

CONCERT SOUND EVOLUTION

**THE
FUTURE
OF
THE
LINE
ARRAY
IS
STRAIGHT**



Focus Venue:
Modular beam steering line array for concert sound.



FV-100

high-frequency module

8 x 1" (1.75" diaphragm) compression driver
8 x 1.5" (4" diaphragm) compression driver
manifold horn-loaded waveguide design
16 x 250 W CLASS D DSP amplifier
16 x DSP
max. SPL: 150 dB

FV-200

low-mid module

8 x 10" long excursion woofer
multi-entrant horn-loaded waveguide design
4 x 1000 W CLASS D DSP amplifier
4 x DSP
Cardioid Technology (CDT)
max. SPL: 145 dB

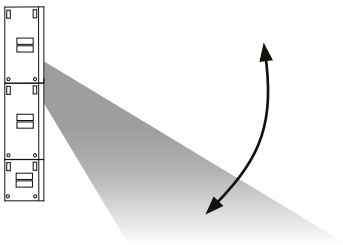


**When line array technology evolves
and beam steering reaches its next level.**

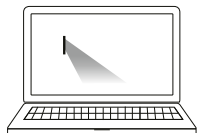
Focus Venue is a straight-flown, active, modular line array system specifically designed for sound reinforcement in concert halls, stadia, arenas etc. This technical revolution has been masterminded by Fohhn, the pioneer of pro audio beam steering technology. Combined with the new PS-800 and PS-850 subwoofers which are driven by DI-2.4000 amplifiers, Focus Venue becomes the ideal concert sound system for a variety of challenges.

- Extremely even & balanced sound coverage
- Excellent sound quality & clarity
- Enormous SPL & dynamics
- Unparalleled flexibility & scalability
- Perfect visual integration

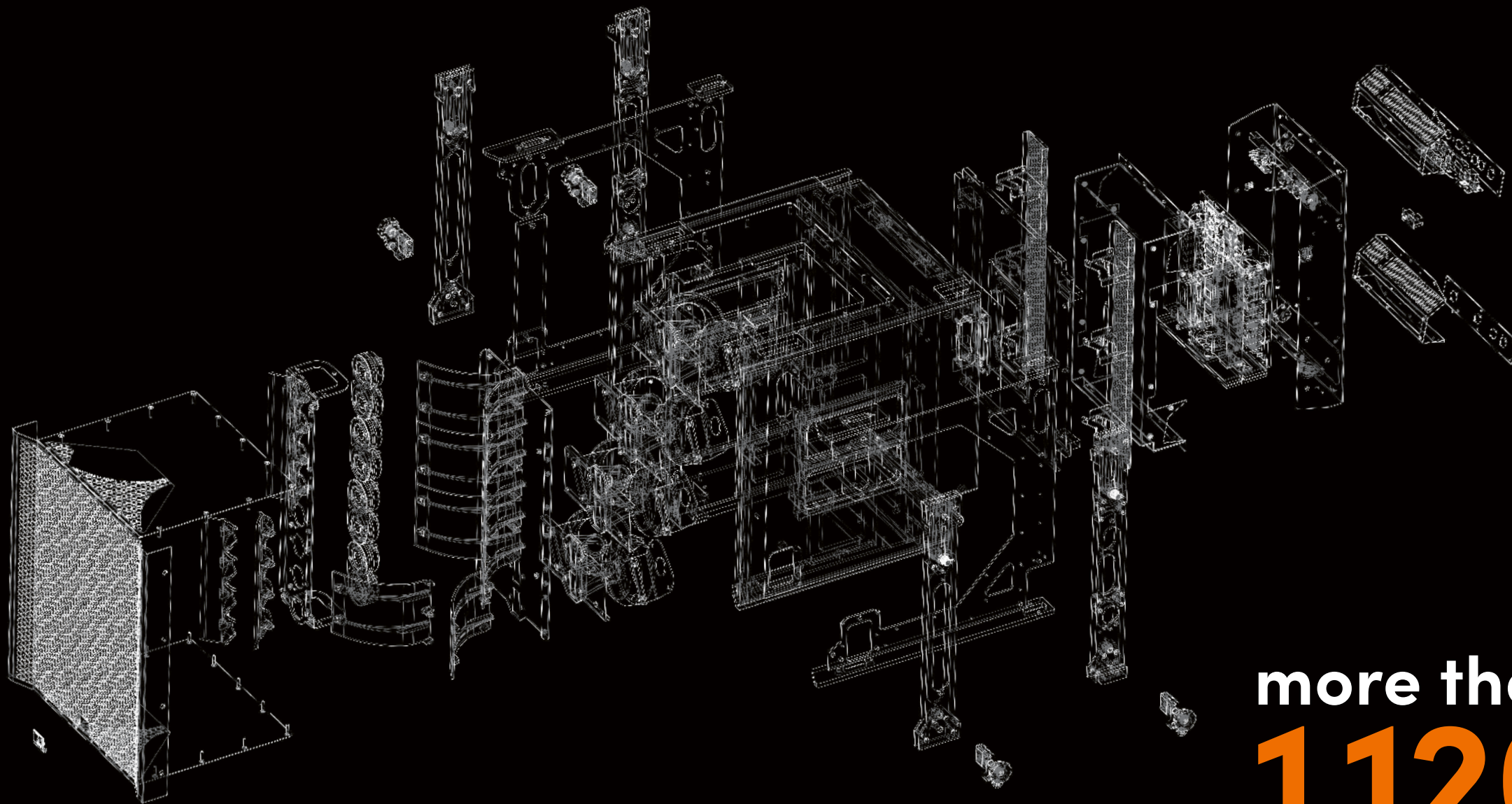
**Beam Steering –
no mechanical curving needed.**



The system is always flown or stacked straight.



Sound beams are controlled in real time via Fohhn Audio Soft.



more than
1,120
components
with love for detail

Maintaining high pressure

Our FV-200 modules include a 4 x Dual-10 engine with multi-entrant low-mid waveguide.

Focus Venue: Superior technology – superior results.

Focus Venue impressively combines state-of-the-art electronics with an extraordinary acoustic design and a new generation of rigging hardware. This results in a high-performance sound system with top sound quality and unprecedented flexibility and scalability. Digital audio networking connectivity is ensured: Focus Venue comes with both AES/EBU- and AIREA inputs. Optionally available input interfaces allow for a connection to analog signal chains or digital audio networks such as Optocore or Dante.

Analog

AES/EBU

AIREA®

Dante™

OPTOCORE

Rock the crowd – not the neighbours.



Convertible
Dispersion
Technology

Our patented Convertible Dispersion Technology (CDT) effectively reduces unwanted low-mid rear sound emissions up to -25 dB. It is integrated into every FV-200 module and allows users to remotely switch between cardioid and vented operation.

Fast and safe rigging with our Fohhn Interlock System.

Discover a new generation of rigging hardware. Simple, tool-free, safe and fast. Significantly less time is spent on system setup.

The power of V8

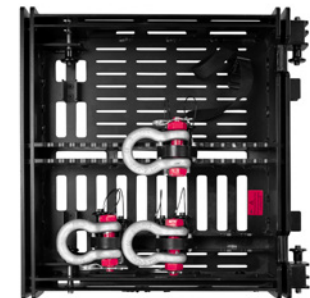
Thanks to the closely spaced HF-drivers and a sophisticated manifold waveguide- and horn design, comb filter effects are efficiently avoided – in contrast to most existing conventional line arrays.

Accessories – ready for touring.



Dolly

transport dolly made of steel for 2 × FV-200 or 4 × FV-100, with braked 125-mm-wheels and safety fork pockets



Flying Frame

for FV-100 and FV-200, max. load 1,300 kg. Complies with the directives and provisions of DGUV Regulation 17.

Transport Cover

for 2 × FV-200 or 4 × FV-100 on a dolly



Rain Cover (top)

for Focus Venue with flying frame



Rain Cover (panel)

for Focus Venue connector panel



Available soon:

- **Pullback Frame**
tilting of array & TV spigot for downfill
- **Stacking Cradle**
consists of pullback frame and feet

PS-850 system subwoofer:
The perfect low end for concert sound.



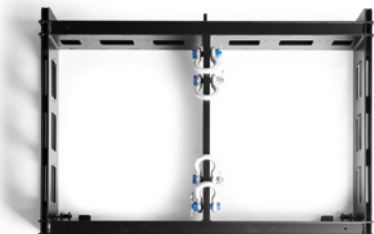
PS-850
system subwoofer
2 × 18" woofer, 2000 W
non-turbulent port design, vented system
cut-off frequency 27 Hz
multiplex birch plywood enclosure, PU-coated
optional flying equipment
weight: 105 kg

- High-performance 2 × 18" subwoofer (4.5" voice coil)
- Non-turbulent port design
- Retrofit Fohhn Interlock rigging system
- Additional Speakon inputs on the front for cardioid setups
- An entire set of accessories

With the launch of our new PS-850 subwoofer, our Focus Venue concert sound system is powerfully complemented in the low-frequency range. By combining it with our new DI-2.4000 amplifier and sophisticated accessories, a perfect integral system is formed.

Using Fohhn subwoofers powered by DI system amplifiers allows for real-time control of a sub array's dispersion characteristics via Fohhn Audio Soft.

Accessories –
ready for action.

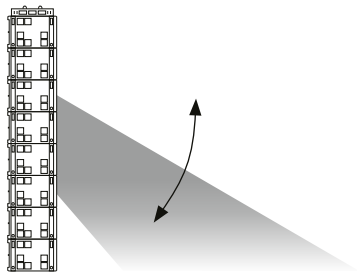


Flying Frame
for up to 16 × PS-850, max. load 2,000 kg.
Complies with the directives and provisions of
DGUV Regulation 17.

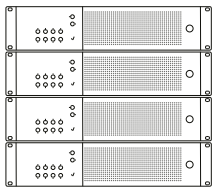


Dolly
transport dolly made of steel for up to 4 × PS-850,
with braked 125-mm-wheels and safety fork pockets

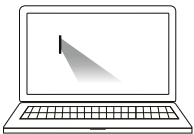
Beam Steering – Focus Sub Array



A passive PS-850 sub array
is stacked or flown straight.



DI-2.4000 system amplifiers
power and control the sub array.



Sound beams are steered in
real time via Fohhn Audio Soft.



Wheel Board
Safe transport of one unit, SmartLock
mounting. Transport cover available.



Retrofit Fohhn Interlock System
Our simple and tool-free rigging system can be retrofitted
to any non-flown PS-850 subwoofer.

DI-2.4000 system amplifier:
100 % performance.
100 % reliability.
100 % Fohhn.

Features:

- Designed for both mobile applications and fixed installations
- Networking, remote control and monitoring via Fohhn Audio Soft
- Extensive DSP input- and output processing
- Power supply that includes a microprocessor with various sensory functions – mains voltage, temperature, and power consumption – to ensure optimal operation and device protection
- Universal 100-240 V AC power supply with Power Factor Correction (PFC)
- Auto power save function enabling fanless idle operation, temperature-controlled fans
- Two configurable switching contacts and a fault contact



DI-2.4000
system amplifier for PS-850
and PS-800
DSP-controlled CLASS D amplifier
2 × 4000 W / 4 ohm
2HU / 19"
9.6 kg

High-performance amplification built to order:
Get the connection that meets your requirements.

Whenever you order a Fohhn DI amplifier, you preconfigure its input- and output connections. Input options include AES/EBU (terminal block or XLR), Dante, Optocore, Fohhn AIREA and Analog (XLR). For signal outputs, you can choose between terminal blocks or Speakon connectors.

Available Input Interfaces



AES/EBU (Phoenix 3-pin)



Optocore



AES/EBU (XLR)



Analog



Dante™

Available Output Interfaces



Speakon connectors

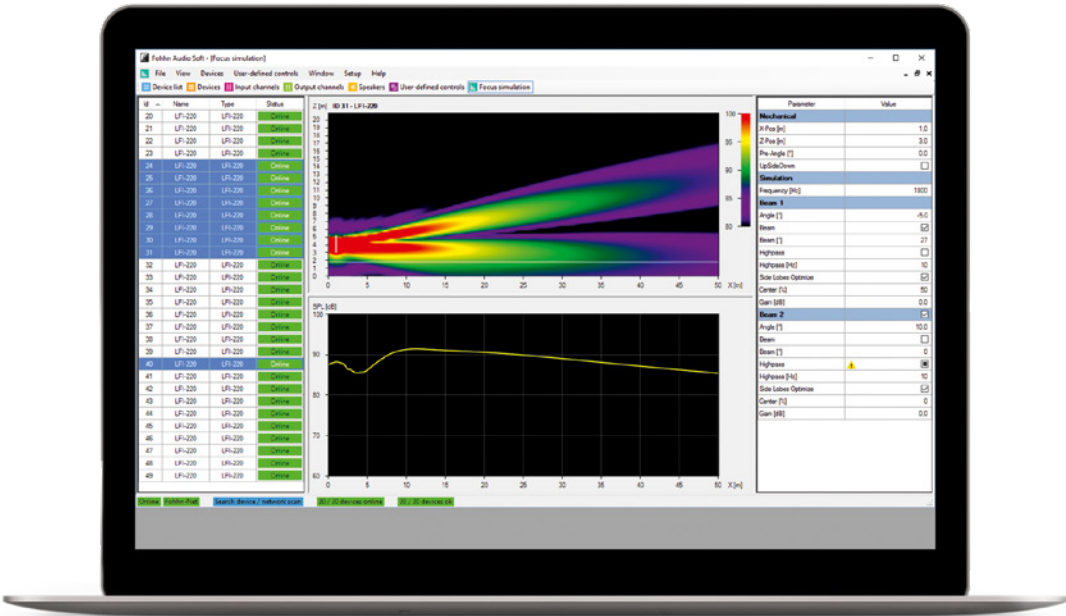


Phoenix 2-pin

One piece of software controls the entire system: Fohhn Audio Soft.

- **Direct and intuitive remote control of Fohhn systems in real time**
- **A clear graphical user interface ensures quick access to all connected audio devices, group functions, software presets and to the Focus Simulation.**
- **Devices can be controlled via PC using a Fohhn-Net USB- or Ethernet adapter.**
- **All settings can be saved as presets.**
- **Up to 254 devices can be networked and remotely controlled.**

State-of-the-art technology and dedicated software have been closely developed in tandem and fine-tuned for perfect compatibility by our engineers. No other software programme is required; everything is included in a single intuitive application - Fohhn Audio Soft. The advantages are not far to seek: no unnecessary waiting time while data is transferred between software programmes, or computer processes are completed. Loudspeakers do not have to be muted at any time while settings are optimised. Both software and loudspeaker systems are permanently online and constantly communicating with one another. Every adjustment can be made in real time, guaranteeing problem-free live control of all connected Fohhn systems.

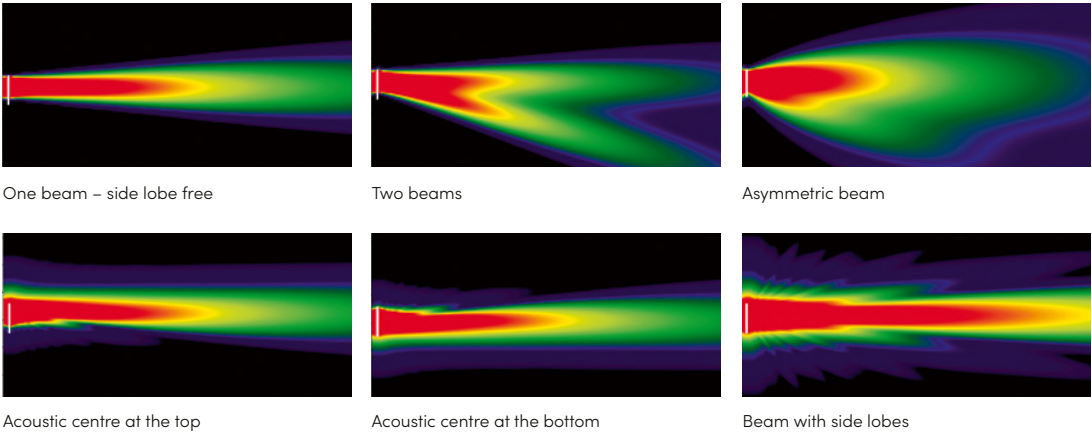


Perfect control in real time: Fohhn Beam Steering Technology.

Fohhn Audio Soft version 5.0 offers a comprehensive set of Beam Steering features:

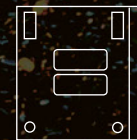
- **Vertical dispersion: 0 – 90°**
- **Sound inclination angle: +/-40°**
- **Precise adjustment in 0.1° increments**
- **Two Beam Technology: two beams possible per module – each beam can be controlled separately.**
- **Side Lobe Free Technology: effective suppression of unwanted side lobes**
- **Moveable acoustic centre**
- **Asymmetric beams possible**
- **High-class audio tools like parametric EQs, Dynamics, X-Over etc.**

The result: exceptionally even sound pressure levels and sound quality in every row. Attenuated room reflections. More direct sound. Perfect intelligibility.

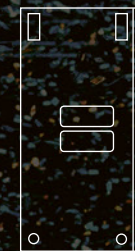


Welcome to the system

Focus Venue
straight line array



FV-100



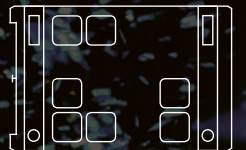
FV-200

DI Amplifier
DSP-controlled system amplifier



DI-2.4000

Subwoofer
flyable 2 x 18" subwoofer

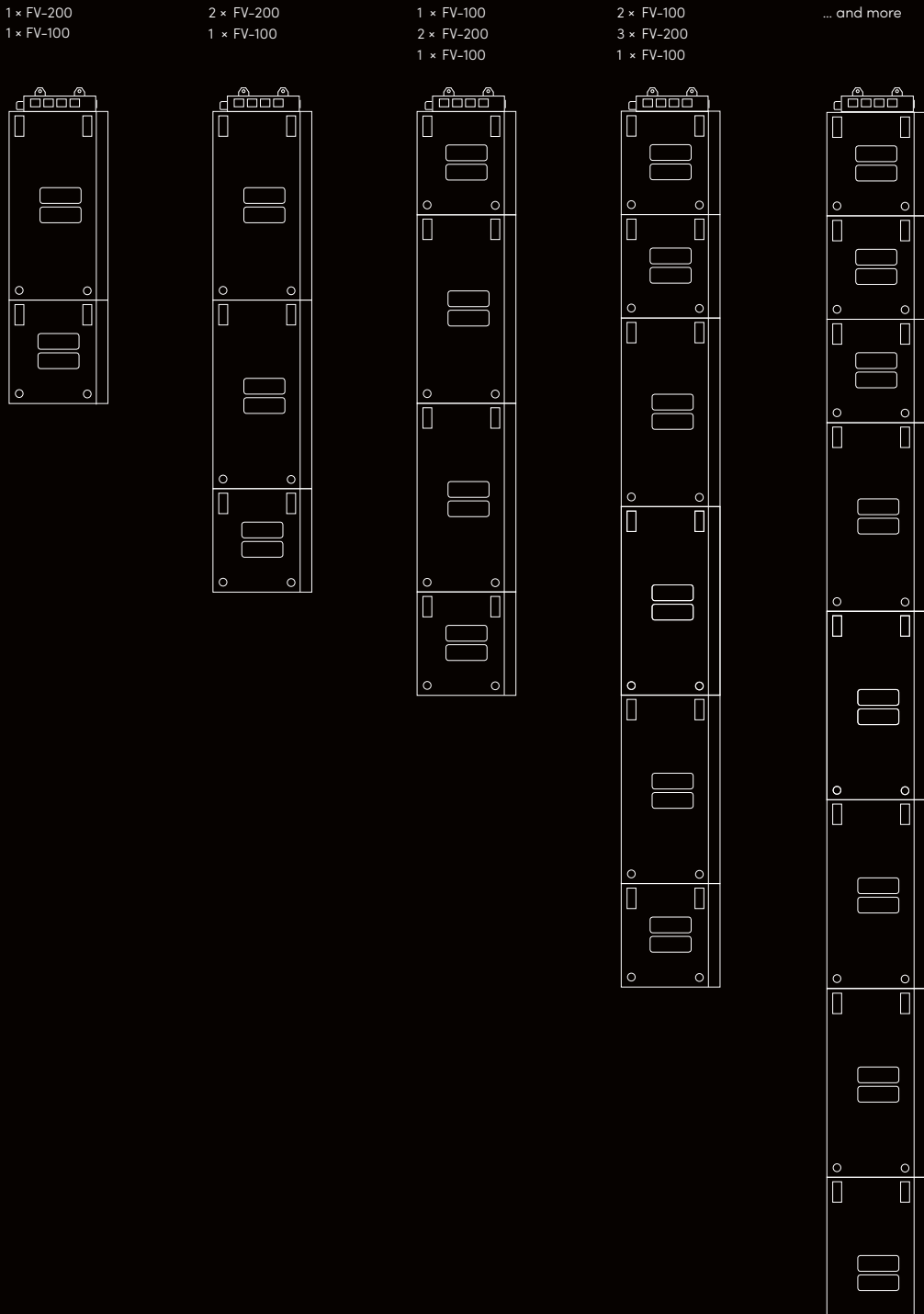


PS-850

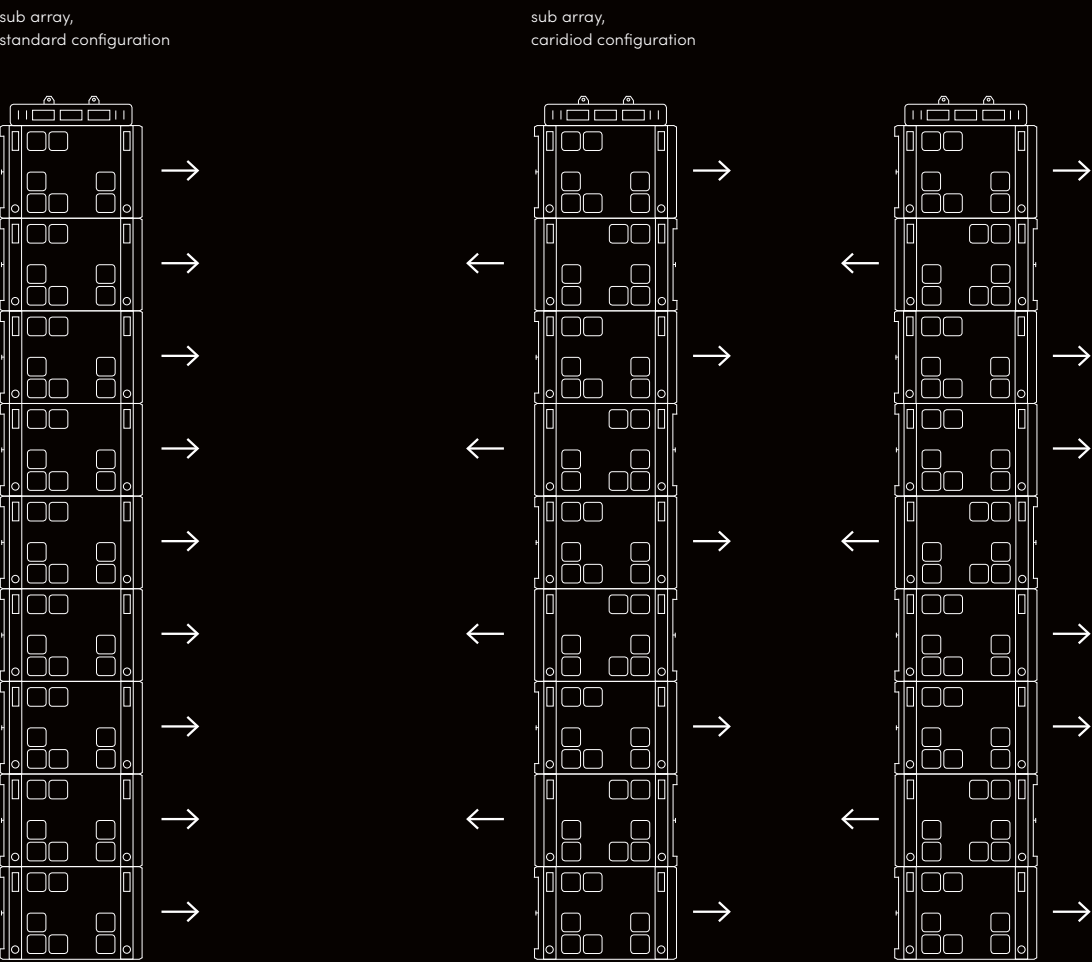


Fohhn Audio Soft
real-time control of the entire system

Focus Venue: Standard module combinations.



PS-850: Standard or cardioid configuration.

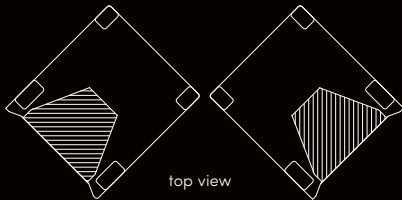


The PS-850 can also be used in a cardioid setup.
Integrated Speakon connectors at the front grille facilitate cabling.

Application examples.

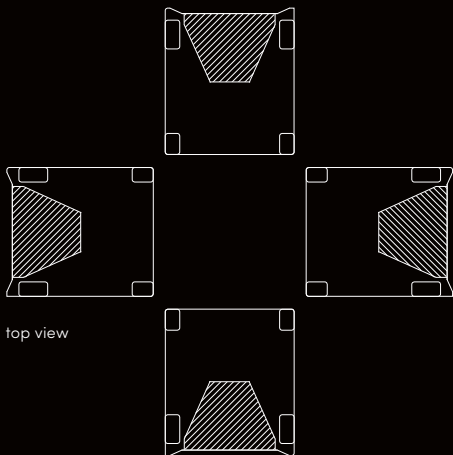
180° sound reinforcement

Sound systems flown side by side in the tightest of spaces, since mechanical curving is not applied.



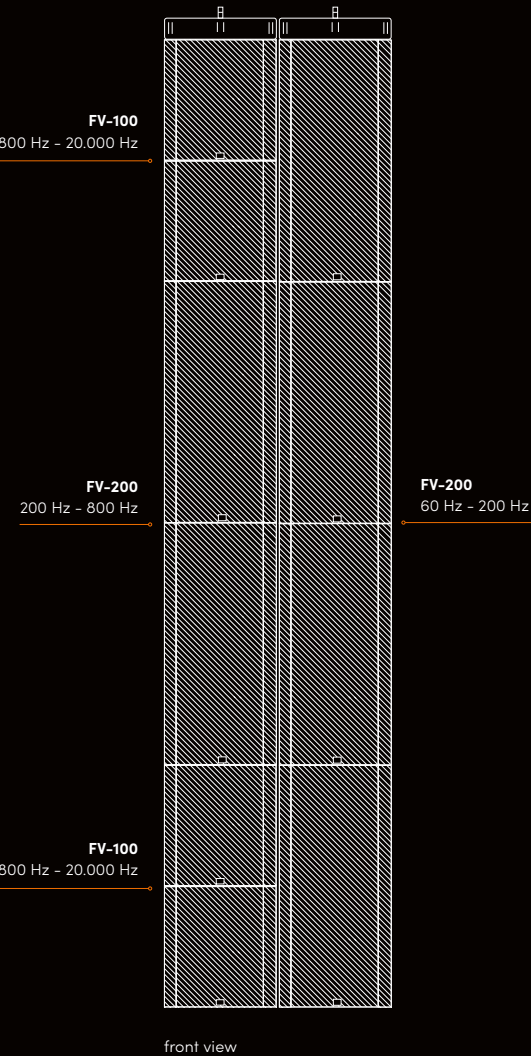
360° sound reinforcement

360° sound reinforcement in the tightest of spaces, since mechanical curving is not applied.



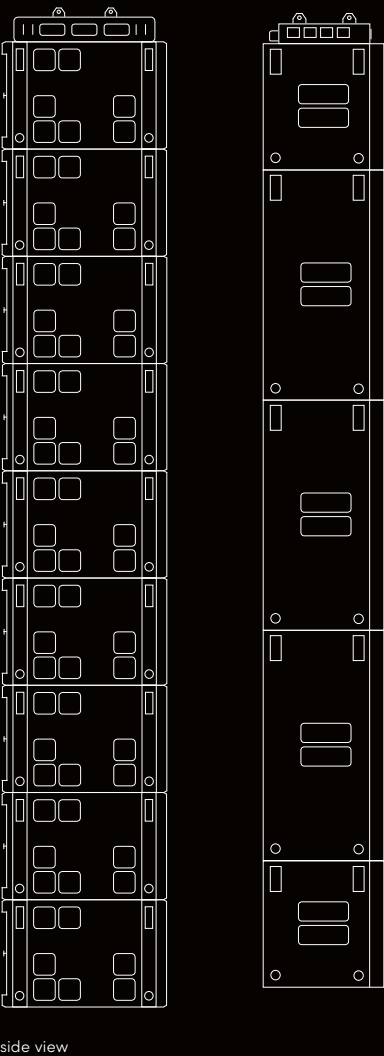
Loving neighbours – side by side

Due to a crossover slope of 48 db/Oct, the HF- and LF modules can be flown or installed side by side without any interference. And in case you need even more power, you can set up the system as depicted below.



Full-range beam steering including a sub array

Mechanical and optical compatibility of Focus Venue and Perform-Series subwoofers, full beam steering performance across the entire frequency range.



A sound system integrated into LED walls

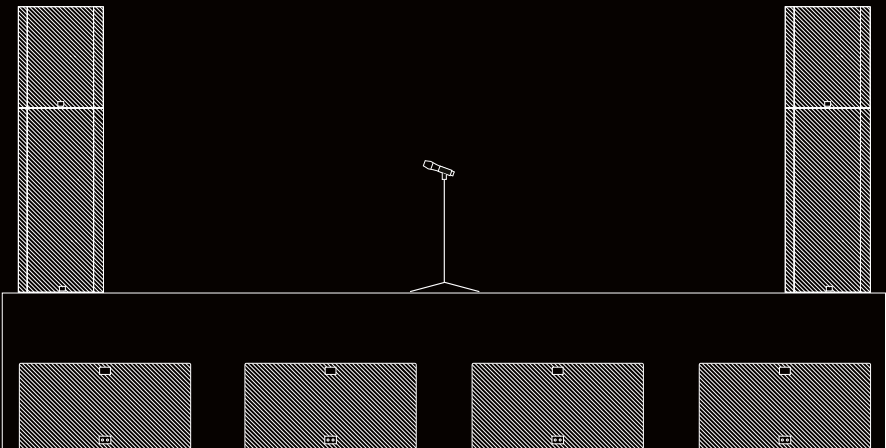
Seamless integration without mechanical curving, no interference with visual axes, minimal space requirement.



front view

Stack your PA

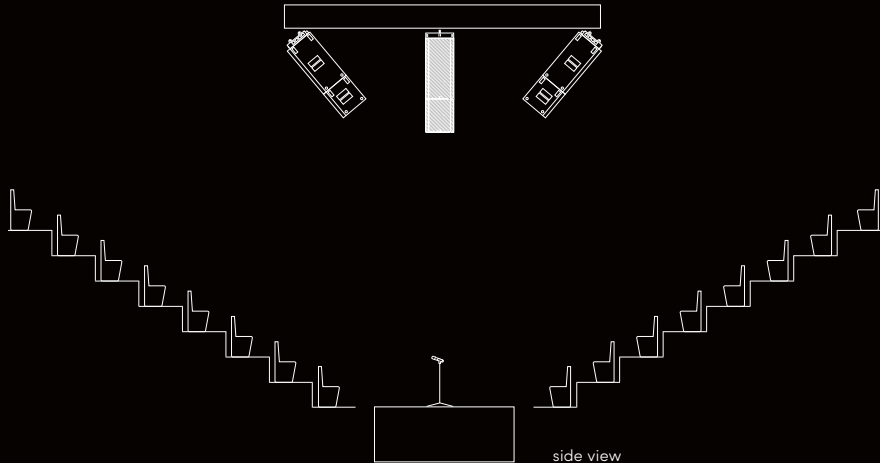
You can also stack your entire system. An optional stacking cradle for Focus Venue arrays will be available soon.



front view

Mechanical pre-tilting possible

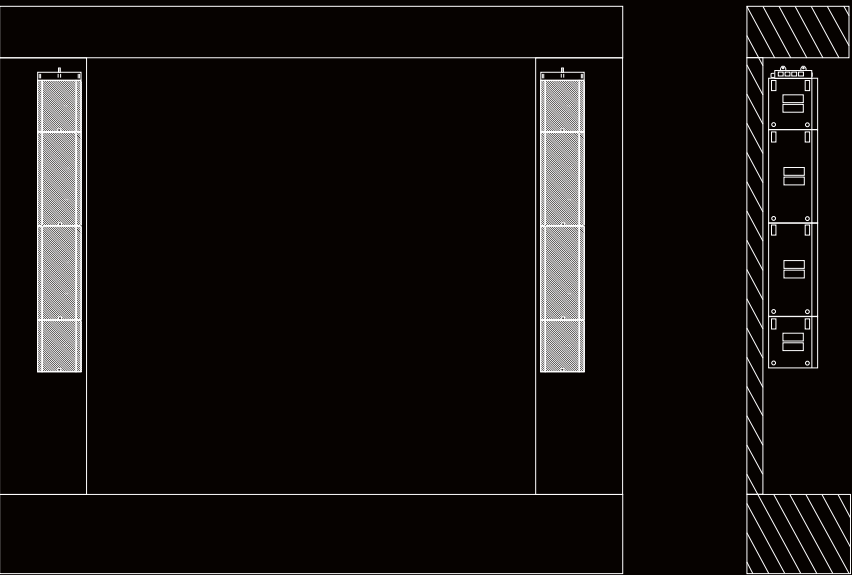
Beam steering and mechanical pre-tilting of up to 40° guarantee perfect sound dispersion for every application. The integrated tilt sensor displays the actual angles.



side view

Seamless integration

Since they are flown straight, all of our systems can be integrated easily and almost invisibly.



front view

side view

Entering the stage: Fohhn Concert Sound systems.

100th anniversary of Poland's independence, Warsaw, 2018.
Live music from Tomasz Szymus Orchestra and a number of well-known Polish singers for more than 20,000 fans on Warsaw's Castle Square. The feedback was totally positive.

53rd Heineken Jazzaldia, Kursaal Auditorium, San Sebastian, Spain, 2018.
Line-Up: Gregory Porter & Symphonic Orchestra / Tribute to Nat King Cole, Brad Mehldau Trio, Kenny Baron Quintett, Caetano Veloso.

42th Festival de Jazz de Vitoria-Gasteiz, Spain, 2018.
Line-Up: Kool & The Gang, Al McKay's Earth Wind & Fire, Hudson: Jack DeJohnette, John Medeski, John Scofield, Scott Coley, Brooklyn Funk Essentials, Mingus Big Band, Carla Bruni, Cory Henry and the Funk Apostoles ...

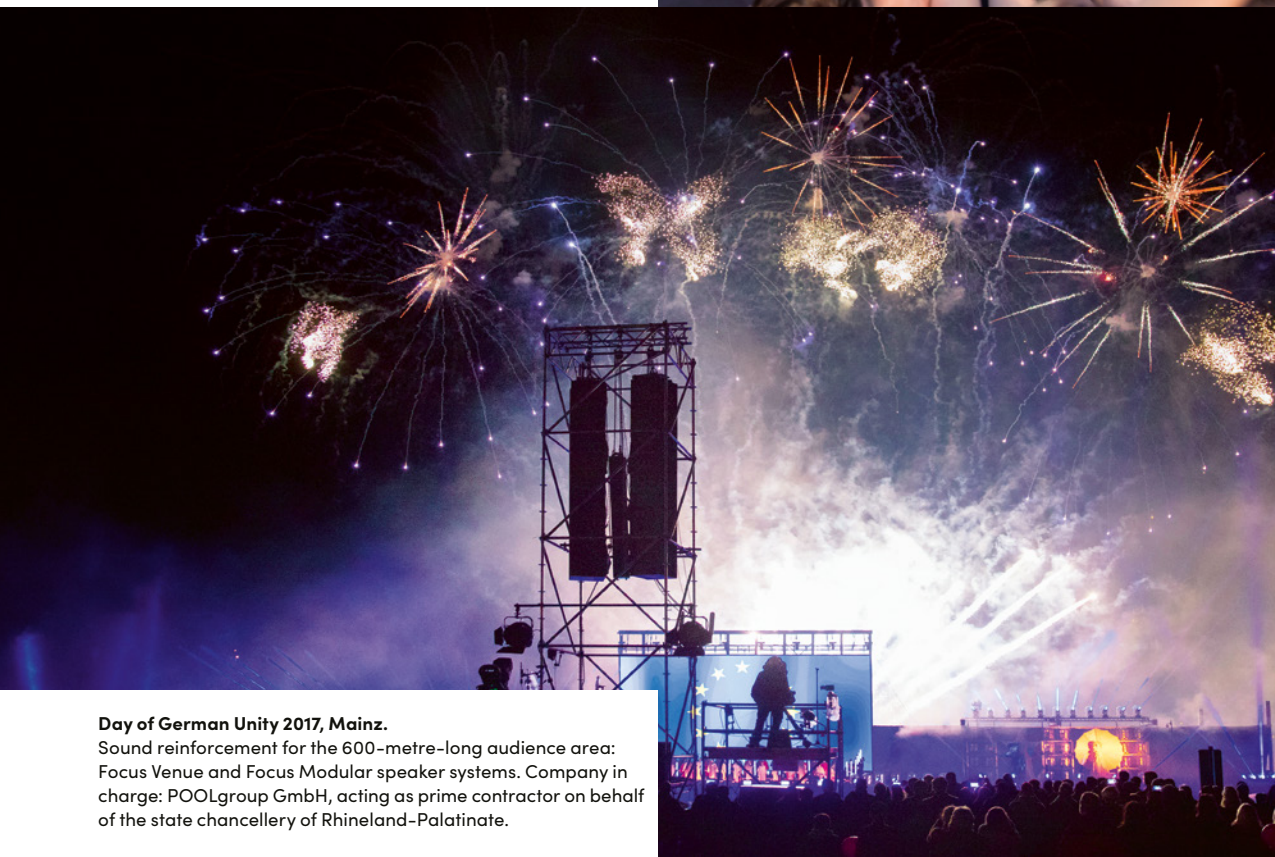
Rock im Allerpark Festival 2018, Wolfsburg, Germany.
New venue for the city's popular open-air festival: The 80th anniversary of Wolfsburg took place at the city hall square where headliner Guano Apes fired up around 7,000 rock music fans.



Lake Night Festival 2018, Constance, Germany.
Main PA: Focus Venue. Sub Array: Perform PS-850.
Nearfills/Outfills: Perform PT-70. Amps: DI-2.2000.
Image: Palko!Muski from Switzerland.



KulturmZelt, Bürgerpark, Braunschweig, Germany, 2017 & 2018.
Sound reinforcement for this multi-week festival included two Focus Venue line arrays, two PT-70 systems, six PS-850 subwoofers, 16 monitor speakers as well as several X-Series speaker systems.



Day of German Unity 2017, Mainz.
Sound reinforcement for the 600-metre-long audience area:
Focus Venue and Focus Modular speaker systems. Company in
charge: POOLgroup GmbH, acting as prime contractor on behalf
of the state chancellor of Rhineland-Palatinate.



Anastacia's "Music Loves Fashion" event, E-Werk, Cologne, 2017.
US star Anastacia presented her unique live fashion/rock show,
introducing her brand new collection, while Focus Venue delivered
excellent sound and a powerful performance.



Chöre Live in Concert 2018, EWS Arena, Göppingen, Germany.
Focus Venue delivered outstanding coverage and consistency of sound.



Filmnächte am Elbufer, Dresden.
Europe's largest open-air film festival. Higher SPL and less noise pollution thanks to Focus Venue's beam steering capability and our Convertible Dispersion Technology (CDT).



Fête de la Musique 2018, Nice, France.
Sound reinforcement for the first 60 metres in front of the stage courtesy of Focus Modular. Live acts: Sting & Shaggy, Youssou N'Dour, Zazie, MC Solaar ...



Fête de la Musique 2018, Nice, France.
Focus Venue and PT-70 systems cover another 120 metres. A total of 65,000 guests partied at Place Masséna.

The future of the line array:
Convinced first-movers.



“ Since I began my career as a sound engineer almost 40 years ago, I have had the opportunity to experience the progress of sound reinforcement systems up to the current line array. I always knew that the best sound comes from a point source, but I thought that on a large scale it was nothing short of a dream ... In this case, Fohhn has managed to achieve excellence with their new Focus Venue and beam steering technology: precise and powerful sound, surprising and unique in its kind. Congratulations to the entire Fohhn team for this wonderful gift. “

Fernando Díaz Martínez
FOH sound engineer, Alejandro Sanz, Julio Iglesias



“ I chose Focus Venue because it is the future of the line array. “

Angelo Pelliccioli
Sound Service, Italy



“ Focus Venue combines the sound and performance of a traditional line array with the flexibility and precision of a vertical beam steering system. The side-lobe-free mode and the cardioid technology allow previously unavailable control of your sound and thanks to the scalability of Focus Venue, it’s always the perfect system whether you’re playing in a club or an arena. “

Chris Madden
FOH sound engineer, Pink, Anastacia, Sade



“ Rental companies have to cover a broad range of applications and therefore Fohhn’s electronic beam steering technology offers a whole new level of flexibility: With a conventional line array the vertical coverage is typically defined by rough measurements of the venue, put into some software. Once the array is up in the air it’ll take a lot of time to do changes if you have to. With Focus Venue you can control the vertical coverage any time, using the computer and Fohhn Software. So instead of having to rely on computer simulations based on most of the times imprecise input data, you can immediately react to coverage issues as soon as you hear them. I believe there will be a bright future for the Focus Venue system! “

Thomas Mundorf
Head of Audio Project Management & Technologies, PRG Germany

Technical Data

FV-100

ELECTROACOUSTIC FEATURES	
Acoustic design	electronically steerable high frequency line array speaker, manifold horn-loaded waveguide design
Components	8 × 1" (1.75" diaphragm) compression driver 8 × 1.5" (4" diaphragm) compression driver
Operational mode	2-way active, 16 × DSP amplifiers, Class D
Max. SPL (1 m)	150 dB
Frequency range	800 Hz – 20 kHz
Beam dispersion angle, horizontal	90°
Vertical beam width, digitally controlled	0° to +90° in 0.1° increments
Vertical inclination angle, digitally controlled	–40° to +40° in 0.1° increments
Acoustic centre	moveable between 0 – 100 % (from speaker bottom to top)
LOUDSPEAKER FEATURES	
Enclosure	multiplex birch plywood
Protection grille	steel, powder-coated
Dimensions (W × H × D)	approx. 560 × 635 × 595 mm
Weight	approx. 92 kg
ELECTRONIC FEATURES	
Amplifier power	16 × 250 W
Amplifier type	Pure Path Digital PWM
DSP channels	16
Frequency response	20 Hz – 20 kHz
Signal/Noise ratio	> 105 dB/A
Protective circuit	softstart, overheating, short circuit, overload
Power supply	100 V – 240 V AC, 50/60 Hz switching power supply with Power Factor Correction (PFC), inrush current limiter, power-up delay
AUDIO SIGNAL INPUTS	
Digital audio inputs	1 × AES/EBU or 1 × AIREA powered
Input processing	yes, 2 × DSP
REMOTE CONTROL, REMOTE MONITORING	
Remote control	Fohhn-Net over RS-485, Fohhn Audio Soft
Remote monitoring	temperature, protect, AES/EBU signals, power supply, Fohhn-Net, Fohhn Audio Soft, tilt sensor

FV-200

ELECTROACOUSTIC FEATURES	
Acoustic design	electronically steerable low-mid line array speaker, horn-loaded waveguide design, Cardioid Technology (Fohhn CDT)
Components	8 × 10" long excursion driver
Operational mode	active, 4 × DSP amplifiers, Class D
Max. SPL (1 m)	145 dB
Frequency range	60 Hz – 800 Hz
Beam dispersion angle, horizontal	90°
Vertical beam width, digitally controlled	0° to +90° in 0.1° increments
Vertical inclination angle, digitally controlled	–40° to +40° in 0.1° increments
Acoustic centre	moveable between 0 – 100 % (from speaker bottom to top)
LOUDSPEAKER FEATURES	
Enclosure	multiplex birch plywood
Protection grille	steel, powder-coated
Dimensions (W × H × D)	approx. 560 × 1275 × 595 mm
Weight	approx. 135 kg
ELECTRONIC FEATURES	
Amplifier power	4 × 1000 W
Amplifier type	Pure Path Digital PWM
DSP channels	4
Frequency response	20 Hz – 20 kHz
Signal/Noise ratio	> 105 dB/A
Protective circuit	softstart, overheating, short circuit, overload
Power supply	100 V – 240 V AC, 50/60 Hz switching power supply with Power Factor Correction (PFC), inrush current limiter, power-up delay
AUDIO SIGNAL INPUTS	
Digital audio inputs	1 × AES/EBU or 1 × AIREA powered
Input processing	yes, 2 × DSP
REMOTE CONTROL, REMOTE MONITORING	
Remote control	Fohhn-Net over RS-485, Fohhn Audio Soft
Remote monitoring	temperature, protect, AES/EBU signals, power supply, Fohhn-Net, Fohhn Audio Soft, tilt sensor

Technical Data

DI-2.4000

ELECTRONIC FEATURES	
Amplifier technology	Class D
Output power	2 × 4000 W / 4 ohm 2 × 2000 W / 8 ohm (1 kHz, THD+N < 1 %)
Minimum impedance	4 ohm
DSP input channels, Fohhn Audio DSP	4
Amplifier outputs	2
Frequency response	20 Hz – 20 kHz
S/N ratio	>100 dB/A
THD+N	0.08 % (1 kHz, 8 ohm, 3 dB below clipping)
Dynamic range	>120 dB, A-weighted 20 Hz – 20 kHz
Protective circuit	over voltage protection, over current protection, over temperature protection short-circuit protection, DC protection, power on delay, soft start and inrush current limit
Remote control	Fohhn-Net, Fohhn Audio Soft
Remote monitoring	temperature, protect, signals, AES/EBU signals, power supply, Fohhn-Net, Fohhn Audio Soft
Power supply	100 – 240 V AC 50/60 Hz, universal input switching power supply with Power Factor Correction (PFC)
Temperature range	0 – 40°C
Controls	power on/off switch fault contact (open/close): 1 × Phoenix 3-pin, switching contact 1 & 2: 1 × Phoenix 3-pin remote power in/out: 2 × Phoenix 2-pin, USB config port
Auxiliary supply 24 V / 5 W	1 × Phoenix 2-pin
MECHANICAL FEATURES	
Cooling	temperature-controlled fan
Weight	9.6 kg
Dimensions (W × H × D)	2HU / 19", 485 × 89 × 425 mm
Display (front)	1 × receive LED, 1 × send LED, 1 × ready LED, 1 × protect/error LED, 4 × input LED, 2 × output LED
AUDIO SIGNAL INPUTS/ OUTPUTS	
Audio inputs	2 × Phoenix 3-pin AES/EBU, 1 × Phoenix 3-pin Fohhn-Net
Optional input interfaces	AES/EBU XLR, Analog XLR, Dante, Optocore
Audio outputs (terminal block)	2 × Phoenix 4-pin
Optional output interface	2 × Speakon

PS-850

ELECTROACOUSTIC FEATURES	
Acoustic design	direct radiating, vented design, NTP (non-turbulent port design)
Components	2 × 18" long excursion driver, 4.5" voice coil, water-resistant cones
Power rating (nominal) ^[1]	2000 W
Max. SPL ^[2]	142 dB
Cut-off frequency ^[3]	27 Hz
Nominal impedance	4 ohm
MECHANICAL FEATURES	
Enclosure	multiplex birch plywood
Protection grille	hexagonal perforated steel grille, powder-coated in enclosure colour, backed by acoustically transparent foam
Fittings	1 × M20 thread for distance rod 4 × slot for Interlock rigging system 2 × catch for optional front panel
Connections	rear: 2 × Neutrik NL4 Speakon, recessed front: 2 × Neutrik NL4 Speakon for cardioid setups
Finish	scratch-proof polyurethane coating, black
Dimensions (W × H × D)	1200 × 600 × 900 mm
Weight ^[4]	110/105 kg with/without FIS
Wheels	2 × fitting for optional wheel board
Handles	4 handles on each side
Miscellaneous	2 × rubber skid on bottom, 2 × matching slot on top 4 × rubber foot on each side 1 × fitting for cable strain relief on rear panel
OPTIONAL FEATURES	
Weather protection	polyurethane coating with additional UV-resistant finish, additional water-repellant speaker cone impregnation

[1] according to IEC-60268-5 long term
[2] peak, 20 ms with bandpass filtered pink noise signal according to IEC
[3] -10 dB under anechoic half-space conditions with speaker preset
[4] net weight without optional equipment

**The entire Fohhn product range is developed and
manufactured by our team in Nürtingen, Germany.**

- GERMAN QUALITY
- ENGINEERED AND MADE
- BY FOHNN®

FOHHN.
SOUNDS PERFECT.
IS PERFECT.

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