HK AUDIO

PROFESSIONAL

CONTOUR X

EXCELLENCE THROUGH EFFICIENCY



CONTOUR X SERIES



The HK Audio CONTOUR series of point source loudspeakers has graced the world's stages for more than ten years now. Excellent audio performance, smart handling, roadworthy ruggedness, the near legendary reputation for made-in-Germany quality: all this made CONTOUR what it still is today – the first choice for discerning professionals.

Now the new CONTOUR X series has arrived to carry this grand tradition over to the next generation. Brimming with new features and sophisticated components, it incorporates state-of-the-art advances in audio and the wishes and ideas that experienced users have shared with us.

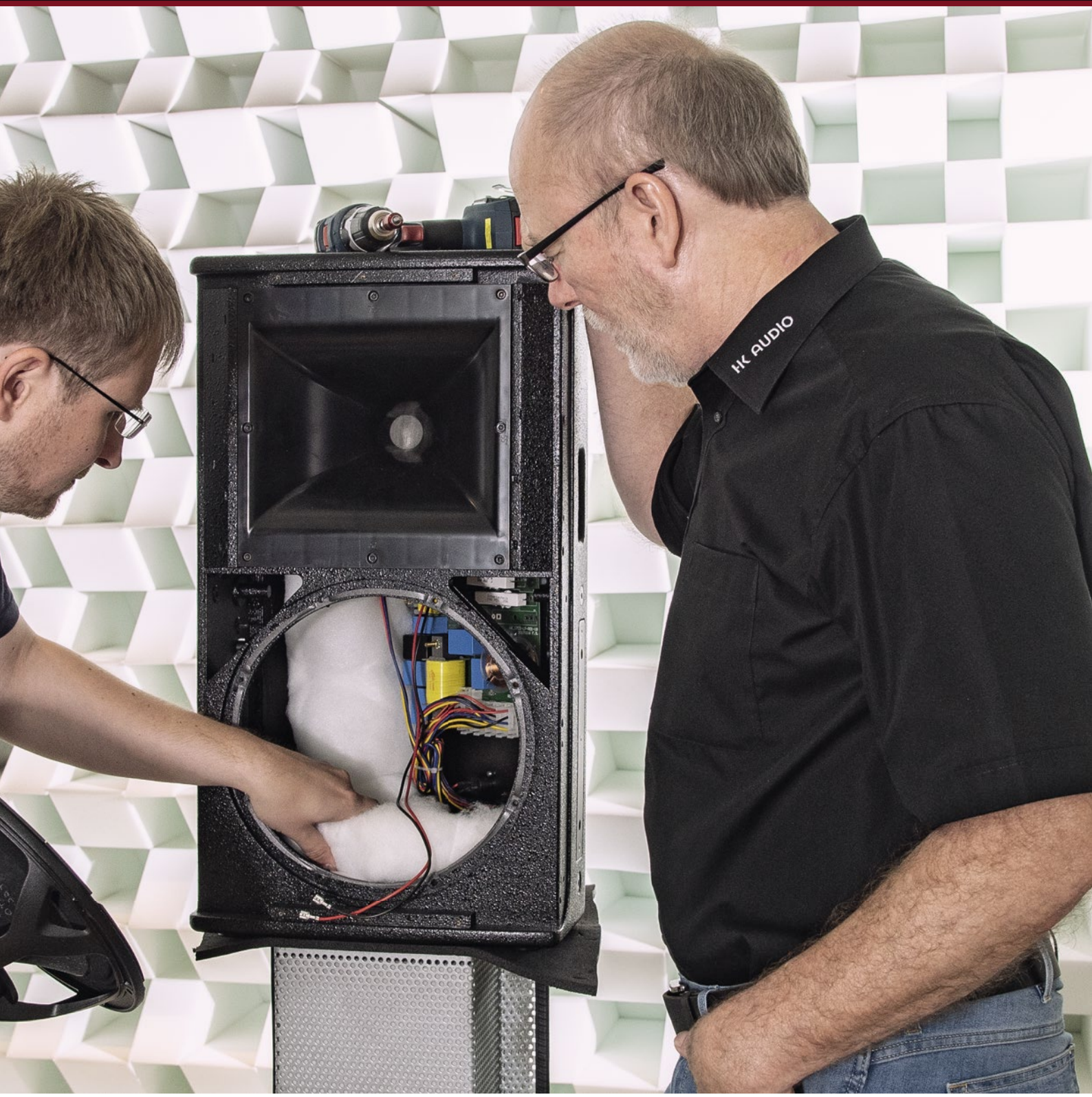
This brochure is here to give you an overview of the many special features of our new flagship line of point-source speakers.










HK AUDIO




HK





Audio Performance

Developed to deliver the finest in fullrange performance at very high useful sound pressure levels, the new CONTOUR X line of point-source speakers renders vocals and speech with rich detail and remarkable authenticity.

CONTOUR X cabinets feature the latest generation of professional high-performance speakers. With very high power handling and efficiency ratings, they serve up dynamic yet homogeneous sound at all volume levels, underpinned by extraordinarily low-ranging bass response. That is exactly what makes them such exceptionally effective fullrange solutions.

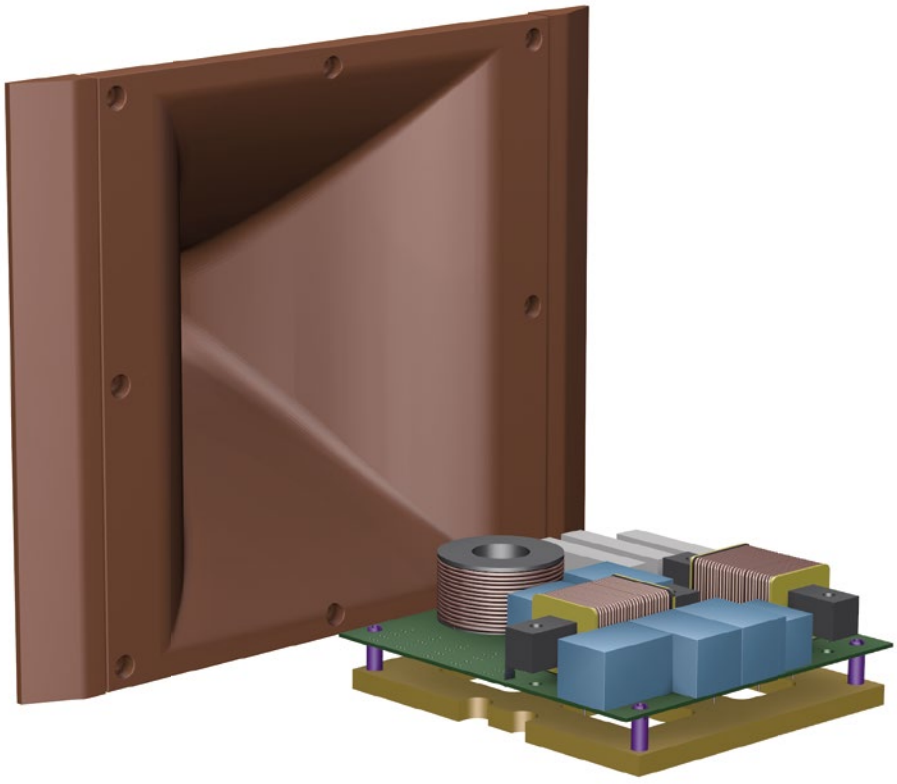
Custom developed and fine-tuned to CONTOUR X cabinets' specifications using the BEM (Boundary Element Method), the high-frequency horn rotates 90 degrees. Engineers went to great lengths to achieve ultra-precise directivity, minimize distortion, and optimize high and low frequencies' time alignment.

These specialists devoted no less effort to designing and painstakingly tuning the passive crossovers, which have a 24 dB slope. Woofers, crossovers, state-of-the-art HF drivers, HF horns with near-perfect directivity – all this comes together to render even the finest musical details with awesome articulacy.

The passive filtering irons out any kinks to deliver very smooth frequency and phase response. This feature lends all CONTOUR X models a hugely practical advantage: They deliver top-drawer professional sound right out of the box, even without an outboard external controller and with practically any power amp.

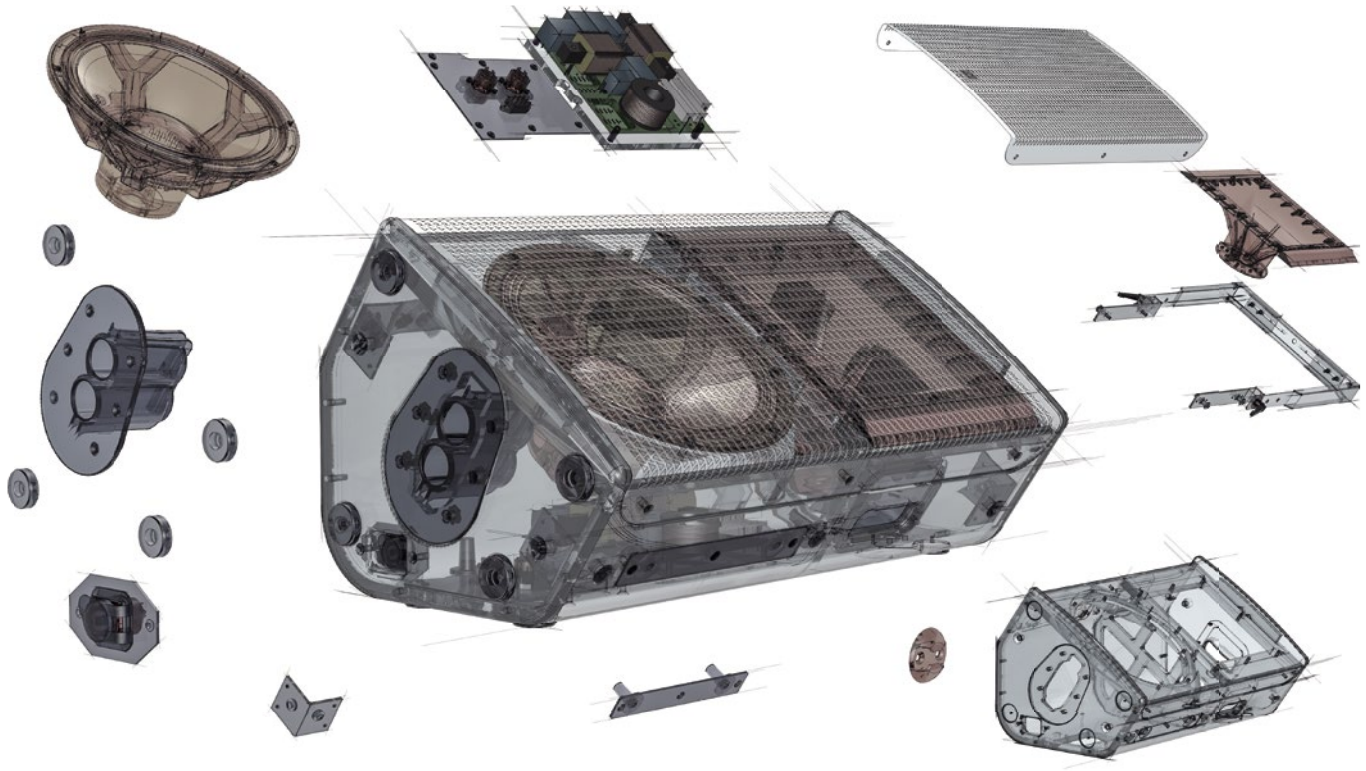
LAKE Processing (LAB.Gruppen) and Armonia Pro Audio Suite (Powersoft) filter sets are available for all CONTOUR X models. They add a finishing touch to the CONTOUR X series' already outstanding audio performance.

The CONTOUR X series' state-of-the-art sound and performance is the answer to increasingly demanding real-world requirements. Highly efficient and versatile, these speakers are the tools serious users need to tackle the ever-changing challenges of sound reinforcement.





Mechanics



The new CONTOUR X series' rugged housings are built to hold up under years of hard use ´on the road´.

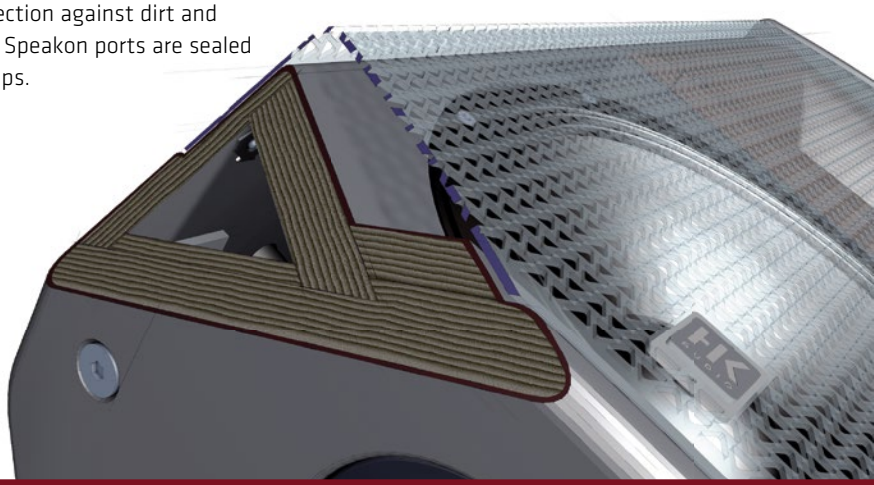
Crafted with trademark HK Audio care in our St. Wendel joinery, these touring-tried and road-tested birch multiplex cabinets are sealed with a resilient PU coating. A steel grille with an anticorrosive coating protects the speakers from harm. That combination makes for a very tough enclosure indeed.

These housings rolled off a brand-new production with a fetching modern design and generously rounded edges that set them apart from the predecessor models.

The new look is more than merely cosmetic. We shaped and reshaped the housing, testing and retesting each iteration to optimize its lines for monitoring applications.

All CONTOUR X speakers come with effective protection against dirt and moisture. The Speakon ports are sealed with rubber caps.

All mounting and rigging points are backed by steel plates or brackets installed inside the housing. This distributes the loads over a larger area and reinforces the enclosure.



CONTOUR X SERIES

Flexibility

The richly appointed CONTOUR X series comes with a wealth of smart features, each designed to make this line an exceptionally versatile set of sound reinforcement tools.

The CX 12 and CX 15 may be angled up in two positions, so deploying them as wedge monitors on stages large and small is an exercise in convenience. Patching the signal through in monitor setups is just as effortless with the easy-access Speakon NL4 ports on the bottom and top panels. Simply connect short cables to the downwards facing ports. If you wish to use fewer speaker cables and want a tidier stage, you can even route two power amp signals via one NL4 line and use the Pin Assignment switch to assign the speaker to one of the signal busses.

The HF horns rotate 90 degrees, so you can adjust the CONTOUR X speakers' throw pattern to suit any application.





All CONTOUR X models may be set up, installed and flown in every conceivable way. Designed for utmost convenience, they do not require proprietary accessories for standard scenarios. The patented DuoTilt speaker mount, for example, lets you aim the speaker at - 3° or - 7° angles on a regular speaker stand.

We carried the same no-muss-no-fuss concept over to the speakers' voicing: An external controller is helpful, but you do not necessarily need it to get great audio results.

All CONTOUR X models are equipped with lots of rigging points and an Aeroquip safety point.

The TB-XQ bracket's width is adjustable, so it can serve to fly the CX 12 and the CX 15. It attaches in the conventional way with bolts, but you can also use quick-release pins when time is tight and you are in hurry to set up and tear down.

Economical

The CONTOUR X series is not just versatile. With its smart set of handy features, it is also remarkably economical.

CONTOUR X models are powerful sound reinforcement tools designed from the bottom up to be part of a larger toolset in the HK AUDIO rental portfolio. That means the power amp racks, software and C SUB series subwoofers are all a perfect match and seamless fit for both CONTOUR X cabinets and the COSMO line arrays. This saves you money, training time and storage space.

Select hardware accessories fit several CONTOUR X models. For instance, the rigging frame fits both the CX 12 and CX 15. Its width adjusts to accommodate both models, which saves on up-front costs and simplifies handling.

Crafted of the finest materials with premium-quality made-in-St. Wendel workmanship, CONTOUR X speakers are to last and last while retaining their value for many tomorrows to come.

Speech reinforcement, stage monitoring, club PA, side-fill, front-fill – CONTOUR X does all this and more in style.

With so much going for it, CONTOUR X is sure to serve you well at practically any event.



CONTOUR CX 8



Remarkably compact yet extremely powerful, the CX 8 is a very flexible point-source speaker.

Everything about the CX 8 is impressive, particularly its excellent efficiency rating and low-ranging frequency response. Its top-drawer components and sophisticated crossover are tuned to render signals in rich detail and achieve high maximum SPL.

The custom high-frequency horn, newly developed with the benefit BEM simulations, delivers uniform directivity up to the highest frequencies.

Use it as an unobtrusive yet powerful stage monitor, as an elegant front-fill on the edge of the stage, or as a compact club PA in combination with a CS 118 or CS 218 subwoofer. But whatever you choose to do with it, know this: The CX 8 always delivers excellent audio results.

Applications: Distributed speech, music, audio and instrument reinforcement and monitoring; FOH top unit for smaller club gigs, front-fill



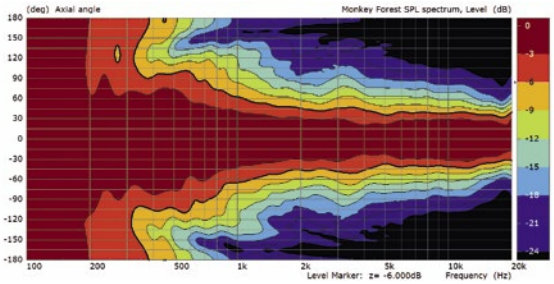




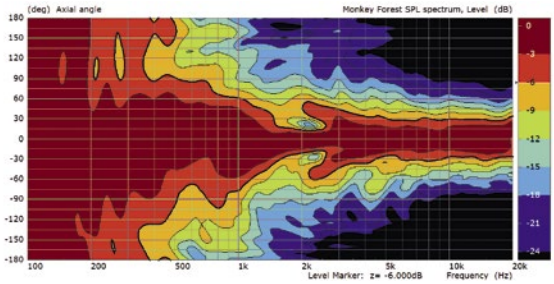


Power handling, nominal:	300 W
Power handling, program:	600 W
Power handling, peak:	1200 W
Frequency response - 10 dB:	65 Hz – 20 kHz
Frequency response +/-3 dB:	76 Hz – 19 kHz
Directivity:	80° x 60°, rotatable CD horn
Sensitivity 1 W @ 1 m:	95 dB (100 Hz – 10 kHz), full space
Max. SPL @ 10% THD (EN 60268-21:2018):	127 dB
Electrical impedance:	8 ohms
Low-/midrange woofer:	8" neodymium, 2.5" voice coil
HF driver:	1", 1.4" voice coil
X-over frequency:	2.2 kHz, 24 dB/octave
Connectors:	4x Speakon NL4, Pin Assignment switch
Housing:	Right and left versions, birch plywood
Angles up:	30°/90° (for monitoring)
Finish:	PU coating, black
Front grille:	Steel with an anticorrosive coating, backed with acoustic foam
Carrying handles:	1x recessed grip
Rigging points:	1x Aeroquip mounting point 4x M8 threaded inserts
Speaker extension pole mount:	HK Audio MonoTilt (- 3°)
Weight:	10.4 kg/ 22.9 lbs
Dimensions (W x H x D):	25.1 x 42.3 x 27 cm 9-7/8 x 16-21/32 x 10-5/8 “
Accessories:	Mounting bracket TB-X8, anchor point AP 8, protective cover, touring flight case (4x CX 8)

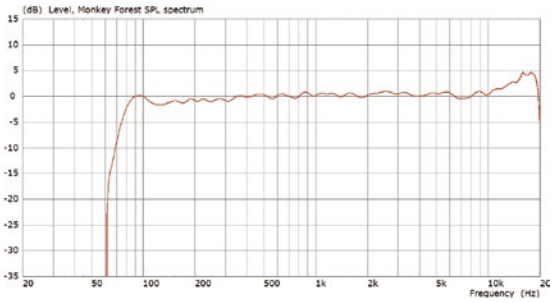
Horizontal directivity



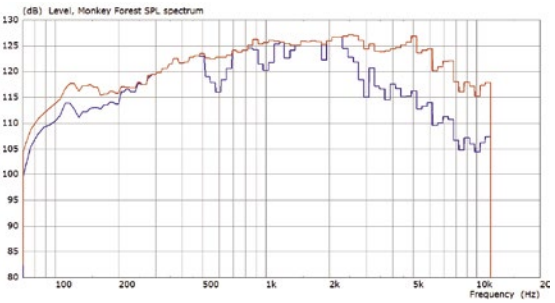
Vertical directivity

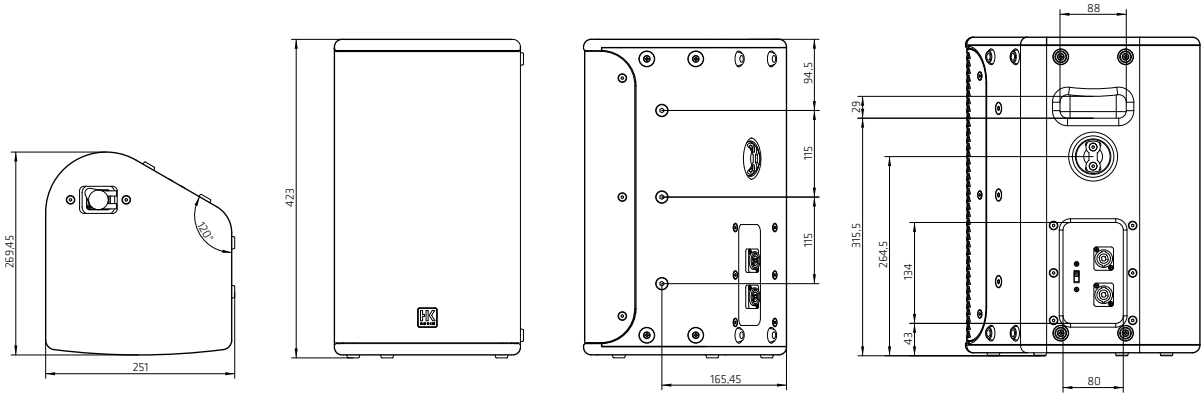


Frequency response (with controller)



Max. SPL @ 1.2 kW (blue = 3 % THD, red = 10 % THD)





CONTOUR CX 12



Compact and multifunctional by design, the CX 12 is a powerful point-source speaker that serves up sweet sound for a wide range of applications.

This unit's hallmark features include extremely high maximum SPL and excellent speech intelligibility. The CX 12's phase response is smooth; its dynamic range astonishingly wide. And its high-frequency horn was optimized using the BEM (Boundary Element Method). All this adds up to a high-definition, strikingly transparent audio image with very precise directivity. In fact, the throw pattern is so precise that clustering is an exercise in convenience.

The CX 12 comes in left and right versions for symmetrical monitoring arrays.

Applications: Fullrange sound reinforcement, near-field sound reinforcement with high SPL requirements, for example, as an FOH, front-fill, side-fill or drum-fill top unit and as a monitor on large stages

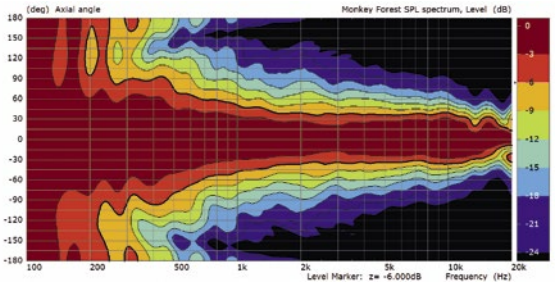




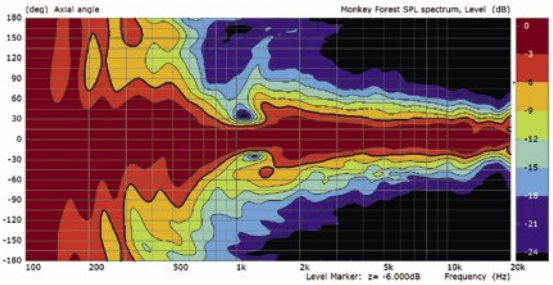


Power handling, nominal:	500 W
Power handling, program:	1000 W
Power handling, peak:	2000 W
Frequency response - 10 dB:	61 Hz – 19 kHz
Frequency response +/-3 dB:	70 Hz – 18 kHz
Directivity:	75° x 55°, rotatable CD horn
Sensitivity 1 W @ 1 m:	99 dB (100 Hz – 10 kHz), full space
Max. SPL @ 10% THD (EN 60268-21:2018):	131 dB
Electrical impedance:	8 ohms
Low-/midrange woofer:	12" neodymium, 3" voice coil
HF driver:	1.4", 3" voice coil
X-over frequency:	1.2 kHz, 24 dB/octave
Connectors:	4x Speakon NL4, Pin Assignment switch
Housing:	Right and left versions, birch plywood
Angles up:	35°/55° (for monitoring)
Finish:	PU coating, black
Front grille:	Steel with an anticorrosive coating, backed with acoustic foam
Carrying handles:	3x recessed grip
Rigging points:	1x Aeroquip mounting point 10x M10 threaded inserts
Speaker extension pole mount:	HK Audio DuoTilt (- 3°/- 7°)
Weight:	22.8 kg/ 50.3 lbs
Dimensions (W x H x D):	37x 66.8 x 32.3 cm 14-9/16 x 26-19/64 x 12-23/32 “
Accessories:	U-bracket TB-XQ, anchor point AP 10, protective cover, touring flight cases (2x CX 12 and 4x CX 12)

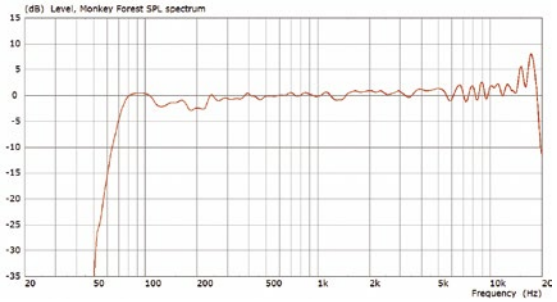
Horizontal directivity



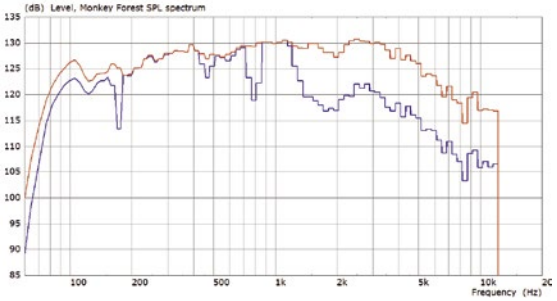
Vertical directivity

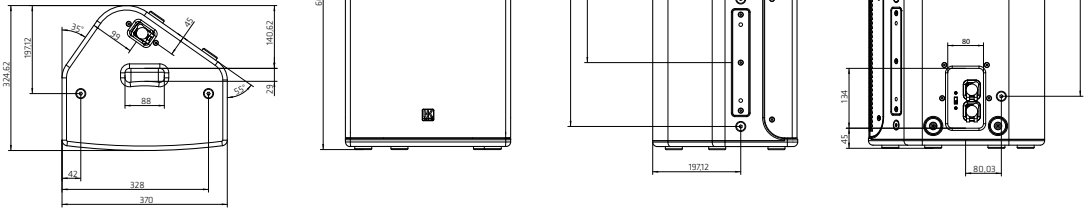


Frequency response (with controller)



Max. SPL @ 1.5 kW (blue = 3 % THD, red = 10 % THD)





CONTOUR CX 15



The CX 15 is a compact, multifunctional point-source speaker with enhanced low-end frequency response.

The CX 15 has its highs and lows in all the right places – very high load handling and efficiency ratings paired with very low distortion and low-ranging frequency response. This combination adds up to extraordinarily high useful sound pressure levels, served up with authority and assertiveness by the large 1.4“ HF horn and a muscular woofer with an exceptionally powerful 3.5“ voice coil.

The CX 15’s extended low frequency range makes it the perfect choice for bass-heavy applications such as drum-fills. And it will also serve you well as a powerful yet unobtrusive FOH system.

Like every CONTOUR X model, it projects audio images with very analytical resolution and exemplary fidelity.

The CX 15 comes in left and right versions for symmetrical monitoring arrays.

Applications: Fullrange sound reinforcement, near-field sound reinforcement with high SPL requirements, for example, as an FOH, front-fill, side-fill or drum-fill top unit and as a monitor on large stages

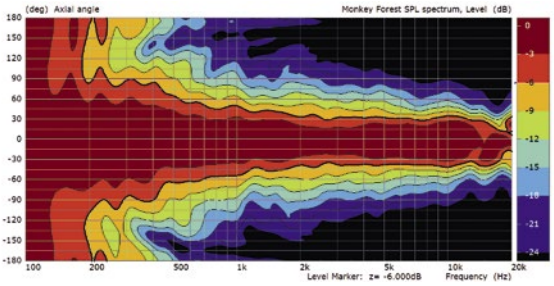




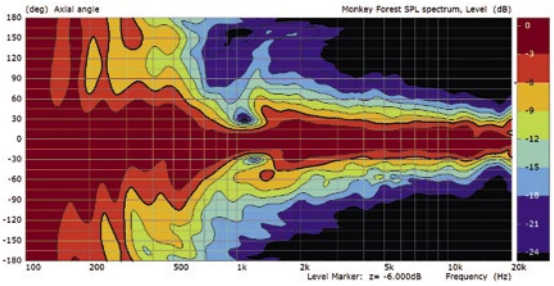


Power handling, nominal:	700 W
Power handling, program:	1400 W
Power handling, peak:	2800 W
Frequency response - 10 dB:	55 Hz – 19 kHz
Frequency response +/-3 dB:	69 Hz – 18 kHz
Directivity:	75° x 55° , rotatable CD horn
Sensitivity 1 W @ 1 m:	99 dB (100 Hz – 10 kHz), full space
Max. SPL @ 10% THD (EN 60268-21:2018)	132 dB
Electrical impedance:	8 ohms
Low-/midrange woofer:	15" neodymium, 3.5" voice coil
HF driver:	1.4", 3" voice coil
X-over frequency:	1.2 kHz, 24 dB/octave
Connectors:	4x Speakon NL4, Pin Assignment switch
Housing:	Right and left versions, birch plywood
Angles up:	35°/55° (for monitoring)
Finish:	PU coating, black
Front grille:	Steel with an anticorrosive coating, backed with acoustic foam
Carrying handles:	4x recessed grip
Rigging points:	1x Aeroquip mounting point, 10x M10 threaded inserts
Speaker extension pole mount:	HK Audio DuoTilt (- 3°/- 7°)
Weight:	29.1 kg/ 64.2 lbs
Dimensions (W x H x D):	45 x 75.3 x 39.1 cm 17-23/32 x 29-41/64 x 15-25/64 "
Accessories:	U-bracket TB-XQ, anchor point AP 10, cover, touring flightcase (2x CX 15) protective cover, touring flight cases (2x CX 15)

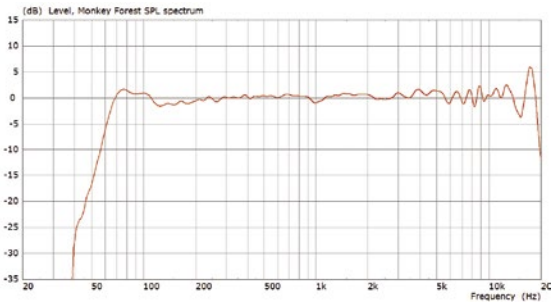
Horizontal directivity



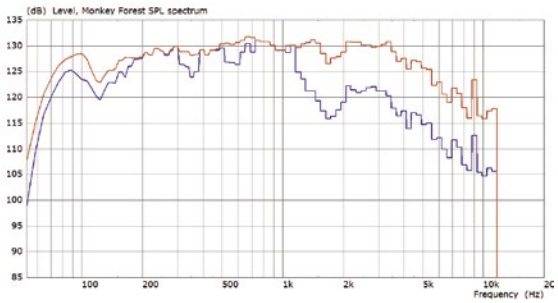
Vertical directivity

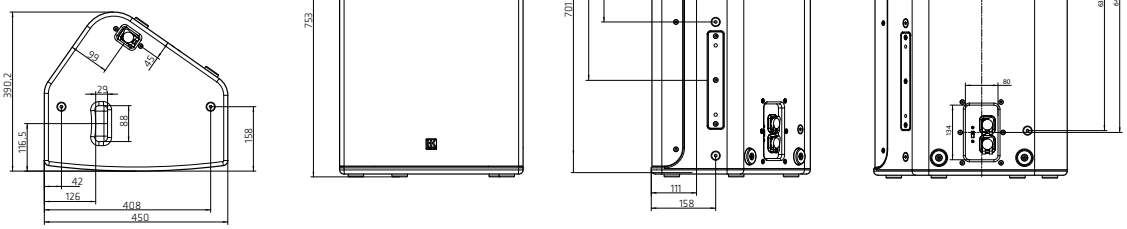


Frequency response (with controller)



Max. SPL @ 2 kW (blue = 3 % THD, red = 10 % THD)





C SUBS

Remarkably efficient and able to handle a great deal of power, C SUB series subwoofers deliver impressive sub-bass performance. Their premium-quality components are crafted to the highest standards of workmanship and fine-tuned to deliver the best performance with CONTOUR X point-source speakers and COSMO line arrays.

C SUB series subwoofers feature four Speakon NL 4 ports, two in back and two more up front, to make it so much easier to connect cardioid and end-fire setups. The signal from a four-wire line is easily assigned to the C SUB via the Pin Assignment switch.

The CS 218 and CS 118 subwoofers' frequency response, phase response and housing dimensions are matched so they can be readily combined to configure subwoofer clusters that deliver excellent audio performance.

The birch multiplex housings are coated with a PU finish; the solid steel front grilles have been treated with an anticorrosive. Caps keep dirt and moisture out of the Speakon inputs. All C-series subs are built to stand up to the heavy wear and tear of professional use. They come with everything it takes to keep these speakers running smoothly and their value intact for a very long time to come. We recommend that you use Lab.Gruppen PLM+ and Powersoft X series high-performance power amps to drive these potent subwoofers. Special filter sets are also available for these controller-driven amps if you wish to configure cardioid or end-fire setups.



C SUB 118

Loaded with one 18" direct-radiating, high-performance transducer, this compact enclosure comes with large bass reflex ports. Tuned for maximum efficiency and exceedingly high power handling, its unusually expansive dynamic headroom extends down to the lowest frequencies. The 18" high-performance transducer's passive forced magnet cooling system keeps the voice coil cool even after hours of continuous operation.

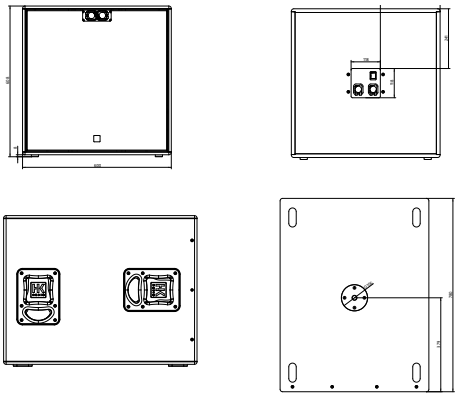


C SUB 218

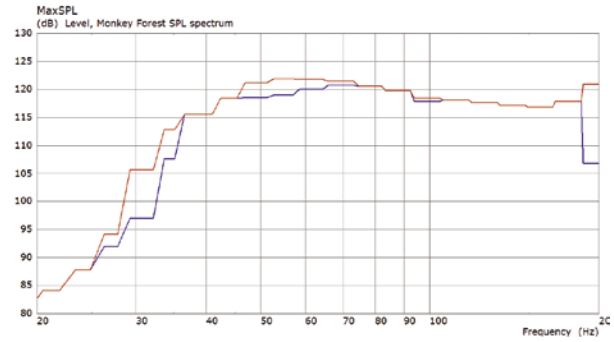
This enclosure is loaded with two 18" direct-radiating, high-performance transducers. Like the smaller CS 118, the CS 218's dimensions are tailored for a perfect fit on standard pallets and truck beds. Designed for convenient handling, this enclosure weighs just 88 kg. It is 7 kg lighter than two CS 118s.



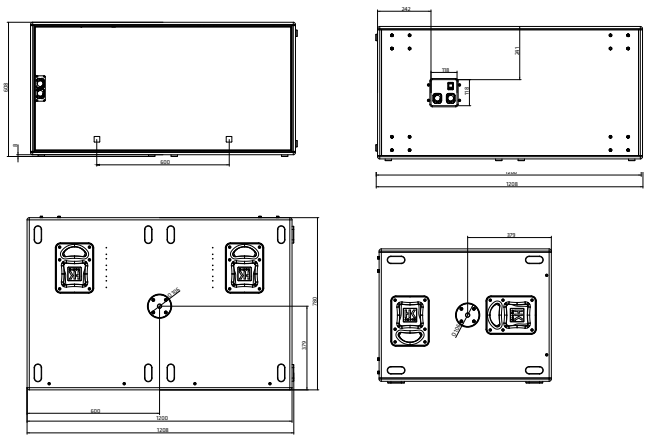
C SUB 118	
Power handling, nominal:	1600 W RMS
Power handling, program:	3200 W
Frequency response - 10 dB:	31 Hz – 120 Hz
Frequency response +/-3 dB:	35 Hz – 120 Hz
Sensitivity 1 W @ 1 m:	93 dB (30 Hz – 120 Hz), full space
Max. SPL @ 10% THD (EN 60268-21:2018):	129 dB
Electrical impedance:	4 ohms
Low/Mid Speaker:	18" neodymium, 4" voice coil
Connectors:	4x Speakon NL4 (front and rear), Pin Assignment switch
Enclosure:	Birch plywood
Finish:	PU coating, black
Grille:	Steel with an anticorrosive coating, backed with acoustic foam
Carrying handles:	4x ergonomic grips
Integrated pole mount:	M20 threaded base plate
Weight:	47.5 kg/ 105 lbs
Dimensions (W x H x D):	60 x 61 x 78 cm 23-5/8 x 23-5/8 x 30-45/64 "
Accessories:	Dolly board with 100 mm castors CS-WB1, protective cover CS-WB1



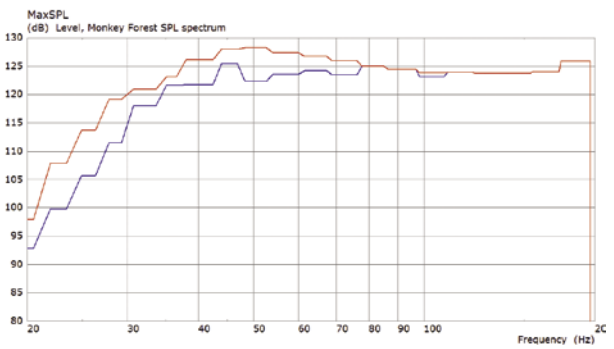
Max. SPL @ 2 kW (blue = 3 % THD, red = 10 % THD)



C SUB 218	
Power handling, nominal:	3200 W
Power handling, program:	6400 W
Frequency response - 10 dB:	23 Hz - 100 Hz
Frequency response +/-3 dB:	27 Hz - 100 Hz
Sensitivity 1 W @ 1 m:	94 dB (30 Hz – 100 Hz), full space
Max. SPL @ 10% THD (EN 60268-21:2018)	133 dB
Electrical impedance:	4 ohms
Low/Mid Speaker:	2x 18" neodymium, 4" voice coil
Connectors:	4x Speakon NL4 (front and rear), Pin Assignment switch
Enclosure:	Birch plywood
Finish:	PU coating, black
Grille:	Steel with an anticorrosive coating, backed with acoustic foam
Carrying handles:	8x ergonomic grips
Integrated pole mount:	2x M20 threaded base plate
Weight:	88 kg / 194 lbs
Dimensions (W x H x D):	120 x 60 x 78 cm 47-1/4 x 23-5/8 x 30-45/64 "
Accessories:	Dolly board with 100 mm castors CS-WB2, protective cover CS-WB2



Max. SPL @ 4 kW (blue = 3 % THD, red = 10 % THD)



ELECTRONIC COMPONENTS



C-DRIVE 4 LB/PS or C-DRIVE 8 LB/PS amplifier racks

C-DRIVE amplifier racks are well-equipped for the rigors for professional use with shock-mount suspension, double sliding doors, 100 mm blue wheels, and a heavy-duty design.

These power amps and the PB-8 patchbay fit right in with the CONTOUR X line, which is all about flexibility and versatility for a wide range of applications.

The LAB.Gruppen PLM+ series (C-DRIVE 4/8 LB) and Powersoft X series (C-DRIVE 4/8 PS) are the supported amplifier platforms.

Model:	LAB.Gruppen PLM+ 12K44
Product category:	4-channel controller amp
Max. input level:	+26 dBu
Total power output (1 kHz burst, 12 dB CF):	4x 3000 W @ 2 ohms, all channels driven
Inputs:	4x XLR, 4x AES/EBU, 2x RJ 45, 8x DANTE in/out
Outputs:	2x Speakon NL4, 1x Speakon NL8
Processing:	LAKE
Network:	DANTE
Amp-Gain:	22 - 44 dB
Mains voltage/ frequency:	100 - 240 V / 50 - 60 Hz
Dimensions (W x H x D):	48,5 x 8,8 x 42,5 cm
Weight:	16.5 kg / 36.4 lbs

Model:	Powersoft X4
Product category:	4-channel controller amp
Max. input level:	+27 dBu
Total power output (calculated, see Powersoft):	4x 5200 W @ 2 ohms, all channels driven
Inputs:	4x XLR, 4x AES/EBU, 2x RJ 45, 8x DANTE in/out
Outputs:	2x Speakon NL4
Processing:	Armonia
Network:	DANTE
Amp-Gain:	32 dB
Mains voltage/ frequency:	100 - 240 V / 50 - 60 Hz
Dimensions (W x H x D):	48,3 x 4.5 x 49.5 cm
Weight:	15 kg / 33 lbs

For further data and information please refer to the manufacturer websites.

ACCESSORIES



TB-X8 (MS/1)

The TB-X8 (formerly known as the MS/1) serves as a rigging and mounting bracket for the CX 8 speaker. It attaches to the side panel with two M8 countersunk screws to freely adjust the speaker's tilt angle.



Speaker mounting fork

The speaker mounting fork holds two CX 8s on one speaker stand to widen the throw pattern without increasing the footprint.



AP 8 and AP 10/B

These optional anchor points for the CX 8 (AP 8), CX 12 and CX 15 (AP 10) serve to safely attach these cabinets to steel cables and chains.



TB-XQ

This universal tilt bracket attaches the CX 12 and CX 15 speakers to trusses, ceilings and wall mounts. Easily installed without tools using QRPs inserted into the side-mounted fittings, it lets you freely tilt the cabinet.



CONTOUR X Series Covers

These padded, sealable covers effectively protect CX 8, 12 and 15 enclosures on the road.



Stereo Pole Add-on M20

This add-on set for half-stack systems consists of two height-adjustable König & Meyer M20 speaker extension poles, two high-quality XLR or Speakon cables, and a carrying bag.

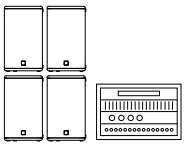


Flightcases

Optional black flight cases for 4x CX 8, 2x CX 12, 4x CX12 and 2x CX15 units



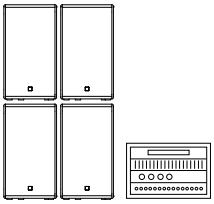
EXAMPLE CONFIGURATIONS



CX 8 Solo

Applications: Distributed speech and background music reinforcement, front-fill, inconspicuous on-stage monitoring

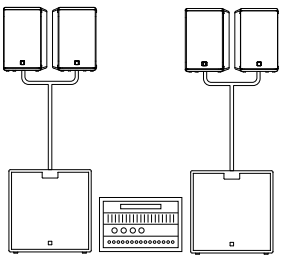
4-16x CX 8
1x C-DRIVE 4 LB or C-DRIVE 4 PS



CX 12/CX 15 Solo

Applications: Speech and music sound reinforcement, front-fill for larger PA systems, monitoring on stages of any size

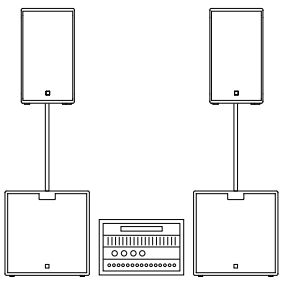
4-8x CX 12/CX 15
1x C-DRIVE 4 LB or C-DRIVE 4 PS



CX 8/CS 118 Satellite System

Applications: Roads shows and presentations, acoustic gigs and the like

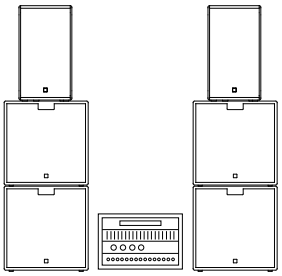
Stereo:
4x CX 8
2x CS 118
2x Speaker Extension Pole
1x Speaker Mounting Fork
1x C-DRIVE 4 LB or C-DRIVE 4 PS



CX 12/CX 15 mit CS 118/CS 218 Sub Satellite System

Applications: Club gigs, side-fill on mid-sized stages, drum-fill, and so on

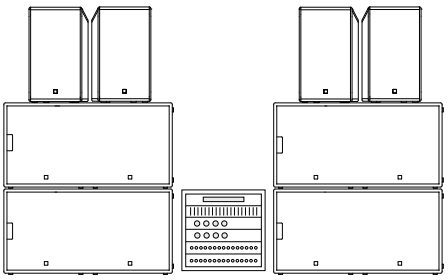
Stereo:
2x CX 12, or CX 15
2x CS 118
2x Speaker Extension Pole
1x C-DRIVE 4 LB or C-DRIVE 4 PS



CX 12/CX 15 with CS 118/CS 218 Sub Full Stack System

Applications: FOH system in clubs, side-fill on larger stages and the like

Stereo:
2x CX 12, or CX 15
4x CS 118
1x C-DRIVE 4 LB or C-DRIVE 4 PS



CX 12/CX 15 with CS 118/CS 218 in a Double Full Stack System

Applications: FOH system in clubs and smaller halls, side-fill on large stages, etc. etc..

Stereo:
4x CX 12, or CX 15
8x CS 118
1x C-DRIVE 8 LB or C-DRIVE 8 PS

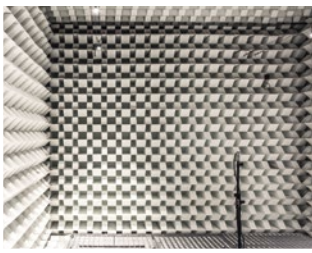
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