
Pole mount	M20 threaded base plate	M20 threaded base plate	M20 threaded base plate	M20 threaded base plate	-
Dimensions (W x H x D)	53 x 63.5 x 68.5 cm	48.5 x 49.5 x 58.5 cm	47.5 x 47 x 58.5 cm	47.5 x 47 x 58.5 cm	32 x 41 x 46.5 cm
Weight, system	96 kg, 211.7 lbs	67.5 kg, 149 lbs.	51.6 kg, 113.7 lbs.	53.2 kg, 117.3 lbs	30 kg, 66.1 lbs

* half-space ** active x-over



ELEMENTS



The ingeniously different PA



Ingeniously Different Sound

Extended Sweet Spot

Featuring the latest-generation line array technology, ELEMETS treats audiences and musicians to an unprecedented experience in natural sound. Listeners enjoy a remarkably well-defined audio image at every spot in the room. Pleasantly assertive without being aggressive, the signal is not too loud up front and not too soft in back.

A Common Sound Field

What's more, an ELEMETS system is remarkably unsusceptible to feedback, so it can be placed alongside and behind musicians. No longer forced to fuss with separate stage monitors, you finally get to enjoy an authentic audio experience. You hear what the audience hears. And you and your fellow musicians can intuitively vary volume and tone to blend together in a unified whole. Only ELEMETS is as musically inspiring as that.



Ingeniously Different Setup

The best cable is... no cable at all! With the ingenious E-Connect coupler/bus, most ELEMETS systems are practically wireless devices, bar one mains and one signal cord.

ELEMETS also relegates heavy speaker stands to history. There's less gear to carry and a lot less weight to heave up on a tall stand.

An ELEMETS subwoofer also leaves a much smaller footprint system than a tripod. You are free to site ELEMETS wherever it serves your purposes best – before, beside or behind the band – without having to give feedback more than a passing thought.



ELEMETS treats musicians and listeners alike to the same sweet sound – not too loud up front and not too soft in back.

Leaving a tiny footprint and unsusceptible to feedback, ELEMETS fits on even the most crowded stages.



Ingeniously Different Portability

If you're wondering why ELEMETS components are so extraordinarily light for units as powerful as this and so easy for one person to carry, you need only to look to its advanced, ultra efficient speaker and power amp technologies for an answer. It's this remarkable compactness that has made ELEMETS the first bona fide PA to fit in an ordinary passenger car.



Ingeniously Different Expandability

Do you regularly gig in pubs and clubs that hold up to 150 people? Then start out with a mono or stereo ELEMETS Easy Base system. Your gigs are getting bigger and you want to be more flexible? Then opt for the ELEMETS Smart Base and augment it with the ELEMETS Add-On subwoofers and mid/high units.

Do you frequently play for 300 or more people? Then get in on the game with an ELEMETS Big Base rig made up of the new ELEMETS Plus components, and gradually extend it to a large PA with ELEMETS Add-Ons.

ELEMETS is the only columnar system that can be flexibly configured, reconfigured and extended. Why? Because ELEMETS – unlike other columnar systems – is a genuine line array engineered to accommodate and harmonize with add-on components.

ELEMETS is small. ELEMETS is large. ELEMETS is mono. ELEMETS is stereo. ELEMETS fits your needs today – and adapts to tomorrow's.



left to right:

ELEMETS can be positioned so that stage monitors are rarely if ever needed.

Quick setup: With the built-in signal bus and ingenious E-Connect coupler, there's no tangled mess of cables.

One trip to the stage is all it takes to set up an entire ELEMETS rig.

The band bus is history – with ELEMETS, a big PA fits in a normal passenger car.

Your band is growing; your gigs are getting bigger? ELEMETS grows as you go, leaving all your options open.

You're sure to love your ELEMENTS PA even before you hear the first tone. Its compact, lightweight components can be assembled almost instantly without having to fuss with cords. And you don't need an audio engineer to position your PA. Set it up just behind the band, and ELEMENTS will serve your audience as an awesome PA and you equally well as a monitor.

And once you hear ELEMENTS there will be no doubt that you have moved up to a whole new league of speaker system. ELEMENTS adapts flexibly as your needs change. Welcome to the world of HK Audio ELEMENTS.

Getting started with an ELEMENTS PA is easy enough: Simply select the performance class that suits you best. If you need ultra compact, lightweight components, ELEMENTS Smart Base and Easy Base are your first choices.

These systems are built on a powered 10" subwoofer that weighs just 19 kg. Its on-board amp also drives the mid / high units or additional passive subwoofers.

If you want a mightier low-end punch because you regularly play for larger audiences, then the ELEMENTS Big Base PA is just right for you. It features a dual 10" subwoofer powered a muscular 1,200-watt amp. These amps also deliver plenty of power to add more mid/ high units and a passive subwoofer to comfortably cover audiences of up to 500.

The mid/ high units were designed specifically to port your music far into the audience for everyone to enjoy uncolored, crisp and highly defined audio images. Equipped with eight or four fullrange speakers and offering 140 Hz down to 20 kHz dynamic range, they deliver signals with a silky-smooth top end. The mid/ high units' visuals are also a treat with their stylish look of sleek elegance. Rest assured all the attention will be on your performance and not on the PA. Best of all, they provide plenty of SPL for larger gigs.



The ELEMENTS ELW 1 Locking Wedge provides a secure connection between the various modules.



Easy Base

The ELEMENTS Easy Base PA gets the job done in many live situations. It's a great choice if you are not planning to add on those wonderfully flexible ELEMENTS extensions later down the line. A mono Easy Base PA format is the no-fuss, no-muss solution for applications where you can do without stereo sound, for example, presentations and speeches at corporate events, ensemble performances and one-man bands.

Easy Base Stereo

The stereo version of ELEMENTS Easy Base is ideal if your sound reinforcement scenarios remain much the same so you are unlikely to need add-ons further up the road. A stereo Easy Base rig is perfect for sound sources such as keyboards or the master signals of smaller bands and ensembles' consoles.



Smart Base

The name says it all: The new E110 Sub Bass AS subwoofer boasts not one but two 600-watt Class-D power amps so ELEMENTS Smart Base can be easily extended with other mid/ high units or passive subwoofers. Able to deliver 2,400 watts in total, the power amps provide plenty of headroom to play larger clubs or smaller open-air gigs. But even with all that power, ELEMENTS Smart Base still fits comfortably in a car or station wagon.

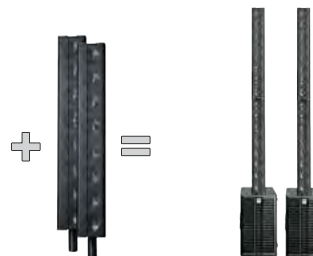
Sub Add-On

This ELEMENTS Sub Add-On consists of two E110 subwoofers that readily connect to ELEMENTS Smart Base's powered subwoofers via Speakon connectors. This not only increases the radiating surface area, but also boosts output power substantially. It's perfect for bands and DJs.



Top Add-On

This midrange and top-end expansion pack consists of two E835 mid/ high units that increase the radiating surface area, performance and the benefits of the line-array effect. The outcome is an assertive sonic image with extraordinary reach that is always transparent and cohesive even at great distance.



These two Twin Packs can be combined to enjoy all their many benefits.





Big Base

Do you need the headroom of a large PA but refuse to do without that trademark ELEMENTS sound and handling ease? Then ELEMENTS Big Base fits the bill. With a whopping 4,800 watts total output power, you can drive up to four dual 10" subwoofers and six E835 mid/ high units. That's enough acoustical energy to keep several hundred listeners happy. With over two meters line length in the largest configuration, this rig is able to throw midrange and high frequencies across distances that conventional systems can only reach with the help of multiple delay cabinets.

Big Sub Add-on

This ELEMENTS Sub Add-On on consists of two passive dual 10" subwoofers L SUB 1200 that readily connect to ELEMENTS Big Base's powered subwoofers via Speakon connectors. This not only increases the radiating surface area, but also boosts output power substantially. It's perfect for bands and DJs.



Top Add-On

This midrange and top-end expansion pack consists of two E835 mid/ high units that increase the radiating surface area, performance and the benefits of the line-array effect. The outcome is an assertive sonic image with extraordinary reach that is always transparent and cohesive even at great distance.



These two Twin Packs can be combined to enjoy all their many benefits.





E 835 Mid/High Unit

Our engineers developed the E 835 mid/ high unit to afford you even greater flexibility when you want to set up bigger systems. Loaded with eight speakers, it can handle 300 watts at 8 ohms impedance. The E 835 comes highly recommended when you want to minimize the number of mechanical connections. The E 835 and E 435 mid/ high units' design and tuning are identical, so feel free to combine them.



E 435 Mid/High Unit

Made of extruded aluminum and featuring true line array technology, the mid/ high unit delivers homogeneous, natural-sounding response, rendering voices and instruments with astonishing authenticity. A novel coupler/ bus combination called E-Connect provides fast, convenient means of linking it to other elements. The acoustical properties of two E 435s are identical to those of one E 835.



E 210 SUB AS System Subwoofer

The new E 210 SUB AS system subwoofer comes with two 1,200-watt amps in its engine room. Power amp number one drives the two internal 10" woofers, with plenty of juice left over to run an external passive type L Sub 1200. The second power amp delivers 900 watts at 2.6 ohms to drive up to three E 835s (or six E 435s).



E 110 SUB AS System-Subwoofer

The E110 sub AS is remarkably compact and light, yet its two onboard 600-watt power amps deliver twice the performance of the E110 Sub A. And that makes this subwoofer the perfect choice if you wish to flexibly extend an ELEMENTS PA system. Go for the optional Twin Packs and you can run up to two subwoofers and mid / high units for a total of 16 fullrange speakers per stereo side.



E 110 SUB A Active Subwoofer

The surprisingly handy 10" subwoofer delivers a tight, low-ranging bass foundation. Its 600-watt, Class-D power amp can also drive two mid/ high units or another passive subwoofer. Equipped with two E-Connect ports, the sub unit can be placed horizontally or vertically to serve as a base for further components. The ergonomic carrying handle on the top panel makes it easy to tote.



L SUB 1200
Passive Subwoofer

This passive sub is the ideal add-on for applications that demand even more muscular low-end performance. It sources its power from the E 210 Sub A active subwoofer or EA 600 amp module. A subwoofer with two 10" woofers housed in a bass reflex enclosure, the L Sub 1200's hair-trigger response delivers tight, punchy bass signals ranging down to 38 Hz.



E 110 SUB
Passive Subwoofer

This passive subwoofer is the perfect add-on for applications demanding even more powerful low-end response. It is powered by a connected E 110 Sub AS, E 110 Sub A or EA 600 amp module. It also sports an E-Connect port for mid/high units with the amp module.



EA 600
Power Amp

Sharing the mid/ high unit's elegant design, the power amp is a perfect visual and mechanical match. Its 600-watt, Class-D power amp provides plenty of juice to drive four E 435 mid/high units or a passive E 110 SUB and two E 435 mid/high units.



EF 45
Base

The base accommodates the mid/ high units, amp module, and mounting pole. Its extendible feet ensure the mounted elements sit on a stable, secure platform.

- Stable system base with a small footprint
- Integrated E-Connect bus
- Two parallel NL4 ports
- 45-51 x 31 x 12.5 cm; 7.7 kg



EP 1/EP 2
Speaker Poles

These speaker poles are unlike any other. They enable simple, speedy setup for smaller configurations. Freely adjustable, they forward the signal to the top-mounted mid/ high units via the internal E-Connect coupler/ bus – no speaker cords necessary.

- Anodized aluminum with twist-lock fastener
- EP 1: Adjustable height from 95 to 160 cm
- EP 2: from 44 to 60.5 cm
- Integrated E-Connect bus
- Exceedingly light weight
EP 1 = 0.8 kg
EP 2 = 0.5 kg



Accessories



Elements Soft Bag

This padded bag accommodates any combination of a maximum of four E 435 mid/high units (or two E 835) or power amps. For example, three E 435 mid/high units and one power amp EA 600. You can also easily tuck a speaker pole in the bag.



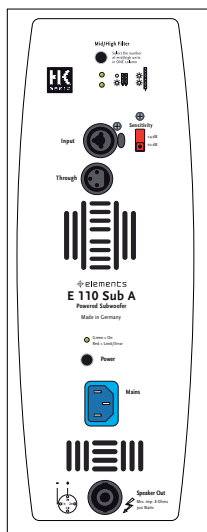
Elements Subwoofer Cover

Subwoofers are rarely handled with velvet gloves, so this cover provides twice the padding to protect active and passive subs especially effectively against damage in transit.

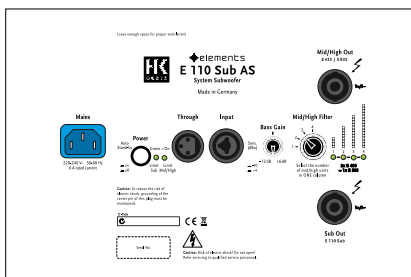


Elements Base Bag

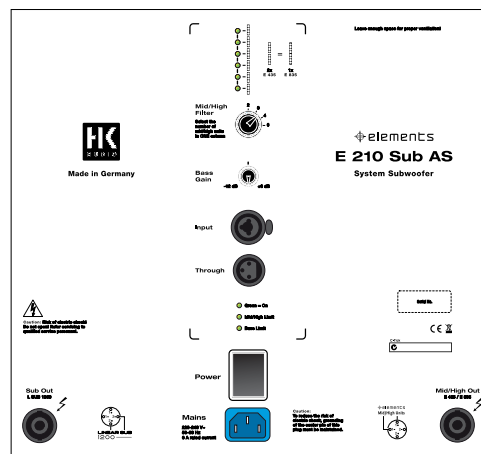
As the name would suggest, the Base Bag is tailored to fit the ELEMENTS EF 45 base. Equipped with a handy carrying strap, it accommodates one base.



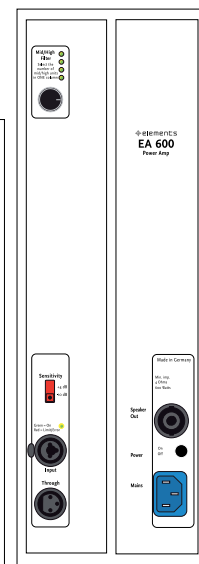
Rückseite E 110 Sub A



Rückseite E 110 Sub AS



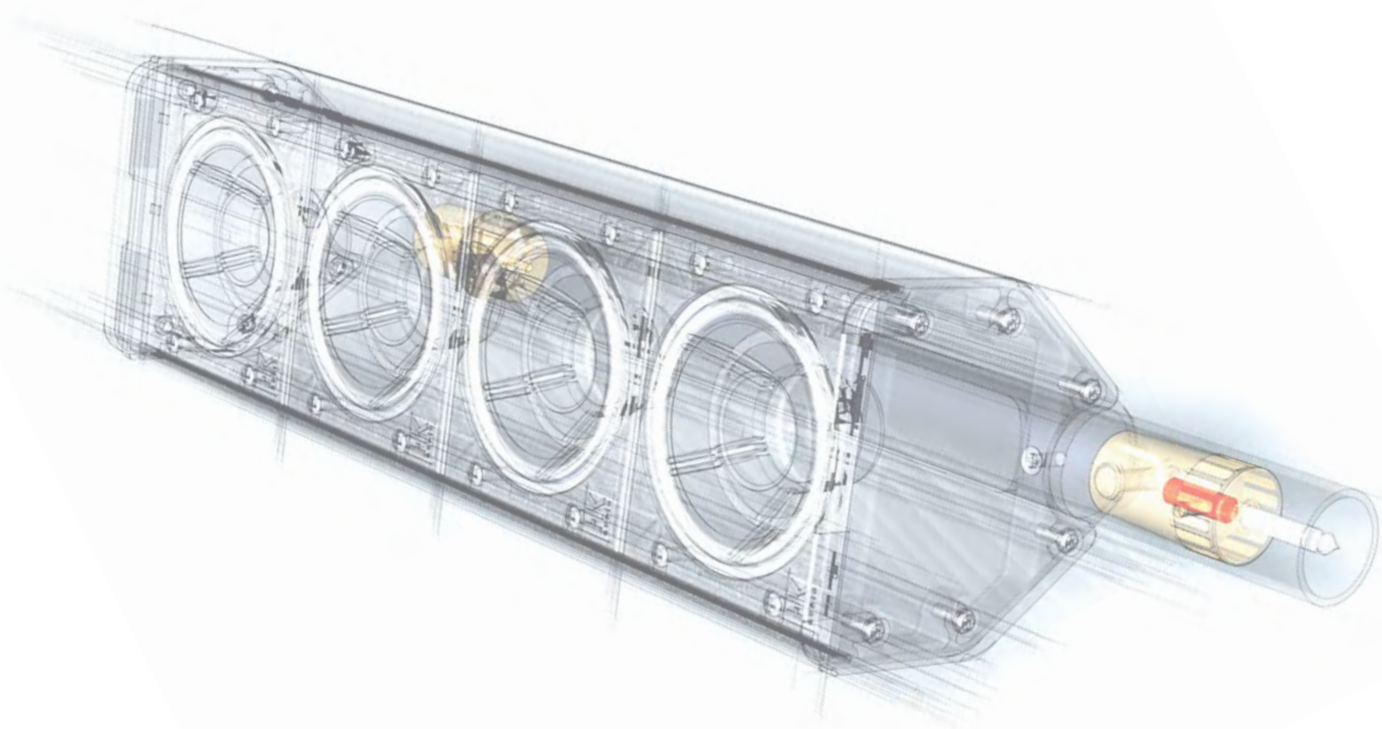
Rückseite E 210 SUB AS



Rückseite EA 600 Amp

Technical Specifications

	E 835	E 435	E 210 Sub AS	E 110 Sub AS	E 110 Sub A	L Sub 1200	E 110 Sub	EA 600
Power handling, nominal	300 W RMS @ 8 Ω	150 W RMS @ 16 Ω			-	1200 W RMS @ 8 Ω	250 W RMS @ 10 Ω	-
Continuous power per amp		-	1200 W Class-D @ 4 Ω (Subs) / 1200 Watt Class-D @ 4 Ω (Mid/High)	600 W Class-D @ 4 Ω (Subs) / 600 Watt Class-D @ 4 Ω (Mid/High)	600 W Class-D @ 4 Ω		-	600 W Class-D @ 4 Ω
Frequency response -10 dB	140 Hz – 20 kHz, via active system filter	140 Hz – 20 kHz, via active system filter	38 Hz – 150 Hz via active system x-over	45 Hz – 150 Hz via active system x-over	45 Hz – 150 Hz via active system x-over	38 Hz - 15 Hz via active system x-over	45 Hz – 150 Hz via active system x-over	-
Nominal impedance	8 Ω	16 Ω	8 Ω	10 Ω	10 Ω	8 Ω	10 Ω	-
Axial sensitivity 1 W @ 1 m *	100 dB	97 dB			-		-	-
Active protective circuits		-	RMS limiter, subsonic filter; DC, load, & thermal (temp.- controlled fan)	RMS limiter, subsonic filter; DC, load, & thermal (temp.- controlled fan)	RMS limiter, subsonic filter; DC, load, & thermal (temp.- controlled fan)		-	RMS limiter, subsonic filter; DC, load, & thermal (temp.- controlled fan)
Input sensitivity		-	+4 dBu	(switchable) +4 dBu / -10 dBu	+4 dBu / -10 dBu (switchable)		-	+4 dBu / -10 dBu (switchable)
Connectors	1 x E-Connect In 1 x E-Connect Out	1 x E-Connect In 1 x E-Connect Out	1 x XLR-Combo In 1 x XLR-Through 2 x Speakon Out (1 x Sub + 1 x Mid-High) 2 x E-Connect Out	1 x XLR-Combo In 1 x XLR-Through 2 x Speakon Out (1 x Sub + 1 x Mid-High) 2 x E-Connect Out	1 x XLR-Combo In 1 x XLR-Through 1 x Speakon Parallel Out 2 x E-Connect Out	1 x Speakon In 1 x Speakon Out	1 x Speakon In 1 x Speakon Out 1 x E-Connect Out	1 x XLR-Combo In 1 x XLR-Through 1 x Speakon Parallel Out 1 x E-Connect Out
Speakers	8 x 3.5" broadband	4 x 3.5" broadband			-		-	-
Woofers		-	2 x 10" (2.5" voice coil)	1 x 10" (2" voice coil)	1 x 10" (2" voice coil)	2 x 10" (2.5" voice coil)	1 x 10" (2" voice coil)	-
Directivity	70° horizontal	70° horizontal			-		-	-
Corner frequency, passive x-over	140 Hz, 12 dB/oct.	140 Hz, 12 dB/oct.			-		-	-
Pole mount		-	2 x E-Connect coupler	2 x E-Connect coupler	2 x E-Connect coupler	2 x M20	1 x E-Connect coupler	-
Dimensions (W x H x D)	11 x 74.5 x 12 cm (excl. E-Connect sleeves)	11 x 38 x 12 cm (excl. E-Connect sleeves)	38 x 66,8 x 56 cm	30 x 48 x 46 cm	30 x 48 x 46 cm	38 x 66,8 x 56 cm	30 x 48 x 46 cm	11 x 38 x 12 cm (excl. E-Connect sleeves)
Weight	4.5 kg	2.35 kg	32 kg	18.5 kg	19 kg	29 kg	16.5 kg	2.75 kg





PREMIUM PR:O



Time to go Pro

Honest Speakers for Honest Musicians:
It's Time to Go PR:O. With Premium PR:O

PREMIUM PR:O

The PREMIUM PR:O series' best-in-class acoustic properties and features set standards for others to follow. Its remarkably linear frequency response, precise attack and decay, and tremendous sound pressure certainly raise the performance bar. The audio image remains transparent, homogeneous and remarkably articulate across a very wide dynamic range. All PREMIUM PR:O models come in rugged, road-worthy wood cabinets. They not only deliver a stable sonic image, but also stand up to the wear and tear of life on the road. And the second generation PTC™ provides reliable protection for high-frequency drivers.

Just 1.5 kg heavier than their passive siblings, the active models ship with easy-to-use electronic circuitry including a 600-watt, Class-D power amp. The powered and passive versions' acoustical properties are compatible so the two are easily combined. All mid/high units may be used as standalone fullrange cabs and in combination with PR:O 18 and PR:O 210 SUB subwoofers.





**PR:O 8
PR:O 8 A**

This 8"/1" fullrange enclosure delivers awesome bass response and exceptionally high SPL for its size. Its manageable format and included mounting hardware (PR:O 8 A only) also make it an excellent choice for expedient permanent installation. The active PR:O 8 A model comes with power circuitry that delivers 600W RMS and a Speakon port that accepts an added passive cab.



**PR:O 10 X
PR:O 10 XA**

This remarkably versatile 10"/1" enclosure can serve as a satellite, a fullrange cabinet, and a low-profile wedge monitor. The Music/Speech knob adjusts its finely balanced—and therefore feedback-resistant—frequency response to suit very different applications. The PR:O 10 XA also features an onboard power amp and a Speakon port for connecting a passive add-on cab.



**PR:O 12
PR:O 12 A**

A fullrange enclosure in classic 12"/1" format, this cab's balanced sonic image, speech intelligibility and high SPL are impressive indeed. It is the perfect satellite for the PR:O 18 Sub. The PR:O 12 A also features 600W RMS power electronics and a Speakon port for connecting a passive auxiliary cabinet.



**PR:O 12 M
PR:O 12 MA**

This high-quality 12"/1" stage monitor provides remarkably assertive reinforcement for voices and instruments. The active PR:O 12 MA also sports a 600W RMS power amp and a Speaker Out for another passive monitor cabinet, so setting up a large monitoring system is easily and affordably done.



**PR:O 15
PR:O 15 A**

Sporting a 15" woofer, this cab delivers performance on par with the PR:O 12, but with even more muscular low-midrange and bass response. And that makes it a great choice for standalone deployment without a subwoofer. The active PR:O 15 A model also features a 600W RMS power amp and a Speakon port that accepts a passive add-on cab.



**PR:O 15 X
PR:O 15 XA**

This multifunctional 15"/1" cabinet delivers powerful low-end response and high SPL. Remarkably feedback resistant and amazingly articulate, it will also serve you well as a monitor. The active PR:O 15 XA model ships with 600W RMS power circuitry and a Speakon port to connect a passive auxiliary cabinet.



**PR:O 210 SUB
PR:O 210 SUB A**

Housed in a bass reflex enclosure, the two 10" woofers pack a powerful punch and deliver low-ranging bass response that is sure to impress and amaze. Remarkably compact, versatile and light at less than 26 kg, it is readily combined with mid/ high units to deliver outstanding performance as a system. Setting up and operating such a powerful yet inconspicuous rig is a piece of cake.

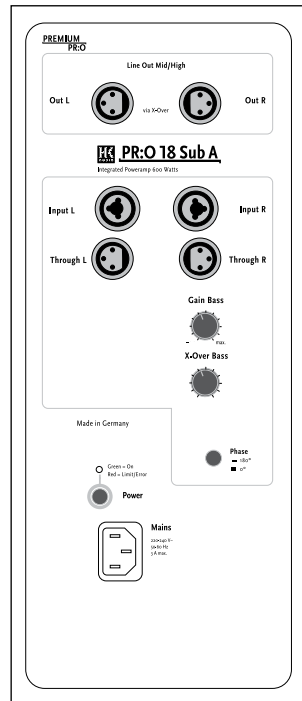


**PR:O 18 SUB
PR:O 18 SUB A**

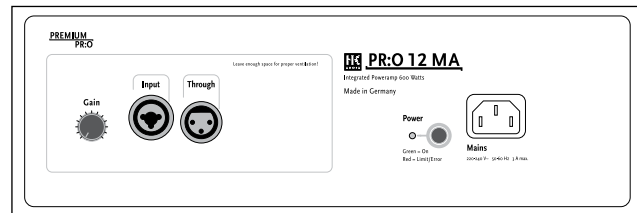
Boasting an 18" woofer in a bass reflex housing, this bin delivers a low-ranging bass foundation. The specially designed active stereo x-over routes the right frequency spectrum to the mid/ high unit connected via the Satellite Out. The active PR:O 18 Sub A model also ships with a 600W RMS power amp and a port for active satellites.



The satellite's panel
(PR:O 8 A, PR:O 10 XA, PR:O 12 A,
PR:O 15 A, PR:O 15 XA)

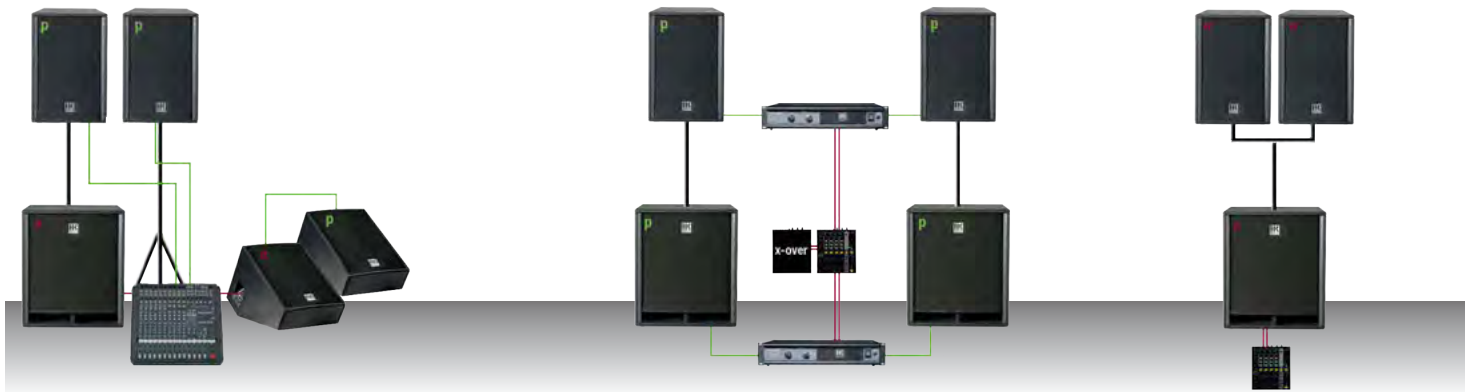
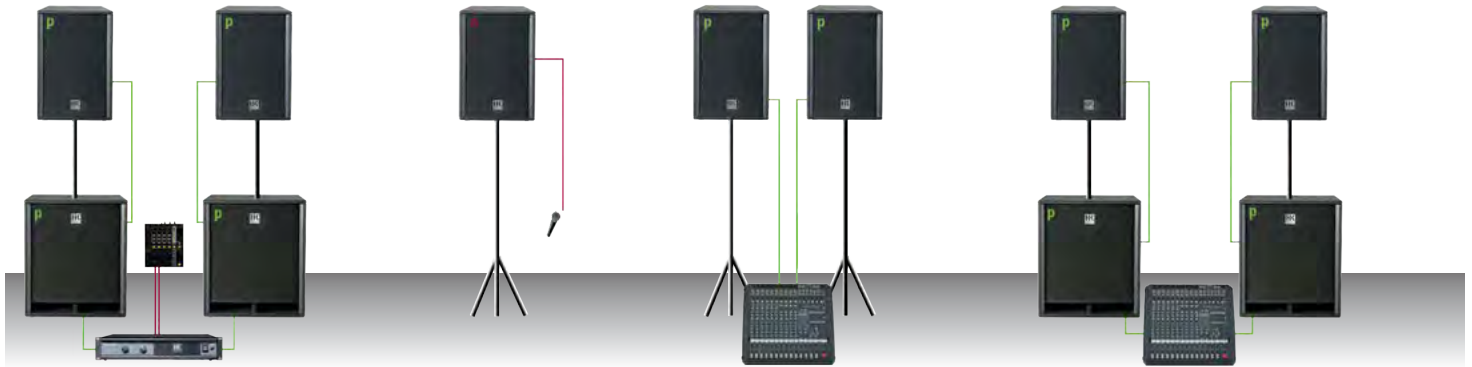


The subwoofer's panel
(PR:O 210 Sub A, PR:O 18 Sub A)



The PR:O 12 MA monitor's panel

Configurations



p = passive speaker
a = active speaker

— speaker cable
— signal cable



Accessories



PREMIUM PR:O Rain Gear

With these protective covers in place, your cabinets will be ready to withstand the damp outdoors and well-protected on the way to gigs. Simply leave the covers on if the weather takes a turn for the worse. Rather than dampening the sound, the acoustic fleece merely keeps the dampness out.



HK AUDIO Protective Covers

Made of water-repellent, extremely tear-resistant nylon, these thickly padded covers afford excellent protection for the PA en route to and from gigs. With slots providing easy access to the handles of all the cabinets, the enclosures may be carried with the covers on. Zip-fasteners fully seal the covers for mid/high units.



HK Audio Satellite Add-On M20 Speakon

The Satellite Add-On Package comes with two aluminum speaker poles and two 3m speaker cables equipped with Speakon connectors, all in a nylon carrying bag.

Technical Specifications

Active	PR:0 8 A	PR:0 10 XA	PR:0 12 A	PR:0 12 MA	PR:0 15 A	PR:0 15 XA	PR:0 210 Sub A	PR:0 18 Sub A
Frequency response +/- 3 dB	89 Hz – 19 kHz	89 Hz – 19 kHz	85 Hz – 19 kHz	85 Hz – 19 kHz	55 Hz – 19 kHz	55 Hz – 19 kHz	60 Hz – X-Over	48 Hz – X-Over
Frequency response -10 dB	63 Hz – 19 kHz	67 Hz – 19 kHz	78 Hz – 19 kHz	78 Hz – 19 kHz	48 Hz – 19 kHz	48 Hz – 19 kHz	40 Hz – X-Over	38 Hz – X-Over
Max SPL @ 10% THD*	118 dB	121 dB	123 dB	123 dB	123 dB	123 dB	123 dB	125 dB
Power amp	Class-D	Class-D	Class-D	Class-D	Class-D	Class-D	Class-D	Class-D
Power output	600 W @ 4 Ω	600 W @ 4 Ω	600 W @ 4 Ω	600 W @ 4 Ω	600 W @ 4 Ω	600 W @ 4 Ω	600 W @ 4 Ω	600 W @ 4 Ω
Protective circuits, power amp	RMS limiter	RMS limiter	RMS limiter	RMS limiter	RMS limiter	RMS limiter	RMS limiter	RMS limiter
Protective circuits, power amp	Dynamic HF protect, 35-Hz subsonic filter, peak limiter	Dynamic HF protect, 35-Hz subsonic filter, peak limiter	Dynamic HF protect, 35-Hz subsonic filter, peak limiter	Dynamic HF protect, 35-Hz subsonic filter, peak limiter	Dynamic HF protect, 35-Hz subsonic filter, peak limiter	Dynamic HF protect, 35-Hz subsonic filter, peak limiter	35-Hz subsonic filter, peak limiter	35-Hz subsonic filter, peak limiter
Audio ports	1 x balanced Mic/Line In 1 x XLR-Through 1 x Speakon Parallel Out	1 x balanced Mic/Line In 1 x XLR-Through 1 x Speakon Parallel Out	1 x balanced Mic/Line In 1 x XLR-Through 1 x Speakon Parallel Out	1 x balanced Mic/Line In 1 x XLR-Through 1 x Speakon Parallel Out	1 x balanced Mic/Line In 1 x XLR-Through 1 x Speakon Parallel Out	1 x balanced Mic/Line In 1 x XLR-Through 1 x Speakon Parallel Out	2 x Line In 2 x XLR-Through 2 x XLR-Out (L/R, Mid/High) 1 x Speakon Parallel Out	2 x Line In 2 x XLR-Through 2 x XLR-Out (L/R, Mid/High) 1 x Speakon Parallel Out
Bass/Mid woofer	8"	10"	12"	12"	15"	15"	2 x 10"	18"
HF driver	1"	1"	1"	1"	1"	1"	-	-
Horn directivity	80° x 80° CD horn	90° x 60° CD horn	60° x 40° CD horn	60° x 40° CD horn	60° x 40° CD horn	60° x 40° CD horn	-	-
X-over frequency **	-	-	-	-	-	-	75 Hz – 150 Hz, switchable	75 Hz – 150 Hz, switchable
Equalizer	Tone Control	Tone Control	Tone Control	-	Tone Control	Tone Control	-	-
Pole mount	MonoTilt	DuoTilt 3°/7°	DuoTilt 3°/7°	-	DuoTilt 3°/7°	DuoTilt 3°/7°	2 x M20	M20
Rigging/ pick points	2 x M8	3 x M8	3 x M8	-	3 x M8	3 x M8	-	-
Accessories	Rain gear, protective cover, satellite add-on	Rain gear, protective cover, satellite add-on	Rain gear, protective cover, satellite add-on	Rain gear, protective cover, satellite add-on	Rain gear, protective cover, satellite add-on	Rain gear, protective cover, satellite add-on	Rain gear, protective cover, satellite add-on 100-mm casters	Rain gear, protective cover, satellite add-on 100-mm casters
Dimensions (W x H x D)	27 x 42 x 27 cm	32 x 48 x 29 cm	39 x 57 x 36 cm	39 x 55.5 x 38 cm	47 x 61.5 x 41.5 cm	47 x 61.5 x 44.5 cm	36 x 61 x 53 cm	53 x 61 x 64 cm
Weight	11 kg, 24.3 lbs	13.9 kg, 30.7 lbs	19.5 kg, 43 lbs	17.1 kg, 37.7 lbs	23.5 kg, 51.8 lbs	22.4 kg, 49.4 lbs	27.2 kg, 60 lbs	39.8 kg, 87.7 lbs

Passive	PR:0 8	PR:0 10 X	PR:0 12	PR:0 12 M	PR:0 15	PR:0 15 X	PR:0 210 S	PR:0 18 S
Frequency response +/- 3 dB	89 Hz – 19 kHz	95 Hz – 19 kHz	68 Hz – 19 kHz	70 Hz – 19 kHz	60 Hz – 19 kHz	60 Hz – 19 kHz	60 Hz – 150 Hz	48 Hz – 150 Hz
Frequency response -10 dB	63 Hz – 19 kHz	80 Hz – 19 kHz	60 Hz – 19 kHz	63 Hz – 19 kHz	53 Hz – 19 kHz	53 Hz – 19 kHz	40 Hz – 150 Hz	38 Hz – 150 Hz
Max SPL @ 10% THD*	122 dB	126 dB	128 dB	128 dB	128 dB	128 dB	126 dB	129 dB
Axial sensitivity 1W@1m*	97 dB	99 dB	104 dB	104 dB	104 dB	104 dB	101 dB	104 dB
Power handling, peak	1,200 W	1,200 W	1,200 W	1,200 W	1,200 W	1,200 W	1,500 W	1,500 W
Power handling, program	600 W	600 W	800 W	800 W	800 W	800 W	1,000 W	1,000 W
Power handling, nom. (RMS)	300 W	300 W	400 W	400 W	400 W	400 W	500 W	500 W
Speakers								
Bass / Mid	8"	10"	12"	12"	15"	15"	2x 10"	18"
HF driver	1"	1"	1"	1"	1"	1"	-	-
Impedance	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	4 Ω	4 Ω
HF protection (passive)	Dyn. protective circuit	Dyn. protective circuit	Dyn. protective circuit	Dyn. protective circuit	Dyn. protective circuit	Dyn. protective circuit	-	-
Horn dispersion	80° x 80° CD horn	90° x 60° CD horn	60° x 40° CD horn	60° x 40° CD horn	60° x 40° CD horn	60° x 40° CD horn	-	-
X-over frequency	2.5 kHz, 12 dB/oct.	2.2 kHz, 12 dB/oct.	2 kHz, 12 dB/oct.	2 kHz, 12 dB/oct.	2 kHz, 12 dB/oct.	2 kHz, 12 dB/oct.	150 Hz, 12 dB/oct.	150 Hz, 12 dB/oct.
Connectors	2 x Speakon	2 x Speakon	2 x Speakon	2 x Speakon	2 x Speakon	2 x Speakon	2 x Speakon	2 x Speakon
Angles up	-	30°	-	30°	-	45°	-	-
Pole mount	Mono Tilt 3°	DuoTilt 3°/7°	DuoTilt 3°/7°	-	DuoTilt 3°/7°	DuoTilt 3°/7°	2 x M20	M20
Rigging/ pick points	3 x M8	3 x M8	3 x M8	-	3 x M8	3 x M8	-	-
Casters	-	-	-	-	-	-	-	Optional 100 mm
Dimensions (W x H x D)	27 x 42 x 27 cm	32 x 48 x 29 cm	39 x 57 x 36 cm	39 x 55.5 x 38 cm	47 x 61.5 x 41.5 cm	47 x 61.5 x 44.5 cm	36 x 61 x 53 cm	53 x 61 x 64 cm
Weight	10 kg, 22 lbs	12.9 kg, 28.4 lbs	18.5 kg, 40.8 lbs	16.1 kg, 35.5 lbs	22.5 kg, 49.6 lbs	21.4 kg, 47.1 lbs	25.9 kg, 57.1 lbs	40.6 kg, 89.5 lbs

Recommended power output: Use amps that deliver between 600 and 800 watts RMS per channel @ 4 ohms to drive PREMIUM PR:0 enclosures. Ensure the amp's peak power output is at least 1,200 watts per channel @ 4 ohms to leave enough headroom for dynamic musical signals.

*) All measurements taken under half-space conditions.

**) Active x-over frequency at 24 dB/ octave



Balance and Power

PULSAR

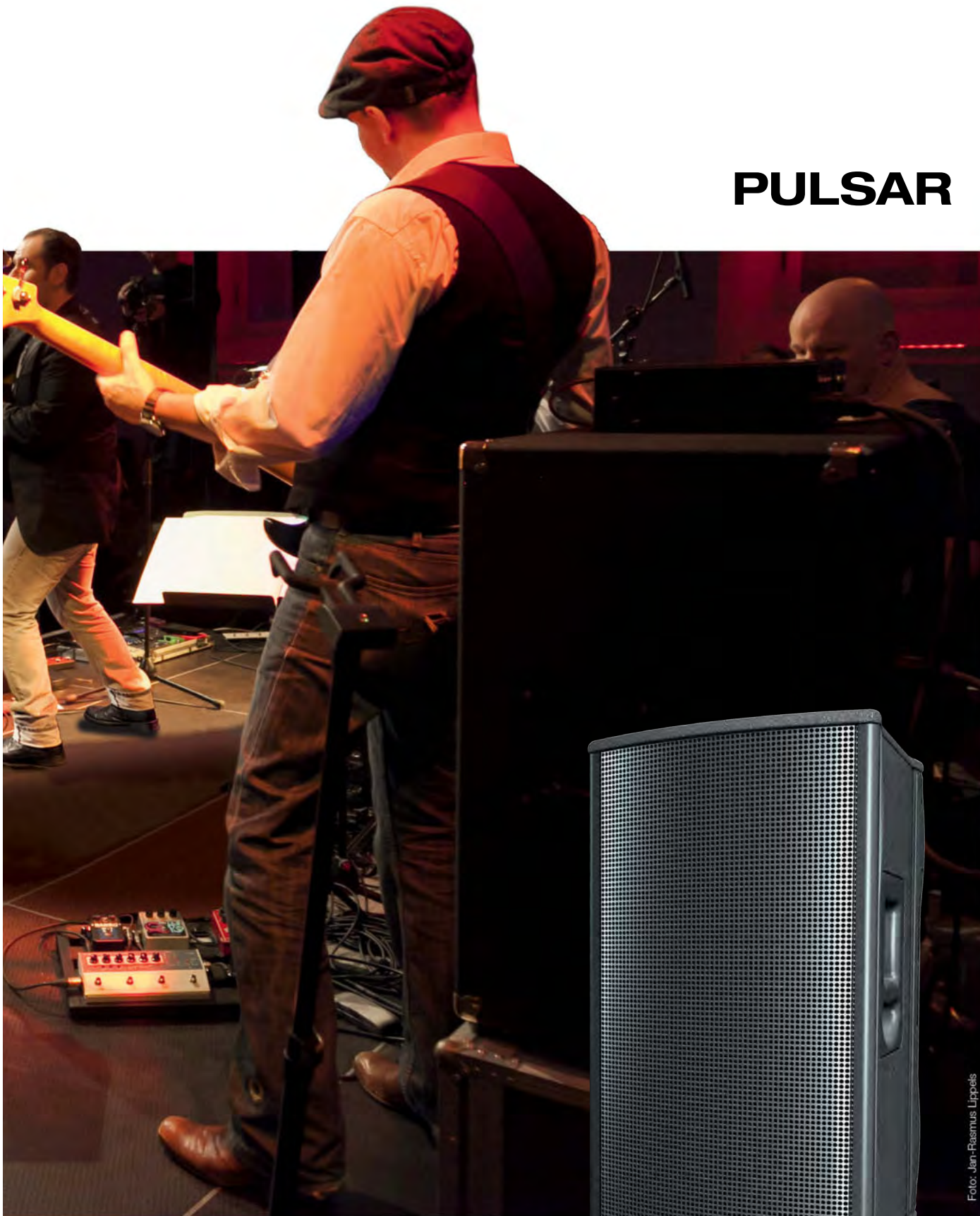


Foto: Jan-Rasmus Lippels

The new PULSAR line of speaker cabinets was designed specifically for musicians and DJs who want state-of-the-art acoustics and electronics packaged in a classic format. Manufactured at HK AUDIO's St. Wendel plant, these PA cabinets feature select wood chosen for its superior acoustic properties. What's inside is no less impressive – a sophisticated integrated digital controller and power circuitry with remarkable headroom. This combination packs a mighty sonic punch with perfectly balanced, rich and transparent sound at any volume. It has never been so easy to enjoy professional audio performance!



Inconspicuous strips protect the unit's vertical edges. Built-in feet prevent scratches when the cab is placed on its side.



Designed for comfortable handling in every situation, the practical grips attest to HK AUDIO's experience, the culmination of decades spent working with professional PA companies.



The patented DuoTilt™ pole mount has also proven its merits in countless applications. It is certainly convenient and quite possibly the easiest means of aligning fullrange models so audience enjoy excellent acoustics all around.



Pulsar cabinets feature a low-resonance, doweled wooden chassis crafted with old-world quality and care. Ingeniously simple yet well-designed plastic components are placed at strategic points for maximum utility.



The electronic circuitry with all the connectors and controls is a cohesive block well-protected by an epoxy frame.



The two PL 112 FA and PL 115 FA fullrange models' amps deliver a total of 1,000 watts each, with 650 watts devoted to the subwoofer and 350 watts going to the high-frequency driver. A DSP-driven controller ensures these components work together to deliver optimum performance and reliably protects speakers from overloads. Both models can be adapted quickly and efficiently to different application scenarios simply by flipping two preset switches.



The fullrange models' connector panels sport independently variable inputs for line, mic and stereo line signals. This means the PL 115 FA and PL 112 FA may be used for small PA applications even without an external mixer.



The 600-watt PL 118 SUB A subwoofer also comes with exceptional features tuned to deliver superior results. A hybrid design with a resonator chamber delivers impressive SPL from the lowest sub-bass frequencies up to the crossover frequency. The built-in x-over routes bass frequencies exclusively to the 18" woofer and provides a frequency-compensated output signal for the connected mid/ high-range satellite.





PL 112 FA

A compact and comfortably portable high-performance unit, this cabinet continues to deliver remarkable bass response even at high volume levels without sacrificing any of the midrange performance that is so vital to live sound.



PL 115 FA

Although just slightly larger and heavier than the PL 112 FA, the PL 115 FA packs a mightier punch in the bass frequencies and low mids. And that makes it an excellent standalone solution for DJs and the perfect complement to the PL 118 SUB A subwoofer in larger setups.



PL 118 SUB A

This powerful 18" subwoofer delivers crisp, tight signals. Its renders higher-register bass tones with plenty of snap despite its remarkably low-ranging response. It's everything the demanding DJ wants and larger PAs need in a bass bin.

System Examples



The PL 112 FA top with TB-1 single-cab tilt bracket (optional)



PL 112 FA + PL 118 SUB A



PL 115 FA + 2 x PL 118 SUB A



Covers

Padded covers are available as an optional accessory for all PULSAR series models.



TB-1

This single-cab tilt bracket serves to attach the PL 112 FA / PL 115 FA to trusses using appropriate half-couplers or trigger clamps (M12). It attaches to variable positions on the recessed handles. Once the unit is aimed properly, the TB-1 is simply secured with the clamping lever.



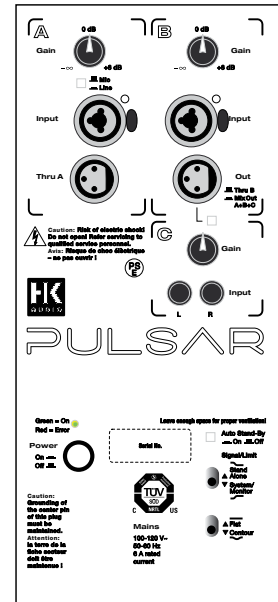
Tilt Unit

The Tilt Unit serves to aim the mid/ high unit that sits on top of the subwoofer in full stack configurations. Custom-made for PULSAR / LINEAR 5 enclosures, it provides the optimum spacing between the speaker on top and the subwoofer below.

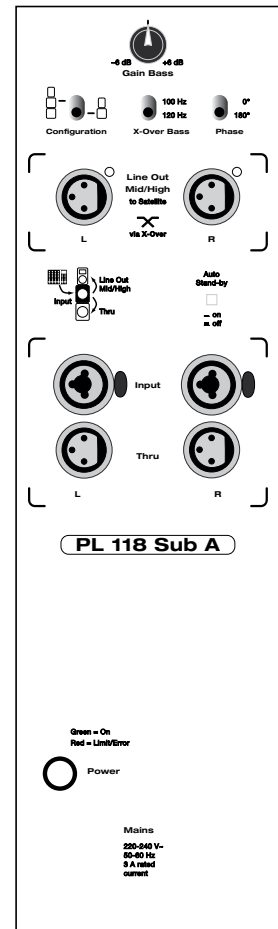
Technical Data

	PL 112 FA	PL 115 FA	PL 118 Sub A
Frequency response ± 3 dB	70 Hz - 16kHz	58 Hz - 16 kHz	44 Hz X-over
Frequency response -10 dB	56 Hz - 18kHz	49 Hz - 18 kHz	35 Hz X-over
Max. SPL @ 10% THD	125 dB half space	127 dB half space	125 dB half space
Output power	1000 watts	1000 watts	600 watts
Amp type	Class D biamped	Class D biamped	Class D
Amp to woofer	650 watts @ 4 ohms	650 watts @ 4 ohms	
Amp to driver	350 watts @ 4 ohms	350 watts @ 4 ohms	
Bass woofer	12" with 2" voice coil (4 Ω)	15" with 2.5" voice coil (4 Ω)	18" (4 Ω) with 3" voice coil featuring Advanced Cooling technology
HF driver	1" with 1" voice coil (16 ohms)	1" with 1" voice coil (16 ohms)	
Horn directivity	90° x 55° CD horn	90° x 55° CD horn	
Voicing section	2 EQ switches: Stand Alone / System & Flat / Contour	2 EQ switches: Stand Alone / System & Flat / Contour	
Input sensitivity	+4dB @ Gain	+4dBu @ Gain center-click	+4dBu @ Gain center-click
Active protective circuits	Under-voltage, thermal, short circuit, and over-current protection	Under-voltage, thermal, short circuit, and over-current protection	Under-voltage, thermal, short circuit, and over-current protection, look-ahead thermal management
DSP	Crossover, EQ, RMS limiter, peak limiter, time alignment, look-ahead thermal management	Crossover, EQ, RMS limiter, peak limiter, time alignment, look-ahead thermal management	
Subsonic Filter	yes	yes	yes
Peak Limiter	yes	yes	yes
RMS Limiter	yes	yes	
Auto Standby	yes	yes	yes
Phase Reverse			yes
Audio ports	2 x XLR Combo In 1x Stereo Cinch In 2 x XLR Thru 1 x XLR Mix Out	2 x XLR Combo In 1x Stereo Cinch In 2 x XLR Thru 1 x XLR Mix Out	2 x XLR Combo In 2 x XLR Thru 2 x XLR Mid/High Out
Sensitivity switch	yes - Line/Mic Input A	yes - Line/Mic Input A	
Active x-over frequency			100Hz / 120Hz variable with 24 dB/oct.
Pole mount	Duo Tilt 3/7	Duo Tilt 3/7	M20
Suspension points	5 x M8	5 x M8	
Grips	2, integrated	2, integrated	4, integrated
Optional accessories	Cover Tilt Unit Rigging Yoke	Cover Tilt Unit Rigging Yoke	Cover Tilt Unit 100mm casters
Housing	Hybrid (MDF, particle)	Hybrid (MDF, particle)	MDF / particle
Front grille	1mm metal grille backed with black acoustic foam	1mm metal grille backed with black acoustic foam	1mm metal grille
Finish	Acrylic enamel, black	Acrylic enamel, black	Acrylic enamel, black
Dimensions (WxHxD)	38 x 66 x 37cm	46.5 x 69 x 45.2 cm	52.5 x 69 x 69.1 cm
Weight	19.7 kg / 43.43 lbs	25.7 kg / 56.66 lbs	40.5 kg / 89.3 lbs

Preliminary technical data at the time of printing; standard devices' specifications subject to change. To learn more, visit our website at www.hkaudio.com.



The top's panel (PL 112 FA & PL 115 FA)



The subwoofer's panel (PL 118 SUB A)



LINEAR 5



Superior Performance & Loudness

High-Performance Speakers with Remarkable SPL

LINEAR 5

With LINEAR 5, HK AUDIO has unveiled a line of high-performance PA cabinets that is sure to delight ambitious musicians and DJs as well as discerning hire companies. No other system competing in the class of 1" drivers can match its SPL. The high-quality wood housings are anything but standard. Made of tough multilayer birch plywood and a birch/MDF hybrid, these rugged enclosures not only stand up to the rigors of the road, they also have excellent performance enhancing acoustical properties.

Top-drawer features like this usually come at a steep price, but the LINEAR 5 line is surprisingly affordable. LINEAR 5 is exceptionally versatile: It takes just two

L5 112 FA units to set up a full-edged fullrange system. Two stackable LINEAR 5 subwoofers may be added for applications requiring more bass. What's more, these tops can also serve as delay line monitors (the XA model) and as speakers in distributed sound reinforcement systems. Engineered by a crack R&D team that has been designing pro audio equipment for more than 25 years, LINEAR 5 is made in Germany. Users expect nothing less than flawless finishing, faithful reproduction, and excellent specs from HK AUDIO. LINEAR 5 delivers all this and more: Our customers also enjoy exemplary service provided by dealers in 55 countries around the world.



L5 112 X / XA

The 12"/1" model is housed in a multifunctional enclosure that delivers highest sound pressure levels (135 dB MAX SPL peak). A switchable filter configures it for use as a top unit (adding long-range capability) in systems with the Linear Sub 2000/2000 A. The L5 112 XA also serves as an excellent monitor with a plenty of gain before feedback, whereby the rotatable 60° x 40° CD horn provides an exemplary coverage pattern.



L5 112 F / FA

The 12"/1" fullrange top delivers the most powerful bass performance in its class. It also sports an asymmetrical horn (60°x90°x55°) tuned to optimize sound dispersion. The switchable EQ (High Power/ Small Venue) configures the cab's dynamic response to suit the application and location. High Power is always your first choice when you need maximum sound pressure and range. Small Venue is a great option for standard applications in smaller to midsized rooms and for moderate levels because it serves up a remarkably transparent and warm audio signal.



L5 115 F / FA

Able to pump out up 1,000 watts as a stand-alone cabinet, the ultra efficient 15"/1" fullrange top is, like its smaller sibling, the loudest reference speaker in its class. And like the L5 FA 112, it is equipped with an asymmetrical horn. Its throw pattern is optimized to provide the best coverage. The pattern is wider up front and grows more directed with distance, thereby achieving greater range.





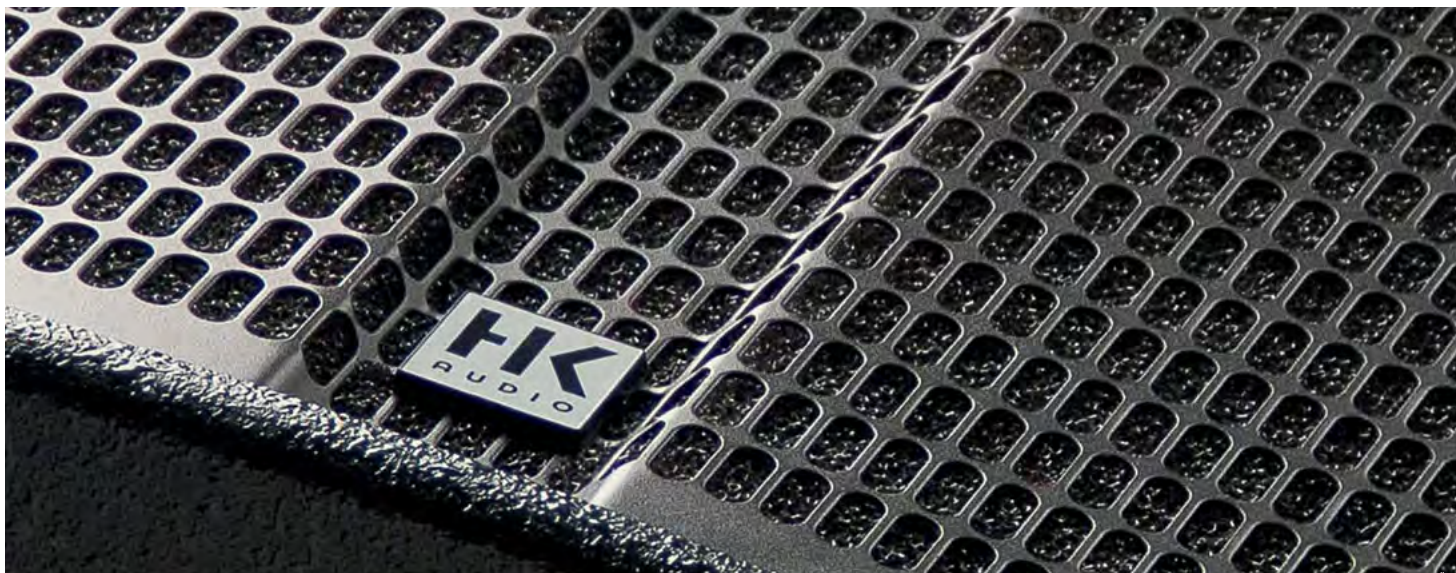
L SUB 2000/2000 A

Equipped with a sixth-order double bandpass crossover, the L Sub 2000/ 2000 A is the perfect reinforcement for L5 tops. Its low-end performance in the 39 -120 Hz range is most impressive. It sports two 12" high-excursion woofers. This speaker's 2.5" voice coil comes with a state-of-the-art cooling system and a dual spider suspension to keep it perfectly centered. A newly developed 1,200-watt, Class-D power amp drives these speakers.



L SUB 1200/1200 A

This compact and light woofer comes in a bass reflex enclosure. It is ideal for band PAs. The powered version sports a remarkably efficient 1,200 watt, Class-D power amp that can also drive a connected passive L Sub 1200. Loaded with two remarkably responsive 10" woofers, it delivers tight, snappy bass with a lot punch ranging all the way down to around 38 Hz.



LINEAR 5 - PACKS

Fully Powered, End-To-End Systems for ambitious Musicians, Bands, DJs and Hire Companies

LINEAR 5 Packs consists of LINEAR 5 series active components in plug & play configurations designed to deliver unrivalled performance. All packs deliver persuasive performance with impressive SPL, high-definition signals and great flexibility. Users benefit from a surprisingly simple handling concept. Cabinets are easily configured for the given setup with a flick of the mid/ high units' Gain/EQ switch and the subwoofers' Configuration switch. The system does the rest using the integrated controller's settings. Covers, mounting poles and tilt units (for select Packs) put the finishing touch on these all-in-one packages.



L5-CLUB PACK

Consisting of:
 2 x L5 112 FA
 2 x L Sub 1200 A
 2 x speaker pole
 4 x protective cover
 Extendable to a full stack with 2 x L Sub 1200

User profile	Audience size
Entertainer	300
Acoustic duo	300
Band	200
DJ	200
Hire companies	200



L5-ROCK PACK

Consisting of:
 2 x L5 112 FA
 2 x L Sub 1200 A/ 2 x L Sub 1200
 6 x protective cover
 2 x Tilt Unit

User profile	Audience size
Acoustic band	400
Rock band	300
DJ	300
Hire companies	300



L5-POWER PACK

Consisting of:

- 2 x L5 112 XA
- 2 x L Sub 2000 A
- 2 x speaker pole
- 4 x protective cover

Extendable to a full stack with 2 x L Sub 2000 A

User profile	Audience size
Rock band	350
DJ	350
Hire companies	350



L5-BIG VENUE PACK

Consisting of:

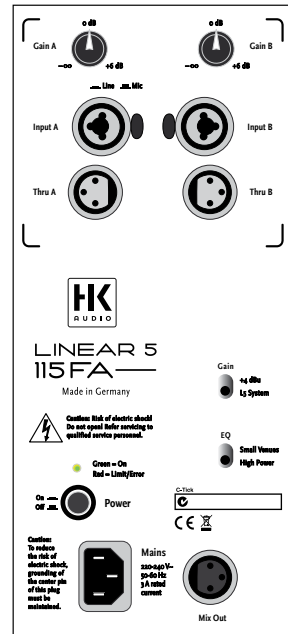
- 2 x L5 115 FA
- 4 x L Sub 2000 A
- 2 x Tilt Unit
- 6 x protective cover

User profile	Audience size
Rock Band	500-600
DJ	500-600
Hire companies	500-600

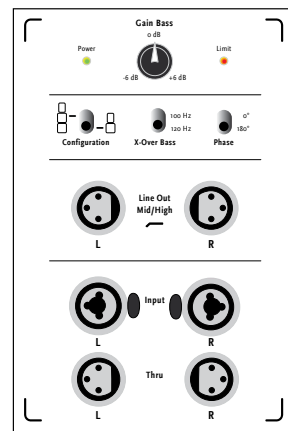
The benefits of LINEAR 5 Packs

- All components fine-tuned for a perfect match
- No outboard hardware such as controllers & amps required
- Flexible setup and use
- Factory-included accessories
- Much better deal than buying individual components
- Engineered to withstand the rigors of the road
- Linear 5 factory presets for utmost handling convenience

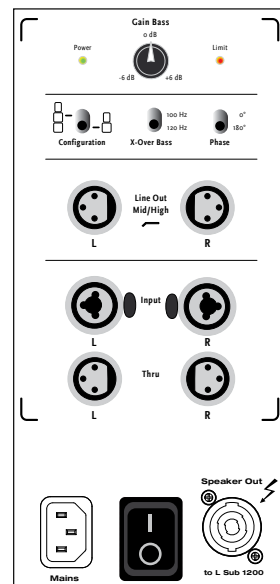
The best performance packs in its class with stellar sound pressure, Toughness, Bang for buck and Handling



The top's panel
(L5 112 FA, L5 115 FA)



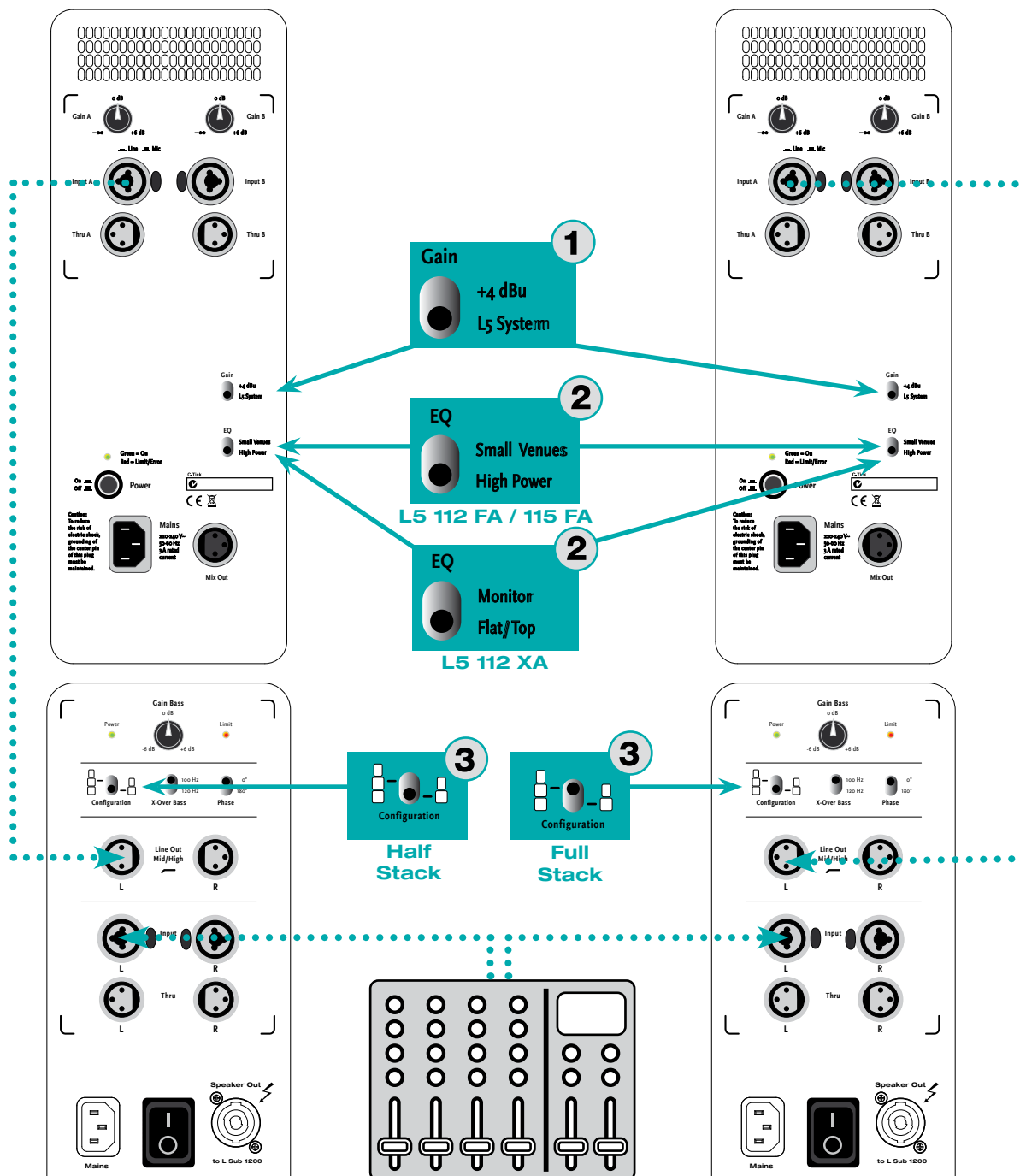
The subwoofer's panel (L Sub 2000 A)



The subwoofer's panel (L Sub 1200 A)

The tilt bracket attaches to variable positions on the recessed handles. Once the unit is aimed properly, the TB-1 is simply secured with the clamping lever.

System setup/signal routing map



- 1** Automatically adjusts the enclosure's input sensitivity or gain to match the given system configuration when using subwoofers
- 2** Selects the optimum EQ setting for L5 112 FA/XA and L5 115 FA mid/high units when used in a Linear 5 system with subwoofers
- 3** Adjusts the subwoofers' levels to match that of the mid/high unit in the given half-stack or full-stack configuration

Accessories



Protective covers

Padded covers are available as optional accessories for all Linear 5 models.



Satellite Add-On Package

An accessory set for powered satellite systems, the Satellite Add-On Package contains two aluminum M 20 speaker poles and two 3m XLR cables in a nylon carrying bag.



TB-1

This single-cab tilt bracket serves to attach the L5 112 F/FA and L5 115 F/FA to trusses using appropriate half-couplers or trigger clamps (M12). It attaches to variable positions on the recessed handles. Once the unit is aimed properly, the TB-1 is simply secured with the clamping lever.



Tilt Unit

The tilt unit permits perfect satellite-to-audience alignment using a full stack system.

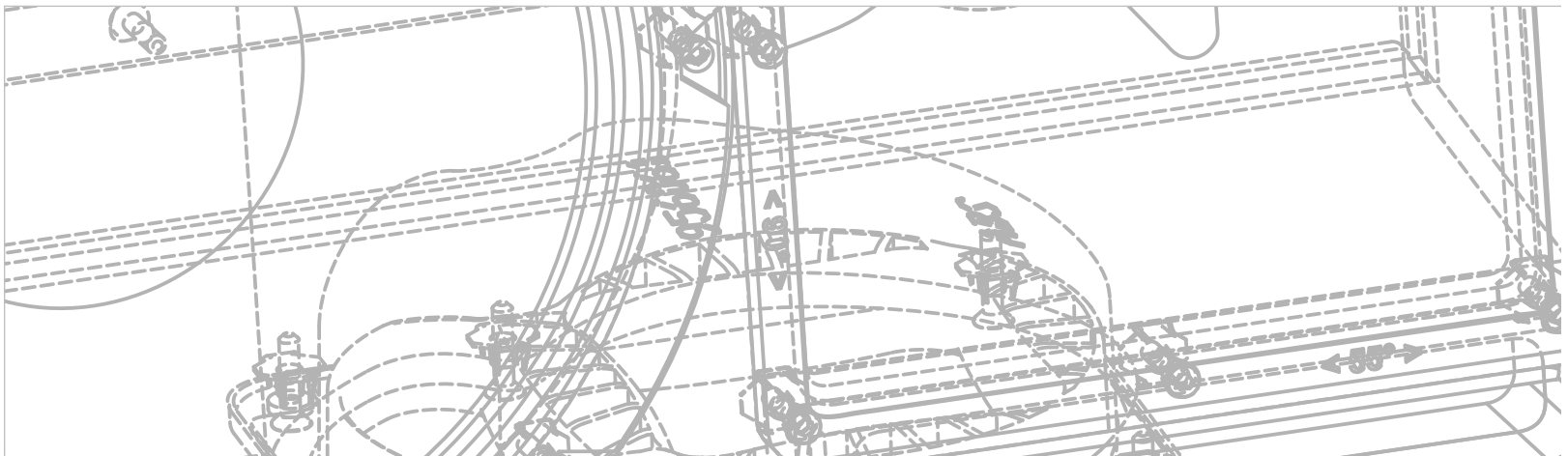
Technical Specifications

Passive	L5 112 X	L5 112 F	L5 115 F	L Sub 2000	L Sub 1200
Frequency response +/- 3 dB	100 Hz - 18 kHz	70 Hz - 18 kHz	60 Hz - 18 kHz	49 Hz X-over	55 Hz - X-over
Frequency response -10 dB	72 Hz - 20 kHz	60 Hz - 19 kHz	55 Hz - 20 kHz	39 Hz - X-over	38 Hz - X-over
Axial sensitivity 1 W @ 1 m*	105 dB	104 dB	106 dB	104 dB	101 dB
Power handling					
Continuous	500 W	500 W	600 W	700 W	600 W
Program	1000 W	1000 W	1200 W	1400 W	1200 W
Peak	2000 W	2000 W	2400 W	2800 W	2400 W
Max SPL @ 10% THD*	129 dB	128 dB	130 dB	134 dB	128 dB
Max SPL Peak @ 10% THD*	135 dB	134 dB	139 dB	135 dB	130 dB
Audio ports	2 x Speakon NL4	2 x Speakon NL4	2 x Speakon NL4	2 x Speakon NL4	2 x Speakon NL4
Bass woofer	1 x 12" with 2.5" voice coil	1 x 12" with 2.5" voice coil	1 x 15" with 3" voice coil	2 x 12" with 2.5" voice coil featuring Advanced Cooling technology	2 x 12" with 2.5" voice coil featuring Advanced Cooling technology
HF driver	1" with 1.75" voice coil	1" with 1.75" voice coil	1" with 1.75" voice coil	-	-
Nominal impedance	8 ohms	8 ohms	8 ohms	4 ohms	8 ohms
Horn directivity	60° x 40° CD horn, rotatable	60°-90° (asy.) x 55° CD horn, rotatable	60°-90° (asy.) x 55° CD horn, rotatable	-	-
X-over	1.7 kHz, 12 dB/oct. passive	1.7 kHz, 12 dB/oct. passive	1.7 kHz, 12 dB/oct. passive	Controller driven	Controller driven
Pole mount	DuoTilt 3/7	DuoTilt 3/7	DuoTilt 3/7	M20	2 x M20
Suspension points	3 x M8	3 x M8	3 x M8	-	-
Grips	2, integrated	2, integrated	2, integrated	4, integrated	4, integrated
Optional accessories	Protective cover	Protective cover	Protective cover	Protective cover, 100 mm Blue Wheels, Tilt Unit	Protective cover, 100 mm Blue Wheels, Tilt Unit
Housing	Hybrid (birch multiplex / MDF)	Hybrid (birch multiplex / MDF)	Hybrid (birch multiplex / MDF)	Birch multiplex 15/18 mm, 9/13 ply	Birch multiplex 15/18 mm, 9/13 ply
Front grille	2 mm metal grille backed with black acoustic foam	2 mm metal grille backed with black acoustic foam	2 mm metal grille backed with black acoustic foam	2 mm metal grille	2 mm metal grille
Finish	Acrylic enamel, black	Acrylic enamel, black	Acrylic enamel, black	Acrylic enamel, black	Acrylic enamel, black
Dimensions (W x H x D)	37 x 66.8 x 30 cm	37 x 66.8 x 36.5 cm	44.9 x 70.8 x 45 cm	50.6 x 80.6 x 61 cm	38 x 66.8 x 56 cm
Weight	19.5 kg / 43 lbs	23.3kg / 51.4 lbs	30.1 kg / 66.4 lbs	44.3kg / 97.7 lbs	29 kg / 63.9 lbs

* half-space

Active	L5 112 XA	L5 112 FA	L5 115 FA	L Sub 2000 A	L Sub 1200 A
Frequency response +/- 3 dB	100 Hz - 18 kHz	64 Hz - 18 kHz	57 Hz - 18 kHz	49 Hz X-over	55 Hz - X-over
Frequency response -10 dB	72 Hz - 20 kHz	57 Hz - 20 kHz	48 Hz - 20 kHz	39 Hz - X-over	38 Hz - X-over
Axial sensitivity HF 1 W @ 1 m*	116 dB	116 dB	116 dB	-	-
Axial sensitivity LF 1 W @ 1 m*	104 dB	104 dB	106 dB	104 dB	101 dB
Max. SPL@10% THD	129 dB	127dB	129 dB	132 dB	126 dB
Max. SPL Peak@10% THD	135 dB	134 dB	139 dB	133 dB	128 dB
Max. SPL Calc.	138 dB	138 dB	139 dB	135 dB	129 dB
Amp/type	Class-D – biamped	Class-D – biamped	Class-D – biamped	Class-D	Class-D
Output power	1000 W	1000 W	1000 W	1200 W	1200 W
Amp to driver	350 W @ 4 ohms	350 W @ 4 ohms	350 W @ 4 ohms	-	-
Amp to woofer	650 W @ 4 ohms	650 W @ 4 ohms	650 W @ 4 ohms	1200 W @ 4 ohms	1200 W @ 4 ohms
Protective circuits, amp	Under-voltage, thermal, short circuit, and over-current protection	Under-voltage, thermal, short circuit, and over-current protection	Under-voltage, thermal, short circuit, and over-current protection	Under-voltage, thermal, short circuit, and over-current protection	Under-voltage, thermal, short circuit, and over-current protection
Protective circuits, speakers	Subsonic 24 dB/oct. peak limiter	Subsonic 24 dB/oct. peak limiter	Subsonic 24 dB/oct. peak limiter	Subsonic 24 dB/oct. peak limiter	Subsonic 24 dB/oct. peak limiter
Power consumption	3 A/230 V nominal pursuant to EN60065	3 A/230 V nominal pursuant to EN60065	3 A/230 V nominal pursuant to EN60065	3.3 A/230 V nominal pursuant to EN60065	3.3 A/230 V nominal pursuant to EN60065
Input sensitivity	+4 dBu @ Gain center-click / L5 system level	+4 dBu @ Gain center-click / L5 system level	+4 dBu @ Gain center-click / L5 system level	+4 dBu @ Gain center-click	+4 dBu @ Gain center-click
Audio ports	2 x XLR Combo In 2x XLR Through 1x XLR Mix Out	2 x XLR Combo In 2 x XLR Through 1 x XLR Mix Out	2 x XLR Combo In 2 x XLR Through 1x XLR Mix Out	2 x XLR Combo In 2 x XLR Through 2 x XLR Mid/High-Out	2 x XLR Combo In 2 x XLR Through 2 x XLR Mid/High-Out 1 x Speakon NL4 Out for 1 passive L Sub 1200
Mains connector	1x IEC socket with V-Lock cord retainer	1x IEC socket with V-Lock cord retainer	1 x IEC socket with V-Lock cord retainer	1 x IEC socket with V-Lock cord retainer	1x IEC socket with V-Lock cord retainer
Bass woofer	1x 12" with 2.5" voice coil (4 ohms)	1x 12" with 2.5" voice coil (4 ohms)	1 x 15" with 3" voice coil (4 ohms)	2 x 12" (8 ohms) with 2.5" voice coil featuring Advanced Cooling technology	2 x 10" (4 ohms) with 2.5" voice coil featuring Advanced Cooling technology
HF driver	1" with 1.75" voice coil (16 ohms)	1" with 1.75" voice coil (16 ohms)	1" with 1.75" voice coil (16 ohms)	-	-
Horn directivity	60° x 40° CD horn, rotatable	60°–90° (asy.) x 55° CD horn, rotatable	60°–90° (asy.) x 55° CD horn, rotatable	-	-
X-over	1.65 kHz, 24 dB/oct. active	1.65 kHz, 24 dB/oct. active	1.65 kHz, 24 dB/oct. active	100/120 Hz variable with 24 dB/oct.	100/130 Hz variable with 24 dB/oct.
Pole mount	DuoTilt 3°/7°	DuoTilt 3/7	DuoTilt 3/7	M20	2 x M20
Suspension points	3 x M8	3 x M8	3 x M8	-	-
Grips	2, integrated	2, integrated	2, integrated	4, integrated	4, integrated
Optional accessories	Protective cover	Protective cover	Protective cover	Protective cover, 100 mm Blue Wheels, Tilt Unit	Protective cover, 100 mm Blue Wheels, Tilt Unit
Housing	Hybrid (birch multiplex / MDF)	Hybrid (birch multiplex / MDF)	Hybrid (birch multiplex / MDF)	Birch multiplex 15/18 mm, 9/13 ply	Birch multiplex 15/18 mm, 9/13 ply
Front grille	2 mm metal grille backed with black acoustic foam	2 mm metal grille backed with black acoustic foam	2 mm metal grille backed with black acoustic foam	2 mm metal grille	2 mm metal grille
Finish	Acrylic enamel, black	Acrylic enamel, black	Acrylic enamel, black	Acrylic enamel, black	Acrylic enamel, black
Dimensions (WxHxD)	37 x 66.8 x 30 cm	37 x 66.8 x 36.5 cm	44.9 x 70.8 x 45 cm	50.6 x 80.6 x 61 cm	38 x 66.8 x 56 cm
Weight	21.1 kg / 46.5 lbs	23.9 kg / 52.7 lbs	30.7 kg / 67.7 lbs	46.2 kg / 101.9 lbs	30.7 kg / 67.7 lbs

* half-space





ICON LTS



Engineered for Utmost Efficiency and Coverage

A Powered, Processor-controlled PA Designed for Stacking

ICON LTS

ICON LTS is an ultra efficient rig that delivers more than 10,000 watts of Class-D power from a compact plug & play package. Consisting of 'smart' IC 112 LA mid-/high units with built-in DSPs paired with IC 118 BA subwoofers, this rig is an excellent choice for tents, clubs, open-air stages and other venues that demand substantial SPL. ICON LTS is always a world-class alternative for events where time or budget constraints prevent you from flying a line array.

The onboard ICON system controller may be managed remotely using the Podware PC application and a BVNet module. It lets you keep track of key performance parameters such as input and output levels, the amp modules' temperatures, drivers' loads, and limiter activation. You can even fine-tune the system to suit the venue's acoustics without outboard system controllers and graphic EQs. The controller also logs the temperature and limiter values during the last 72 hours in operation. This info is very useful in diagnosing errors, particularly for conducting after-action checkups on dry-hire gear.



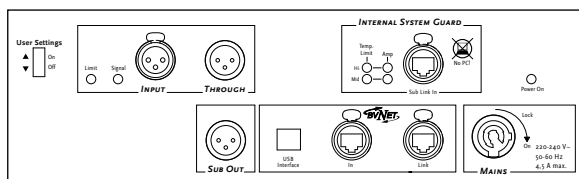
IC 112 LA

This horn-loaded 12"/1.4" mid/ high unit features a 24-bit/96-kHz DSP that manages the entire system. With a focused 60° x 40° coverage pattern ranging down to 400 Hz, it renders signals with richly detailed accuracy, sizeable reach, and high SPL. The built-in Class-D power amp delivers 1,000 W@ 4 Ω to the 12" speaker and 600 W@4 Ω to the 1.4" HF driver. Equipped with Aeroquip tracks, the enclosure can even be flown if need be. The IC 112 LA comes with a dolly that protects electronic components and the rear-mounted connectors during transport.

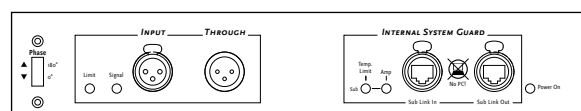


IC 118 BA

This ultra-efficient band-pass enclosure features an 18" subwoofer. Its frequency response (-10 dB) ranges from 33 Hz up to the x-over frequency, with 136 dB maximum SPL. The IC 118 BA is powered by a 2,000-watt, Class-D amp managed by a digital controller located in its mid/ high counterpart. The amp also sends status reports back to the controller via a networked link.



The IC 112 LA's panel



The IC 118 BA's panel



Accessories



ICON LTS Tilt Unit

Serving to aim the mid/ high unit, the Tilt Unit offers a choice of 5°, 10°, and 15° angles. It comes with a tote bag.



ICON LTS BVNet Interface

The BVNet Interface and a CAT5 cable let you integrate the system into a network and remote-control it from PC, even via a wireless link, if you wish.



ICON LTS Protective Covers

These tailored covers made of extremely tear-resistant, water-repellent nylon protect the units, with slots affording access to the carrying handles.



ICON LTS Bass Connector Set

Technical Specifications

	IC 112 LA	IC 118 BA
Power output, low-range	-	2,000 W Class-D @ 4 Ω
Power output, midrange	1,000 W Class-D @ 4 Ω	-
Power output, high-range	600 W Class-D @ 4 Ω	-
Frequency response +/- 3 dB	134 Hz – 17 kHz	41 Hz – x-over
Frequency response - 10 dB	108 Hz – 17 kHz	33 Hz – x-over
Directivity	60° x 40° CD horn (400 Hz – 17 kHz)	-
Sensitivity 1 W @ 1 m*	109 dB	105 dB
Max. SPL calculated	139 dB	138 dB
Max. SPL peak @ 10% THD*	130 dB	138 dB
Max. SPL @ 10% THD*	134 dB	136 dB
Low- / midrange woofer	12" neodymium/ 8 Ω	18" neodymium/ 4 Ω
HF driver	1.4"/8 Ω	-
X-over frequency	900 Hz, 24 dB/octave	-
Connectors	1 x XLR Line In 1 x XLR Line Through 1 x XLR Sub Out 2 x BVNet RJ45 IN/OUT 1 x Ethernet RJ45 Internal System Guard	1 x XLR Input 1 x XLR Through 2 x Ethernet RJ45 Internal System Guard
Housing	15 mm (5/8"), 13-ply birch	15 mm (5/8"), 13-ply birch
Rigging hardware	Aeroquip rail	-
Dimensions (W x H x D)	50 x 60 x 81 cm	50 x 90 x 81 cm
Weight	49.9 kg, 110 lbs	54.1 kg, 119 lbs

* half-space



CONTOUR



Stellar Dynamic Response and Phenomenal Fidelity

High-performance Speakers for Near-field and Monitoring Applications

CONTOUR

The CONTOUR SERIES comprises professional-grade, high-performance speakers well suited for many applications. Common to all models is HK AUDIO's trademark versatility, handling ease and old-world craftsmanship. They raise the bar for speech intelligibility and phase linearity. Housed in dual-purpose enclosures,

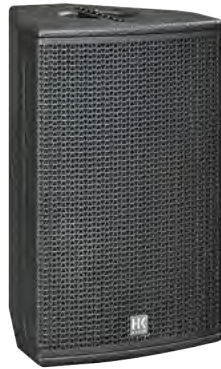
they may be deployed as FOH speakers and as stage monitors. CT models were designed for loud rock stages. They brook no compromises in their ability to deliver high SPL, yet remain remarkably feedback-resistant. For the best audio results, we recommend operating these enclosures with a FIRNET or DSM 2060 controller.





CT 108

A compact, 8" / 1" fullrange speaker with a rotatable (90° x 60°) HF horn, it excels at rendering vocals and acoustic instruments. Able to deliver considerable output while remaining true to the signal, it is very well suited for speech reinforcement and as a low-profile monitor in theaters and for orchestras. Paired with a CT 118 sub, it also serves as a small FOH club system.



CT 112

Configurable in passive and biamped modes, this 12" / 1.4" cab delivers high SPL and assertive performance. It chiefly serves as a mid/ high unit in combination with the CT 118 subwoofer, as a monitor on big and deep stages, and as a standalone speaker for public address. The rotatable 60° x 40° CD horn provides precise directivity.



CT 115

Configurable in passive and biamped modes, this 15" / 1.4" enclosure delivers enhanced low-frequency response. It serves primarily as a fullrange cabinet without an added subwoofer, as a stage monitor on big stages, and as a mid/ high unit paired with the CT 118 subwoofer. The rotatable 60° x 40° CD horn provides precise directivity.



CT 118 SUB

Featuring a direct-loaded 18" subwoofer in a bass reflex housing, this unit operates in two-way active mode. Exceedingly compact, it is also very light owing to its neodymium woofer. Able to render signal peaks with authority even at the highest levels, it is well suited for FOH systems in clubs and as a side- or drum-fill on larger stages.



SL 218

This 2 x 18" sub-low handles 2 x 1,000W RMS at 4 Ω. Housed in two separate chambers, the woofers may be driven separately at 4 Ω or in parallel using a power amp rated to deliver this kind of output.

Accessories



**ConTour Series
Flight Cases and
Protective Covers**

Padded protective covers and flight cases with 100-mm Blue Wheels



**CT 118 Sub
Dolly**

Removable dolly with butterfly latches and 100-mm Blue Wheels



**CT 108
MS 1**

Mounting yoke for CT 108



**CT 112/CT115
MS 2**

35-mm pole mount adapter for the MS 1 mounting yoke and rigging frame



**CT 108
MS 3**

TV stud for MS 1 and rigging yoke with threaded M10 bushings



**CT 108
MS 4**

Cluster plate (1 pair) for CT 108 clusters



**CT 118 Sub
M20**

This speaker pole for the CT 118 serves to set up satellite systems.



**CT 108
Small Twin Fork**

For two CT 108s



**CONTOUR SERIES
Aeroquip Stud**

Eyelet-equipped stud for Aeroquip tracks



**CT 112/CT115
Rigging Yoke**

Single-point, swiveling (vertical) arm for truss mounting, with 2 x M10 studs



Technical Specifications

	CT 108	CT 112	CT 115	CT 118 Sub	SL 218 A	SL 218
Power-handling, nominal	200 W RMS	400 W RMS	600 W RMS	1,000 W RMS	-	2 x 1,000 W RMS
Power handling, program/peak	400 W / 800 W	800 W / 1,800 W	1,200 W / 2,400 W	2,000 W / 4,000 W	-	2 x 2,000 W
Recommended amplification	1,200 W RMS @ 4 Ω	1,200 W RMS @ 4 Ω	1,200 W RMS @ 4 Ω	min. 1,200 W RMS @ 4 Ω	-	1,200 W RMS @ 4 Ω
Power output, subwoofer	-	-	-	-	2 x 1,000 W Class-D @ 4 Ω	-
Power output, mid/ high	-	-	-	-	-	-
Frequency response +/-3 dB	100 Hz – 19 kHz	80 Hz – 16 kHz	65 Hz – 16 kHz	41 Hz – 350 Hz	39 Hz – 130 Hz	39 Hz – 130 Hz
Frequency response -10 dB	90 Hz – 19 kHz	65 Hz – 19 kHz	55 Hz – 19 kHz	32 Hz – 350 Hz	39 Hz – 130 Hz	39 Hz – 130 Hz
Directivity	90° x 60° / 60° x 90°	60° x 40° / 40° x 60°	60° x 40° / 40° x 60°	-	-	-
	CD horn rotatable	CD horn rotatable	CD horn rotatable	-	-	-
Sensitivity 1 W @ 1m*	101 dB	107 dB	106 dB	100 dB (50 Hz – 200 Hz)	105 dB	105 dB
Max. SPL calculated*	130 dB	139 dB	140 dB	136 dB	139 dB	139 dB
Max. SPL peak @ 10% THD*	129 dB	138 dB	138 dB	133 dB	135 dB	135 dB
Max. SPL @ 10% THD**	128 dB	134 dB	134 dB	131 dB	132 dB	132 dB
	(200 Hz – 5 kHz)	(200 Hz – 5 kHz)	(200 Hz – 5 kHz)	(50 Hz – 200 Hz)	-	-
Nominal impedance	16 Ω	8 Ω	8 Ω	8 Ω	-	2 x 4 Ω
Low-/midrange woofer	8"	12" neodymium	15" neodymium	18" neodymium	2 x 18"	2 x 18"
HF driver	1", 2" voice coil	1.4", 3" voice coil	1.4", 3" voice coil	-	-	-
X-over frequency	1.8 kHz, 12 dB/octave	850 Hz, 12 dB/octave	850 Hz, 12 dB/octave	100 Hz - 130 Hz, controller-driven	60 Hz - 100 Hz, 12 dB/oct.	60 - 100 Hz, 24 and 12 dB/oct.
X-over modes	Passive	Bi-amped/passive, switchable	Bi-amped/passive, switchable	-	-	-
X-over shapes		FOH, Monitor	FOH, Monitor	-	-	-
Connectors	2 x Speakon NL4	2 x Speakon NL4	2 x Speakon NL4	2 x Speakon NL4	1 x XLR In/Out	4 x Speakon NL4
Housing	12-mm (1/2"), 9-ply birch	18-mm (3/4"), 13-ply birch	18-mm (3/4"), 13-ply birch	18-mm (3/4"), 13-ply birch	18-mm (3/4") 13-ply birch	18-mm (3/4") 13-ply birch
Angles up	45° (monitor application)	47° + 18° (monitor)	47° + 18° (monitor)	-	-	-
Rigging hardware	9 x M8 threaded bushings	2 x Aeroquip fly tracks 2 x M10 threaded bushings	2 x Aeroquip fly tracks 2 x M10 threaded bushings	-	-	-
Pole mount	MonoTilt 3°	TripleTilt Ø 35 mm, +5°, -3°, -10°	TripleTilt Ø 35 mm, +5°, -3°, -10°	M20 plate	-	-
Dimensions (W x H x D)	23.5 x 40.5 x 23.5 cm	38 x 62 x 34 cm	45 x 69.6 x 39.6 cm	50 x 60 x 68 cm	120 x 56 x 79 cm	120 x 56 x 79 cm
Weight	8 kg, 17.6 lbs	25 kg, 55 lbs.	33 kg	42,5 kg	98 kg	88 kg

* half-space



CONTOUR ARRAY



Maximum Efficiency

A Profitable Line Array with Professional DNA

CONTOUR ARRAY

HK Audio has bridged the gap between conventional near-field systems and big line arrays: With CONTOUR ARRAY, you finally have a rig that lets you deploy this technology profitably for sound reinforcement scenarios where in the past it simply did not pay to set up line arrays.

CONTOUR ARRAY readily scales from a small club system to a two-meter array for larger events. Flown, stacked or deployed as a satellite system, it does

exactly what you want it to do. Like the COHEDRA and COHEDRA COMPACT rigs, CONTOUR ARRAY is equipped with our Acoustic Lens technology to produce very precise directivity and maximum efficiency in the mid- and high-frequency ranges. The fine-tuned combination of active circuitry and perfectly matched speakers ensures uniform and transparent sound even at highest volumes.



CTA 208

The CTA 208 mid/ high unit excels at generating a stable line array wave-front that travels great distances. Largely impervious to the adverse effects of wind, it is loaded with two 8" neodymium speakers and four 1" drivers. The combination of its HK AUDIO Acoustic Lens and the DDO-Pro technology in the CTA 118 subwoofer of the same line delivers the ultimate in natural-sounding response.

The special DualCurve rigging system offers 0° and 9° tilt angles to facilitate both long-throw and near-field applications: Set to 0°, the individual mid/ high units are not articulated; instead they form a stable and remarkably coherent wave. This maximizes frequency bundling effects, thereby maximizing range.



CTA 118 SUB A

This direct-loaded 18" subwoofer comes with a DDO-Pro digital controller and two 1,000-watt PWM power amps on board. One drives the subwoofer's 18" speaker; the other is configured by the controller to drive a mid/ high unit; that is, a CONTOUR SERIES CT 108, CT 112 or CT 115 enclosure. The CTA 118 SUB delivers low-ranging, uniform and punchy bass response, rendering peaks with power and authority even at highest loads.



Accessories



ConTour Array Rigging Frame

Designed for flying up to four CTA 208 mid/ high units, this harness is TÜV/ BGV-C1 certified.



ConTour Array Stacking Plate

Serving to connect ground-stacked CTA 118 Sub and CTA 208 units, the plate's tilt angle adjusts in 1.5° steps up to 9° max. It is TÜV/ BGV-C1-certified.



CTA 208 Flight Case & Protective Covers

Optional padded protective covers and flight cases with heavy-duty fittings and 100-mm Blue Wheels are available for all models.



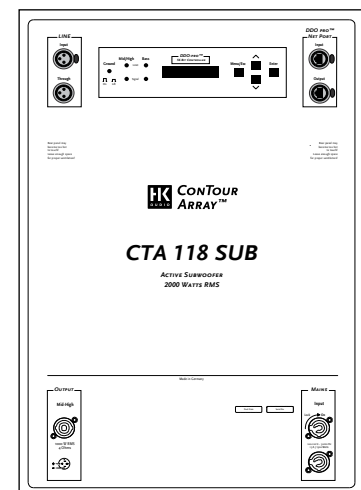
CTA 118 Dolly

Butterfly latches instantly fix the bins in place. The factory-included dolly protects the active circuitry against dirt and damage during transport.

Technical Specifications

	CTA 208	CTA 118 Sub A
Power-handling, nominal	500 W RMS	-
Power handling, program/peak	1,000 W / 1,500 W	-
Power output, subwoofer	-	1,000 W Class-D @ 4 Ω
Power output, mid/ high	-	1,000 W Class-D @ 4 Ω
Frequency response +/-3 dB	95 Hz – 19 kHz	42 Hz – x-over
Frequency response -10 dB	80 Hz – 20 kHz	36 Hz – x-over
Directivity	100° horizontal	-
Sensitivity 1 W @ 1 m*	105 dB	101 dB
Max. SPL calculated*	138 dB	134 dB
Max. SPL peak @ 10% THD*	136 dB***	133 dB
Max. SPL @ 10% THD*	134 dB (200 Hz – 5 kHz)***	130 dB (50 Hz – 200Hz)
Nominal impedance	8 Ω	
Low-/ midrange woofer	2 x 8"	1 x 18"
HF driver	4 x 1", 2" voice coil	
X-over frequency	2 kHz, 12 dB/octave	Filter set-controlled
Connectors	2 x Speakon NL4	1 x XLR In/Through, 1 x Speakon Out NL4
Housing	15/18-mm, 9/13-ply birch	18-mm, 13-ply birch
Rigging hardware	DualCurve, integrated with quick-release pins	-
Pole mount	DuoTilt 3°/7°	M20 plate
Dimensions (W x H x D)	51 x 52.5 x 34.6 cm	51 x 73 x 71 cm
Weight	29 kg, 63.9 lbs	59 kg, 130 lbs

* half-space *** measured with 2x CTA 208 mid/ high units





COHEDRA COMPACT



Professional and Versatile

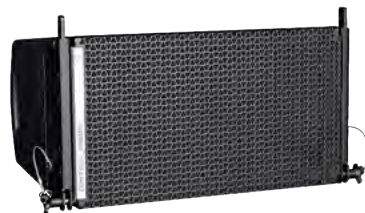
Line Array System for Audiences of Up to 3,000

COHEDRA COMPACT

Industry events, club gigs and smallish open-air rock concerts - COHEDRA COMPACT lets you roll out line arrays in venues that in the past have been the domain of conventional PAs. This rig provides plenty of oomph to keep up to 3,000 listeners entertained. And the versatility and utility that comes courtesy of the compact dimensions, light weight and easy stacking is nothing short of amazing.



COHEDRA COMPACT features the same advanced Acoustic Lens, real CD horns and compression chambers for midrange speakers as its bigger brother. The added reach, awesome dynamic range, and fantastic fidelity are sure to delight you and your audiences. What's more, COHEDRA and COHEDRA COMPACT can be readily combined.



CDR 108 C

This is a 1 x 8" / 2 x 1" mid/high unit with 100° horizontal directivity. An array composed of CDR 108 C mid/ high units delivers natural-sounding dynamic response and impressive range thanks to the 1" drivers featuring Acoustic Lens technology, a bona fide CD horn design, and 8" midrange speakers housed in compression chambers. Rigging hardware with quick-release pins is fully integrated in the housing.



CDR 210 C

This direct radiating 2 x 10" subwoofer's response is exceedingly faithful, culminating in powerful and natural-sounding low-end performance. The compact dimensions and integrated rigging hardware afford maximum flexibility for both flown and stacked setups. A special coating protects the cabinets against dirt and moisture.

Accessories



COHEDRA COMPACT Standard Rigging Frame

This rigging harness holds up to 16 CDR 108 Cs and, with the connector set, serves as the base for stacked configurations with the CDR 210 C Sub. It is TÜV/BGV-C1-certified.



COHEDRA COMPACT Connector Set

These eight quick-release pins and four connectors attach the rigging frame to a CDR 210 C or connect two CDR 210 Cs.



CDR 210 C Protective Cover

These tailored covers made of extremely tear-resistant, water-repellent nylon protect the units, with slots affording access to the carrying handles.



CDR 210 C Dolly

Removable dolly for the CDR 210 C Sub with butterfly latches and 100-mm Blue Wheels.



CDR 108 C Flightcase

Safely transports four CDR 108 Cs and a standard-rigging frame, with 100-mm Blue Wheels.

Technical Specifications

	CDR 108 C	CDR 210 C
Power-handling, nominal (RMS)	250 W	600 W
Power handling, peak	1,000 W	2,400 W
Power handling, program	500 W	1,200 W
Frequency response +/- 3 dB	88 Hz - 19 kHz	47 Hz - x-over
Nominal impedance	16 Ω	8 Ω
Axial sensitivity 1 W @ 1m*	107 dB	104 dB
Max. SPL @ 10% THD*	136 dB	139 dB
Connectors	2 x Speakon NL 4	2 x Speakon NL 4
Woofer	1 x 8" with compression chamber	2 x 10"
HF driver	2 x 1" with Cohedra Acoustic Lens	-
HF horn	100° CD horn	-
Corner frequency, passive x-over	800 Hz, 12 dB/oct.	Controller-driven
Rigging/ pick points	Integrated rigging hardware	Integrated rigging hardware
Grips	2, integrated	3, integrated
Housing	15-mm, 13-ply birch	18-mm, 13-ply birch
Front grille	Impact-resistant steel grille	Impact-resistant steel grille
Finish	2-component PU enamel, black	2-component PU enamel, black
Dimensions (W x H x D)	50 x 26 x 32.5 cm	60 x 50 x 63 cm
Weight	17.9 kg, 39.5 lbs	48 kg, 105.8 lbs

*half-space



COHEDRA



Convenient Coverage for Big Venues

Line Array System for Audiences of Up to 50,000

COHEDRA

A line array with plenty of coverage for up to 50,000 spectators, the uninitiated would say COHEDRA is certainly a big rig. Surprise, surprise: It is far more compact and lighter than comparable systems. A single one-ton motor hoist is all it takes to fly a 24-unit array. COHEDRA may be operated with and without flown

subs (CDR 210 F), although the sonic image from a line source with CDR 210 F units will be fuller. Nonetheless, it is this flexibility, among other budget-friendly factors, that makes the system such an economically efficient proposition. Both COHEDRA and COHEDRA COMPACT feature the same contingent

of advanced Acoustic Lens, real CD horns and compression chambers for midrange speakers. The added reach, awesome dynamic range, and fantastic fidelity attained by these features are a boon to audiences and audio engineers alike. And for even more versatility, COHEDRA and COHEDRA COMPACT can be readily combined.



CDR 208 S/T

This 2x 8"/1.4" mid/ high unit with 80° horizontal directivity delivers faithful dynamic response and greater range courtesy of its COHEDRA Acoustic Lens, CD horn design, and compression chambers for midrange drivers. Equipped with fully integrated rigging hardware with quick-release pins, the two CDR 208 S and T housing variants come in two forms to curve the array in different ways while minimizing side lobes.



CDR 210 F

This direct-radiating, flyable (2 x 10") subwoofer has the same basic shape as the CDR 208 S/T mid/ high units and can be flown with the same rigging hardware. The enclosure is sloped on top and bottom to enable flown bass arrays to be curved (up to 20 CDR 210 F units). The subs may be mounted on the rigging frame above the mid/ high units, flown as a separate bass array, or serve as the base for ground-stacked mid/ high units.



CDR 210 SUB

This direct-radiating (2 x 10") subwoofer delivers remarkably faithful impulse response for crisp, natural-sounding low-end performance. The CDR 210 Sub's compact design gives you maximum flexibility—left-right clusters, quad blocks, sub arrays—in configuration. A special coating protects the speakers against dirt and moisture.



Accessories



COHEDRA Rigging-Hardware

Fly harness with upper and lower rigging frame for up to 24 CDR 208 S/T mid/high units or 12 CDR 210 F bins, including lashing strap; TÜV/BGV-C1-certified



COHEDRA Stack Frame

Special frame for ground stacks with CDR 208 S/T and/or CDR 210 F units, including four adjustable spindle feet to compensate for uneven flooring



CDR 208/CDR 210 F Mid/High Case

Safely transports four CDR 208 S/T or two CDR 210 F units, with 100-mm Blue Wheels



CDR 210 SUB Bass Dolly

Special dolly for four CDR 210 units, with 100-mm Blue Wheels and lashing strap



CDR 210 SUB Protective Cover

Made of extremely tear-resistant, water-repellent nylon, this tailored zippered cover protects four CDR 210 units on the bass dolly (not included).

Technical Specifications

	CDR 208 S/T	CDR 210 F	CDR 210 Sub
Power handling, nominal (RMS)	500 W	600 W	600 W
Power handling, peak	2,000 W	2,400 W	2,400 W
Power handling, program	1,000 W	1,200 W	1,200 W
Frequency response +/- 3 dB	88 Hz – 16 kHz	47 Hz – x-over	47 Hz – x-over
Nominal impedance	8 Ω	8 Ω	8 Ω
Axial sensitivity 1 W @ 1 m*	108 dB	104 dB	104 dB
Max. SPL @ 10% THD*	138 dB (measured with 4 x CDR 208)	139 dB (measured with 4 x CDR210F)	139 dB
Connectors	2 x Speakon NL 4	2 x Speakon NL 4	2 x Speakon NL 4
Bass woofer	2 x 8"	2 x 10"	2 x 10"
HF driver	1.4"	-	-
HF horn	80° CD horn	-	-
Corner frequency, passive x-over	800 Hz, 12 dB/oct.	Controller-driven	Controller-driven
Rigging/ pick points	Integrated rigging hardware	Integrated rigging hardware	-
Grips	2, integrated	-	-
Optional accessories	Touring flight case for 4 x CDR 208,	Touring flight case for 2 x CR 210 F	Protective cover, dolly
Housing	15/18-mm, 13-ply birch	18-mm, 13-ply birch	18-mm, 13-ply birch
Front grille	Impact-resistant steel grille	Impact-resistant steel grille	Impact-resistant steel grille
Finish	2-component PU enamel, black	2-component PU enamel, black	2-component PU enamel, black
Dimensions (W x H x D)	65 x 25.5 x 60 cm (CDR 208T) 65 x 24 x 60 cm (CDR 208S)	65.5 x 48.2 x 59.4 cm	110 x 32 x 40 cm
Weight	30 kg, 66.1 lbs	41 kg, 90.4 lbs	32 kg, 70.5 lbs

* half-space



SOUNDCADDY ONE



The World's Fastest PA!

The Ultra Portable Sound System with a Retracting Line-Array, Built-in Mixer and Casters

SOUNDCADDY ONE

Sets Up in Seconds

Simply push on its mid/ high unit and the array rises fully automatically, propelled by an ingenious pneumatic lift. Another twist of the wrist is all it takes to adjust its height to up to 2.10m. And the mid/ high unit is stowed in the housing and securely locked down for transport just as quickly. What's more, the signal bus is built into the mounting pole, so no further cords are necessary to connect the unit.

Superlative Sound

The six 3.5" speakers in the mid/ high-range unit are the product of over two years of joint research with a top manufacturer who developed them exclusively for us. Their vertical alignment is based on the line-array principal to optimize frequency response, spread sound uniformly throughout the audience area, and tap the power amp's full potential.

Profound Bass

Our engineers practically reinvented the subwoofer for SOUNDCADDY ONE. It sports three 6" woofers developed specifically for the world's fastest PA. The result is a bass foundation so rich and profound that it will leave your audience wondering how an enclosure as compact as this could produce it.

Power Aplenty

SOUNDCADDY ONE is home to a 600W, Class D power amp. And with that kind of power in the engine room, it can easily entertain up to 200 guests.

Ports Galore

The integrated mixing console accepts up to four signal sources simultaneously. Microphone, guitar or MP3 player, SOUNDCADDY ONE is ready for just about anything. And its tone control may be simple, but it's surprisingly effective. Dialing in the right sound for the surroundings couldn't be any easier, even for the less technically inclined.

Made in Germany

SOUNDCADDY ONE not only looks elegant and inconspicuous, it is also well-equipped to withstand the rigors of daily use on the go. The well-crafted birch ply housing is robust and weather-resistant, the wheels are tough enough to handle even rough terrain, and the pneumatic lift can withstand years of hard use in a kindergarten.





Accessories

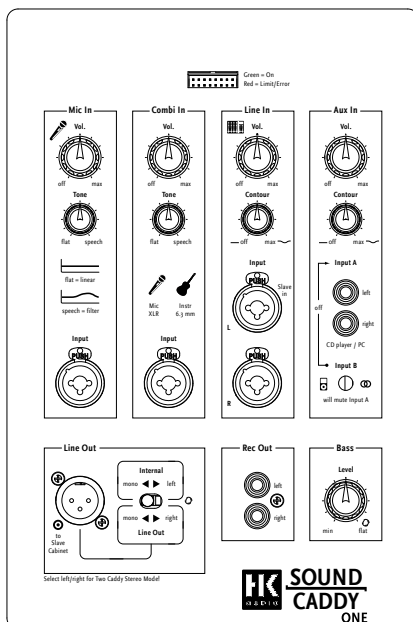
Made of water-repellant, extremely tear-resistant nylon and tailored to fit, a thickly padded cover comes factory-included to protect SOUND CADDY ONE during transport.



Technical Specifications

Power output, system amp	600W Class D @ 4 Ω
Frequency response -10 dB	42 Hz – 18 kHz
Frequency response +/-3 dB	49 Hz – 18 kHz
Dispersion pattern	70° x 15°
Max SPL, calculated*	125 dB
Max SPL, peak @ 10% THD*	125 dB
Max SPL @ 10% THD*	120 dB
Woofer	3 x 6"
Midrange/ HF speaker	6 x 3.5"
X-over frequency	150 Hz, 12 dB/octave
X-over mode	Passive
Connectors	Onboard 4-channel mixing console
Housing (birch)	15 mm, 13-ply
Weight	29 kg, 63.9 lbs
Dimensions (W x H x D)	27 x 102 x 34 cm
Connectors, 4-channel mixing console	
Mic In	XLR Combo port
Mono Combo In (Mic/Line)	XLR Combo port
Stereo Line In	XLR Combo port
Aux In	RCA (cinch) / 3.5 mm mini jack
Line Out	XLR
Rec Out	RCA (cinch)

* half-space





ELEMENTS INSTALL



Authentic Audio across the Board

The Scalable High-Performance Line System

ELEMENTS INSTALL

The ELEMENTS INSTALL KIT, in combination with ELEMENTS E 435 and E 835 units, gives you a highly scalable line array. Engineered to deliver wide-ranging frequency response, its 3.5" high-performance broadband speakers deliver a richly detailed sonic image



across the spectrum. Its high-definition signals render the human voice and top-end frequencies with utmost fidelity and outstanding speech intelligibility. And courtesy of its remarkable load-handling capacity, ELEMENTS delivers plenty of SPL to cover large rooms.

E 435 INSTALL KIT

Mid/High Unit

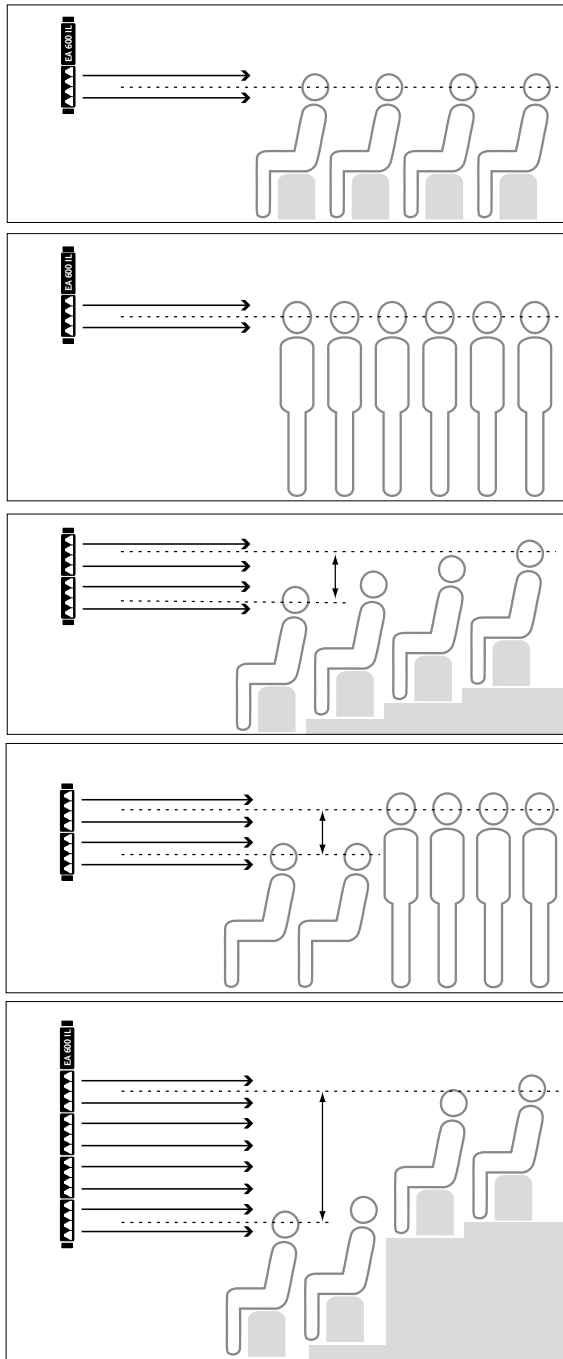
Our engineers developed the ELEMENTS INSTALL KIT to make inconspicuous installation an exercise in speed, efficiency and convenience. It consists of two modified E 435 mid/high units and mounting fixtures. Up to six mid/high units (including wall-mount kit) may be combined. An installed ELEMENTS system swivels 180° horizontally for alignment purposes. Once aimed, they units are bolted in place simply by tightening two Allen screws.

E 435 A INSTALL KIT

Mid/ High Unit with Amp Module

The powered Install kit is much the same as the E 435 IL except that it features an EA 600 with mounting fixtures in place of the passive kit's top mid/high unit. The amp module is powerful enough to drive three more E 435 mid/high units, or a combination of one E 435 and one E 835.





This makes planning that much easier: You can tailor the length of the near field and align the listening zone the audience's position simply by varying the line length. This also lets you minimize undesirable reflections from the floor and ceiling.



Technical Specifications

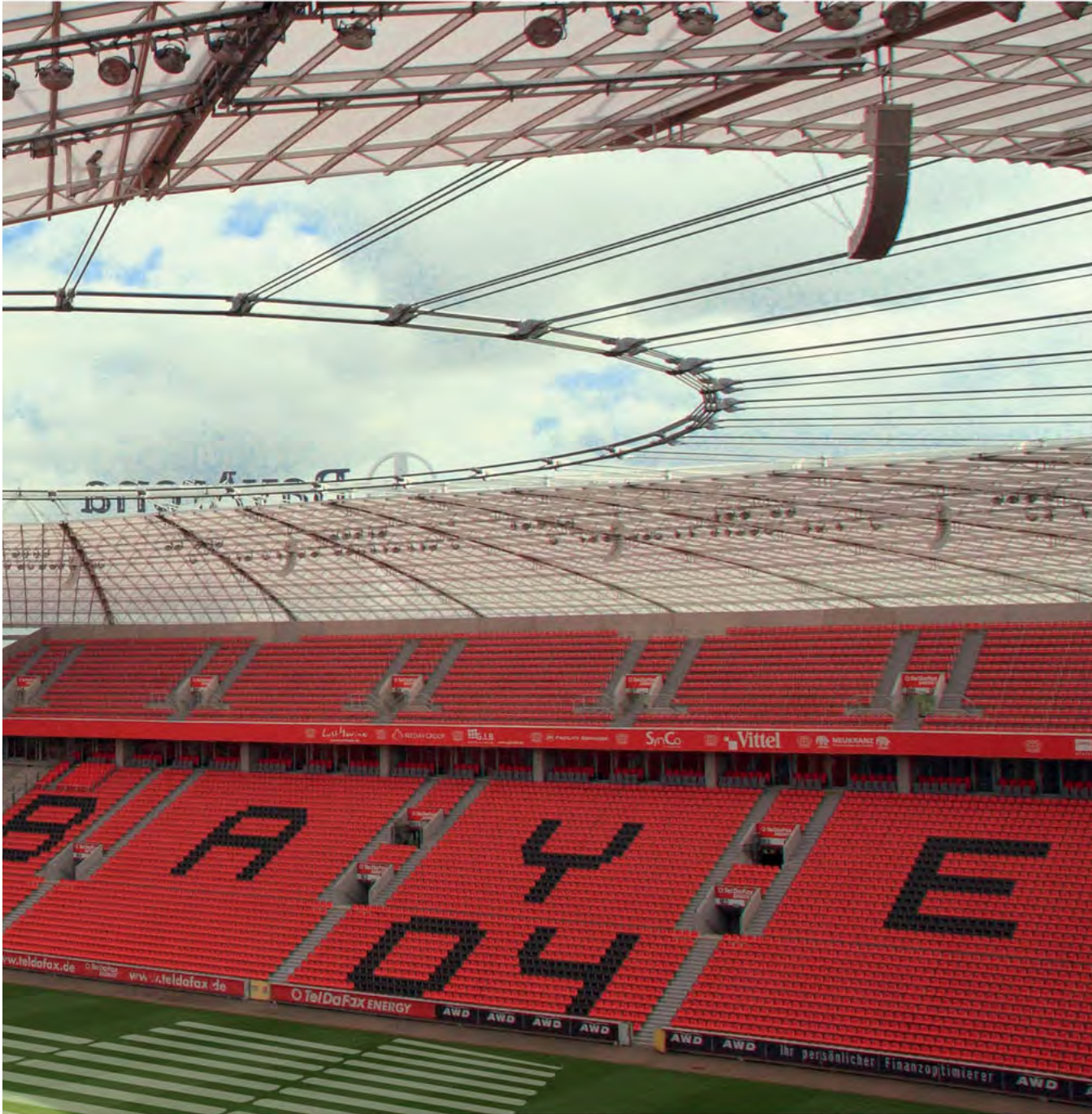
	E 435 Install Kit	E 435 A Install Kit
Power handling, nominal	300W RMS @ 8 Ω *	150W RMS @ 16Ω
Continuous power per channel		600W Class D @ 4 Ω
Frequency response -10 dB	140 Hz – 20 kHz via controller	140 Hz – 20 kHz, via active system filter
Nominal impedance	8 Ω	16 Ω
Axial sensitivity 1 W @ 1m ****	100 dB	97 dB***
Active protective circuits		RMS limiter subsonic filter DC, load, & thermal (temp.- controlled fan)
Input sensitivity		+ 4 dBu / -10 dBu (switchable)
Connectors	1 x 1/4" (6.3 mm) In jack	1 x XLR Combo In 1 x XLR Through 1 x Speakon Parallel Out
Speakers	8 x 3.5" broadband	4 x 3.5" broadband
Dispersion pattern	70° horizontal	70° horizontal
Corner frequency, passive x-over	140 Hz, 12 dB/oct.	140 Hz, 12 dB/oct.
Dimensions (W x H x D)	11 x 85 x 13 - 17 cm (incl. mounting brackets)	11 x 85 x 13 - 17 cm (incl. mounting brackets)
Weight	5.2 kg, 11.5 lbs	5.6 kg, 12.3 lbs

*) extendable with up to four E 435s or two E 835s depending on the amp's minimum impedance

) extendable with three E 435s or one E 435 + one E 835 *) with one E 435 *****) half-space



CADIS



Top Performance Regardless of Wind and Weather

Versatile Line Array for Installation Indoors and Out

CADIS

CADIS was designed first and foremost to satisfy discriminating expectations for state-of-the-art installations in stadiums, theaters, clubs, and civic centers. It is noteworthy not only for its extraordinary flexibility and sonic performance, but also for the ruggedness of its components. The mid/ high unit sports a housing made of polyamide resin, an especially durable, weatherproof space-age plastic. This resin also happens to be remarkably anti-resonant; hence the units' excellent acoustical properties.



CAD 208

This 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. It handles up to 500 watts and its horns' 100° x 15° throw pattern reaches far and wide. Just eight mid/ high units deliver full-fledged fullrange performance with excellent speech intelligibility down to the last

syllable. The rigging hardware accepts up to 24 CAD 208 mid/ high units to cover larger venues. In the stacked variant, up to eight mid/ high units and two subwoofers may be connected to the rigging frame. Given an HK AUDIO FIRNET Controller and a suitable power amp, the unit readily integrates into networked systems.

Inconspicuous installation is easy and convenient courtesy of its unobtrusive yet upscale design and the handy three-point rigging system. Black and white models are standard, and versions in any RAL color can be special-ordered. Simulation software and the requisite specifications (Ease Focus 2) are included with the CADIS system.



CAD 115 SUB

This passive subwoofer sports a high-quality 15" neodymium woofer. Its hair-trigger response and impulse accuracy make it a perfect low-end complement to the CAD 208 mid/ high unit. It may be flown at will and deployed to augment the bass performance of a speech array. A CADIS system with just two subs and four mid/ high units will serve you well as a high-quality fullrange system for smaller venues.

Accessories



CADIS Rigging Frame

This black rigging harness holds up to 24 flown CAD 208 units and, with the connector set, serves as the base for stacked configurations with the CAD 115 Sub. It is TÜV/BGV-C1-certified.



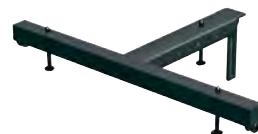
CADIS Connector Frame

This lightweight connector attaches CAD 115 subwoofers to CAD 208 mid/ high units. Up to ten mid/ high units may be installed below a flown CAD 115 Sub bin.



CADIS Wall Mount

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



CADIS Ceiling Mount

The CADIS ceiling mount accepts up to three CAD 208 mid/ high units to suspend them directly from the ceiling.



Sub Connector Set

These eight quick-release pins and four connectors attach the rigging frame to a CAD 115 Sub or connect two CAD 115 Subs.



T 1

T-bracket including one attached connector and two quick-release pins for up to four CAD 208s



ST 1

ST1 skate/ carriage for the T bracket with safety eyelet; includes two M10x12 set screws and two M8 screws



Arakno 3D Adapter

3D-adjustable angle adapter, ARAKNO connector with 2 x 20 mm system bolts



MA 1

Connector, system double bolt, stainless steel, D = 20 mm, L = 46.5 mm



MA 2

Pole connector casing with bolt fixture, 36 mm inside, to system bolt, D = 20 mm



MA 3 7,5°

Angle adapter kit, 7.5° fixed; stainless steel with two angle adapters and two 8 x 17 quick-release pins for additional set angles



MA 4

System bolt adapter, 20 mm to M12 female thread, stainless steel



MB 6

Wall-mount bracket with safety eyelet including two M10x12 set screws



MB 7

Ceiling mount accepts the 20-mm system double bolt, including two M10x12 set screws



Touring Case

Safely transports four or eight CAD 208s, with 100-mm Blue Wheels



Dolly

Removable dolly with butterfly latches for the CAD 115 Sub with 100-mm Blue Wheels

Technical Specifications

	CAD 208		CAD 115 Sub
Frequency response +/- 3 dB	75 Hz/100 Hz – 18 kHz (depending on controller & length)	Frequency response +/- 3 dB	47 Hz – 150 Hz
Axial sensitivity, 1 W @ 1m*	101 dB	Frequency response -10 dB	42 Hz – 150 Hz
Max. SPL @ 10% THD (4 x CAD 208)	136 dB	Axial sensitivity 1 W @ 1 m*	102 dB (50 Hz- 200 Hz)
Nominal impedance	8 Ω	Max. SPL	128 dB (60 Hz – 150 Hz)
Power-handling, nominal	250 W RMS, 500 W program	Max. SPL peak	131 dB (70 Hz – 90 Hz)
Speakers	2 x 8" Speaker	Max. SPL calculated	135 dB (2,400 W Peak)
HF driver	2 x 1"	Nominal impedance	8 Ω
Directivity	100° horizontal, 15° vertical	Power handling	600 W RMS
X-over frequency	1.8 KHz, 12 dB/octave	Speaker	1 x 15" neodymium woofer
Connectors	2 x Speakon NL 4 (standard), external terminal (optional), PG gland, internal terminal (optional)	Connectors	2 x Speakon NL 4
Housing	Polyamide	Housing	18-mm birch plywood
X-over	2.5 passive	X-over	Via external controller
Filter	X-over controller	Finish	Black or white, further RAL colors optional
Finish	Black or white, further RAL colors optional	Grille	Metal
Grille	Metal	Rigging hardware	4 fly tracks
Rigging hardware	Integrated 3-point	Weight	38 kg, 83.8 lbs
Adjustable curving angles	0°, 1.5°, 3°, 4.5°, 6°, 7.5°, 9°, 10.5°, 12°, 13.5° 15°	Dimensions (W x H x D)	58.3 x 57.3 x 64 cm
Weight	17.5 kg passive, 16.4 kg tri-amped (without internal passive x-over)		
Dimensions (W x H x D)	57.8 x 23.8 x 37.3 cm		
Max. number of enclosures per array	Up to 24 x CAD 208		

* half-space



VORTIS



Muscular Performance, Stylish Visuals

Passive Fullrange Speakers for Upscale Installations

VORTIS

The VORTIS series was engineered specifically to live up to the towering expectations for today's upscale indoor installations. It comprises of six high-performance enclosures. Notably, these passive fullrange speakers' coverage pattern may be adjusted individually. Their hallmark feature is a newly developed set of high-frequency horns with the same dimensions but different directivities. The horns' mouths are square so they can all be rotated, giving sound designers and audio techs plenty of patterns to choose from when installing these speakers.

Three choices of horn are available for each cab:

- 60° horizontal x 40° vertical
- 90° horizontal x 55° vertical
- 60° - 90° horizontal, (asymmetrical) x 55° vertical



60° x 40°

90° x 55°

asymmetric

VORTIS series cabinets blend nicely with the architecture of both modern and classic buildings thanks to their stylish look of subdued elegance. Fronts are covered in an acoustical grille cloth that, like the housings, comes in black and white and is available at short notice in many RAL colors.

The MDF are coated with impact-resistant paint and equipped with M10 threaded bushings for HK Audio mounting hardware.



CADIS is optionally available in all RAL colors

90



VR 10810

A two-way fullrange speaker housed in a bass reflex enclosure, the VR10810 is loaded with an 8" woofer and a 1" high-frequency driver coupled to a constant directivity horn. It is an excellent solution for speech reinforcement and smaller fullrange applications, and will serve you well as the mid/ high unit in configurations with a subwoofer such as the compact HK AUDIO IL 112 Sub or IL 115 Sub. It is also the perfect complement to larger speakers, for instance, in delay lines and for near-field coverage.



VR 11210

A two-way fullrange speaker with a passive x-over, the VR 11210 is housed in a bass reflex enclosure designed for fixed installation. It is loaded with a 12" woofer and a 1" high-frequency driver coupled to a constant directivity horn. The VR 11210 is the perfect choice for smaller fullrange applications and for use as a mid/ high unit in configurations with a subwoofer such as the compact HK Audio IL 115 Sub or IL 118 Sub.



VR 11510

A two-way fullrange speaker with a passive x-over, the VR 11510 is housed in a bass reflex enclosure loaded with a 15" woofer and a 1" high-frequency driver coupled to a constant directivity horn. The VR 11510 is ideal for midsized fullrange applications requiring extended low-frequency response, and for use as a mid/ high unit in configurations with a subwoofer such as the compact HK AUDIO IL 115 Sub or IL 118 Sub.



VR 11214

A high-performance speaker with a passive x-over, the VR 11214 is housed in a bass reflex enclosure loaded with a 12" woofer and a 1.4" high-frequency driver coupled to a constant directivity horn. An installed VR 11214 is particularly well-suited for use as a mid/ high unit in long-throw applications. It excels at rendering live music in configurations with a subwoofer such as the compact HK AUDIO IL 115 Sub or IL 118 Sub. For larger and more complex sound reinforcement scenarios, we recommend that you operate this unit with the HK AUDIO FIRNET Controller.



VR 11514

A high-performance speaker with a passive x-over, the VR 11514 is housed in a bass reflex enclosure loaded with a 15" woofer and a 1.4" high-frequency driver coupled to a constant directivity horn. A great choice of mid/ high unit for long-throw applications, it also stands out in the crowd with its ability to render live music in setups with a subwoofer such as the compact HK AUDIO IL 115 Sub or IL 118 Sub. The HK AUDIO FIRNET Controller comes highly recommended if you wish to operate this unit in larger and more complex rigs.



VR 21214

A high-performance speaker with a passive x-over, the VR 21214 is housed in a bass reflex enclosure designed for fixed installation. It is loaded with two 12" woofers for extended low-frequency response and one 1.4" high-frequency driver coupled to a constant directivity horn. The VR 21214 is well-suited for use as a mid/ high unit in long-throw applications requiring high SPL. Paired with a subwoofer such as the compact HK AUDIO IL 115 Sub or IL 118 Sub, it excels at rendering live music. If you wish to configure larger, more intricate systems, you will find the HK AUDIO FIRNET Controller to be an invaluable asset.

Accessories



Rigging/ Pick Points

These fixtures serve to attach hardware such as shackles, making it easy to connect arrest wires.



U-bracket with Mounting Plates

The U-bracket lets you mount speakers to walls and ceilings. You can aim and align cabinets as you see fit using a combination of speaker tilt unit and/or wall plate. The U-bracket ships with two mounting plates.



Speaker Tilt with Angular Alignment

This adapter adjusts the tilt angle of cabinets in 5° steps up to a maximum of 45°. The U-bracket connects the enclosure and speaker tilt fixture.



Wall Plate

This plate serves to mount cabinets to walls and ceilings. It lets you rotate the enclosure in 5° steps. You need either the U-bracket on its own or in combination with the speaker tilt to join the cabinet to the wall plate.



Cluster Plate

Speaker cabinets may be clustered to widen their throw pattern and extend coverage. This cluster plate lets you array cabinets vertically and horizontally. You will need the extension plate to cluster more than two enclosures.



Cluster Extension Plate

This extension plate is needed to cluster more than two enclosures. It serves as a shim for overlapping plates when clustering three enclosures.





Technical Specifications

	VR 10810	VR 11210	VR 11510	VR 11214	VR 11514	VR 21214
Power handling, nominal	100 W	350 W	350 W	350 W	350 W	700 W
Power handling, program	200 W	700 W	700 W	700 W	700 W	1,400 W
Power handling, peak	400 W	1,400 W	1,400 W	1,400 W	1,400 W	2,800 W
Frequency response -10 dB	84 Hz - 20 kHz	61 Hz - 20 kHz	60 Hz - 20 kHz	62 Hz - 20 kHz	55 Hz - 20 kHz	60 Hz - 20 kHz
X-over	2-way passive	2-way passive	2-way passive	2-way passive	2-way passive	2.5-way passive
X-over frequency	1100 Hz, 2 nd order	1800 Hz, 2 nd order	1800 Hz, 2 nd order	990 Hz, 2 nd order	990 Hz, 2 nd order	800 Hz/ 1100Hz
Sensitivity 1 W @ 1 m* (100 Hz - 20 kHz)	101 dB	104 dB	106 dB	105 dB	106 dB	107 dB
Max SPL @ 10% THD*	124 dB	134 dB	135 dB	135 dB	136 dB	139 dB
Nominal impedance	16 Ω	8 Ω	8 Ω	8 Ω	8 Ω	4 Ω
Woofers	1 x 8"	1 x 12"	1 x 15"	1 x 12"	1 x 15"	2 x 12"
HF driver	1 x 1"	1 x 1"	1 x 1"	1 x 1.4"	1 x 1.4"	1 x 1.4"
Horn versions: 60° x 40°, 90° x 55°, 60°- 90° x 55°	Yes, rotatable	Yes, rotatable	Yes, rotatable	Yes, rotatable	Yes, rotatable	Yes, rotatable
Directivity index	Varies depending on the version of horn					
Connectors	1 x NL 4 2 x Terminal	1 x NL 4 2 x Terminal	1 x NL 4 2 x Terminal	1 x NL 4 2 x Terminal	1 x NL 4 2 x Terminal	1 x NL 4 2 x Terminal
Housing	MDF	MDF	MDF	MDF	MDF	MDF
Filters	Controller	Controller	Controller	Controller	Controller	Controller
Finish	Textured coating in all RAL colors					
Metal grille covered in acoustical cloth	Yes	Yes	Yes	Yes	Yes	Yes
Rigging/ pick points	13 x M10	13 x M10	13 x M10	13 x M10	13 x M10	13 x M10
Dimensions (W x H x D) in cm	49 x 29 x 24 cm	60 x 42 x 40 cm	75 x 52 x 40 cm	74 x 42 x 40 cm	81 x 52 x 40 cm	109 x 42 x 40 cm
Weight	11 kg, 24.3 lbs	17 kg, 37.4 lbs	22 kg, 48.5 lbs	26 kg, 57.3 lbs	30 kg, 66.1 lbs	34 kg, 75 lbs

*half-space



IL SERIES



As Natural as Reinforced Sound Gets

Speakers for Permanent Installation

IL Series

When we set out to develop Installation Line speakers, our top priority was to render the human voice in all its natural glory. Once we perfected the acoustics, we focused on the mechanical details. Robust speaker grilles, rugged and reliable connector ports, mounting options galore, and easy-to-use hardware and accessories — nothing less would do.



IL 12.1

A two-way, fullrange cabinet geared for high-quality voice and music reinforcement in theaters, pubs, sports arenas and multipurpose halls, clubs, etc., the IL 12.1 may be deployed as a fullrange or mid/ high unit in combination with the IL 115 Sub, IL 118 Sub or IL 218 Sub subwoofers.



IL 12.2

Tuned for voice and music applications, this fullrange cab offers extraordinary phase linearity, highest speech intelligibility, and considerable dynamic range. The IL 12.2 may be deployed as a fullrange or mid/ high unit in configurations with a subwoofer such as the IL 115 Sub, IL 118 Sub or IL 218 Sub. It is the consummate cab for voice and music applications demanding high SPL. Passive x-over on board.



IL 15.1

This fullrange cab delivers enhanced low-end response and great power handling capacity for high-quality voice and music sound reinforcement in bars, live venues, smaller clubs, theaters, and so forth. It may also be deployed as a mid/ high unit with IL 115 Sub, IL 118 Sub or IL 218 Sub subwoofers. Passive x-over on board.



IL 15.2

Designed for voice and fullrange applications, this cabinet's great dynamic range with powerful low-end response, extraordinary phase linearity, and excellent speech intelligibility predestine it for use in theaters, sports and multipurpose arenas, live venues, clubs, etc. It may be supplemented with a subwoofer such as the IL 118 Sub or IL 218 Sub. Passive x-over on board.



IL 112 SUB

An exceedingly compact, direct-loaded subwoofer, it delivers natural-sounding low end with minimal distortion. It is particularly well-suited for reinforcing IL 8.1, IL 8.2, IL 8.75, IL 12.1, and IL 12.2 cabinets. Built-in hi cut filter.



IL 115 SUB

This compact, direct-loaded subwoofer delivers natural-sounding low-end at impressively low distortion levels. It provides splendid bass support for IL 8.1, IL 8.2, IL 8.75, IL 12.1 and IL 12.2 cabinets. Hi cut filter on board.



IL 118 SUB

This high-performance, direct-loaded subwoofer delivers powerful, low-ranging and dynamic low-end response to reinforce fullrange cabs. Well-suited for installation in dance clubs, live venues and theaters, it is loaded with an 18" conical loudspeaker housed in a bass reflex enclosure.



IL 218 SUB

This ultra powerful, direct-loaded subwoofer delivers extremely low-ranging, punchy and precise bass response to support fullrange cabs. Designed for large theaters, halls, clubs, live venues and all applications demanding high SPL, it is the perfect complement to IL 12.1, IL 12.2, IL 15.1, and IL 15.2 enclosures.

Accessories



2" Horn 90° x 40°
1" Horn 90° x 60°

Horn conversion kits: Converts to a 90° x 40° horn for IL 12.2 and IL 15.2, and to a 90° x 60° horn for IL 8.1, IL 12.1 and IL 15.1



MB 5

Wall mount for IL 12.1, IL 15.1, IL 12.2, IL 15.2



MC 1

Wall mount for IL 12.1, IL 15.1, IL 12.2, IL 15.2



TR 200

Transformer with 0.5 m connecting cord and 200W, 100W, and 50W power taps for IL 12.1, IL 15.1, IL 12.2, and IL 15.2

Technical Specifications

	IL 12.1	IL 12.2	IL 15.1	IL 15.2
Q-factor	9.68	10.43	11.5	15.54
Power-handling, nominal (RMS)	300 W	300 W	400 W	400 W
Power handling, peak	1,200 W	1,200 W	1,600 W	1,600 W
Power handling, program	600 W	600 W	800 W	800 W
Frequency response +/- 3 dB	83 Hz - 19 kHz	95 Hz - 19 kHz	68 Hz - 19 kHz	68 Hz - 19 kHz
Frequency response -10 dB	67 Hz - 19 kHz	65 Hz - 19 kHz	50 Hz - 19 kHz	50 Hz - 19 kHz
Nominal impedance	8 Ω	8 Ω	8 Ω	8 Ω
Axial sensitivity 1 W @ 1m*	104 dB	107 dB	106 dB	107 dB
Max. SPL @ 10% THD*	131 dB	133 dB	131 dB	133 dB
Max. SPL @ 3% THD*	125 dB	126 dB	126 dB	126 dB
Connectors	1 x Speakon NL 4 1 x binding posts	1 x Speakon NL 4 1 x binding posts	1 x Speakon NL 4 1 x binding posts	1 x Speakon NL 4 1 x binding posts
Bass woofer	12"	12"	15"	15"
HF driver	1" exit throat	2" exit throat	1" exit throat	2" exit throat
Horn directivity	60° x 40° (90° x 60°)	60° (90°) x 40°	60° x 40° (90° x 60°)	60° (90°) x 40°
Directivity index	8.40 dB	8.65 dB	9.22 dB	9.04 dB
Corner frequency, passive x-over	2 kHz, 12 dB / oct.	900 Hz, 12 dB / oct.	2 kHz, 12 dB / oct.	900 Hz, 12 dB / oct.
Rigging/ pick points	12 x M10 threaded bits for attaching mounting hardware	12 x M10 threaded bits for attaching mounting hardware	12 x M10 threaded bits for attaching mounting hardware	12 x M10 threaded bits for attaching mounting hardware
Housing	16-mm MDF	16-mm MDF	16-mm MDF	16-mm MDF
Front grille	Impact-resistant steel grille	Impact-resistant steel grille	Impact-resistant steel grille	Impact-resistant steel grille
Finish	Black or white acrylic enamel	Black or white acrylic enamel	Black or white acrylic enamel	Black or white acrylic enamel
Dimensions (W x H x D)	42 cm x 59 cm x 41 cm	42 cm x 64 cm x 41 cm	48.5 cm x 76.6 cm x 54.5 cm	48.5 cm x 76.6 cm x 54.5 cm
Weight	22 kg, 48.5 lbs	30 kg, 66.1 lbs	34 kg, 75 lbs	39 kg, 86 lbs

	IL 112 Sub	IL 115 Sub	IL 118 Sub	IL 218 Sub
Power-handling, nominal (RMS).	150 W	600 W	400 W	1,200 W
Power handling, peak	500 W	2,400 W	1,600 W	4,800 W
Power handling, program	250 W	1,200 W	800 W	2,400 W
Frequency response +/- 3 dB	75 Hz - 130 Hz	52 Hz - 130 Hz	46 Hz - 250 Hz	39 Hz - 250 Hz
Frequency response -10 dB	65 Hz - 230 Hz	48 Hz - 230 Hz	37 Hz - 250 Hz	32 Hz - 250 Hz
Nominal impedance	8 Ω	8 Ω	8 Ω	4 Ω
Axial sensitivity 1 W @ 1 m*	102 dB	102 dB	102 dB	104 dB
Max. SPL @ 10% THD*	115 dB	125 dB	128 dB	133 dB
Max. SPL @ 3% THD*	-	-	-	124 dB
Connectors	1 x Speakon NL41 pair of binding posts	1 x Speakon NL41 pair of binding posts	1 x Speakon NL41 pair of binding posts	1 x Speakon NL 4 1x binding posts
Bass woofer	12"	15"	18"	2 x 18"
Corner frequency, passive x-over	150 Hz / 12 dB per octave	150 Hz / 12 dB per octave	-	-
Housing	16-mm MDF	16-mm MDF, bass reflex	19-mm MDF	16-mm MDF
Front grille	Impact-resistant steel grille	Impact-resistant steel grille	Impact-resistant steel grille	Impact-resistant steel grille
Finish	Black or white acrylic enamel	Black or white acrylic enamel	Black or white acrylic enamel	Black or white acrylic enamel
Dimensions (W x H x D)	55 x 42 x 43 cm	54 x 45.5 x 62.5 cm	71.7 x 51.8 x 70 cm	129 x 52 x 70 cm
Weight	23 kg, 50.7 lbs	29 kg, 64 lbs	38 kg, 83.7 lbs	62 kg, 136.7 lbs

* half-space



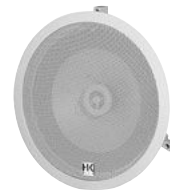
IL 60-CT

A compact two-way speaker that mounts into ceilings, it is loaded with a direct-radiating 6.5" conical woofer and a 3/4" HF tweeter. It is well-suited for background and near-field sound reinforcement in foyers, boutiques, bars, restaurants, shopping centers, airports, train stations and so forth. A passive x-over with a 100V transformer is on board, offering five power taps that may even be selected after installation.



IL 60-CTC

This compact two-way speaker housed in a metal enclosure installs into ceilings. Loaded with a direct-radiating 6.5" conical woofer and a 3/4" tweeter, it is an excellent choice for background and near-field coverage in foyers, boutiques, bars, restaurants, shopping centers, airports, train stations and the like. It features a built-in passive x-over with a 100V transformer offering five power taps selectable via a rotary switch.



IL 80-CT

A compact two-way unit designed for in-ceiling installation, it is loaded with a direct-radiating 6.5" conical woofer and a 3/4" tweeter. It is a great choice for background and near-field sound reinforcement in foyers, boutiques, bars, restaurants, shopping centers, airports, train stations and similar venues. A passive x-over with a 100V transformer is built in, offering five power taps that may even be selected after installation.



IL 60-TB/TW & IL 80-TB/TW

These remarkably compact, two-way fullrange enclosures are driven by built-in passive x-overs. Loaded with direct-radiating 6.5" (8") conical woofers in bass reflex housings and 1" tweeters, they are perfect for covering shorter distances in bars, foyers, and the like. Courtesy of their compact dimensions, they integrate inconspicuously into every room.



IL 82

A compact cabinet for voice and fullrange applications, the IL 82 provides exceptional speech intelligibility for background and near-field sound reinforcement, for example, in foyers, lecture halls, bars and clubs. The IL 82 may be combined with the IL 112 Sub or IL 115 Sub. Passive x-over on board.



IL 8.1

A decidedly compact cabinet for voice and fullrange applications, it delivers extraordinary phase linearity, speech intelligibility, and dynamic range. It may be deployed with the IL 112 Sub or IL 115 Sub, and is ideal for decentralized public address, presentations, near-field sound reinforcement, and so forth. Passive x-over on board.



IL 8.75

This horn-loaded, two-way, fullrange ceiling-mount enclosure offers extraordinary fidelity, particularly for speech, and excellent directivity. It is ideal for lecture and conference halls, fairs, airports and the like. Passive x-over on board.

Accessories



MS 1

Mounting bracket for the IL 8.1 and IL 82; with rotatable connector



MS 2

Speaker pole mount for the IL 8.1 and IL 82 and as a supplement to the MS 1



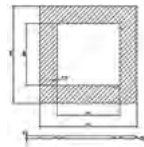
MS 4

Cluster plates (one pair) for IL 82, IL 8.1 models



MB 4

Wall mount for IL 82, IL 8.1, and IL 8.75



Ceiling Mount Frame

For the IL 8.75



EB 8/EB 10

Serves to attach arrest wires and rigging hardware such as chains and steel cables to fly speakers



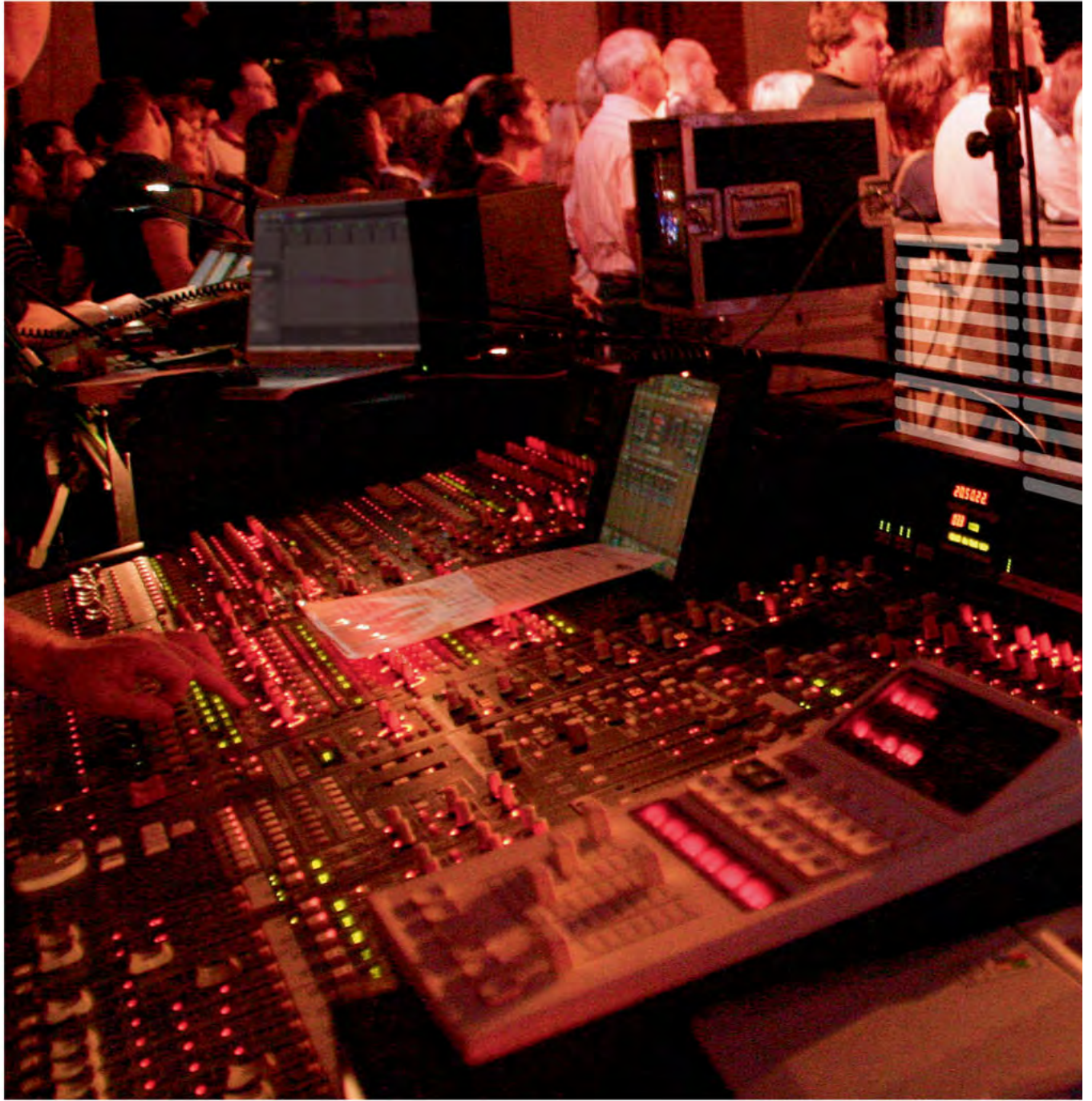
TR 50

Transformer with 0.5m connecting cord and 50W, 25W and 12.5W power taps for IL 82, IL 8.1, and IL 8.75

Technical Specifications

	IL 60-CT	IL 60-CTC	IL 80-CT	IL 60-TB/TW	IL 80-TB/TW	IL 82	IL 8.1	IL 8.75
Power handling, nominal (RMS).	40 W	40 W	60 W	40 W	60 W	100 W	200 W	100 W
Power handling, peak	80 W	80 W	120 W	80 W	120 W	300 W	600 W	400 W
Power handling, program	120 W	120 W	180 W	120 W	180 W	200 W	300 W	200 W
Frequency response +/- 3 dB	70 Hz - 20 kHz	70 Hz - 20 kHz	60 Hz - 20 kHz	70 Hz - 20 kHz	60 Hz - 20 kHz	120 Hz - 18 kHz	100 Hz - 19 kHz	100 Hz - 19 kHz
Frequency response - 10 dB	60 Hz - 20 kHz	60 Hz - 20 kHz	50 Hz - 20 kHz	60 Hz - 20 kHz	50 Hz - 20 kHz	90 Hz - kHz	75 Hz - 21 kHz	68 Hz - 22 kHz
Nominal impedance	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	16 Ω	16 Ω	8 Ω
Axial sensitivity 1 W @ 1 m*	89 dB	89 dB	89 dB	89 dB	89 dB	103 dB	101 dB	102 dB
Max. SPL @ 10% THD*	106 dB	106 dB	106 dB	106 dB	109 dB	125dB	129 dB	128 dB
Max. SPL @ 3% THD*	104 dB	104 dB	104 dB	104 dB	107 dB	116 dB	-	-
Connectors	1 terminal strip, 1, 2, 4, 8, 15 W, Off	1 terminal strip, 1, 2, 4, 8, 15 W, Off	1 terminal strip, 1, 2, 4, 8, 15 W, Off	1 terminal strip, 2, 5, 10, 20, 30 W, Off	1 terminal strip, 2, 5, 10, 20, 40 W, Off	-	2 x Speakon NL4, 1 pair of binding posts	1 pair of binding posts
Speaker	-	-	-	-	-	-	8"	8"
Low-/midrange woofer	6.5" conical speaker	6.5" conical speaker	8" conical speaker	6,5"	8"	8"	-	-
HF driver	¾" tweeter	¾" tweeter	1" tweeter	1" tweeter	1" tweeter	Ceramic	1"	¾"
Horn directivity	-	-	-	-	-	-	90° x 60°	60° x 60°
Corner frequency, passive x-over	3 kHz	3 kHz	3 kHz	2.5 kHz	2.5 kHz	6 kHz / 12 dB octave	1.8 kHz / 12 dB octave	X-over: 2 kHz / 12 dB octave
Rigging/ pick points	-	-	-	-	-	-	9 x M8 for attaching hardware	4 x M8 for attaching hardware
Housing	Polymer	Polymer	Polymer	Polymer	Polymer	-	12-mm MDF	16-mm MDF
Front grille	Metal	Metal	Metal	Metal	Metal	-	Impact-resistant steel grille	Matching color grille cloth
Finish	White	White	White	Black or white	Black or white	Black or white	Black or white	Black or white
Dimensions (W x H x D)	18 cm ø, 7 cm depth for installation	18 cm ø, 12.7 cm depth for installation	22 cm ø, 9.5 cm depth for installation	21.5 x 29 x 17.2 cm	27 x 37 x 22 cm	23,5 x 35 x 23 cm	23.5 x 40.5 x 23.5 cm	45 x 45 x 21.8 cm
Weight	1.2 kg, 2.6 lbs	1.7 kg, 3.7 lbs	1.4 kg, 3 lbs	3.4 kg, 7.4 lbs	5.4 kg, 11.9 lbs	5.5 kg, 12.1 lbs	8 kg, 17.6 lbs	16 kg, 35.3 lbs

* half-space



ELECTRONICS



Control and Amplify

System Software, Controllers and Power Amps

POWER AMPS

CPQ 10

This cutting-edge, four-channel digital power amp delivers whopping 2,600 watts per channel at 4 ohms, and 3,600 watts at 2. If you run it in bridged mode with two outputs, each delivers 7,400 watts (at 4 ohms). But its power is not all that's impressive about this Class-D amp. The great dynamic range, excellent signal-to-noise ratio, and many protective circuits certainly sweeten the deal. It is the perfect powerhouse for all CONTOUR, COHEDRA and COHEDRA COMPACT cabinets.



Technical Specifications

Amplifier type	4-channel Class D
Continuous power @ 2 W per channel	3.600 W*
Continuous power @ 4 W per channel	2.600 W*
Continuous power @ 8 W per channel	1.300 W*
Continuous power, bridged mode @ 4 W, 2 ch.	7.400 W*
Continuous power, bridged mode @ 8 W, 2 ch.	5.300 W*
Frequency response (± 0.5 dB)	20 Hz – 20 kHz
THD @ 1dB at max. power output	@ 1kHz < 0.08 %
THD 20 Hz – 20 kHz	0.15 %
Gain	26 dB
Sensitivity	16 dBu
Input impedance	20 kW
Damping factor	> 400 (8 W / 1 kHz)
Protection	DC, load, thermal, mains in-rush control
Cooling	Fan, airflow from front to back
Inputs	4 x XLR In
Outputs	4 x Speakon NL 4
Dimensions (W x H x D)	48.2cm x 8.8cm x 42.8cm
Weight	12 kg

*) measured using a music signal with a crest factor of 4.8 (14dB)

VX 2400

Offering utmost reliability, neutral response, excellent dynamics and massive headroom, the VX 2400 is the perfect powerhouse for CONTOUR SERIES systems. Protective circuits, front to back ventilation, Speakon connectors and binding posts, a ground lift switch and a switchable limiter make working life a lot easier for sound techs.



Technical Specifications

Amp type	H
Continuous power @ 8 Ω	750 W x 2
Continuous power @ 4 Ω	1,200 W x 2
Continuous power, bridged mode	2,400 W @ 4 Ω
Peak power @ 8 Ω	1,200 W x 2
Peak power @ 4 Ω	2,150 W x 2
Peak power, bridged	4,350 W @ 4 Ω
Frequency response (± 1dB)	20 – 20,000 Hz
Signal-to-noise ratio	- 106 dB
THD - 20 Hz – 20kHz	< 0.1% @ 4 Ω
Input impedance, balanced/un-balanced	20,000 / 10,000 Ω
Input sensitivity	1.4 VRMS
Input gain	36 dB
Stereo/Mono/Bridge	S/M/B
Protective circuitry	DC, load, thermal
Limiter	Peak
Ventilation:	Fan, front-to-back air flow
Inputs	2 x XLR, 2 x 1/4" jack, (un)balanced
Outputs	2x Speakon NL4, 2 x binding post
Power consumption	1,130 W typ. / 1,800 W max.
2-Ω / 4-Ω mode	4 Ω minimum load
Dimensions (W x H x D)	48.3 x 8.9 x 43.9 cm
Weight	19.8 kg

CONTROLLERS

FIRNET

Custom-designed for HK AUDIO systems, the FIRNET Linear Phase FIR Controller sports two inputs and four outputs. As its FIR filter technology, sophisticated AD/DA converters, and advanced DSPs attest, the experts who engineered it dipped into a deep well of more than ten years experience working with these technologies.

FIR (Finite Impulse Response) filtering technology enables total phase linearity among components (speaker, controller and amps). This means sound systems render the different frequency components of a sonic image coherently; that is, in time and faithfully. Differences in phase response no longer cause listening fatigue, dramatically improving the sonic image's clarity and sharpening its details.

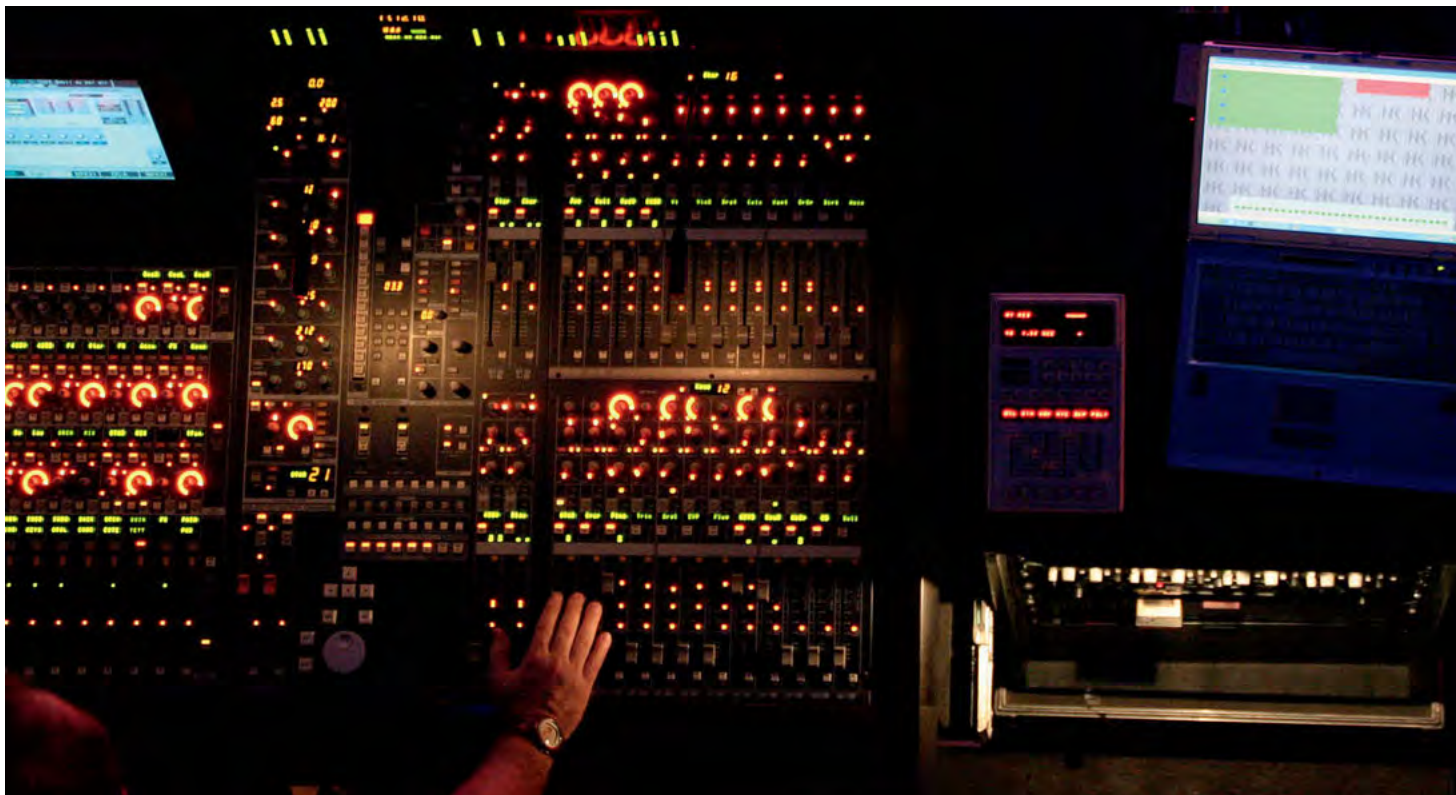
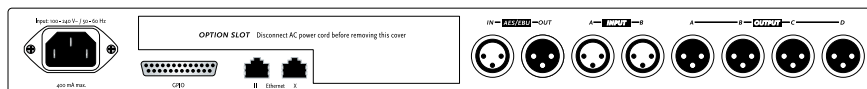


The FIRNET controller also serves to equalize all components, including the speaker chassis, speaker enclosures, passive x-overs, and power amps.

The A/D converter's dynamic range exceeds 128 dB; the internal sampling frequency is 96 kHz. Together, this yields the highest definition and clarity, which translates to a remarkably transparent audio signal. And an ingenious combination of RMS limiters with overshoot functions and look-ahead peak limiters affords loudspeakers utmost protection.

Technical Specifications

Max. input level	+6, +12, +18 +24 dBu, switchable
Max. output level	+6, +12, +18 +24 dBu, switchable
Frequency response ±1 dB	5,5 Hz - 34 kHz
Input impedance	9 kOhms
Output impedance	35 Ohms
Connections	2x In, 4x Out
Mains voltage/ frequency	100- 240 V / 50- 60 Hz
Power consumption	40 VA
Dimensions (WxHxD)	48 x 4,4 x 23,2 cm (19")
Weight	3kg / 6,6 lbs.
Filter type	FIR
latency	AD/DA 96 kHz, 3,15 ms+ FIR Filter: max. 5,8ms
Max input (dBu) dynamics	> 128 db(A) weighted (A/D)
Max output (dBu) dynamics	125 db(A)
Sampling rate	96 kHz
Protocol	AES 3 (AES/EBU)
Delay	500ms IN, 25ms OUT
Network	Ethernet X,II - RJ 45





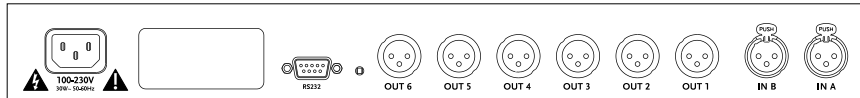
DSM 2060

The DSM 2060 is a freely configurable digital controller that delivers excellent audio quality for both touring rigs and permanently installed systems. It features two inputs and six outputs that may be configured individually for FOH and monitoring applications. Up to six parametric EQs and two additional shelving filters are available for every input and output.

The DSM 2060 boasts powerful fourth-order and eighth-order Hardman filters that serve to configure x-overs. In contrast to conventional filters with steep slopes, Hardman filters preserve the signal's natural sound by minimizing phase shifting and group delay even at maximum

slopes. This results in extraordinarily smooth and precise transitions between frequencies and faster roll-off rates, thereby minimizing distortion, enabling lower x-over frequencies, and affording drivers greater protection.

The DSM 2060 sports high-end 24-bit, 96-kHz converters that ensure pure, unadulterated digital signal processing and frequency response ranging down to 40 kHz. The controller's flagship feature set comprises, alongside the aforementioned Hardman filters, Butterworth, Bessel, and Linkwitz-Riley x-overs with slopes from 6 to 24 dB. Podware lets you control the DSM 2060 remotely via laptop.



Technical Specifications

Analog inputs/outputs	2 x In, 6 x Out
Input impedance	> 10 k Ω , electrically balanced
Output impedance	< 100 Ω , balanced to ground
Maximum input level	+ 20 dBu
Maximum output level	+ 22 dB 600 Ω
Dynamic range, input	> 112 dB A weighted (A/D)
Dynamic range, output	> 112 dB (A)
Internal bit depth	24-bit A/D, 24-bit D/A
Frequency response (-1 dB)	10 Hz – 40 kHz, -1 dB
Output channel source	Input A,B, Master A+B
Filter type	IIR
Latency	AD/DA 96 kHz, > 0.85ms
Limiter	High-perform. limiter, threshold-adjustable in 0.2 dB steps
Options	BVNet option module
Delay	Input 400 ms, Output 80 ms
Network	Optional
Serial port	RS232
Mains	IEC connector
Mains voltage / frequency	100 – 250 V / 50 – 60 Hz
Power consumption	19 w
Weight	2.7 kg
Dimensions (W x H x D)	48.2 x 4.4 x 25.4 cm



The optional BVNET module is available to manage several DSM 2060 controllers simultaneously and remotely. It installs quickly and conveniently by simply plugging it into the option slot on a controller's rear panel.

PATCHBAYS & POWER DISTRIBUTOR



PB 5

Reconfigurable without juggling cables and connectors, the PB 5 interfaces all COHEDRA components. It provides analog and digital inputs, as well as four speaker outputs wired to individual Speakon connectors and to NL8 multi-outs. Selector switches assign the mid/high or subwoofer signal to any power amp channel (speaker pair). This lets you configure any number of rack setups swiftly and easily.



PB 2

Designed for PR 8 Power Racks, this stereo Speakon Patchbay (19", 1U) features XLR In and Through, Ground Lift, Phase Reverse and two bi-amp Speakon outputs per channel (Mid/High 1+/-, Bass 2+/-), wired in parallel.



PS 32

This 19", 2U power distributor offers a 32A CEE In, a Parallel Out, nine 230 V Outs, and three 16A circuit breakers.

SOFTWARE



EASE FOCUS 2

EASE Focus 2 software serves to generate three-dimensional simulations of the dispersion patterns radiated by our line-array products¹ in a given room or venue. Its side and top view panels let you quickly and easily map out venues with complex architecture and several different audience areas. The Rigging menu provides insight into the array's total height, weight, and center of gravity, as well as the splay between individual mid/high-range units. The application can also simulate direct SPL at any given audience area. This lets you determine the delay times, frequency response and direct SPL at all positions in the venue. It supports the EASE GLL format so system-specific filters can be factored into the sonic equation during planning. A virtual EQ lets you optimize the frequency response during the simulation.

EASE Focus 2 enables you to bring different line arrays together in one project. It includes a report generator that can export all project-related data. EASE Focus 2 supports the following languages: German, English, Spanish, Italian, and Portuguese.

Software Design Ahnert GmbH (www.sda-softwaredesign.de) has developed special EASE GLL files for EASE version 4.2 and higher that take spatial factors such as reflections and absorptions into account to compute more complex simulations.

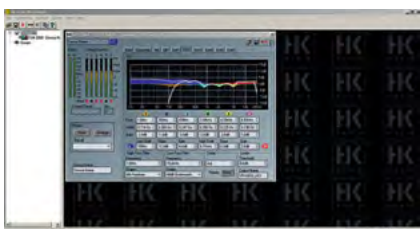
¹ COHEDRA, COHEDRA COMPACT, CONTOUR ARRAY, CADIS and ELEMENTS



FIRSOFT

FIRSOFT turns your PC/laptop into a remote control that manages and operates up to 60 networked FIRNET controllers. The intuitive user interface shows all connected controllers. Providing a clear, uncluttered and individual view of Level, Output EQ, Delay, Channel Mute, Phase,

Speaker Setup, IP Address, Controller Name, and Scene, it also lets you edit the key parameters on-line and off. You can quickly and easily group controllers in up to six hierarchic levels to collectively adjust that group's parameters.



PODWARE

Podware lets you monitor and edit all DSM 2060 and ICON LTS controller functions on a PC or laptop. A clearly ordered main window shows the selected controllers with all their functions and settings. Podware affords direct access to gain structures, delay times, channel

assignments, and filter settings—online and without latency. The optional BVNET module and USB PC Interface lets you network up to 60 controllers, whereby each gets its own module. Podware is also a handy tool for updating controllers' firmware.



www.hkaudio.com



HK Audio®
Postfach 1509
66595 St. Wendel, Germany

info@hkaudio.com
www.hkaudio.com

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