

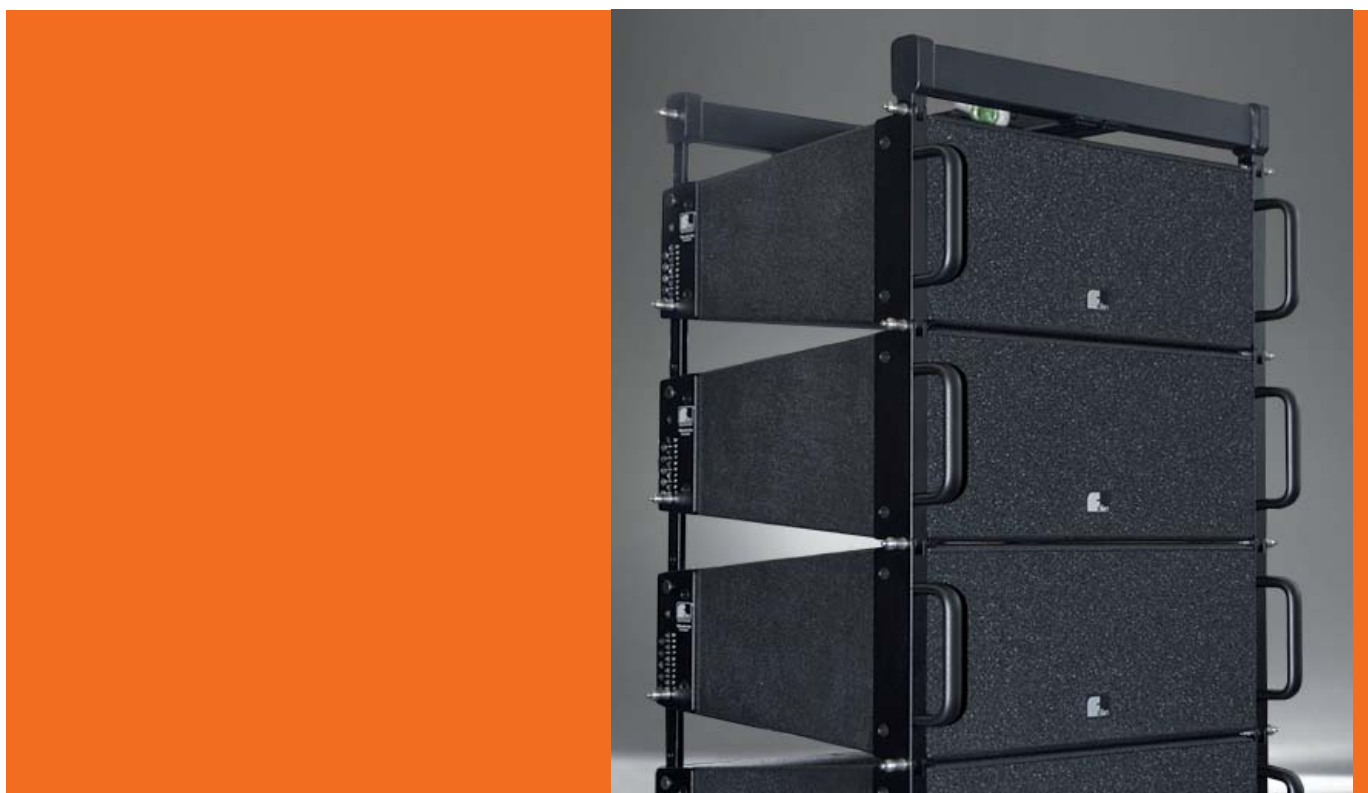
Data sheet

PT-8 WaveLine Compact



# Perform-Series

Line-Array Systems.



## PT-8 WaveLine Compact



The Fohhn® WaveLine Compact ist a very compact and powerful line array System. PT-8 module, twin-coaxial, fully horn-loaded, 2x 6,5" neodymium, 1x 1,4" neodymium driver with HF phase EQ. Impedance: 16 ohms. Weight: 14,5 kg.

### Description

Based on the performance of the 2006 launched WaveLine Line Array System we are proud to introduce the brandnew WaveLine Compact. The since 3 years approved and unmodified concept of the "big" WaveLine system is moved to the basis of a 2x 6,5"/1,4" system. Efficiency in power capability and sound inspired the development of th new small line array system WaveLine Compact.

### WaveLine Compact PT-8

Very compact and powerful line array module, twin-coaxial, fully horn-loaded, 2x 6,5" neodymium, 1x 1,4" neodymium driver with HF phase EQ. Impedance: 16 ohms. Weight: 14,5 kg.

### Optimal Planning. Perfect Realisation.

Fohhn recommends EASE Focus Aiming Software by SDA (Software Design Ahnert GmbH) for simulating and measuring acoustic configurations. This two-dimensional acoustic simulation software realistically configures and arranges line arrays. The program, product-specific system file (Fohhn-WaveLine.efo) and the load evaluator (flying calculator) can be downloaded free of charge.

### System amplifier

The WaveLine system A-2.2100 2-channel DSP amplifier, 2 ohms stable, class H, lightweight (only 14 kg), switch mode power supply, 2U, 2x 2100W / 2 ohms. Remote operation via laptop or remote control devices FR-40.

### Subwoofer

Beyond that the WaveLine Compact System displays an enormous efficiency in full range application. Most venues will not effort a flown bass system. For special applications (no sub extension can be placed on the ground) an optional sublow system (Waveline PS-2 sub) is available to be flown within the rigging.

We recommend using the Fohhn subwoofer system PS-9 active XS-4 and XS-4 passive to maximise system performance for live music events. Fohhn® DSP processor technology modulates the WaveLine Compact and Fohhn subwoofers perfectly. Digital Fohhn signal processors are integral components of active Fohhn subwoofers, Fohhn DSP amplifiers and Fohhn DSP controllers. DSP-controlled Fohhn devices can be controlled remotely from a central location in the room or on the stage via intuitive remote control units. Fohhn therefore offers a perfectly adapted sound system that fulfils all the requirements of a modern speaker system regarding design, sound quality and operating comfort in every respect.

### Applications

Venues, opera, conference halls, theatres, churches, etc.

### Connections

2x NL4MP Neutrik Speakon.

### Accessories

Flying-cradle, Stack-cradle, Touring-Cases, Software.



## PT-8 WaveLine Compact

### Technical specifications

Type	2-way full-range twincoaxial line-array-system, vented/hornloaded
Frequency response	80 Hz – 18 kHz, +/- 3 dB
Power handling capacity	LMF 300 W, HF 70 W IEC norm 268-5
Impedance	LMF 16 ohms, HF 16 ohms
Recommended input power	LMF 750 – 1500 W into 8 ohms, HF 200 – 480 W into 8 ohms
Dispersion	horizontal 110° symmetrical, vertical 0°...10° defined by array adjustment
Sensitivity	LMF 97dB (1W / 1m), HF 110 dB (1W / 1m)
Peak SPL (1m)	single enclosure > 127 dB
Components	2x 6,5" N/Dym, 1,5" voice coil, water-resistant, 1x 1,4" N/Dym compression driver on HF-Phase-EQ
Connections	2 x NL4MP Neutrik Speakon (+1/-1 for 10" speakers, +2/-2 for 2" driver)
Rigging/Fittings	PT-8 flyware, completely integrated, 2 handling recesses at the back, 2 aluminium handles at the front
Enclosure	multi-layered ply 15 mm enclosure
Sealing	polyurea varnish, non-abrasive
Colours	standard black, equivalent to RAL9005, other colours (only in polyurethane sealing) on request
Front protection	stylish frontcover
Weight	14,5 kg of PT-8 element
Dimensions	Overall dimensions 238/147 x 509 x 451 (mm), H (front/back) x W x D, Housing without handles/flyware 215/147 x 509 x 400 (mm), H x W x D
Subwoofer	Fohhn PS-9 active, XS-4
System amplifier	Fohhn® A-2.2100 (2x 2100W/2Ω) with Fohhn Audio DSP
Optional accessories	Flying-cradle, Stack-cradle, Touring-Cases, Software

The manufacturer reserves the right to make technical modifications according to legal regulations stipulating the continual improvement of product features.



## Controlling of WaveLine Compact PT-8 Elementen

### 1. Fohhn system DSP amplifiers

Fohhn offers a range of specially adapted system DSP amplifiers for controlling speaker systems, which guarantee maximum sound performance and operational reliability for your Fohhn products. As manufacturers of speaker, amplifier and DSP technology, we know our systems inside and out right down to the smallest detail and are therefore in a perfect position to provide our users with the best overall system.

#### Fohhn System DSP amplifier are offering following advantages:

##### Integrated high-performance DSP technology:

- quick set-up,
- minimal space requirements in electronics cabinet,
- minimal cable requirements,
- fewer cable faults,
- controller and amplifier can be controlled and monitored using the same software.

##### Dual DSP technology

The DSP amplifiers contain 2 separate DSP engines with enormous capacity and processing power for 5 digital audio devices (DSP-1) and Fohhn specific speaker databases (DSP-2).

##### Remote monitoring and control

Integrated temperature and operating time monitor, status indicator / protection, remote control capability / network compatibility using a laptop, wall installation modules or media control systems.

### Fohhn® dual DSP technology

#### DSP-1: Integrated digital audio devices

Each amplifier channel has a:

- programmable 10 band parametric EQ,
- compressor/limiter/noise gate,
- delay,
- X-over function,
- top-quality pink noise and sweeptone generator

#### DSP-2: Speaker management

An integrated speaker database guarantees excellent sound quality and protection for all Fohhn speaker types. A sophisticated algorithm developed by Fohhn engineers and adapted to each speaker allows the individual monitoring and adjustment of bass, mid and high ranges.

### A-2.2100 system amplifier for WaveLine



#### A-2.2100

**2 channel operation, 2x 2100 W / 2 ohms, 2x 1350 W / 4 ohms, 2x 900 W / 8 ohms, Fohhn Audio DSP, remote control**

Dual-channel DSP amplifier, max. 2 ohms operation, Class H, extremely lightweight (only 14 kg), power pack, in 2 U designer housing, operation and remote control via laptop. Integral Fohhn Audio DSP for each amplifier channel with 2x 10 band EQ (fully programmable), delay, variable high/low pass filter and dynamic processor. Presets for all Fohhn speakers. Ideal for both mobile applications and permanent installations. System amplifiers for the WaveLine line array system. Without wearing digital potentiometers for volume control are located on the back. Dimensions are 2U / 19" 483 mm x 88 mm x 454 mm.

Temperature-controlled fans and noise gate.

Important features for system integration as per EN 60849 / DIN 0828 Regulations on Places of Assembly (alarm sound systems):

Sequential remote activation via control voltage, fault message contact for simultaneous evaluation of the operating status, monitoring and intelligent evaluation of all important device parameters.

Compatible with the Bittner SXL amplifier monitor (programmable control interface) and Bittner AX16 amplifier backup switch.

### 2. Standard amplifiers combined with Fohhn controllers

#### Standard amplifiers combined with Fohhn FC-8 DSP system controllers

All of the Fohhn speaker systems can be operated in combination with standard amplifiers. Each Fohhn speaker model has a linear design, neutral sound adaptation function and is fitted with an integrated crossover with electronic tweeter protection.

We recommend integrating the FC-8 Fohhn DSP system controller for applications involving standard multichannel amplifiers.

The FC-8 guarantees maximum sound quality, operational reliability and performance features that no other standard controller can offer in combination with our Fohhn speakers.

#### Advantages of the FC-8 controller:

##### Perfect adaptation to all standard amplifiers

Automatic amplifier calibration function and integrated amplifier database for perfect adaptation.

##### Dual DSP technology

The FC-8 contains 2 separate DSP engines with enormous capacity and processing power for Fohhn specific speaker databases and 5 digital audio devices.

##### Integrated speaker database

Guarantees excellent sound quality and protection for all Fohhn speaker types.

A sophisticated algorithm developed by Fohhn engineers and adapted to each speaker allows the individual monitoring and adjustment of bass, mid and high ranges.

##### Remote monitoring and control

Remote control capability / network compatibility using a laptop, wall installation modules or media control systems.

#### FC-8 DSP system controller

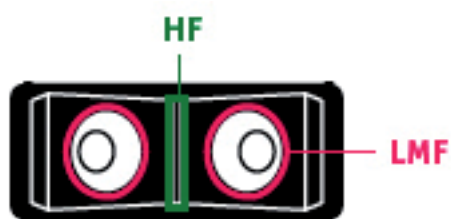
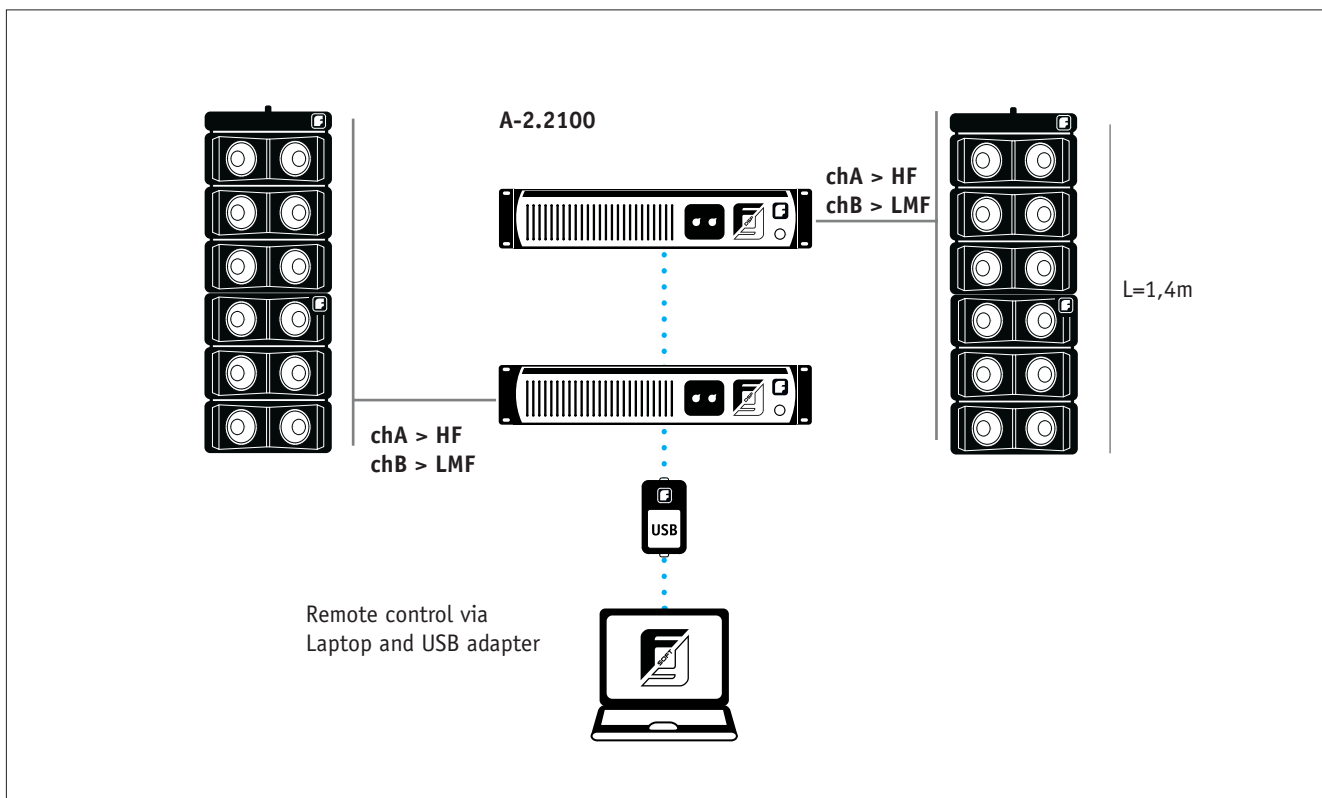


##### 4 inputs / 6 outputs (24 nodes)

A programmable 10-band parametric EQ, compressor/ limiter/noise gate, delay, X-over function, top-quality pink noise and sweptone generator are available at each output, allowing you to conveniently adapt the Fohhn system to the room acoustics or your own personal requirements.

## Controlling of WaveLine Compact PT-8 Elementen

### Amping with 12 elements



1x PT-8 element

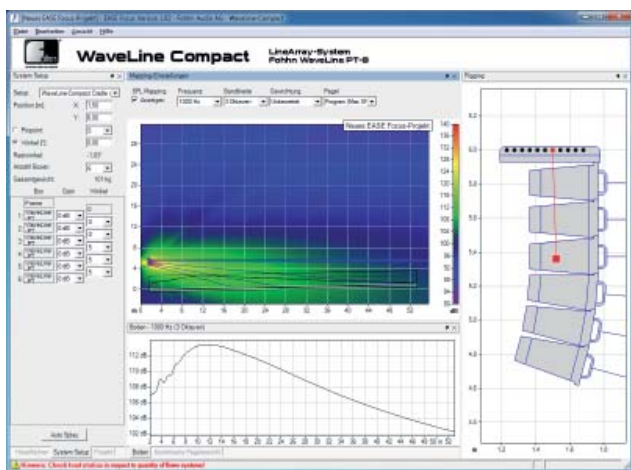
## Optimal Planning. Perfect Realisation.

### Simulation Software EASE Focus

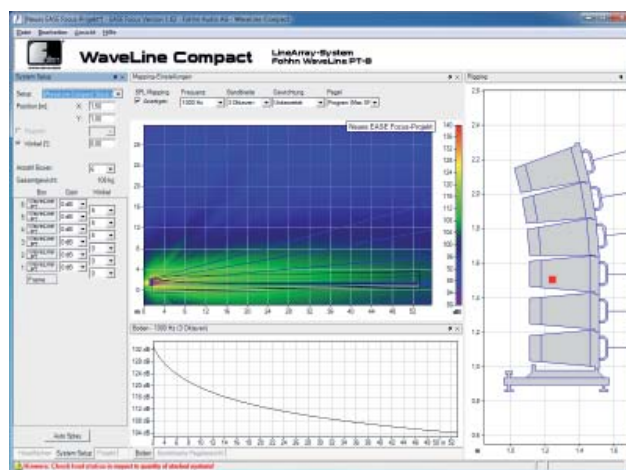
For simulating and calculating of acoustical configurations Fohhn® provides the **EASE Focus** Aiming Software from SDA (Software Design Ahnert GmbH). The **EASE Focus** Aiming Software is a two-dimensional acoustic simulation software that serves for the configuration and modelling of Line-Arrays close to reality.

Ease Focus and the specific product file (Fohhn-WaveLine.efo) together with Fohhn's Flying Calculator are available as free downloads at [www.fohhn.com](http://www.fohhn.com).

### Flying application



### Ground stacking application



## Accessories for PT-8

### FLYING CRADLE for PT-8

Cradle according to BGV C1 for Perform WaveLine. Fohhn® WaveLine-systems rigging mechanics together with the flying-cradle are certified according to German's BGV-C1 and DIN 18800. An analysis of strength can be achieved by a free-of-charge software (Fohhn's Flying Calculator) which shows easily the legality of your rigging job.

Figure shows 1 piece of PT-8 with flying cradle.



### STACKING CRADLE for PT-8

Cradle according to BGV C1 for Perform WaveLine. The stack-cradle together with the attached outriggers enable the mounting of up to 6 WaveLine elements as ground-stacking. The frame of the stack-cradle fits to Fohhn's subs PS-7, RS-4, XS-4, PS-9 and enables a secure mounting of 3 WaveLine PT-8 elements.

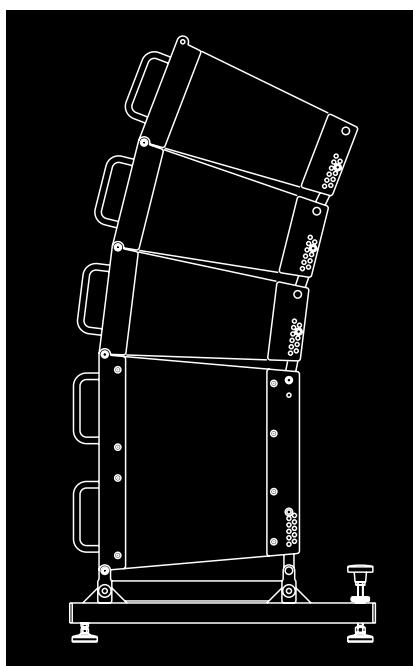


### TRANSPORT CASES

Transport case for 3x **PT-8** WaveLine moduls, wheels

Transport case for PT-8 **Flying Cradle**, wheels

Transport case for PT-8 **Stack Cradle**, wheels





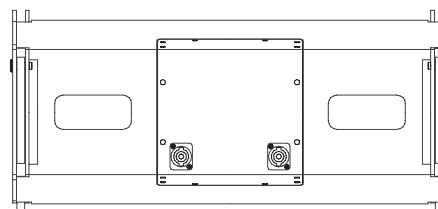
## Views of PT-8

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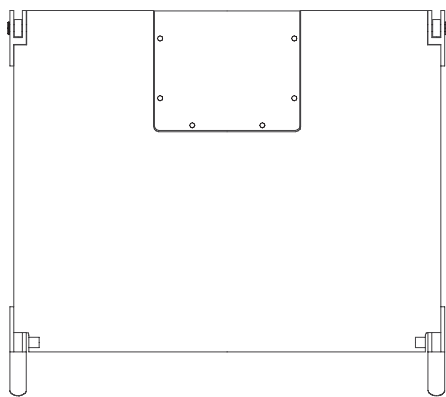
Front view



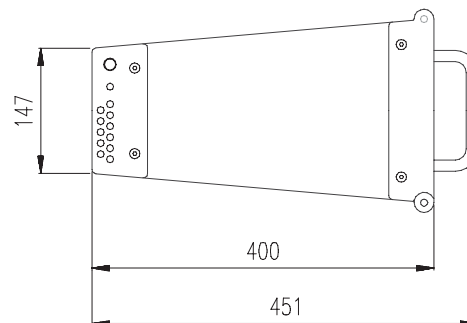
Rear view



Top view



Side view



## PS-2 WaveLine Sub



The Fohhn® PS-2 is a high power subwoofer system. It can be used to supplement the LF headroom of the PT-8 loudspeakers in various combinations, ground stacked or flown, either integrated on top of a PT-8 array or as a separate column, 8 ohms, only 22 kg.

### Description

The Fohhn® PS-2 is a high power subwoofer system, equipped with a 12" high performance sub low loudspeaker, equipped with a 4" voice coil and an extremely heavy-duty Neodymium engine. The system captivates with high efficiency within its extended low frequency range, which was achieved by a special tunnel geometry. In this way the system features a remarkable low frequency efficiency/housing dimension ratio. The system offers a high dynamic behaviour, generated by using a significantly adjusted parameter's loudspeaker with high magnetic flux.

### Design

The very discreet flying mechanic is let in the loudspeaker's enclosure without attracting attention. On request the handles on the front can be removed. The shape relates just to 2 elements WaveLine PT-8. Special editions without handles or special colours i.e. for fixed installations are possible.

### System application

The WaveLine PS-2 Sub can be used to supplement the LF headroom of the PT-8 elements in various combinations. The WaveLine PS-2 sub can be combined as top flown element with WaveLine PT-8 elements within a line, as well as a separate and parallel hung column with a couple of PS-2 sub systems. Used with the stack-cradle the PS-2 sub serves as basic element at the bottom of the line. The loudspeakers are mechanically connected using WaveLine rigging links on both sides of the cabinet at front and rear.

### System amplifier

The impedance of 8 ohms enables a parallel operating of 3 WaveLine PS-2 sub systems at one channel of the A-2.2100 WaveLine system amplifier.

### Connections

2x NL4MP Neutrik Speakon.

### Accessories

Flying-cradle, stack-cradle, touring-cases, software.

### Technical specifications

#### electro-acoustical features

acoustic design	vented subwoofer enclosure
frequency response	38 Hz – 250 Hz, - 3 dB
power handling capacity	700 W IEC norm 268-5
impedance	8 ohms
recommended input power	700 – 1400 W into 8 ohms
dispersion	omnidirectional
sensitivity	90,5 dB (1W / 1m)
peak SPL (1m)	single enclosure > 122 dB
components	1x 12" N/Dym, 4" voice coil, water-resistant

#### features

connections	2x NL4MP Neutrik Speakon
rigging/fittings	WaveLine flyware, completely integrated; 2 handling recesses at the back; 4 aluminium handles at the front
enclosure	multi-layered ply 15mm enclosure
standard colour	scratch-resistant plastic coating, black, other colours on request
protection grille	metal, powder coated finish
frontal design	acoustic foam
weight	22 kg
dimensions	housing without handles/flyware 431/362 x 509 x 400 (mm), H x W x D; overall dimensions 454/362 x 509 x 451 (mm), H x W x D

#### system amplifier

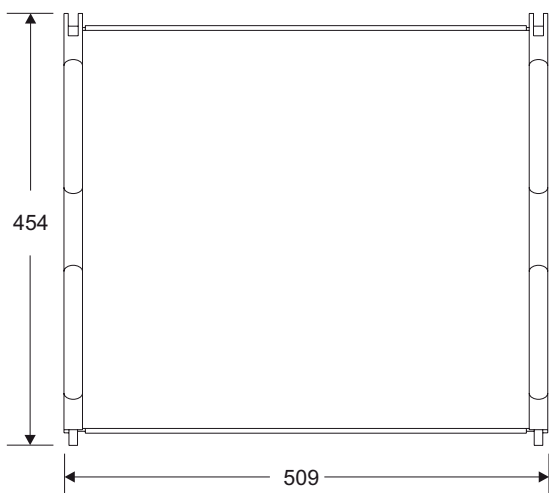
Fohhn® A-2.2100 (2x 2100W/2Ω)  
with Fohhn Audio DSP

#### optional accessories

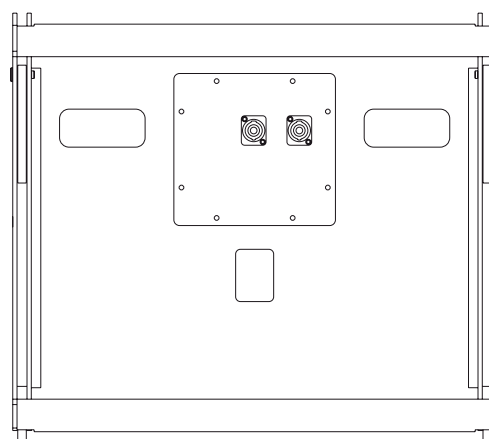
Flying-cradle, stack-cradle, touring case, software  
The manufacturer reserves the right to make technical modifications according to legal regulations stipulating the continual improvement of product features.

Views of PS-2 Sub

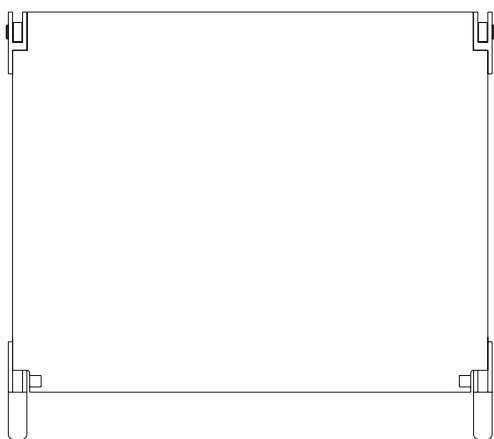
Front view



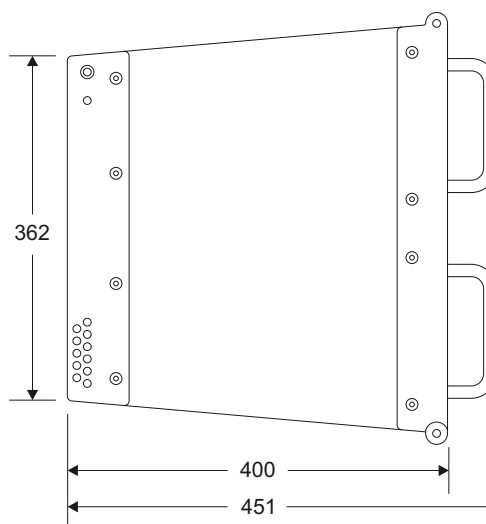
Rear view



Top view

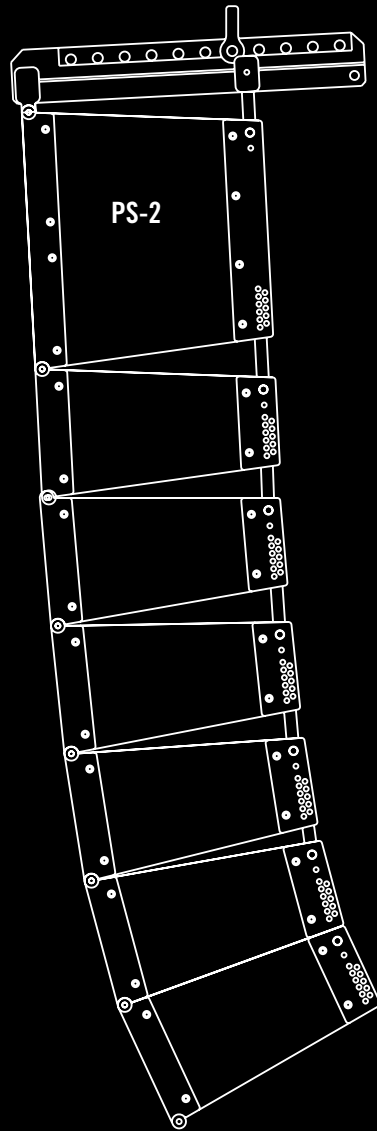
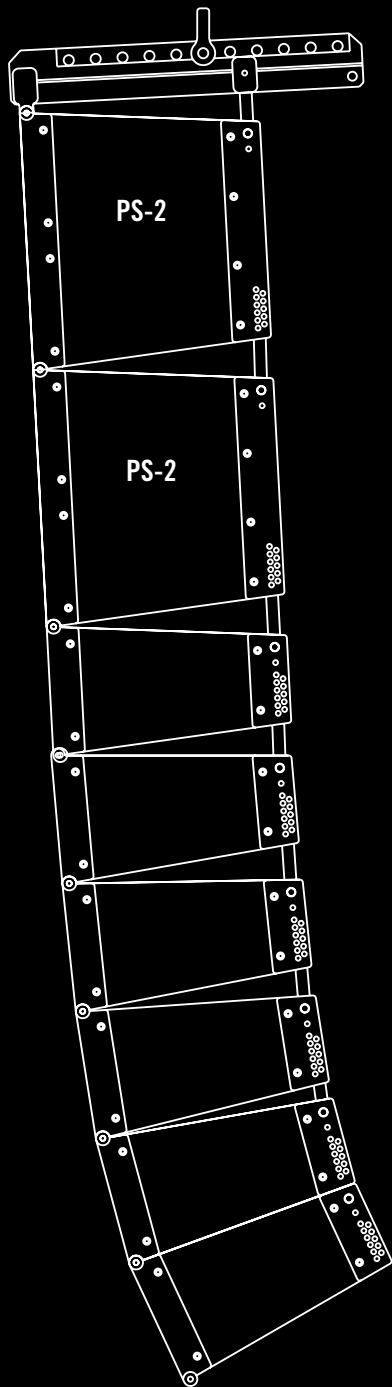


Side view



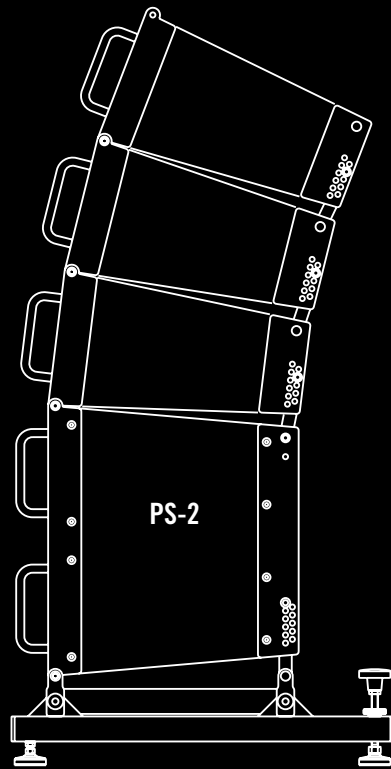
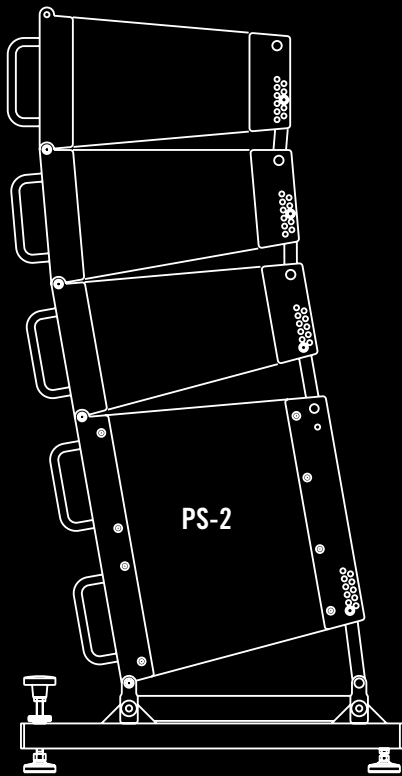
# PS-2 fly

100%  
KNOW-HOW



## PS-2 stack

100%  
KNOW-HOW



### High Power Compact Line Array Module

High power compact Line Array module, equipped with two 6,5" low/mid neodymium driver and one 1,4" high frequency neodymium driver. This compression driver with a 1,5" voice coil uses a special designed WaveLine HF-Phase-EQ waveguide. Both driver units are connected to separate amplifier channels, avoiding passive crossover components for maximum efficiency. The 16 ohms construction allows a very efficient amplifier utilization with up to 6 speaker modules connected to a single two-channel amplifier. A symmetrical construction guarantees a very smooth and symmetrical horizontal coverage pattern of 110°. One module produces a maximum sound pressure level more than 127 dB in a frequency range of 80 Hz to 18 kHz. Very robust multiply birch plywood housing strengthened with metal brackets for fulfillment of all safety regulations. Extremely low total weight of only 14,5 kg. Highly scratch proof textured black lacquer and black frontal acoustic foam. Optionally all RAL-colours, flying cradle, stacking cradle and touring cases available. Simulation data for simulation program EASE focus available. Also available as installation version without front handles.

#### electro-acoustical features

acoustic design	2-way fullrange twin-coaxial Line-Array system, bassreflex/hornloaded
system components	2x 6,5" neodymium, water protected membrane; 1x 1,4" neodymium compression driver, WaveLine HF-Phase-EQ
power rating	LMF 300 W, HF 70 W (IEC standard 268-5)
recommended amplifier power	LMF 750 – 1500 W at 8 ohms, HF 200 – 480 W at 8 ohms
nominal SPL	LMF 97 dB (1 W / 1 m), HF 110 dB (1 W / 1 m)
maximum SPL	single module > 127 dB (1m)
frequency range	80 Hz – 18 kHz, +/- 3 dB
nominal dispersion	horizontal 110°; vertical 0°–10° (depends on array-adjustment – adjustable in 1°-steps)
nominal impedance	LMF 16 ohms, HF 16 ohms

#### features

enclosure	multiply birch plywood 15mm
protection grill	ball impact-resistant protection steel grill, powder-coated
rigging, fittings	flyware integrated in enclosure, 2 handles at back side section, 2 frontal aluminium handles
connections	2x Neutrik NL4 speakon (+1/-1 LMF-section, +2/-2 HF-section)
surface treatment	highly scratch proof textured lacquer
standard colours	black (according to RAL9005)
frontal design	acoustic foam, same colour like enclosure
dimensions (H x W x D)	enclosure without handles/flyware: 215/147 x 509 x 400 mm; total dimensions: 238/147 x 509 x 451 mm
weight	14,5 kg

#### optional features

optional colours	all RAL-colours
accessories	flying cradle, stacking cradle, touring cases

#### CAAD simulation data

EASE Focus


**Make**  
**Type**

**Fohhn Audio AG**  
**PT-8 WaveLine Compact**

# SOUNDS PERFECT. IS PERFECT.

Fohhn audio systems. The ultimate all-round audio experience.



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