FOHHN FOCUS VENUE BEAM STEERING FOR CONCERT SOUND



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THE FUTURE OF THE LINE ARRAY

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



Focus Venue: When Line Array Technology Evolves and Beam Steering Reaches its Next Level.

Features

- Fully integrated active concert sound system with built-in cutting-edge amplification, DSP and digital networking
- Precise control of dispersion characteristics / beams in real time, using intuitive software
- Flown and stacked straight no mechanical curving needed
- Compact size and full scalability
- Fast and safe rigging, significantly reduced system set-up time

Benefits

- Extremely even and balanced sound coverage, from the front row to the very back
- Excellent sound quality, clarity, an enormous SPL and great dynamics
- Unparalleled flexibility. Store and recall presets within milliseconds. Quickly respond to changing event conditions.
- Perfect visual integration into architecture and scenery, or beside video screens

Applications

- Mid- to large-scale concert sound reinforcement for festivals, concert halls, stadia etc.
- High-class installations in concert halls, theatres, and sport arenas etc.





FV-100 High-frequency module







The system is always flown or stacked straight. Sound beams are controlled in real time via software.

8 × 10" long excursion driver Horn-loaded waveguide design 4 × 1000 W CLASS D DSP amplifier 4 × DSPs Cardioid Technology (CDT) Max. SPL: 145 dB 8 × 1" (1.75" diaphragm) compression driver 8 × 1.5" (4" diaphragm) compression driver Manifold horn-loaded waveguide design 16 × 250 W CLASS D DSP amplifier 16 × DSPs Max. SPL: 150 dB

Superior Software: Perfect Beam Control in real time.

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

- Vertical dispersion: 0 90°
- Sound inclination angle: +/-40°
- Precise adjustment in 0.1° increments
- Two separate beams possible per module (Two Beam Technology)
- Effective suppression of unwanted side lobes (Side Lobe Free Technology)
- Moveable acoustic centre
- Asymmetric beams possible
- High-class audio tools like parametric EQs, Dynamics, X-Over etc.

All this leads to an exceptional evenness of sound pressure levels and sound quality in every row. More direct sound. Fewer room reflections. Perfect intelligibility. Better results, even in challenging acoustics. Less noise pollution in city open-air events.



Superior control of any room position using a laptop/PC.

Superior Technology: State-of-the-art Electronics Included.

Intelligent amplifier- and DSP technologies provide the basis for advanced audio control:

- Each driver is powered and controlled by a separate high-performance CLASS D amplifier and a separate DSP.
- An additional Beam Control DSP includes all algorithms used for calculating the beam characteristics.
- Any parameter changes made within the software are sent to the Beam Control DSP, which calculates the data and relays the appropriate information to each speaker in real time.
- Minimal latency: 1.8 ms.

Alongside its Beam Steering capability, the powerful single speaker amplification delivers an enormous SPL, high dynamic levels and maximum reliability.





Superior Power: State-of-the-art Line Array Components.

The Modular Approach, but different.

Instead of using one type of full-range module, Focus Venue consists of separate high-frequency and low-mid modules, which can be combined as follows:

Typical Combinations



Overcome the Acoustical Restrictions of Conventional Line Arrays.

Thanks to the close distance of Focus Venue's high-frequency drivers and its manifold horn-loaded Waveguide design, comb filter effects do not occur – these will occur, by definition, when using a conventional line array. Therefore, natural sound and great clarity can always be guaranteed.

Quiet on Stage, but Full-On Power for the Audience.

Cardioid technology can effectively reduce (unwanted) low-mid rear sound emissions. Our patented Convertible Dispersion Technology (CDT) is integrated into every low-mid module. This allows a user to switch remotely between cardioid and vented operation.

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A Complete Solution: All You Need for Professional Use.

Fast and safe rigging – the Fohhn Interlock System.

Discover a new generation of rigging hardware. Simple, tool-free, no bolts that would otherwise get lost. Significantly less time is spent on system set-up.



Dolly Board (optional) Safe transportation for FV-100 and FV-200 modules. The units can be directly connected to the dolly board via the built-in Fohhn Interlock System.

Flying Cradle (optional) Complies with the directives and provisions of DGUV Regulation 17.



Additional Accessories (optional) Stacking cradle, pull-back bar, extension bar, transport cover, single wheelboard. Safe and quick handling guaranteed.

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 \times H \times 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

| S-485, Fohhn Audio Soft |
|--|
| ect, AES/EBU Signals, Power Supply, Fohhn-Net, |
| |

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 ($W \times H \times D$) | 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 |

Anastacia's Straight Line Array

E-Werk, Cologne, Germany Anastacia's "Music Loves Fashion" event

EQUIPMENT USED

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A.

4 × Focus Venue FV-100 4 × Focus Venue FV-200 9 × PS-9 active subwoofer 4 × PT-70 as near fills

<mark>Germany's</mark> Modular Line Array

Rhine Bank, Mainz, Germany German Unification Day

EQUIPMENT USED

6 × Focus Venue FV-100 8 × Focus Venue FV-200 3 × Focus Modular FM-400 2 × Focus Modular FM-100

Dresden's Precise Sound Reinforcement

Elbe Bank, Dresden, Germany "Filmnächte am Elbufer" open-air event

A REAL PROPERTY AND ADDRESS OF THE OWNER.

EQUIPMENT USED

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ALLE

6 × Focus Venue FV-200 3 × Focus Venue FV-100

Bergamo's Easy Rigging Experience

Creberg Theatre, Bergamo, Italy Concerto delle Stelle

1000

EQUIPMENT USED

2 × Focus Venue FV-100

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- 2 × Focus Venue FV-200
- 6 × PS-9 active subwoofer
- 8 × XM-4 stage monitors



" I chose Focus Venue because it is the future of the Line Array."

Angelo Pelliccioli (Sound Service, Italy)

FOHHN. SOUNDS PERFECT. IS PERFECT.

Keeping It in the Family.

Fohhn offers the widest range of Beam Steering products worldwide – from elegant conference loudspeakers to powerful concert sound systems. So it is only logical that the technology doesn't stop at the low end: Use Fohhn Audio Soft to combine several Fohhn subwoofers into an electronically steerable Focus Sub Array!

Made in Germany – Made by Fohhn.

This product – like the entire Fohhn range – is developed, engineered and built by our team in Nürtingen, Germany.

Fohhn Audio AG Hohes Gestade 3-8 72622 Nürtingen Germany Tel. +49 7022 93323-0 Fax +49 7022 93324-0 www.fohhn.com info@fohhn.com

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