

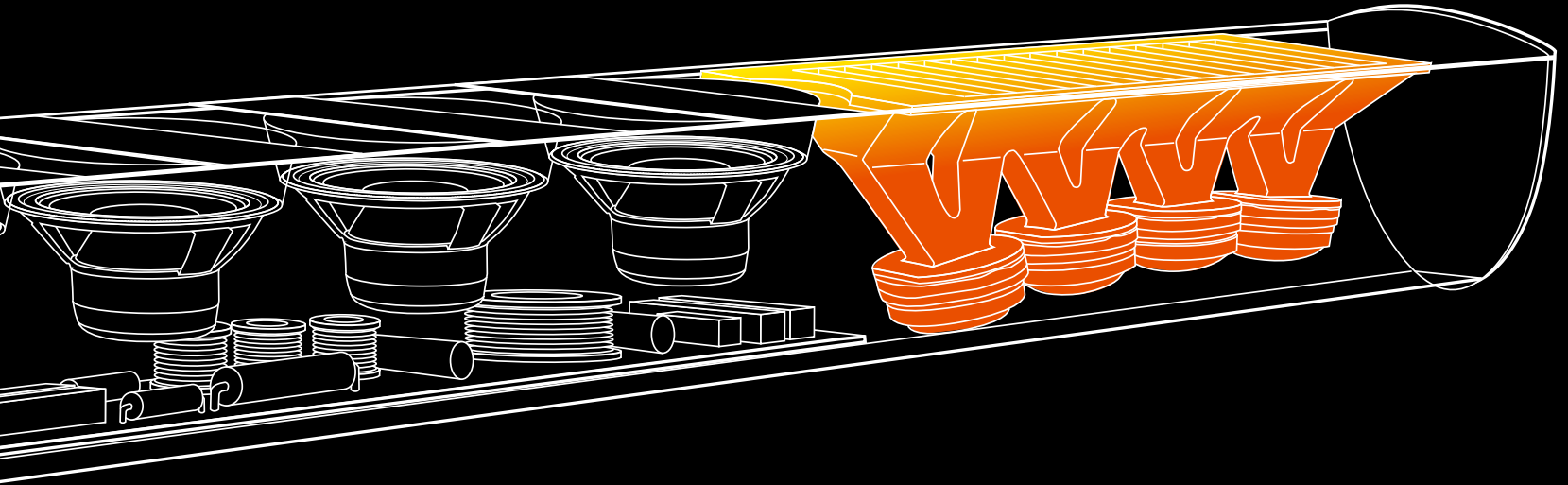


FOHNN®
HYBRID LINE ARRAY TECHNOLOGY

SOUNDS PERFECT. IS PERFECT.



WWW.FOHNN.COM



Fullrange Systems / Active Plug&Play PA / 2-Way Active PA Systems

LINEA LX-501/601

The next generation of Hybrid Line Array Systems



EXPECT PERFECT SOUND.

High performance line array technology in a compact box? NOW IT'S HERE!

Dear Customers,

since the formation of the company, Fohhn's research and development has focussed on the field of high quality line array systems. Our aim has been to transport the main benefits from the large, modular line arrays into more compact, easy to use systems – and by doing so, achieve sonic perfection. Our engineering team has been behind the successful development of Fohhn's unique Hybrid Line Array principle. By originally combining a column speaker with powerful bass-mid chassis and 1" compression drivers with Waveguide, a brand new generation of top quality, compact line array systems was born.

Two even more powerful models have now been added to the current range – the Linea LX-501 and LX-601. These loudspeakers guarantee superb sound quality for both speech transmission and live music / DJ events in a variety of venues including large halls, tents and churches. The new Linea Systems' directional sound capabilities allow audience areas to be specifically targeted, avoiding reflections from the ceiling or floor. The overall sound image is more accurate and more pleasant. Compared with conven-

tional systems, Linea LX-501/601 speakers distribute the sound more evenly, delivering a pleasant sound at the front and a clear, coherent sound right at the back.

Linea LX-501/601 systems also compare more favourably on account of their intuitive operation, quick set-up and reduced dimensions for transportation. Expensive rigging and curving are not necessary either. The speakers' slim, elegant appearance integrates effectively into both stage designs and room architecture. Why not see for yourself? Send us an email: info@fohhn.com to arrange a no-obligation demo at your local dealer, or in the Fohhn Sound Lab.


Jochen Schwarz, Dipl.-Ing. (FH)
Chief Executive Fohhn Audio AG


Uli Haug, Dipl.-Medien-P. (FH)
Fohhn Audio AG Board of Directors

” My congratulations to the enlightened minds at Fohhn for creating a modern public address system that is all at once: ultra hi-fidelity, far-throwing, and widely dispersive, powerful, lightweight, with a most inconspicuous presence that almost seems to disappear on the stage wings – my kind of P.A. “

Gino Vanelli

The electricity and excitement could be felt in the concert hall before the show started, as fans came to Gino Vannelli's concert tour in the Netherlands and Italy. The visionary music of Gino Vannelli with his mini-orchestral approach, super-charged blend of jazz, pop, rock and soul complements his clear voice. That, and his strong showmanship have established him as a major songwriter/artist who has earned numerous Grammy Award nominations over the last 30 years. www.ginov.com



MAXIMUM PERFORMANCE

Outstanding for three good reasons: Acoustics. Appearance. Handling.

Linea LX-501/601: An overview of the main advantages

* First-class sound with excellent dynamics

Whether used for full-on live music and DJ events, or for demanding speech applications, Linea LX-501/601 systems guarantee superb sound quality at any loudspeaker level.

* Even sound distribution with Fohhn Hybrid Line Array Technology

Compared with conventional systems, sound is distributed much more evenly throughout the room, with a pleasing effect at the front and clear, coherent sound right at the back.

* Superb speech intelligibility

Sound can be specifically targeted towards the audience, avoiding unwanted reflections from the ceiling or floor. For the listener, the result is clear and pleasant. Speech intelligibility is considerably improved.

* Perfect integration into room architecture and stage designs

The elegant designer speakers integrate extraordinarily well into their surroundings. They won't interfere with either stage designs or camera shots.

* Disturbance-free listening

Feedback is rarely an issue, even with complex microphone set-ups.

* Easier transportation and quicker set-up

LX-501/601 speakers are equipped with state-of-the-art, lightweight neodymium loudspeaker technology. Conveniently positioned handles ensure quick and safe set-up. The speakers' compact dimensions reduce the amount of space needed for storage and transportation.

* No need for expensive rigging or curving

Compared with modular line array systems, no expensive flying mechanisms, rigging or curving are necessary. All the line array technology is integrated into a single housing, enabling quick and easy installation.

Innovation requires know how.



» Unique! Fohhn Hybrid Line Array technology. «

By Dipl.-Ing.(BA) Boris Kunz, Head of Acoustic and Mechanical Development, Fohhn Audio AG

We have been developing and researching high-quality line array speakers for many years. Our objective is to incorporate the advantages of modular line array systems into compact systems that are easy to implement. The key to achieving these objectives was the development of a completely new system that reproduces live signals at high levels and combines all the advantages of a modular line array system. Designing the speakers in the shape of a column was the logical consequence. However, achieving maximum sound quality at high volumes with the new design required the use of powerful bass-mid speakers combined with horn-loaded compression drivers. The use of a waveguide with directivity adapted specifically to the bass-mid array was an essential factor in achieving coherent dispersion at high frequencies.

Systems from the Fohhn Linea LX series have a hybrid design that is based on a combination of classic two-way speakers and modular line array, and incorporates the func-

tional advantages of both principles. While on larger line arrays the compression driver, waveguide and horn are always arranged in front of one another, this configuration was not possible on the LX series due to the low depth. An extremely complex project with an overall duration of more than a year and a completely new approach to developing the Fohhn HWC (horn-loaded wavefront converter) were required to accommodate all three elements in the housing. In the HWC, a waveguide that produces a vertical, slightly curved cylindrical wave from the wave fronts of four individual 1" drivers was integrated spatially in a horizontal constant directivity horn to maximise the useable sound pressure. The waveguide was the only element that allowed the development of such a narrow system design without requiring modifications that would affect the configuration or dynamics. From a mechanical perspective, the dimensions and the system weight were reduced to a minimum by using appropriate materials for the housing, magnet system and other components.



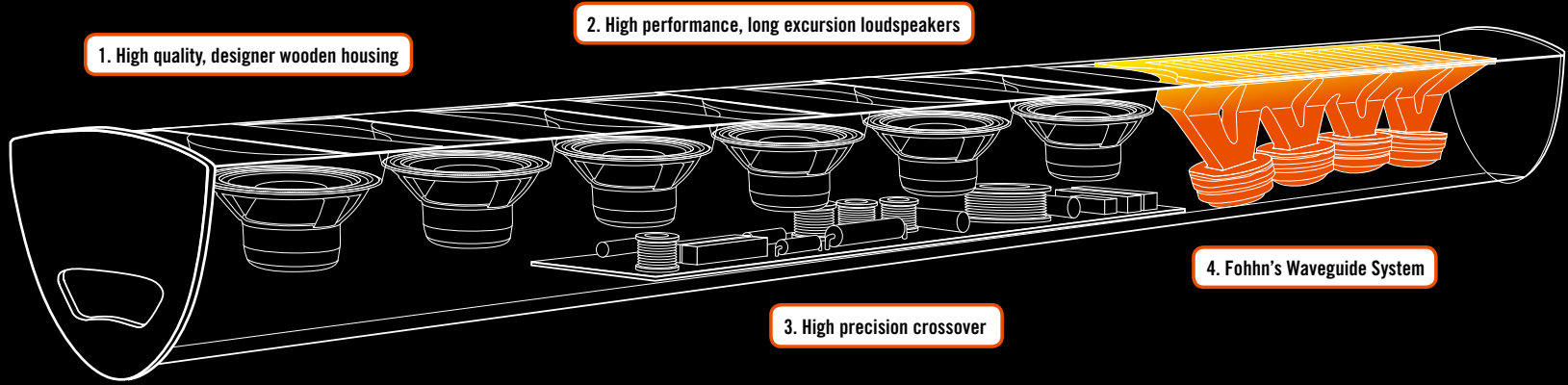
100%
TEAMWORK

The aim was to make the system as easy to transport, set up and align as a classic speaker without affecting any line array characteristics. Bass-mid and tweeter paths are separated by sophisticated passive filters with a high edge steepness to ensure that the system is tuned perfectly at all times and control tasks are kept to a minimum. One amplifier channel per system is therefore sufficient. With all these components integrated in a single compact housing, the LX series offers the user the sum of all advantages: the functionality of a line array combined with the simplicity of a classic speaker.

Visit www.fohhn.com for more detailed information.

The R&D team: Tobias Brändle, Dipl.-Ing. (FH); Bernd Nimmrichter, Dipl.-Physiker;
Sven Ripper, IT-Informatiker; Boris Kunz, Dipl.-Ing. (BA);
Monika Schäfer, Techn. Zeichnerin CAD; Dieter Pikulski, Dipl.-Ing. Elektrotechnik

The difference is the detail.



1. High quality, designer wooden housing for elegant appearance. The speaker housing is made from premium quality birch plywood (Class A, weather resistant and aluminium strengthened), which meets the most demanding requirements. A black polyurethane coating is designed to provide maximum protection for the internal components. All standard RAL colours are available on request. The speaker's slim, rounded form integrates perfectly into both the stage designs and room architecture.

2. High performance, long excursion loudspeakers for effective dynamics. Specially produced for Fohhn, the 6.5" long excursion speaker features state-of-the-art neodymium technology, guaranteeing powerful, dynamic reproduction of speech, vocal and instrumental performance. The plastic coated drivers are exceptionally tough and enable distortion-free sound reproduction. Closely positioned in a perfect linear format, the loudspeaker chassis generate a cylindrical wave in low-mid frequency ranges.

3. High precision crossover for perfect optimization of the loudspeaker system. The speaker's 6.5" chassis and 1" high frequency drivers are effectively linked via a high precision crossover with specially selected components. Fohhn's Intelligent Protection Circuit (IPC) prevents the high frequency drivers from overloading.

4. Perfect high frequency sound reproduction from Fohhn's Waveguide System with four 1" compression drivers. Four high performance 1" compression drivers with Fohhn Waveguide are designed to provide optimum focus in the high frequency range, along with crystal clear sound. The cylindrical wave generated in the mid range continues right up to the top end.

SYSTEM RECOMMENDATIONS

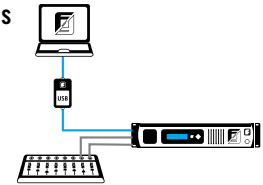
From clear speech transmission to full-on live music, Fohhn® Linea Systems guarantee top sound quality

100%
PERFORMANCE

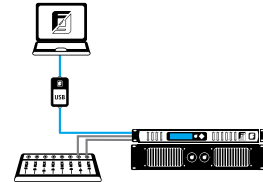
- * Fullrange _____ p. 10
- * 2-way active PA with passive subs and DSP amplifier _____ p. 11
- * Plug & Play PA with active subs _____ p. 12-13
- * High Performance PA with electronically controlled 21" PS-9 sub ___ p. 14

Three different ways to run LX-501/601 systems

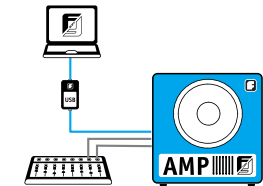
System with Fohhn® DSP amplifier D-2.1500



When using other standard amplifiers we recommend the Fohhn® DSP system controller FC-8.



System with Fohhn® active subs



FULLRANGE

Ideal systems for speech applications

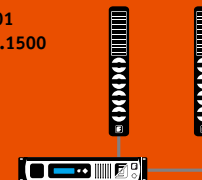
Linea LX-501/601 speakers enable perfect transmission of speech, even in difficult acoustic conditions. The speakers' tightly controlled sound dispersion characteristics mean that unwanted reflections from the ceiling or floor can be avoided, dramatically improving speech intelligibility. Complex microphone set-ups can also be used without any problems.

Linea LX-501/601 speakers work very effectively with Fohhn's D-2.1500 DSP amplifier. Its integrated DSP technology includes a number of factory loudspeaker presets. These guarantee total operating reliability and superb performance at any sound pressure level. Programmable audio tools, such as the 10-band parametric EQ, enable quick adjustments to suit the room acoustic and any related microphone set-ups. All DSP functions can be carried out remotely using a laptop.



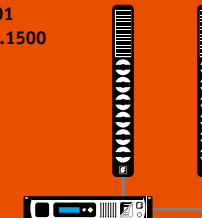
LINEA LX-501

2x Linea LX-501
1x Fohhn® D-2.1500



LINEA LX-601

2x Linea LX-601
1x Fohhn® D-2.1500



2-WAY ACTIVE PA

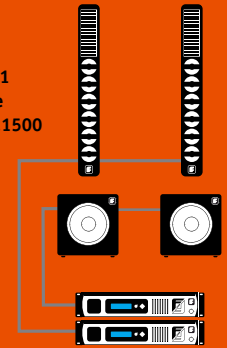
Systems with
Fohhn® DSP amplifiers
and passive subs

For best performance results, we recommend using two separate D-2.1500 DSP amplifiers. These provide the passive tops and subs with the required amplifier power. All the audio tools necessary for 2-way active operation, for example crossover functionality, EQ etc, are controlled by Fohhn DSPs. Optimal adjustments between subs and tops can be carried out quickly and easily. All DSP functions can either be implemented via the 4-line LCD display on the front panel, or remotely via a laptop. Up to 256 devices can be securely networked together

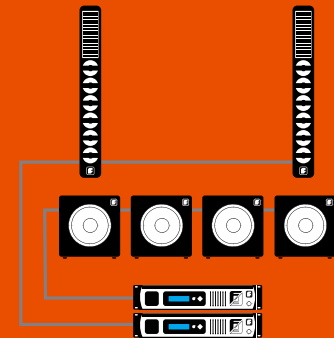


LINEA LX-601 COMBINED WITH PASSIVE SUBS

2x Linea LX-601
2x XS-4 passive
2x Fohhn® D-2.1500



2x Linea LX-601
4x XS-4 passive
2x Fohhn® D-2.1500



PLUG&PLAY PA

Systems with
active Fohhn® subs



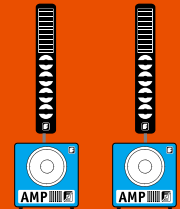
Fohhn's active subwoofers are equipped with the state-of-the-art CLASS D amplifiers, DSPs, operating display and network connectors. They offer sufficient power for use with LX-501/601 systems, which can be hooked up in a straightforward Plug & Play. Fohhn's integrated DSP technology enables sub and tops to be perfectly adapted, ensuring a balanced image at any loudspeaker level.

Using the integrated audio tools (EQ, compressor etc), individual sound settings can be created and saved as presets. All DSP functions can either be implemented via the 4-line display, or remotely using a laptop. Up to 256 devices can be securely networked together.

LINEA LX-501 WITH ACTIVE SUBS

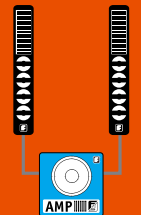
Linea Live III – High Power System

2x Linea LX-501
2x XS-30 active



Linea Live IV – Basic System

2x Linea LX-501
1x XS-4 active

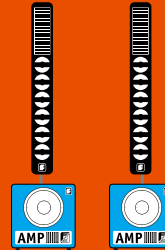




LINEA LX-601 WITH ACTIVE SUBS

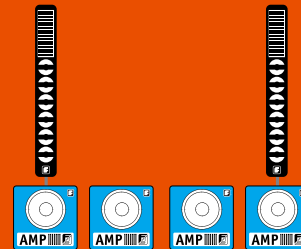
Linea Live IV – Power System

2x Linea LX-601
2x XS-4 active



Linea Live IV – High Power System

2x Linea LX-601
4x XS-4 active



Linea LX-501/601 systems are specially designed for:

- * Live Music Performance
- * DJ Events
- * Speech Applications
- * Rock Concerts
- * Conferences
- * Classical Music Events
- * Musicals
- * Performances in Tents
e.g. Festivals
- * Mobile Theatre
Productions
- * Worship
- * Church Concerts

HIGH PERFORMANCE PA SYSTEM

With electronically controlled 21" PS-9 sub

Superb sound quality and enormous sound pressure levels over the entire frequency range. The ideal combination: Two LX-601 systems plus an active, high performance PS-9 subwoofer. See p. 20

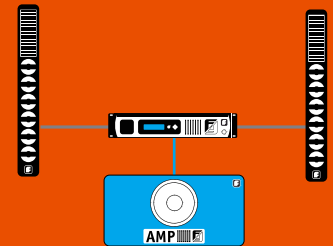


LINEA LX-601
WITH PS-9

100%
PERFORMANCE

Linea Live V – High Power System

2x Linea LX-601
1x PS-9 active
1x Fohhn® D-2.1500



FOHNN® LINEA LX-501/601

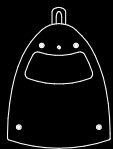
Compact, high performance line array systems

Linea LX-501/601 speakers are superbly manufactured and totally convincing with their elegant design and excellent sound quality. They are exclusively equipped with state-of-the-art neodymium loudspeakers. Their rounded, slim housing is made from top quality birch plywood that has been weatherproofed, strengthened with aluminium and given a black scratch-resistant polyurethane coating. All standard RAL colours are available on request. Accessories for tripod use or flying are also available, enhancing the speakers' professional performance.

Bottom view

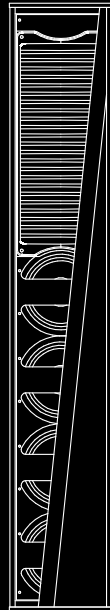


Top view

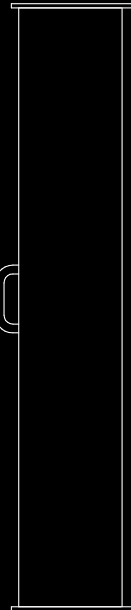


Linea LX-501

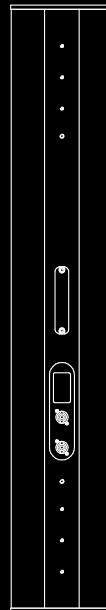
Front view



Side view

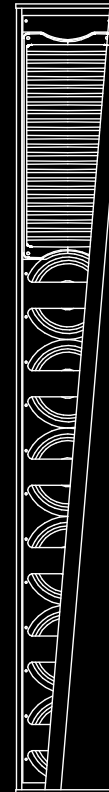


Rear view

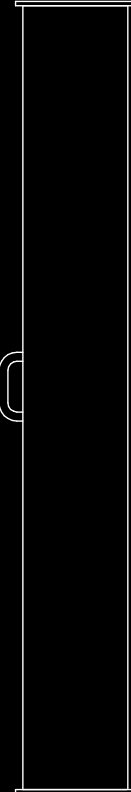


Linea LX-601

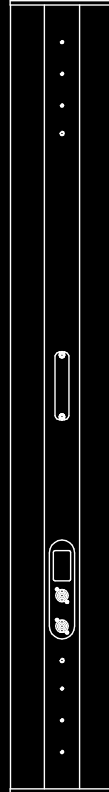
Front view



Side view



Rear view



model	Linea LX-501	Linea LX-601
electro-acoustical features		
acoustic design	passive hybrid line source speaker system, 2-way	
components	4x 6,5" long excursion, neodymium	6x 6,5" long excursion, neodymium
	<ul style="list-style-type: none"> prefixed compression chamber with phase board 4x 1" compression driver on Fohhn®-Waveguide with self-resetting IPC-HF protection [*] neodymium 	
power rating (nominal) [1]	700 W	1.000 W
power rating (program) [2]	1.400 W	2.000 W
power rating (peak) [3]	2.800 W	4.000 W
sensitivity [4]	98 dB	101 dB
maximum SPL [3]	132 dB	136 dB
frequency range [5]	75 Hz – 20 kHz	75 Hz – 20 kHz
nominal dispersion (h x v) [6]	100° x 20°	100° x 20°
nominal impedance	8 ohms	8 ohms

features

enclosure	birch plywood designer cabinet, metal strengthened, aluminium	
protection grille	ball impact resistant metal, powder coating	
rigging points	10x M6 & 2xM8 thread	
connections	2x Neutrik NL4 Speakon	2x Neutrik NL4 Speakon
standard colours	scratch-proof plastic coating, black	scratch-proof plastic coating, black
frontal design	acoustic foam, same colour as enclosure	
handles	2x integrated handles on top and button, 1x carrying handle	
dimensions (W x H x D)	195 x 1160 x 238 mm	195 x 1500 x 238 mm
weight [7]	23 kg	29 kg

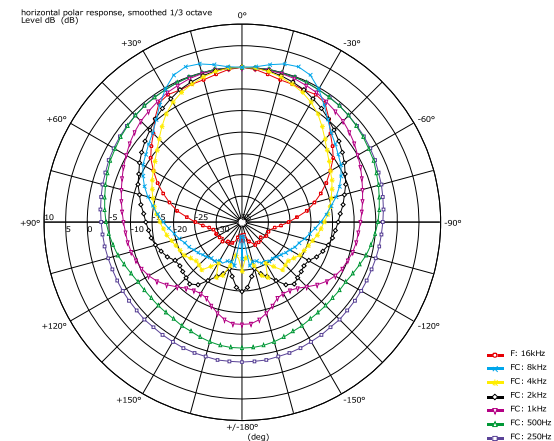
optional features

integrated 100 V-transformer	-	
optional colours	all RAL-colours	
weather protection	scratch-proof plastic coating, impregnated speaker membranes	
CAAD simulation data	EASE, ULYSEES	

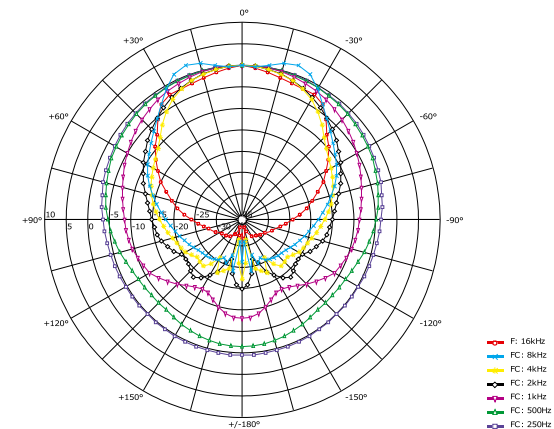
[1] according to IEC-60268-5 long term [2] according to IEC-60268-5 short term [3] Peak, 20 ms with bandpass filtered pink noise signal according to IEC 60268-2 at one octave above the lower limit of the frequency range. [4] 2,83 V at 8 ohms (2 V at 4 ohms, 4 V at 16 ohms) at a distance of 1 meter under anechoic fullspace conditions [5] -10 dB under anechoic halfspace-conditions [6] horizontal x vertical at -6 dB [7] net weight without optional equipment

[*] Intelligent Protection Circuit. Voltage-controlled semiconductor circuit protecting the HF-driver against overload highly effective and with very short attack time.

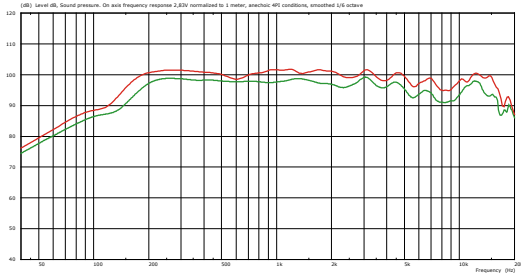
Horizontal polar pattern (LX-501)



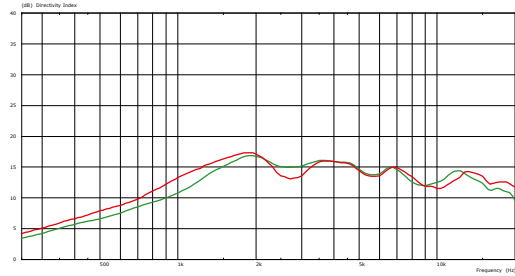
Horizontal polar pattern (LX-601)



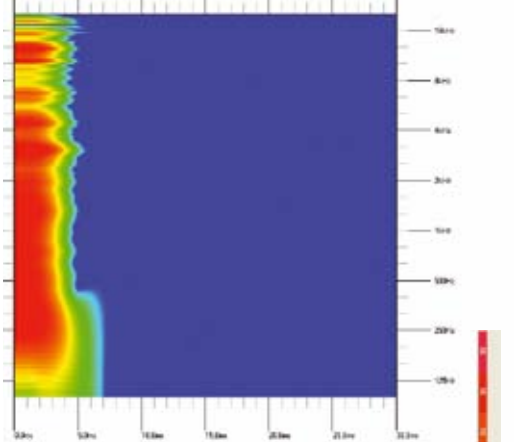
Frequency response (LX-501, LX-601)



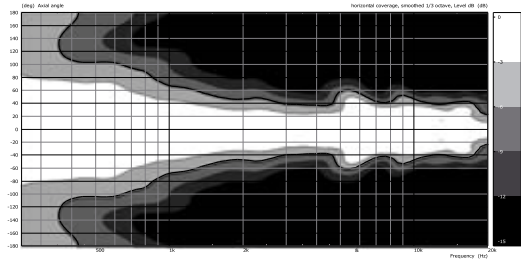
Directivity Index (LX-501, LX-601)



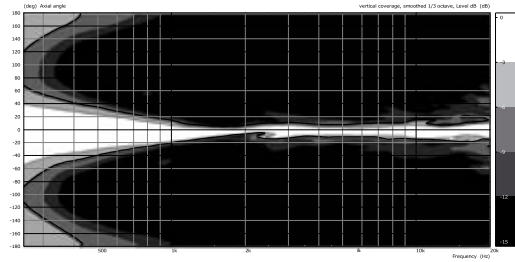
Spectral decay (LX-501)



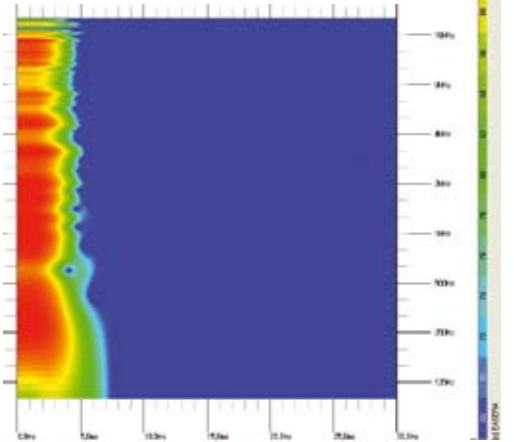
Horizontal coverage (LX-501)



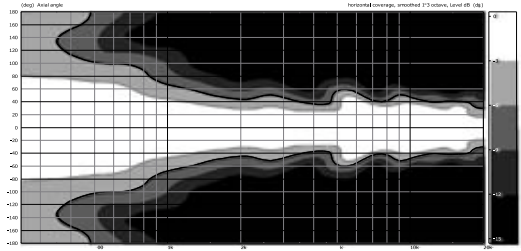
Horizontal coverage (LX-601)



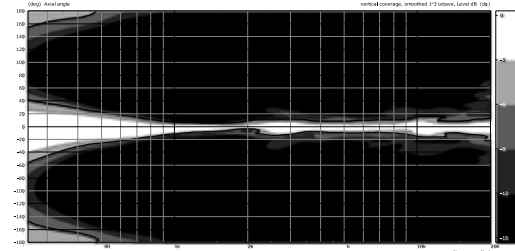
Spectral decay (LX-601)



Horizontal coverage (LX-601)



Horizontal coverage (LX-601)



FOHNN® SUBS ACTIVE & PASSIVE

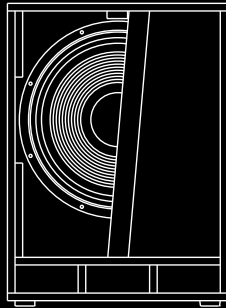
Compact subwoofer systems. The active subs are equipped with state-of-the-art CLASS D amplifiers and Fohhn® Audio DSP.



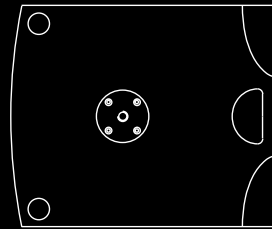
Fohhn® Mains Control – the integrated mains supply monitoring system

During use, the supply to the amplifier is constantly monitored. If at any time it exceeds the maximum permitted range (180-255 V AC), the supply will be interrupted. During power up it also minimizes the input surge current by switching on at the mains voltage zero crossing.

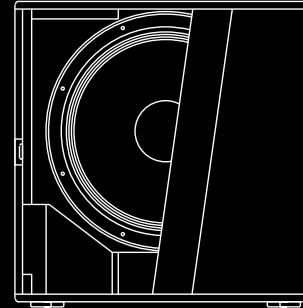
Front view



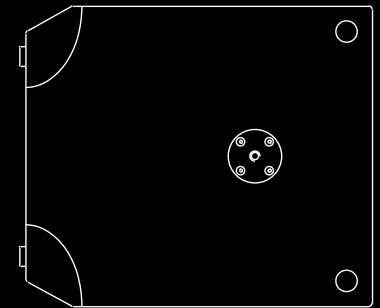
Top view



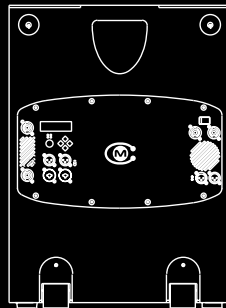
Front view



Top view

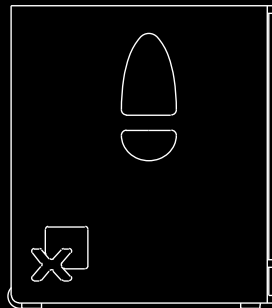


Rear view

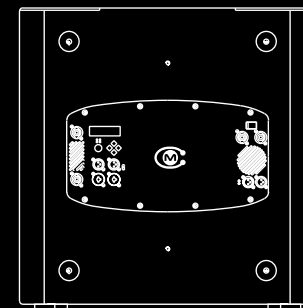


XS-30 active

Side view

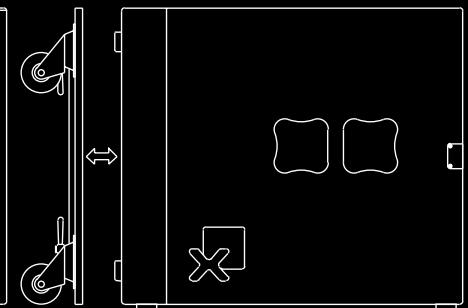


Rear view



XS-4 active

Side view



model	Sub XS-30 active	passive	Sub XS-4 active	passive
-------	------------------	---------	-----------------	---------

electro-acoustical features

acoustic design	vented design		ATD acoustic design	
components	1x 15" long excursion, neodymium		1x 18" long excursion, neodymium	
amplifier output	1.500 W	700 W	1.500 W	800 W / 1200 W (**)
sensitivity	–	98 dB	–	99 dB
SPL max. (**)	128 dB	128 dB	132 dB	132 dB
frequency range	35 Hz – 130 Hz	35 Hz – 500 Hz	35 Hz – 130 Hz	35 Hz – 130 Hz

features

enclosure	multiply birch wood		multiply birch wood	
protection grille	metal, powder coating		metal, powder coating	
front design	acoustic foam		acoustic foam	
standard colour	black, textured paint		black, textured paint	
dimensions (W x H x D)	43 x 59 x 52 cm		59 x 60 x 68 cm	
weight	29 kg	28 kg	39 kg	38 kg
transport	2 edge wheels, 2 side handle, 2 edge handle		wheel board, 2 side handle	
thread plate for distance piece	M20		M20	

optional features

optional colours	all RAL-colours		all RAL-colours	
weather resistance	scratch-proof plastic coating		scratch-proof plastic coating	

electronic features

digital amplifier	integrated	–	integrated	–
controller	integrated	–	integrated	–

connectors

inputs	2x XLR/jacks	–	2x XLR/jacks	–
signal	Input jack, 2x XLR Link jacks	–	Input jack, 2x XLR Link jacks	–
outputs	2x NL4 Neutrik Speakon for Top Speaker and Slave Sub from 130 Hz 2x 4 ohms (stereo) or 1x 8 ohms (bridge mode) mains	4x NL4 Neutrik Speakon	2x NL4 Neutrik Speakon für Top Speaker bzw. Slave Sub ab 130 Hz 2x 4 Ohm (stereo) oder 1x 8 Ohm (bridge mode)	4x NL4 Neutrik Speakon
mains	2x Powercon mains jacks in / thru	–	2x Powercon mains jacks in / thru	–

Integrated digital amplifier

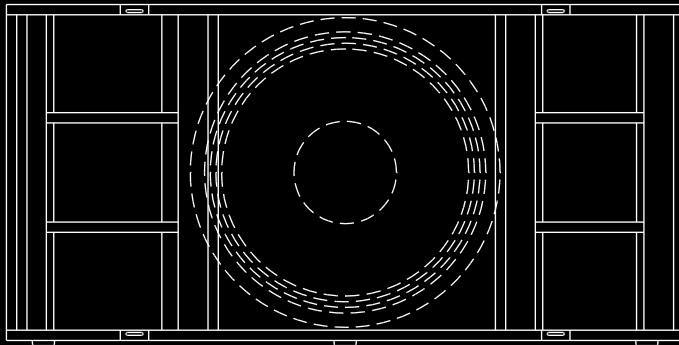
active sub	XS-30 / XS-4
amplifier	Class D
EIA amplifier power Tops (1 kHz, THD+N < 1%)	2x 750 W (**)
Bridge mode	1.500 W
amplification	32 dB
input sensitivity	1,4 V
frequency response	20 Hz – 20 kHz
S/N Ratio	> 105 dB/A
protective circuit	switch-on delay, soft start, impedance- and short-circuit protection, DC protect, temperature monitoring
remote control	Fohhn-Net, Fohhn Audio Soft
remote monitoring	temperature, protect, signals
power supply	195 V–250 V AC, 50/60 Hz, max. 6 A
temperature range	0 – 45°C
cooling	temperature-controlled fan
controller	
2 independant digital stereo signal prozessors	DSP 1: 6 professional audio devices, operating status display, sound generator DSP 2: Speaker Management System AD/DA 24 bit/48 kHz
controls	Select Regler 4 buttons for DSP handling ground/lift switch Power on/off switch
indicator LEDs	4 line display 2x Signal/Clip LED 2x run/protect LED receive/send remote LED

(*) peak, 20 ms (***) each 4 ohms from 130 Hz

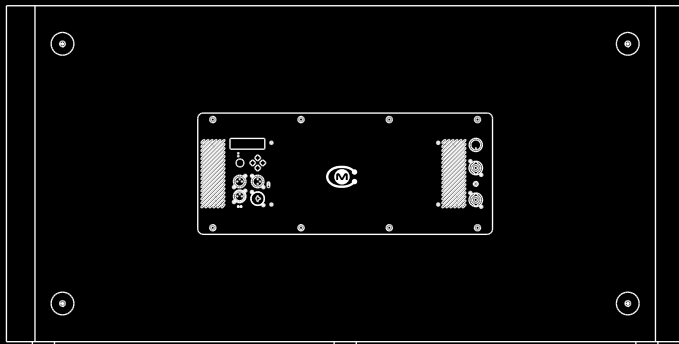
FOHHN® PS-9

Extremely high performance subwoofer

Front view



Rear view



PS-9

- * Extremely high performance, with a peak level of 152 dB*
- * 21" low frequency driver with 6" moving coil and 60 mm excursion
- * DSP-based adaptive Control Loop Technology eliminates distortion as far as the maximum excursion
- * Inexistent power compression
- * Integrated CLASS D amplifier with 8.5 kW power**
- * Switchable power supply with PFC (Power Factor Correction)
- * Built-in digital signal processor (DSP) for delay, EQ and filter functions, as well as for control of amplifier and driver(s)
- * PC-based software application for easy configuration
- * Solid birch plywood housing
- * Polyurethane coating to protect against scratches
- * Removable wheel board - protects the electronics during transportation
- * Green Power Design

The PS-9 is a DSP-controlled subwoofer with integrated 8.5 kW CLASS D amplifier** and an innovative 21" long excursion bass chassis. With its 60 mm excursion and 0.5 Ohm impedance, the patented 21" loudspeaker is completely unique. The speaker power output is equivalent to that of four standard 18" high performance loudspeakers. The 21" chassis can be electronically controlled and guarantees an exceptionally accurate reproduction of low frequencies.



Fohhn® Mains Control – the integrated mains supply monitoring system

During use, the supply to the amplifier is constantly monitored. If at any time it exceeds the maximum permitted range (180-255 V AC), the supply will be interrupted. During power up it also minimizes the input surge current by switching on at the mains voltage zero crossing.



DPC Technology

PCT Patent no. WO-2008-018099 | PCT/IT98/00031
US patent no. US 6,281,767 B1

* 1 m distance, half space

** Maximum output power 8.500 W
Permanent power: 2.500 W

FOHHN® D-2.1500

Highly developed DSP digital amplifier
2 x 1500 W / 4 Ohm. Only 10.1 kg.

- * State-of-the-art CLASS D amplifier technology
- * Integrated Fohhn DSPs guaranteeing optimum sound performance
- * Five premium-class, integrated audio tools e.g. parametric EQ
- * Remote control and monitoring, network compatible
- * Minimal heat generation, extremely quiet fans



The Fohhn D-2.1500 digital amplifier has been developed to meet the most demanding requirements as far as quality and reliability are concerned. It provides excellent sound quality and totally reliable operation when used in combination with any Fohhn loudspeaker system. The integrated Fohhn DSP technology includes two extremely high performance stereo signal processors, offering a range of audio tools including a 10-band parametric equalizer and integral loudspeaker management system. All DSP functionality can be remotely controlled using a laptop. Up to 256 devices can be networked together.



model	D-2.1500
features	
amplifier technology	Class D
EIA amplifier power (1 kHz, THD+N < 1%, 230 V mains)	2x 1500 W / 4 ohms 2x 900 W / 8 ohms
minimum impedance	4 Ohm
outputs	2
inputs	2
DSP channels, Fohhn Audio DSP	2
amplification	35 dB
input sensitivity	1,4 V
frequency response	20 Hz - 20 kHz
S/N Ratio	> 105 dB/A
protective circuit	switch-on delay, soft start
remote control	Fohhn-Net, Fohhn Audio Soft
remote monitoring	temperature, protect, signals
power supply	AC 230V, 195 V – 250 V AC, 50/60 Hz, switch mode power supply
temperature range	0 – 45°C
cooling	temperature-controlled fan
weight	10,1 kg
dimensions (W x H x D)	2HE, 88,9 x 483 x 380 mm
Controller	
2 digital signal processors	DSP 1: 6 professional audio devices, operating status display, sound generator DSP 2: Speaker Management System AD/DA 24 bit/48 kHz
controls	Select potentiometer 4 buttons for DSP handling Power on/off switch
indicators	4 line display, 6x Signal/Level LED, 2x Clip LED, 1x ready LED, 1x over-temperature indicator LED, receive/send remote control LED

FOHNN® FC-8

The FC-8 DSP system controller is recommended when using a Fohhn® PA system with standard amplifiers.

We recommend using Fohhn DSP amplifiers to drive Fohhn loudspeaker systems. However, if you already own another brand of professional, high performance amplifier, we suggest using this in conjunction with the Fohhn FC-8 system controller. This helps to achieve excellent sound quality and the best possible control of all connected devices. A unique feature is the automatic calibration function that protects the connected amplifiers and speakers from overload. The FC-8 has 4 inputs and 6 outputs. Each output channel has its own integrated DSP with 10-band parametric EQ, delay, variable high- / low-pass filter, dynamics processor with noise gate, 180° phase reversal, in addition to status displays for monitoring temperature and operating time. An integral loudspeaker management system has presets for all Fohhn loudspeakers. The FC-8 can be remotely controlled via laptop with Fohhn Audio Soft software. It can also be used in a network with up to 256 devices.



model	FC-8
--------------	-------------

electro-acoustical features

frequency response	20 Hz - 20 kHz +/- 1 dB
DA/AD converter	24 bit / 48 kHz
dynamic range	110 dB, A-weighted 20 Hz - 20 kHz
propagation delay	< 0.65 ms
calculation depth	56 bit
inputs / outputs	electronically balanced
input impedance	10 kOhm
output impedance	100 Ohm
input clipping level	+15 dBu
output clipping level	+20 dBu
internal clipping level	+38 dBu
THD	THD < 0.002%, +3 dBu, 1 kHz THD+N < 0.02%, +3 dBu, 20 Hz - 20 kHz
operating voltage	100 - 40 V AC, 50/60 Hz, 20 W
temperature range operating	0 bis 40°C
temperature range storage	-10 bis 70°C

features

remote control	Fohhn-Net, Fohhn Audio Soft
remote monitoring	signals
dimensions (W x H x D)	19" x 1HE x 221 mm
weight	4 kg

optional accessories

remote control	FR-10 Wall Panel
----------------	------------------

FOHNN[®] AUDIO SOFT

All Fohhn[®] audio DSP functions on one screen.
Signal processing in real time!



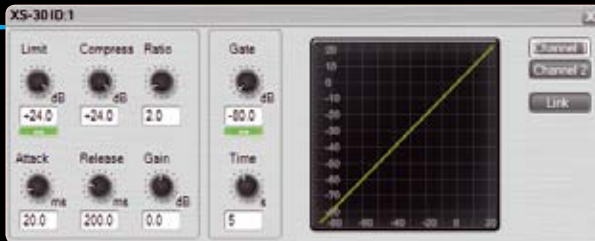
Preset module
Select sound presets and speaker presets. Sub level adjustment.



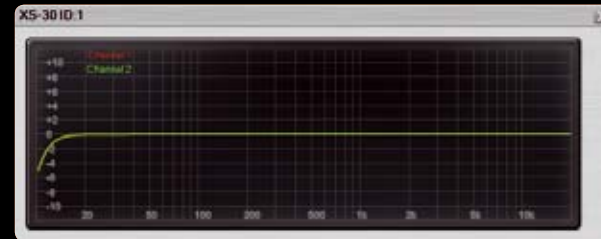
Main module
Individual audio devices or presets are selected with one mouse click. Adjustment of volume level, channel on/off and stereo/mono mode.



Parametric equaliser module with graph
10 band parametric EQ, frequency and Q factor selected as required. Excellent graphic view of your work on the EQ.



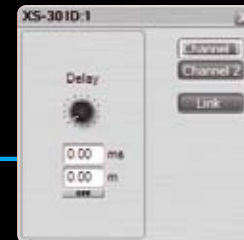
Dynamic module
System compressor, limiter and noise gate with all necessary setting options.



Status module
Displays the temperature and operating time. Protection. Lock function. Signal function = display flashes indicating that the device is detected. Sinus tone and pink noise generator.



Xover module
Programmable crossover



Delay module
For delaying the speaker system. Settings in milliseconds or meters.



Test signals
Sinus tone and pink noise generator.



TECHNOLOGY
BY FOHNN

ACCESSORIES

For professional applications

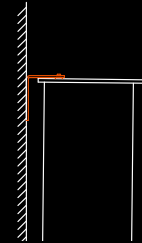
100%
PROFESSIONAL

The optional VLX-600 flying adaptor allows LX-501/601 speakers to be quickly and securely mounted on a traverse, and optimally positioned. An optional ring eye enables rear attachment of a safety wire to comply with international regulations. Used with a tripod, the optional SA-8 enables the line array's sound directionality to be precisely adjusted for optimum audience coverage. 8 x M6 and 2 x M8 threaded inserts are included for attachment to ring eyes and suspension points

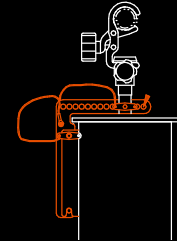
Linea LX-601 placed
on speaker stand with SA-8



WAL-1 Pair of L-brackets



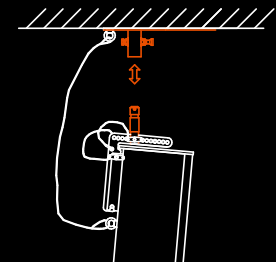
VLX-600 flying adaptor for LX-600/ 601
includes: TV spigot for flown applications.
Inclinable between +3° and -10°, in 1°
steps, using optional LC-50 Clamp. Quick
mount system with safety bolts



Padded carry bag



DH-1 Ceiling adapter for TV spigot



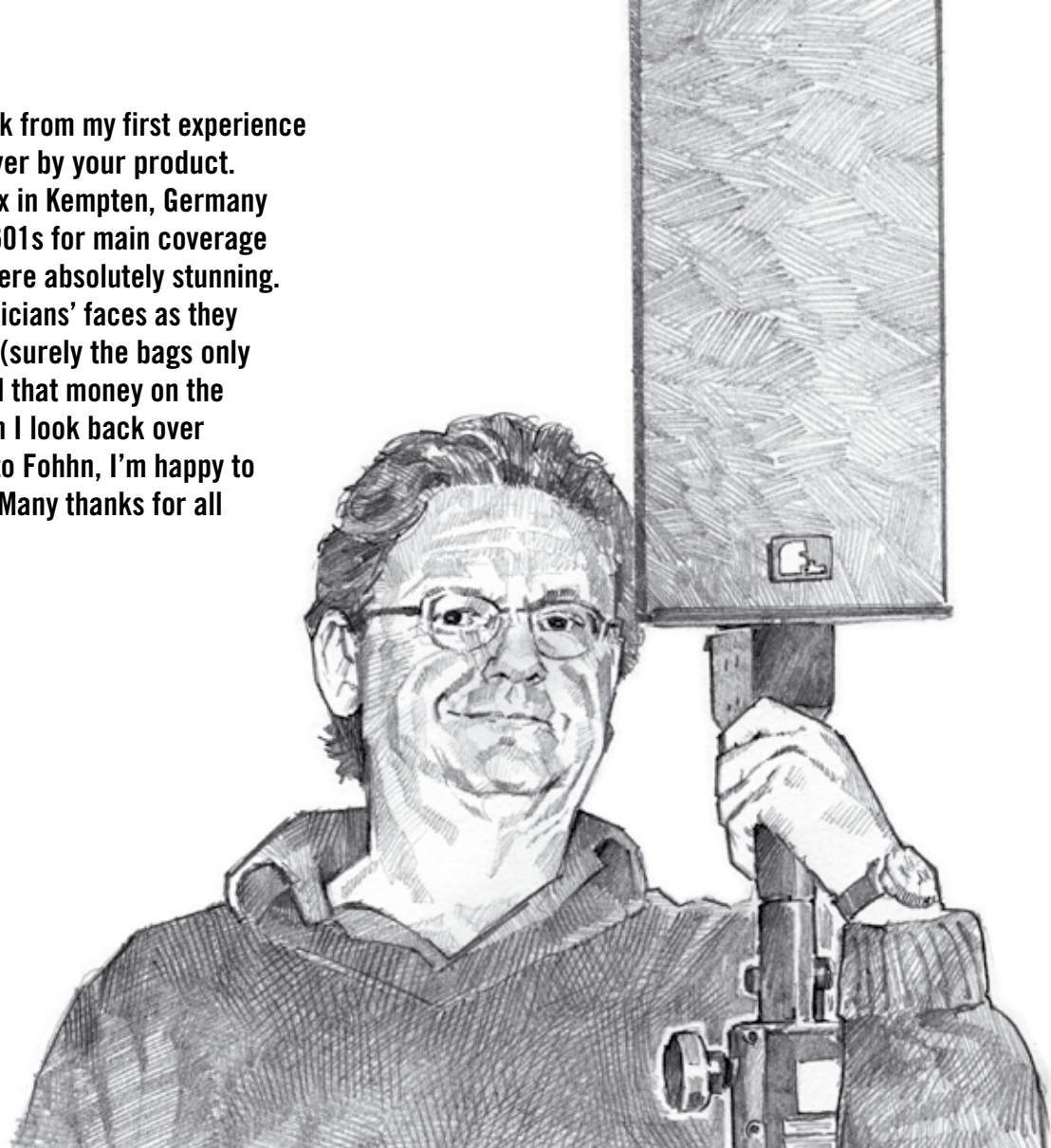
SA-8 dia. 36 mm tripod adapter.
Freely inclinable between +3°
and -10°. Quick mount system
with safety bolts

” Dear Fohhn Team

I just wanted to give you some quick feedback from my first experience with the LX-601. I am completely bowled over by your product. For a cabaret event, the 1300-seater Big Box in Kempten, Germany is a monster venue, but using two Linea LX-601s for main coverage and two LX-150s as nearfields, the results were absolutely stunning. Above all, seeing the look on the house technicians' faces as they obviously wondered where the boxes were, (surely the bags only contain speaker stands?), made spending all that money on the Fohhn system seem totally worthwhile. When I look back over my PA journey, from brands x, y, z, through to Fohhn, I'm happy to have finally arrived at the right destination. Many thanks for all your support. Kind regards, Günter.“

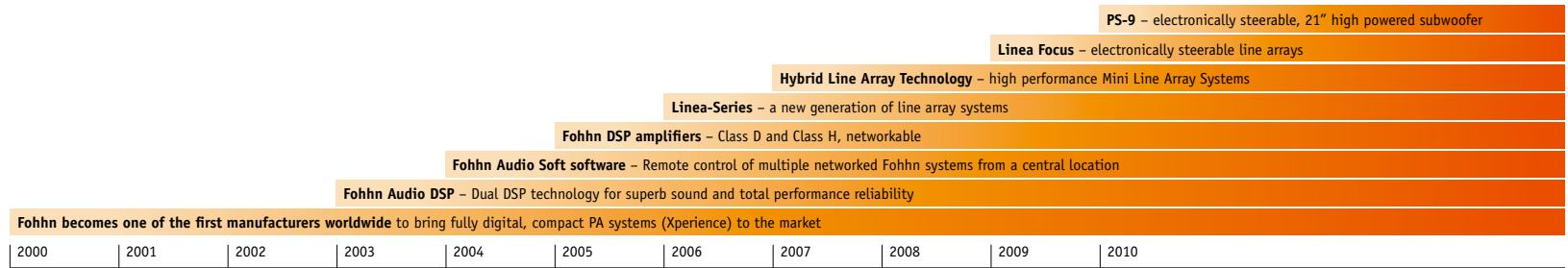
Günter Grünwald

The popular cabaret artist, who has his own show for Bavarian TV, „Grünwald Freitagsscomedy“ (Grünwald's Friday Comedy Show), is touring the whole of Germany, Austria and Switzerland with his stage show. He has also collaborated in various film and television productions including the „Willy Astor Show“, „Ottis Schlachthof“, „Kanal Fatal“ and „Herbert and Schnipsi“. www.guenter-gruenwald.de



FOHHN® SOUND LAB

Intensive research and sustained development –
Fohhn's route to perfect sound quality



The last 10 years of innovative technology from Fohhn

In the Nürtingen factory premises, Fohhn's new Sound Lab offers the great opportunity to carry out fundamental audio research and to develop, measure and test leading-edge technology. Engineers from a range of different backgrounds work closely together to push the boundaries of audio technology. The Sound Lab also provides customers with an excellent venue for thorough testing of the capabilities of Fohhn audio systems.

New paths to tread better solutions to develop and the highest technical levels to aim for – that's the mantra of Fohhn's R&D division. The same goal-driven, scientific approach is applied in all areas of development from electronics and software to acoustics and mechanics. Creative concepts for new loudspeakers are quickly translated into theory, based on extensive calculations. Numerous computer simulations and prototyping phases follow, in which each parameter – frequency response, dispersion characteristics, dynamics, distortion, large signal response – is recorded, adjusted and optimized.

The next stage involves specifically optimizing the amplifier electronics, digital signal processors (DSP) and remote control / networking technology for the loudspeaker. Each development phase, from the mechanics through to the software, is carried out at Fohhn.

At the end of the development process, all newly created products undergo lengthy and rigorous practical tests; both at Fohhn and in live situations. "Practical testing" at Fohhn includes everyone involved in the development process. Fohhn engineers, marketing and distribution personnel, who all have experience as live sound engineers, musicians or DJs. This way, each new product can also be carefully scrutinized from a user's viewpoint. The result is a perfect loudspeaker system that combines optimum sound characteristics with total operating reliability. A system that is simple and safe to use, ready to give maximum performance and real listening pleasure.

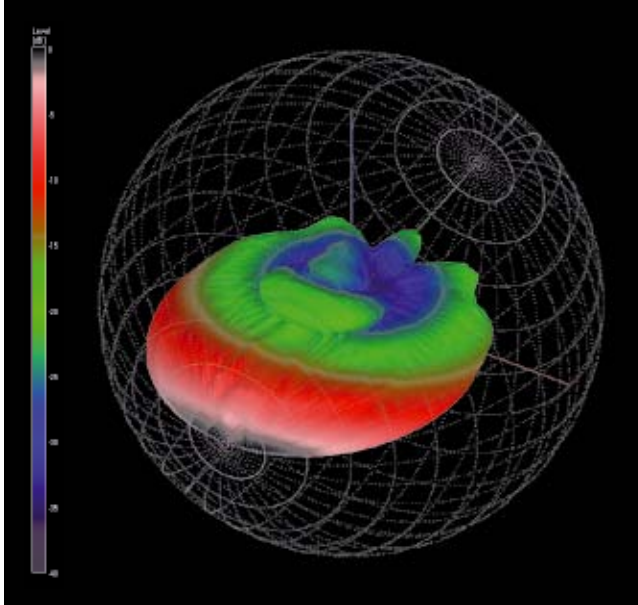


Customers attend a demo in the Fohhn Sound Lab

Optimum Research and Test Conditions

With a floor area of 24 meters x 14 meters and a height of 6.5 meters, the Fohhn Sound Lab is one of Germany's largest and best equipped audio measurement facilities. It enables developers to measure each loudspeaker parameter very precisely and to assess the relevance of the captured data while listening. Only under such special conditions can a loudspeaker's performance be optimized to the highest level. A combination of room size and highly developed FFT measuring systems enable to obtain reflection free measurements down to 100 Hz – something that is usually difficult to achieve.

The amount of wall clearance means that dampening the room to achieve an “anechoic chamber” effect has not been necessary. Instead, at great expense, absorbers and diffusers have been used to convert the former warehouse into a dedicated listening space with superb acoustics. With a natural room reverb of approx 0.4 seconds, Fohhn's new Sound Lab offers top testing conditions.



Fohhn's 2-Axis Measurement Robot enables continuous 360° measurement

Fohhn's 2-Axis Measurement Robot

Another technical highlight of the Fohhn Sound Lab! This impressive device gives us the opportunity to measure very large loudspeaker systems. The robot has been specifically developed by Fohhn for this purpose and is able to pan through both, speaker axes at 360° and with a positioning accuracy of 0.3°. The device enables the speaker's directional characteristics to be assessed and optimized during each development stage – from the speaker chassis to the finished prototype.

The polar pattern data obtained by running Fohhn loudspeakers through room simulation programs such as EASE or ULYSSES can also be analyzed and optimized. This is achieved by making several hundred individual measurements, with the robot positioning itself at a different angle each time. A series of measurements for a single system can take 12 hours or more to complete.

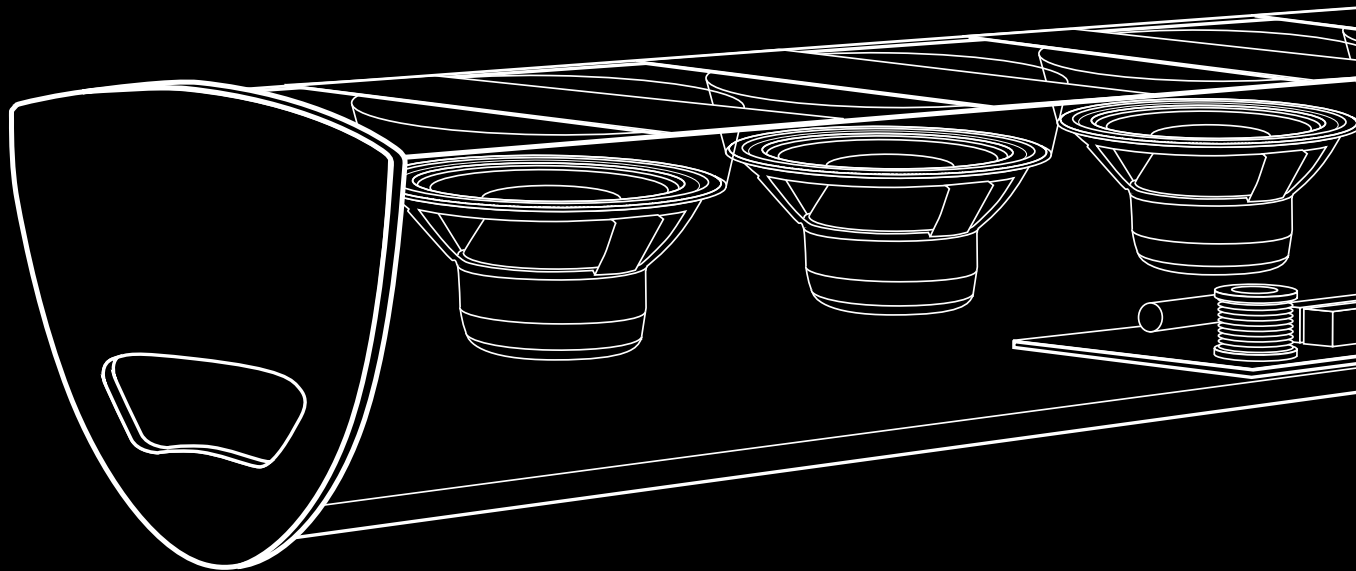




Fohhn Audio AG

Hohes Gestade 3-7 • 72622 Nürtingen • Germany
Tel. +49 7022 93323-0 • Fax +49 7022 93324-0
info@fohhn.com • www.fohhn.com

Dealer address:



The attention to detail continues here: www.fohhn.com

On our website you will find: detailed product descriptions, technical specifications, accessories, detailed data sheets for download, 360°-view product demonstrations, manuals, PDF catalogues, CAD drafts, 2D and 3D DWG-files, Fohhn software, firmware updates, EASE and Ulysses simulation data, references and much more. Visit our website!

