

SOUNDS PERFECT. IS PERFECT.



THE PERFECT SOUND OF A PERFECT YEAR.

LINEA FOCUS: 20 REFERENCE PROJECTS IN 365 DAYS.



In the first few pages of this brochure you will find an introduction to the Linea Focus series and its technical advantages. From Page 12 onwards you will find a series of reference projects, beginning with a unique museum installation.

ONE YEAR LATER.

365 DAYS OF LINEA FOCUS PROJECTS.



It's a great feeling when you can look back over a year and feel satisfied that a new product has found its place in the market, or to be more precise, in a range of markets. In the following pages, we introduce some of the venues that have been successfully won over by the outstanding sound capabilities of our Linea Focus systems. We mustn't forget the visual aspect either, as these elegant column speakers, in lengths of up to 450 cm, have blended perfectly into a range of different architectural settings.

We're also pleased to discover that, after such a short time in the marketplace, Linea Focus

has found its way into a number of very important projects, receiving some extremely positive feedback as a result.

Linea Focus has actually been in development for more than 10 years. In 2000, Fohhn developed the first of its own digital signal processors. In 2003, our engineers previewed in house the very first version of a simple software application designed to electronically control the behaviour of sound beams in a line array system. In 2005, we released the Fohhn Audio Soft package, enabling the control of both single and multiple systems using a laptop and mouse. In

2009, control capability for Linea Focus was also added. This has enabled us to offer one of the most intuitive yet powerful software-based control systems currently available.

In a series of project reports, we present an overview of 365 days filled with positive results and beneficial experiences of using Linea Focus. We also invite you to explore the sound capabilities of Linea Focus for yourself, either by visiting one of the venues shown here, or by visiting your local Fohhn Partner, or the Fohhn Sound-Lab in Nürtingen. To arrange an appointment, please contact us at: info@fohn.com.

Jochen Schwarz, Dipl. Ing. (FH)
Head of the Executive Board

Uli Haug, Dipl.-Medien-P (FH)
Executive Board (Sales & Marketing)

**ENGINEERED FOR ARCHITECTURE
AND LIVE SOUND.**

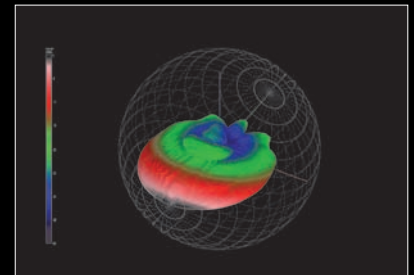
The next generation of electronically steerable line array systems.

4.5 m
Linea Focus LFI-450

3.5 m
Linea Focus LFI-350

2.2 m
Linea Focus LFI-220/LF-220

1.2 m
Linea Focus LFI-120/LF-120



Fohhn Linea Focus 3D Directivity Balloon

EVERY MEMBER OF THIS FAMILY IS INTELLIGENT, SLIM AND FLEXIBLE.

The innovative, finely tuned Linea Focus family differentiates itself from other products because of its column length. This is due to the number of integrated loudspeakers, amplifiers and DSP channels, which enable each individual speaker to be electronically controlled. The flagship LFI-450, for example, contains 32 integrated loudspeakers, 32 amplifiers and 32 DSP channels. The vertical sound inclination angle can be adjusted between $-40^{\circ}/+40^{\circ}$ and the vertical beam width between 0° to 90° . Using Fohhn's intuitive software, adjustments are made in unbelievably fine and precise 0.1° steps.

An outstanding feature of the Linea Focus series is Fohhn's "Two Beam Technology". This allows the speakers to generate two separate beams

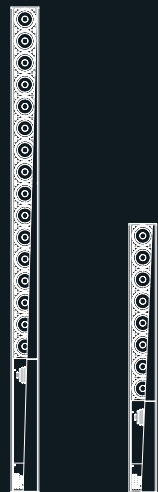
in their vertical dispersion range, providing simultaneous and focussed coverage of different audience areas, such as stalls and gallery. A further unique feature is Fohhn's new "Side Lobe Free Technology", a special algorithm developed in house to suppress the unwanted side lobes that will inevitably occur in the beam. This results in a more directional sound and significantly improved speech intelligibility.

The different lengths of the Linea Focus models determine their acoustic efficiency. The longer the line array, the longer its reach and also its effectiveness in the control of low frequencies. Multiple Linea Focus systems can be networked together to enable monitoring and control from a central location.

MOBILE SOUND

- * Remote control of vertical sound dispersion characteristics
- * Vertical sound inclination angle adjustment $-40^{\circ}/+40^{\circ}$, vertical beam width adjustment -0° to 90° via software in 0.1° steps.
- * Connection field on the speaker underside. Networkable.
- * Optional accessories for tripod use and traverse mounting.

For questions about product selection, please contact our planning engineers who will be pleased to assist you: info@fohnn.com



LF-220

LF-120

LF-220

16x 4" neodymium loudspeakers,
16x CLASS D amplifiers,
16x DSP processors. Length: 2.2 m
Weight: 15 kg

LF-120

8x 4" neodymium loudspeakers,
8x CLASS D amplifiers,
8x DSP processors. Length: 1.2 m
Weight: 8 kg



LFI-450



LFI-350



LFI-220



LFI-120

FIXED INSTALATION

complies with EN 60849 standard

- * Remote control of vertical sound dispersion characteristics
- * Vertical sound inclination angle adjustment $-40^{\circ}/+40^{\circ}$, vertical beam width adjustment -0° to 90° via software in 0.1° steps.
- * Rear-mounted cable outlet. Terminal connections inside the housing.
- * Removable protective front grid for general access
- * 12-64 V emergency power operation, fault message contact etc.

LFI-450

32x 4" neodymium loudspeakers,
32x CLASS D amplifiers,
32x DSP processors. Length: 4.5 m

LFI-350

24x 4" neodymium loudspeakers,
24x CLASS D amplifiers,
24x DSP processors. Length: 3.5 m

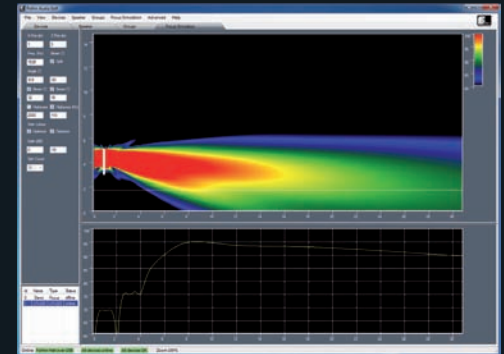
LFI-220

16x 4" neodymium loudspeakers,
16x CLASS D amplifiers,
16x DSP processors. Length: 2.2 m

LFI-120

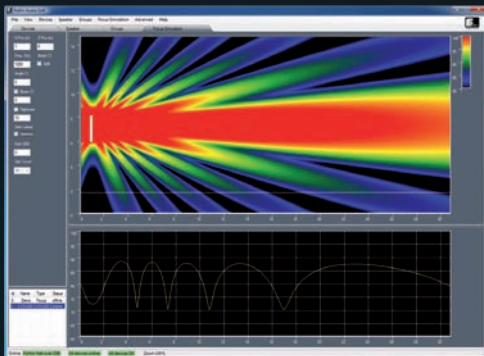
8x 4" neodymium loudspeakers,
8x CLASS D amplifiers,
8x DSP processors. Length: 1.2 m

PERFECT SOUND: NOW THE EYE CAN SEE EXACTLY WHAT THE EAR HEARS.

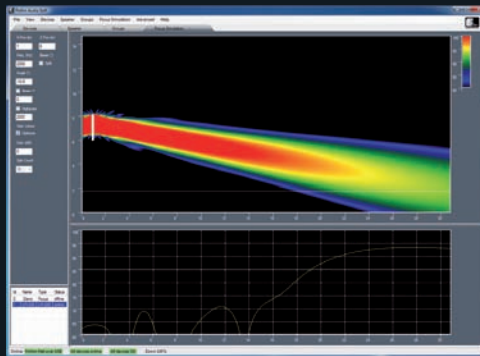


Asymmetric Beam

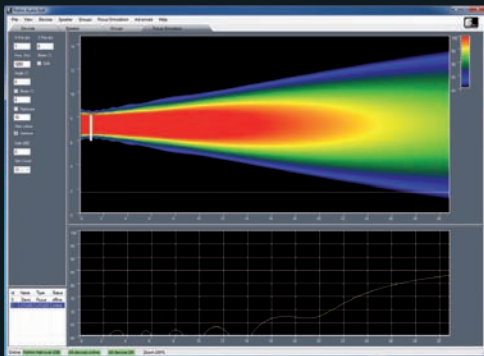
**INTUITIVE BEAM STEERING
IN REAL TIME.**



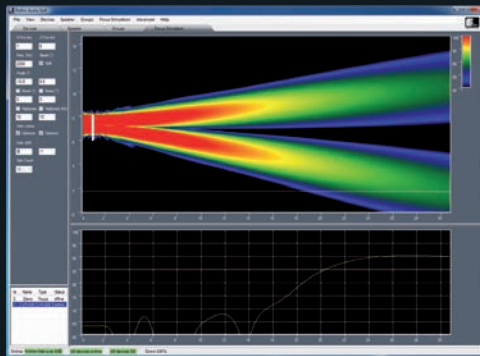
Without Side Lobe Free Technology



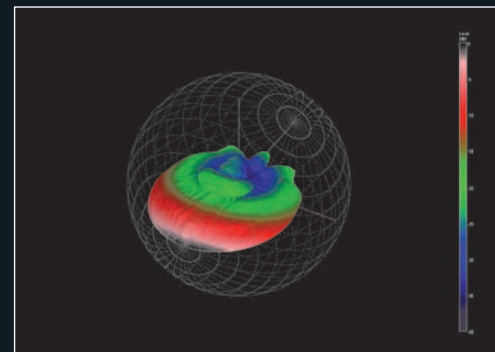
A single beam



With Side Lobe Free Technology



Two separate beams



Fohhn Linea Focus 3D Directivity Balloon

SIDE LOBE FREE TECHNOLOGY

This specially developed algorithm can suppress unwanted side lobes. Superb speech intelligibility is achieved due to the reduced room reflections.

TWO BEAM TECHNOLOGY

This innovative Fohhn development enables two separate beams to be generated in the vertical dispersion range, allowing specific audience areas such as stalls and gallery to be targeted by the same speaker.

FOHNN LINEA FOCUS 3D

In the Fohhn SoundLab, all loudspeakers are measured using a 360° sweep. The resulting polar diagram, or 3D Directivity Balloon, forms a basis for further work using room simulation programs such as EASE.

WHY GO TO JUST ANYONE WHEN THERE'S AN EXPERT AVAILABLE?

Fohhn loudspeaker systems have been manufactured in Germany for over 15 years and are renowned for their outstanding workmanship and sound quality. As the company has developed, its goal has been to provide the customer with solutions that involve state-of-the-art technology and complex functionality, but are easy to use.

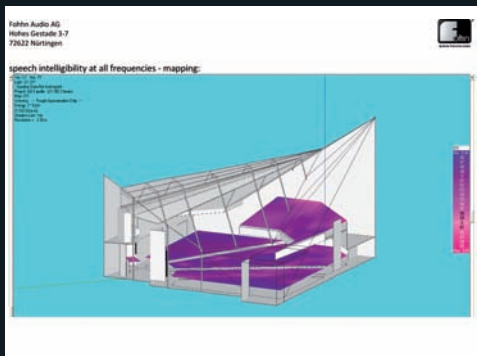
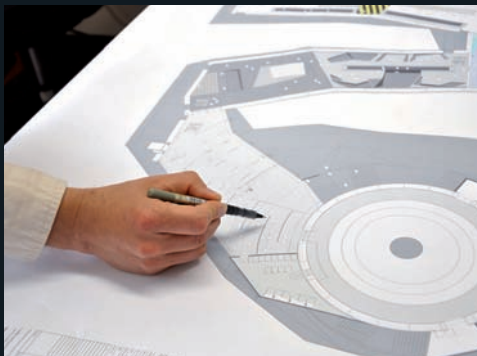
In addition to manufacturing high quality products, we also want to make sure that end users are able to achieve the best possible results. That's why we have created the Fohhn Partner Programme in which specialist dealers are certified as either a "Fohhn Partner" or "Fohhn Sound Expert". Fohhn Partners are trained audio providers who have been approved to advise on Fohhn products and their applications, including areas such as room acoustics, audio

system planning, room simulation, installation and measurement.

Fohhn's in-house planning and project engineers are always on hand to support a Fohhn Partner throughout an entire project. With their extensive technical knowledge and practical experience, they are happy to advise every step of the way and can even assist during the final stages of testing at a venue. The aim is always to help the customer achieve good results. For challenging live sound applications involving Linea Focus systems, experienced sound engineer Ralf Freudenberg is also available to offer support at venues.

The Fohhn SoundLab plays host to a series of regular training and professional development events for Fohhn staff, Fohhn Partners and other professionals. Our speakers have included several of the world's leading audio specialists including Prof. Dr. Wolfgang Ahnert, Prof. Dr.-Ing. Anselm Goertz, Prof. Dr. Jürgen W. Meyer and Dipl. Ing. Volker Löwer. We also offer regular training on commonly used room simulation programs such as EASE and Ulysses, as well as the EASERA measurement system.

Finally, it's important to make sure that you speak to an appropriate project partner. Fohhn Partners can all be identified by their logos.



ALWAYS HERE TO HELP.

As a manufacturer, we're here to support you. Our engineers can help with planning, technical know-how, simulation and measuring.

STAY ON TOP OF YOUR GAME.

Regular training sessions for Fohhn staff, Fohhn Partners and other audio professionals are held in the Fohhn SoundLab.

THE RIGHT PROJECT PARTNER.

The Fohhn Partner and Fohhn Sound Expert logos indicate that an audio provider is approved to offer a range of services relating to Fohhn products and their applications.

1. GERMAN HYGIENE MUSEUM DRESDEN, GERMANY

WHERE YOU CAN SEE THE IMPRESSIVE EXHIBITS, BUT NOT THE IMPRESSIVE LOUDSPEAKERS.

A more interesting and versatile project than its rather “clinical” name first suggests! The busy venue also plays host to a range of conferences, lectures and concerts.

2010 saw the renovation of the museum’s large and small function rooms (which have seating for 450 and 200 visitors respectively). The brief for the new sound system was clear: **in this protected historical building, no loudspeakers must be visible**. The speakers were required to be installed flat in the wall, hidden behind special acoustic material. Mechanical adjustment would not therefore be possible. In order to directly target the audience, it would require the installation of an electronically steerable loudspeaker system.

A perfect opportunity for Linea Focus

- * The vertical inclination angle of the loudspeakers can be finely adjusted in steps of 0.1°, enabling the audience to be precisely targeted.
- * This also enables the best possible speech intelligibility to be achieved in a room with lots of reflective surfaces.
- * Fohhn SoundLab engineers recommended the special acoustic material after thoroughly testing its sound permeability.

System

- * Linea Focus: 2x LFI-120 (near field);
2x LFI-220 (main system)

Installation by

Mediatronic Dresden, under the leadership of Steffen Dressler.



*Mediatronic is a certified “Fohhn Partner”
for Linea Focus and Arc Series products*

LFI-220

LFI-120



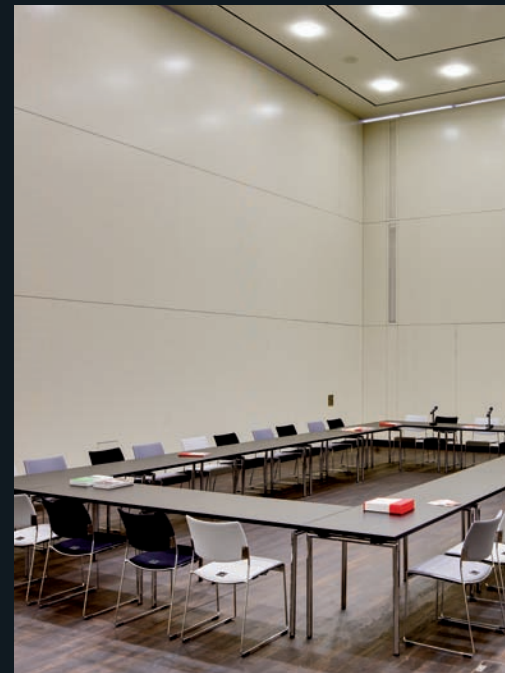
Invisible speakers, in accordance with the project brief! These are hidden behind acoustically transparent material to blend with the room architecture. The sound beams can be electronically adjusted to suit different uses of the room.

Acoustic conditions are even more challenging when the room is used without seating.





Visually, the small room gives a feeling of calm, but hard surfaces present a challenge for the sound system. However, Linea Focus has it all in hand.



2. MAINZ CATHEDRAL, GERMANY

THE CITY OF MAINZ HAS ONE OF THE WORLD'S MOST BEAUTIFUL CATHEDRALS - AND ONE OF THE WORLD'S GREATEST ACOUSTIC CHALLENGES.

Mainz Cathedral is regarded as a building of great architectural significance. The facts surrounding this historic worship venue are impressive to say the least. The building itself is over 1,000 years old, with construction of the original part dating from 975. With its capacity for 4,000 worshippers, the cathedral occupies a vast 4,600 square metre site. 116 metres in length, its ceiling heights range from 28 to 54 metres.

Acoustically, the cathedral is also in a league of its own. The planning and installation of its new sound system involved a number of complex requirements, leading to the project being described as "exceptionally demanding".

In addition to worship, the ecclesiastical space is regularly used for a range of other events involving speech and music. This has also led to requirements for implementing connection facilities for radio, TV and internet broadcast. In short, things could hardly be more complicated.

- * As a protected building of historical interest, effective visual integration proved a highly important and necessary factor.
- * Within its acoustically complex environment, the cathedral's 12-second reverb time was also a particularly important consideration.
- * A sophisticated programme of worship, involving a range of speakers and high quality musical performances, meant exacting criteria regarding the reproduction capabilities of the loudspeakers.

- * Ensuring optimum sound quality also proved important with respect to radio and TV transmission.
- * The gigantic proportions of the building itself created their own problems, with audio systems required to operate simultaneously in several different areas such as the high altar, main aisle, side aisles, side chapels and rotunda.
- * The entire loudspeaker system required perfect alignment in order to avoid interference or colliding beams, thus ensuring the best possible speech intelligibility.



Practically invisible! Fohhn's 4.50 metre and 3.50 metre long speakers are effectively integrated into Mainz Cathedral, which is over 1000 years old. Clearly heard, despite a 12-second reverberation time, the system is rated by the Mainzer Dombauverein as "clearly better" than the previous one.

Given the background to this exacting project, it's not surprising that experts from the "Institut für Beschallungstechnik" in Bischofheim were called in to help test different systems and make recommendations. After extensive comparisons using both technical data and subjective listening, the final decision favoured Fohhn Linea Focus systems, which had consistently produced the best results when reproducing both speech and music. From a visual perspective, the loudspeakers' super-slim 12 cm width proved a final determining factor.

The loudspeakers' outstanding speech intelligibility is mainly a result of Fohhn's unique "Side Lobe Free" technology, developed in house by its engineering team. This guarantees an extraordinarily controlled and targeted sound beam, which is a major factor in improving both the clarity and directionality of speech reproduction.

Integrated amplifier and control technology enables the Linea Focus systems to be perfectly adapted to the room acoustics. The vertical inclination angle, beam width, frequency response, sound pressure level and delay time of each individual speaker can be optimally adjusted to fit within the system as a whole. Although time-consuming, the end results are well worth the effort.

Every loudspeaker in the system is networked and can be remotely monitored and controlled from a central location.

If you're planning a trip to Mainz, come and hear the results for yourself! Maybe you will be as excited as Sabine Flegel, Chairperson of the Mainzer Dombauverein, who, on first hearing commented: "Every visitor will notice that the cathedral sound has dramatically improved." Prelate Heinz Heckwolf, Dean of the Cathedral added: "We have already had a number of enquiries from other cathedrals that are interested in our new technology". We must admit to being very pleased and proud!

System

- * Linea Focus: 2x LFI-450, 4x LFI-350, 6x LFI-220, 7x LFI-120
- * Linea AL-Series: 28x AL-10 (Rotunda); 8x AL-50; 6x AL-100
- * Subwoofer: XS-20 active
- * Amplifier: Fohhn D-4.750

Installation by

- * IFB, Bischofheim (planning, measurement)
- * BFE Studio and Medien System GmbH, Mainz (installation)
- * Fohhn engineering team: support and expertise throughout the planning and measurement stages.



BFE is a certified "Fohhn Sound Expert" for Linea Focus products.



Fohhn's unique "Side Lobe Free" technology results in significantly better definition of consonants, particularly in venues with long reverberation times. Just one of the reasons why Linea Focus proved so successful during subjective listening tests held in the cathedral.



3. EXPO 2010, SHANGHAI, CHINA: STATE GRID PAVILION

A YEAR WHEN ALL EYES WERE ON SHANGHAI AND ALL EARS ON LINEA FOCUS.

Expo aims to fascinate mankind with the latest technological innovations. A perfect venue for Linea Focus then! In addition to featuring in the German and Swiss pavilions, Fohhn was also represented in the Chinese State Grid Pavilion with its magnificent Magic Box. The entire wall, floor and ceiling space of the 16x16x16 metre cube was equipped with LED screens and loudspeaker systems, bombarding visitors with sound from all sides and visuals on every surface.

Technically tricky:

- * With just 13 cm of space available between each of the LED screens, only slim line array systems could be installed.
- * Because of the large doors, speakers had to be fixed at a height of 3 metres.

- * Audience areas needed to be directly and precisely targeted by the speaker sound beams.
- * Delayed reflections from the ceiling could potentially spoil the overall sound image – this had to be avoided.
- * Mechanically adjusting the column speakers would interfere with the visual projections.
- * A wide range of soundtracks, from classics to electro, all had to sound perfect.

Throughout the year, 22 Linea Focus systems did a superb job. **Perfectly tailored to meet the most exacting requirements**, the systems were supported by 16 active subwoofers from Fohhn's XS-10 range.

System

- * Linea Focus: 22x LFI-220; 2x LFI-120
- * Subwoofer: 16x XS-10 active

Project Planning

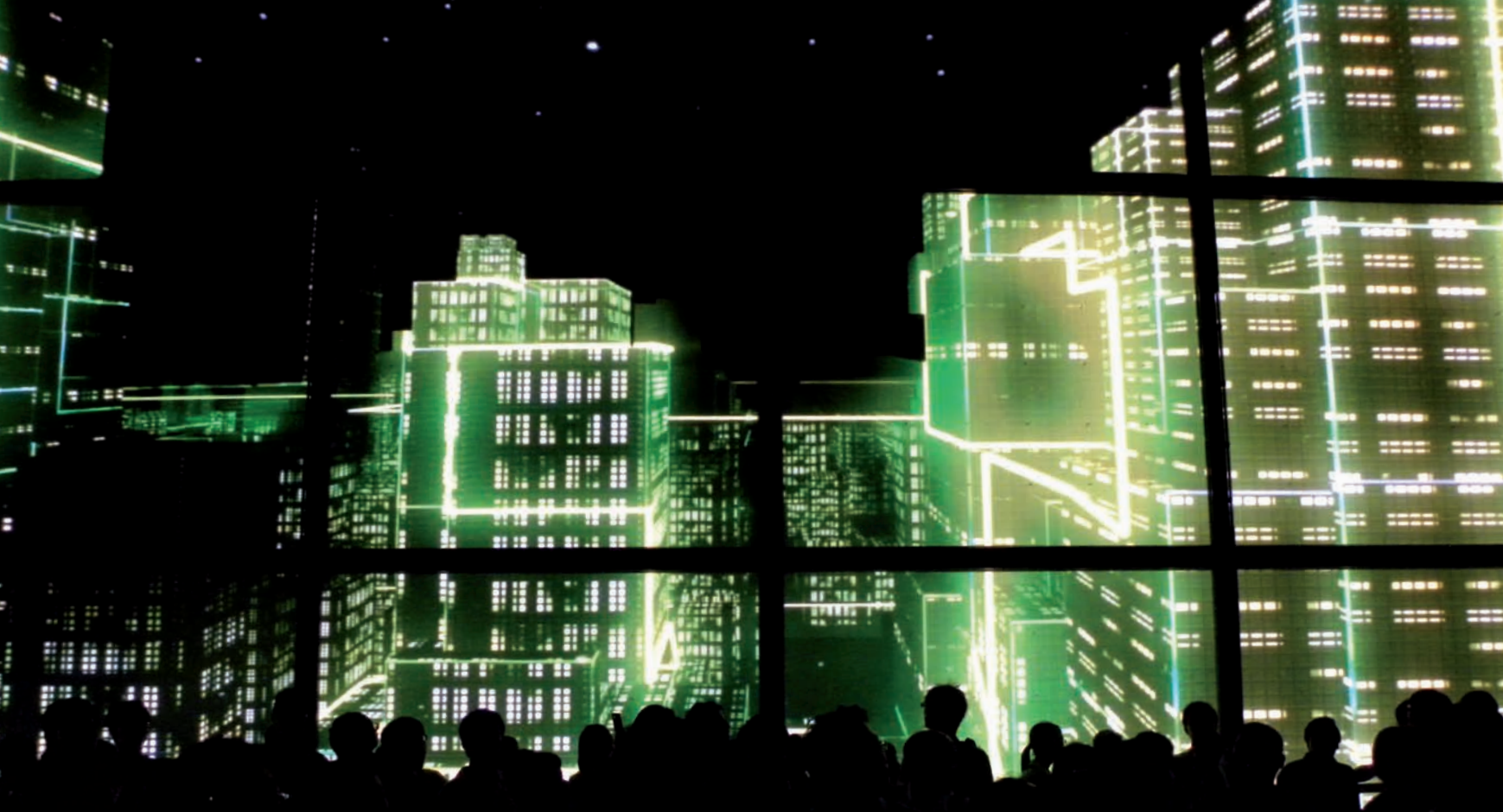
- * Atelier Brückner, Stuttgart (technical project management)
- * Medienprojekt P2, Stuttgart (AV technology)
- * WSDG, Basel, Switzerland (acoustics)
- * Idee & Klang, Basel, Switzerland (sound design)

Installation by

ICT AG, Kohlberg, Germany



ICT AG is a certified "Fohhn Sound Expert" for Linea Focus and Arc Series products.



In one of the most unique audio-visual projects to date, the State Grid Pavilion at Expo 2010 featured a stunning 360°/720° surround experience.





Linea Focus systems are exactly 12 cm wide. Our engineers had also anticipated the 13 cm gap between projection screens in the State Grid Pavilion, so everything fitted together perfectly. Fohhn engineers were also at the venue to oversee the final adjustments of the systems.

4. HANGAR 2 IN THE FORMER BERLIN TEMPELHOF AIRPORT

IT TAKES AN EXPERT TO SUCCESSFULLY INSTALL A SOUND SYSTEM FOR A TV SHOW IN AN AIRCRAFT HANGAR.

During June 2010, Hangar 2 in the former Berlin Tempelhof Airport was the venue for a pilot of SAT.1's TV show "The Duel – Germany v. Holland", which was broadcast live. High profile celebrities, representing sport and show business in Germany and Holland, faced each other in an exciting sports competition.

- * The former aircraft hangar has an 18 m high ceiling, so it doesn't take an expert to work out that such a large venue is almost certain to have an enormous reverberation time.
- * **The use of a free-moving "Spidercam" over the whole arena also meant that any loudspeakers would need to be practically invisible,** flown at a height of over 12 metres with the beams steered downwards.
- * At the same time, the sound beams had to target the tiered audience seating in such a way

as to guarantee the best possible speech intelligibility, without disturbing the broadcast sound, or exciting the room acoustics unnecessarily.

- * The sound system had to face all four directions of the arena, requiring a number of hanging points. These however were subject to weight limits.
- * Avoiding feedback from the simultaneous use of 30 microphones proved an additional challenge.

In the end, eight flown Linea Focus LF-220 systems proved a perfect solution for this challenging TV show. The loudspeakers were networked together and controlled from a laptop. Both the vertical sound inclination angle and vertical beam width could be directed with precision onto the audience areas. Activating the "Side

Lobe Free" mode also maximised the directionality of the sound beam, while suppressing any unwanted side lobes.

System

- * Linea Focus: 8x LF-220 with flown mounting system

Installation by

B&R Medientechnik



B&R Medientechnik is a certified "Fohhn Sound Expert" for Linea Focus products.



LF-220

The former aircraft hangar in which the TV programme was broadcast is gigantic. While on the subject of aircraft, it's perhaps not surprising to find that the Linea Focus systems were flown. Their beam steering capabilities enabled sound to be accurately aimed at the audience from a height of over 12 metres.

5. FORMER PARLIAMENT BUILDING, BONN, GERMANY

DOING A GOOD JOB DOESN'T ALWAYS MEAN BEING IN THE LIMELIGHT!

TV often makes its own rules. SWR's live discussion programme "The Rebellious Republic" was filmed in the former Bundestag parliament room, featuring leading political figures Gesine Schwan and Heiner Geissler. During the filming process, the production team had some very clear requirements. **The live sound system should not be visible in the TV picture, nor should it interfere with the broadcast sound.**

Challenging role for Linea Focus:

- * The systems used to cover the audience area should not interfere with either the TV sound or the live discussion.
- * The use of highly sensitive microphones meant that feedback must be avoided.

- * Speech intelligibility should be as good as possible throughout the entire room.
- * The speaker systems should not be visible in the actual TV picture.

Needless to say, Linea Focus proved more than able to cope with this vital supporting role, as Bernd Kugler, Managing Director of B&R Medientechnik explained:

"In live sound, time is always of the essence. With TV broadcast the main focus often tends to be on visuals, with only a small amount of time allocated for sound. Being able to set up and adjust the loudspeaker beams in real time at the venue saves us a lot of time and we can often achieve great sound in just 15 minutes."

System

- * Linea Focus: 2x LF-220
- * Fohhn Free Stand designer stands

Installation by

B&R Medientechnik



B&R Medientechnik is a certified "Fohhn Sound Expert" for Linea Focus products



*Supporting role! Discreetly flanking the Federal Eagle, a Linea Focus LF-220 system with Free Stand in combination with a Fohhn XS-20 active subwoofer.
Pictured above: Heiner Geissler and Gesine Schwan take part in the "Wutbürger" discussion.*

6. HEINO CHURCH CONCERT TOUR 2009/2010

IMAGINE A TOUR WHERE A SINGLE SOUND SYSTEM IS USED IN OVER 40 DIFFERENT VENUES.

A number of outstanding musicians, including the well-known organist Franz Lambert, supported Heino during his 2009/2010 church concert tour of Germany and Austria. To ensure that the expertise of the musicians was fully appreciated by the audience, a further expert was on board at front of house in the form of Ralf Freudenberg, one of Germany's most experienced sound engineers.

With a total of over 40 concerts taking place in various churches and cathedrals, including Linz Cathedral, the sound system needed to be highly flexible in order to cope with the varying demands of each venue. Let's hear it from the expert however – over to you Herr Freudenberg:

"Linea Focus systems proved an obvious choice for this concert tour where church acoustics were involved. We took Linea Focus LF-120 and LF-220 systems with us. **It was all we needed, both in ordinary parish churches and in the 100 m long Linz Cathedral.** Previously, we used a conventional two-way system with speakers at the front and four delay lines running the length of the room. The cabling costs alone were enormous. Today we've been able to use four LF-220 systems to cover the first 50 metres. After that, we put in a delay line and that's about it. Every evening we had lots of positive comments. For Franz Lambert's organ, we also used two compact, DSP-controlled, 15-inch active subwoofers to enhance the bass frequencies. The integral Fohhn Audio DSPs made it easy for us to do the necessary time corrections."

System

- * Linea Focus: 4 x LF-220; 2 x LF-120
- * Subwoofer: 2 x XS-30 active

Concert sound by

Jordans & Hompesch, Langerwehe and Ralf Freudenberg



Jordans & Hompesch are a certified "Fohhn Sound Expert" for Linea Focus products.



Ralf Freudenberg



The concert tour took Heino and his high-profile band to over 40 different churches. Ralf Freudenberg, one of Germany's leading sound engineers, was highly enthusiastic about the Linea Focus system's capabilities: "I particularly like the quick, uncomplicated system set-up, the real-time control of the speaker beams producing extraordinary sound quality from the line arrays, along with other more complex technical options such as the Two Beam function."

7. PORSCHE PRESENTATION, STUTTGART, GERMANY

WITH PORSCHE, EVERY DETAIL COUNTS.

Picture the scene at Porsche headquarters in Zuffenhausen: hidden from view under a white cloth, the latest object of desire, the new Porsche Panamera. 400 VIP guests listen with anticipation to a presentation by Porsche's Head of Design, Michael Mauer. Like the car, the building is also futuristic and for the sound designers, the challenge starts here. Reflective surfaces of marble, glass and steel make for a difficult acoustic. Previous events have involved up to ten conventional loudspeakers placed in different parts of the room. Functional maybe, but for a brand like Porsche, looks are also extremely important.

Looking good, sounding even better

- * Two electronically steerable Linea Focus LF-220 systems were positioned by the stage and used to cover a room area of approximately 35 x 20 metres, on two levels. Slim and discreet, but highly effective.
- * **Using Linea Focus's Two Beam Technology, two beams could be projected from a single speaker enabling audience areas on both the floor and gallery to be separately targeted.**
- * Although the Porsche design chief moved around the room during the presentation, the sound reproduction remained absolutely consistent, with no trace of feedback.

System

- * Linea Focus: 2 x LF-220
- * Subwoofer: 1 x XS-30 active

Installation by

f.concept, Stuttgart



f.concept is a certified "Fohhn Sound Expert" for Linea Focus products.



Porsche's demonstration hall is not only large, but also has a lot of height. Fohhn's Two Beam Technology enables audience areas on both the floor and gallery to be separately targeted, resulting in fewer reflections and better sound.

8. VU UNIVERSITY, AMSTERDAM, THE NETHERLANDS

GOOD FOR THE EYES AND GOOD FOR THE EARS. NEW LECTURE THEATRE OFFERS STUDENTS BOTH CLEAR SOUND AND VISION.

January 2011 saw the official opening of “Initium”, a new building at the VU University in Amsterdam. The building’s lecture theatre can accommodate up to 500 students.

* Following a trend set by many modern football stadiums, the rows of seating were steeply tiered in order to give each student the best possible view. However what’s good for the eyes isn’t necessarily good for the ears!

- * The planner specified a sound system to be installed at the front of the lecture theatre, capable of covering the entire width and depth of the room.
- * Microphones would also need to be placed in front of the loudspeakers.

Two slim, compact Linea Focus LFI-120 systems have integrated perfectly into the room architecture, **providing clear coverage while avoiding the risk of feedback.** The speakers’ beam steering capabilities mean that the vertical dispersion angle of the beam can be adjusted to handle the steep slope of the tiered seating. The fixed horizontal beam width of 110° also enables sound to effectively cover the whole room width, allowing students to hear clearly wherever they are sitting.

System

- * Linea Focus: 2x LFI-120

Installation by

- * Installation Department of the VU University, Amsterdam
- * Heuff, Maarsbergen, The Netherlands (planning)



*Heuff, Maarsbergen is a certified
“Fohhn Distribution Partner” for all
Fohhn products*



*Every university and every lecture theatre is different.
So it's just as well that Linea Focus systems can be adapted
to suit any room.*

9. EV. CHURCH, NEUENSTEIN, GERMANY

SUCCESSFULLY SINGING FROM THE SAME HYMN SHEET: REPRESENTATIVES WORK TOGETHER TO IMPROVE CHURCH SOUND.

Many historic buildings are subject to some kind of preservation order. It is certainly the case with this 450-year old church in Neuenstein, South Germany, which was built in 1550.

When the historic worship venue looked at installing a new sound system at the end of 2009, there were two important considerations:

- * The reproduction of both speech and modern church music, which sometimes uses electronic instruments, should be as good as possible throughout the entire building.
- * Due to some historically significant frescos and the unique construction of the pillars, suitable mounting points for loudspeakers might be limited. It would not be possible to use either the load-bearing pillars or any wall mounting points over 3.6 m high around the altar area.

Following initial tests carried out by our Fohhn Partner, which were also attended by representatives from the parish and from the Department for the Preservation of Historic Monuments in Baden Württemberg, it was decided that the best solution would involve a combination of electronically steerable line arrays to handle the difficult acoustics of the main aisle, with other loudspeakers placed on and underneath the balcony areas. The installation was successfully carried out in December 2009.

An extremely satisfied Reverend Hägele told us: "All the services that involve music, including either a choir or band, are notable for their great sound quality and for the clear reproduction of speech. It's even been possible to achieve high quality sound in what were previously very difficult areas of the church."

System

- * Linea Focus: 2 x LFI-220
- * Linea LX: 4 x LX-100
- * Subwoofer: 1 x XS-30 active
- * Amplifier: 1 x D-4.750

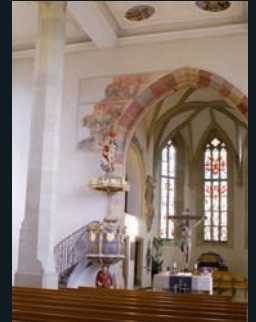
Installation by

Hummel Audio Akustik, Roigheim



Hummel Audio Akustik is a certified "Fohhn Sound Expert" for Linea Focus and Arc Series products.

Protecting cultural artefacts is an important responsibility. Linea Focus has already proved itself in a number of protected buildings. Clearly heard, but not seen!



10. COPENHAGEN CITY HALL, DENMARK

ELEGANT SCANDINAVIAN DESIGN HAS NO COMPROMISES.

There has been a City Hall in Copenhagen since 1479, although the actual building has been destroyed several times during the city's great fires. Its current manifestation dates from 1892, based on a design by the architect Martin Nyrop and inspired by the city hall in Sienna, Italy.

It's hard to remember a project that has had such demanding requirements, but only by observing these would it be possible to achieve the clear, elegant lines that have become associated with Scandinavian design.

- * The Danish organisation responsible for protecting historic buildings defined the loudspeaker specifications as precisely as possible, from the RAL colour right down to the mounting points.
- * The loudspeakers were required to be exactly the same colour as the wall, mounted flat against it in order to appear as discreet as possible.
- * Adjusting the speakers mechanically was out of the question. So for the installer, the only real choice was an electronically steerable system in which software could be used to direct sound onto the listeners as appropriate.

Two Linea Focus systems in a special shade of white ("Mermaid White"), have ensured that the system visually fits the bill, while at the same

time guaranteeing the best possible speech intelligibility for everyone in the room. Incidentally, it has also met with approval from the historic buildings people.

System

- * Linea Focus: 2 x LFI-120 in special white colour

Installation by

Informationstechnik, Copenhagen, Denmark



INFORMATIONSTECHNIK is a certified "Fohhn Distribution Partner" for Fohhn Linea Focus and Arc Series products



When Copenhagen's officials gather in the City Hall, Linea Focus systems ensure that every word can be clearly heard. The loudspeakers' electronic beam steering capabilities enable sound to be precisely directed onto the listeners.

11. REINFORCING THE POPE IN PORTUGAL

OVER 220,000 FLOCK TO HEAR THE HOLY FATHER AT AN OPEN AIR MASS IN PORTO.

During the celebration of any mass, clear reproduction of both speech and music is very important. But when delivered in person by the Pope to a congregation of 220,000 worshippers who have come together in Porto's massive Avenida dos Aliados, it takes on a whole new dimension. To cope with the huge distances involved, Fohhn PT-9 line arrays were used as the main loudspeaker system.

For the 1,300 invited guests sitting directly in front of the stage, two Linea Focus LF-220 systems were used to transmit speech and music provided by a choir and electronic church organ. "Will this be sufficient? Don't we need an additional, larger system here?" asked the Production Manager with some concern. After all, the main system was installed nearly 40 metres away.

However, the instruction from the Vatican's design representative had been very clear:

- * No large speaker systems, or modular line arrays to be installed.
- * In order not to detract from the visual effect of the ceremony, absolutely no loudspeakers to be placed in close proximity to the immediate stage area.

The two slim Linea Focus line arrays were eventually placed side on to the stage to target the 35 metre wide x 40 metre deep area in front.

As the engineer powered up the system, the critics were silenced. After the event, the Vatican representative was full of praise for the sound team. Meanwhile, the musical director invited our distributor to visit his church with a view to planning a new loudspeaker system.

System

- * Linea Focus: 2x LF-220 (front area with 1,300 guests)
- * Line Array System: 24x PT-9 (main system)
- * Additional delay lines were provided by a local supplier.

Installation by

Definisom, Nuno & Ricardo Campos, Portugal



The Vatican issues clear guidelines on the positioning of PA systems for the Pope's speeches. For example, loudspeakers can only be placed around the outer edges of any staging, as seen here in Porto at a mass with over 220,000 worshippers.



12. HANDELSKAMMER, HAMBURG, GERMANY

ELEGANT HANSEATIC BUILDING POSES ACOUSTIC CHALLENGE.

In the historic hall of Hamburg's majestic Handelskammer, a conference was held as part of the "Copper 2010" international trade gathering. 400 specialists from all over the world were invited to attend a programme of lectures and discussions in the elegant, high-ceilinged (and therefore reverberant) room.

- * The extreme acoustic challenges associated with this impressive venue were already well known from other events.
- * **The imposing architecture precluded the use of lengthy cabling**, large unsightly loudspeaker systems or even conventional speaker stands.

- * Two loudspeakers positioned at the front were required to completely cover the 30 metre long room and provide the best possible sound quality.

Using the narrowest possible speaker beam, the distance could be successfully handled without the sound being affected by room reverberation. The vertical beam width was electronically set at a required 8°.

The result: Event organisers, agents and technicians were all amazed at the sound quality, which had never been achieved using conventional systems. Subtle, effective and sonically brilliant.

System

- * Linea Focus: 2x LF-220, using a Fohhn mounting system with covered aluminium traverse.

Installation by

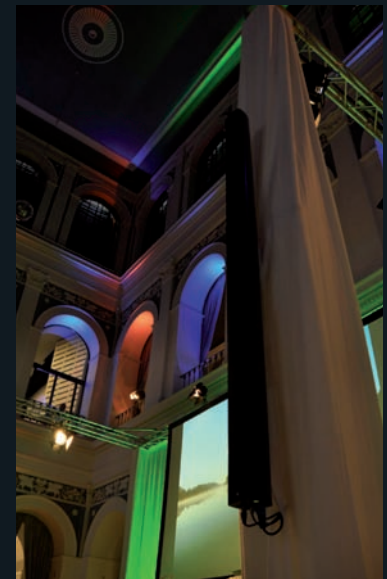
Carl Konferenztechnik, Hamburg



*Carl Konferenztechnik is a certified
"Fohhn Partner" for Linea Focus products.*



With Fohhn Audio Soft software, the speaker beam can be precisely and intuitively steered, as shown here in the majestic Hamburg Handelskammer. Beam characteristics, frequency response and levels were all controlled via laptop using just the one piece of software.



13. MOSTEIRO DE MONTARIOL, BRAGA, PORTUGAL

ONE SINGLE SPEAKER DEALS WITH A 6-SECOND REVERBERATION TIME. RESPECT.

Acoustic conditions in the main church of the Mosteiro de Montariol monastery in Braga, Portugal, could generally be described as challenging.

- * The building is narrow and tall, with a highly reflective spherical ceiling.
- * Measurements revealed a reverberation time of between 4 and 6 seconds within a frequency range of 500 Hz – 2500 Hz, the most important range for the spoken voice.

The original 100V system had consisted of ten small speakers in different parts of the church. These had not been electronically time corrected and the results were less than satisfactory. Consonants were barely recognizable and the acoustic orientation of the sound did not correspond to the actual location of the priest.

Any audio specialist visiting the church today would be astounded to see a single Linea Focus LFI-220 system covering the entire main aisle.

A Linea LX-150 also supplements the 12 rows of pews nearest the altar area. The LFI-220's internal DSP processor has enabled it to be time corrected and its beam precisely directed towards the congregation. It has also been possible to minimize transmission of sound towards the reflective ceiling. Right from the start, the overall sound image was found to be more homogeneous and much dryer. Speech intelligibility and sound positioning have been greatly improved. Both the system installer and the monks have agreed on one thing: If this loudspeaker system can cope so well with such a difficult acoustic, there's a lot of work that can be done in Portugal!

System

- * Linea Focus: 1x LFI-220 (main aisle)
- * Linea LX: 1x LX-150 (altar area)

Installation by

Definisom, Nuno & Ricardo Campos, Portugal



Narrow, high and reverberant. It's not surprising that this monastery church in Braga has a reputation for being "acoustically challenging". Just one single Linea Focus speaker was required to do a perfect job in the main aisle.

14. AUDI URBAN FUTURE AWARD, VENICE, ITALY

FOUR RINGS, A PRESTIGIOUS ARCHITECTURE PRIZE AND LINEA FOCUS MAKE A WINNING COMBINATION.

The Audi Urban Future Award prize ceremony and exhibition opening took place during August 2010 at the Scuola Grande della Misericordia in Venice. With a 100,000 Euro award on offer, the event is Germany's most generously endowed architectural prize. As the historic building plays host to a contemporary architecture event, one thing is clear: **the main emphasis is on design.** At such an event however, the sound system, while functioning flawlessly, should visually remain in the background.

- * A major priority for the event organiser was a clear stage design using white loudspeakers.
- * The quality of sound for reproducing both speech and music was required to be appropriate for the occasion and reflect the quality of the brand from Ingolstadt.
- * A central sound system was requested for the front of the room – no other loudspeakers were required.
- * No conventional speaker systems or stands were to be in evidence.

The event was a huge success. In our opinion however, the two Linea Focus LF-220 systems with their stunning white finish, mounted on designer stands each side of the stage, provided more than just an acoustic highlight!

System

- * Linea Focus: 2x LF-220, with white finish

Installation by

Show EM Veranstaltungstechnik



Show EM Veranstaltungstechnik is a certified "Fohhn Sound Expert" for Linea Focus products.



More than just an acoustic highlight: a stunning white finish gives Linea Focus added elegance in Venice.



Linea Focus systems also feature at an Audi event in Neckarsulm.

15. LANG AKADEMIE, LINDLAR, GERMANY

SIZE MATTERS: THE 16 X 9 M PROJECTION SCREEN THAT MAKES EVEN A 4.5 M LOUDSPEAKER LOOK PETITE.

Lang AG is one of Europe's leading rental and sales providers of AV presentation technology. In the autumn of 2010, at its headquarters in Lindlar, Germany, the company opened a brand new presentation and training facility – the Lang Akademie. Its main hall is the size of a typical event hall in a German city.

- * The architecture is dominated by media technology. Having said that, the loudspeaker systems were required to play a background role and blend with the surroundings.
- * The main projection screen is an impressive 16x9 metres. The loudspeakers must not obstruct the visual presentations, so although positioned nearby, they had to be out of the way.

- * The room is a multi-purpose facility. Lecterns and microphones had been deployed in different areas of the room, often positioned in front of the speakers.
- * Long-throw speakers would be required to cover the room's 50-metre depth.

Two fixed installation Linea Focus LFI-450 systems (each 450 cm in length) were mounted near the projection screen, providing an even coverage of the entire room. The degree of speech intelligibility achieved has been excellent, even right at the back. **This is also where the asymmetric beam option and Fohhn's Two Beam Technology have made a difference**, enabling volume levels to be reduced at the front, creating a more pleasant, feedback-free listening environment for the whole audience. At one of the Akademie's first major events –

the "3D Forum" held during October 2010, AV experts reacted extremely positively to the new room sound.

System

- * Linea Focus: 2 x LFI-450
- * FR-10 remote control unit

Installation by

B&R Medientechnik



B&R Medientechnik is a certified "Fohhn Sound Expert" for Linea Focus products.

Very few non-public facilities have the same room dimensions as the Lang Akademie. Despite its size and the reflective surfaces, both speech and music are perfectly reproduced.



16. UNIVERSITY OF HEIDELBERG, GERMANY

CRYSTAL CLEAR SOUND THANKS TO ASYMMETRY.

The University of Heidelberg is one of the world's oldest universities. With 12 faculties and over 28,000 students, the revered seat of learning celebrates its 625th anniversary during 2011. Coinciding with this, a renovation programme that has included a refit of Lecture Theatre 13, a room holding approximately 400 people. Preserving the room's historical architecture and installing state-of-the-art technical facilities were equally high on the agenda. The new sound system must therefore blend discretely with the room architecture, while providing the best possible coverage and speech intelligibility. After all, successful learning can only be achieved when everything is clearly understood.

- * For design reasons, it was necessary to mount the new loudspeaker system at the front of the

lecture theatre, with no additional speakers elsewhere in the room.

- * A further challenge: the speakers would have to be positioned behind the microphone.
- * And, as if that wasn't enough: the tiered seating in the highly reverberant room also banked steeply from the front up to the back.

Two Linea Focus LFI-220 systems were installed flat on the wall, either side of the projection screen. The system's electronic steering capability enabled the speaker beam characteristics to be precisely targeted towards the listeners, enabling students in both the front and back rows to enjoy the same crystal clear sound quality.

A word about asymmetry: In order to achieve the best possible coverage over the steeply tiered rows of seating, **an asymmetrical beam**

was chosen to permit lower volume levels at the front, while higher sound pressure levels are produced to cover the back of the room. The beam was also set up like this to enable it to pass over the microphone and avoid feedback.

The results have been so successful that similar concepts for other universities are currently in the planning stages.

System

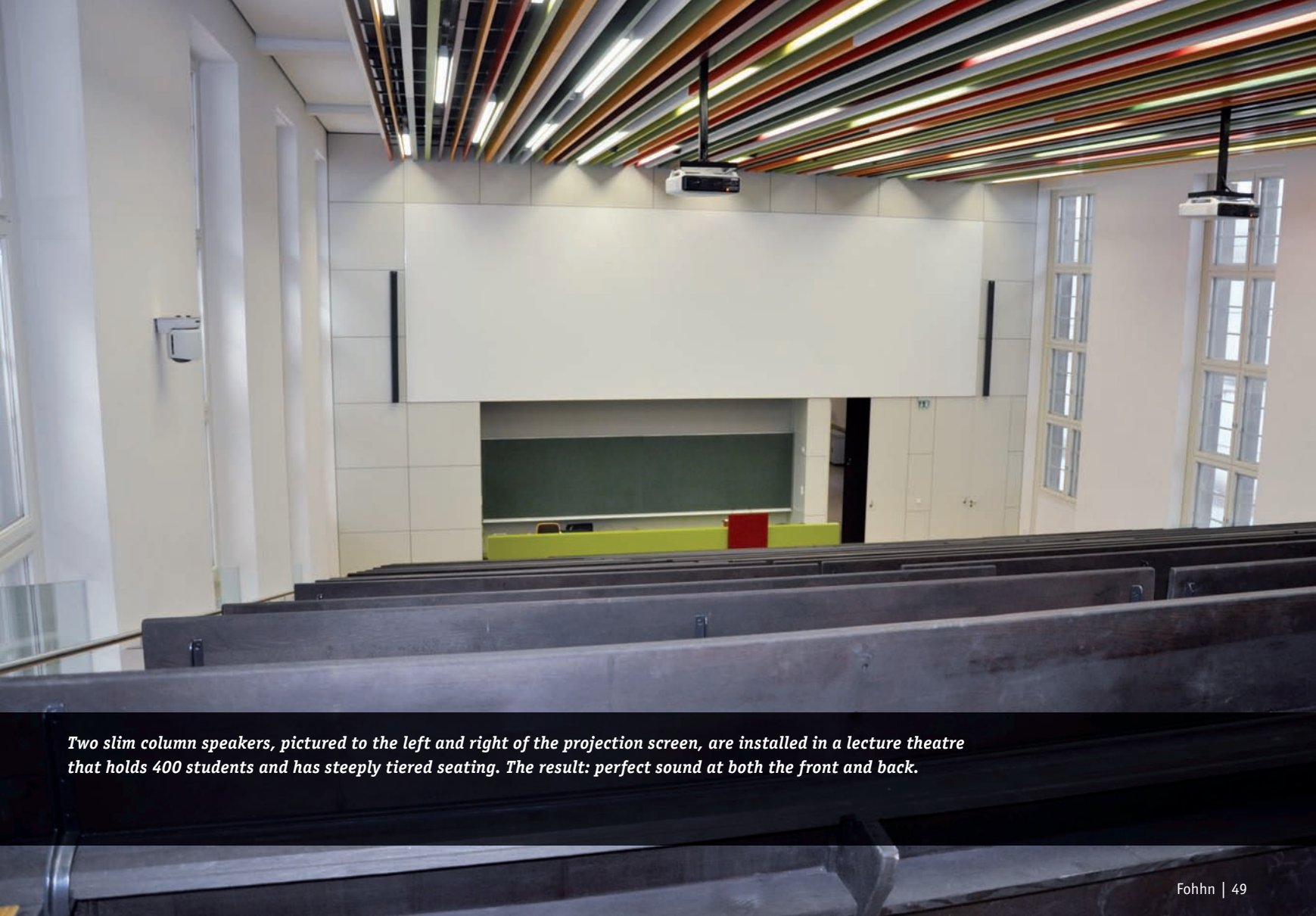
- * Linea Focus: 2 x LFI-220
- * Subwoofer: 1 x XS-20 active

Installation by

Sentio, Ettlingen



Sentio is a certified "Fohhn Partner" for Linea Focus products.



Two slim column speakers, pictured to the left and right of the projection screen, are installed in a lecture theatre that holds 400 students and has steeply tiered seating. The result: perfect sound at both the front and back.

17. ZHEJIANG PROVINCIAL PARTY SCHOOL, CHINA

THE LAWS OF PHYSICS APPLY EQUALLY IN CHINA AND GERMANY.

During December 2010, the newly-built Zhejiang Provincial Party School in Hangzhou, China was equipped with Fohhn loudspeaker systems. Within its massive complex, systems were installed in the school's 700-seater theatre, sports hall and swimming pool, as well as in the 400-seater conference room and 15 other teaching rooms.

The choice of a loudspeaker system “Made in Germany” was down to the fact that difficult acoustic conditions would require a state-of-the-art solution.

* Even during the initial planning stages, it was clear that long reverberation times **in the swimming pool, sports hall and conference room needed to be addressed using a modern line array system.**

- * As a rule, for anything greater than a 1.5 second reverb time, line array systems are usually recommended in order to target the audience as directly as possible.
- * On both acoustic and visual grounds, the customer opted for Linea Focus LFI-220 and LFI-120 systems with a white finish.

Fohhn Arc Series speakers and D-Series amplifiers were also installed in the theatre and in other rooms where the acoustics were less critical.

System

- * Linea Focus: 4x LFI-220; 12x LFI-120

Installation by

Shoushan System Integration and Chinese partner companies



Shoushan System Integration is a certified “Fohhn Distribution Partner” for all Fohhn products.



Demographic development in China has led to an increase in the construction of large-scale public buildings. Even during the planning phase of this project, considerations were given to the most suitable type of sound system for the building. With its beam steering capabilities and discreet appearance, Linea Focus proved an obvious choice.



18. ST. JODOK CATHOLIC CHURCH, RAVENSBURG, GERMANY

THE TOUCH OF A BUTTON IS ALL IT TAKES FOR THE VERGER TO OPERATE THE SOUND SYSTEM.

St. Jodok's Church in Ravensburg is a showcase in contemporary worship within the Catholic church. All the more reason for ensuring that the sound quality of its services is as good as possible: speech, music playback, contemporary music involving a band – it's important that the congregation can hear and understand everything perfectly.

- * Challenging acoustics – not entirely unusual in the nave of a 14th century church.
- * Because of this, the planners recommended equipping the entire nave with steerable line arrays.
- * Church staff would ideally be able to recall different worship settings at the touch of a button.

Modern sound systems allow adjustments to be made to cater for a wide range of worship scenarios. The Fohhn Audio Partner responsible for this installation devised a number of presets, enabling different settings to be recalled simply by pressing a button on an intuitive control unit. The vergers can therefore select "Standard Service" or "Service with Band" and the settings are instantly implemented. Fohhn technology has significantly reduced the workload for many church staff, while ensuring the best possible reproduction of both speech and music at all times.

And so it was that the sound quality of St. Jodok's Church was enhanced by the installation of just two Linea Focus LFI-220 systems in the main aisle. These have been reinforced by two Linea AL passive systems, for optimum

clarity of speech and music, plus two Fohhn sub-woofers, adding more low end to the music to create a warm, pleasant sound.

System

- * Linea Focus: 2x LFI-220 (main aisle)
- * Linea AL: 2x AL-150 (choir area)
2x AL-50 (lectern, font)
- * Subwoofer: 2x XSP-2
- * Amplifier: 1x D-4.750
- * 1x FR-10 for recalling different worship set-ups.

Installation by

Doc Music, Tett nang



Doc Music is a certified "Fohhn Partner" for Linea Focus products.



Today, many churches have a versatile role, from delivering spoken services to hosting concerts involving both backing tracks and live bands, all of which must sound perfect to the listener. Fohhn technology enables presets for different scenarios to be recalled at the touch of a button.

19. PHARMACEUTICAL COMPANY MEETING, MAJORCA

A FIRST-CLASS COMPANY PRESENTATION DOESN'T NEED A SECOND-CLASS SOUND SYSTEM.

When one of Europe's leading pharmaceutical companies invited 500 guests to an event in one of Majorca's most elegant hotels, the highest standards of presentation were expected. A variety of audio including speech, music and other soundtracks had to sound absolutely perfect.

- * The room in which the event took place was 45 metres long and included a number of large, reflective glass surfaces.
- * Conventional loudspeaker systems were not wanted on grounds of both space limitation and appearance. Although the system should sound perfect, it should be visually unobtrusive.
- * The presenters needed freedom to move around the room, or to stand in front of the stage area without the risk of feedback occurring.

Thomas Petri, Managing Director of Petri Konferenztechnik told us: "Using the electronically steerable systems meant that we were able to completely fulfil all the required criteria. Fohhn's intuitive software enabled us to adjust the speaker beam characteristics and make the necessary frequency adaptations and time corrections quickly and easily. The level of speech intelligibility was excellent throughout the entire room – and our customer was delighted."

System

- * Linea Focus: 2 x LF-220; 2 x LF-120
- * Subwoofer: 2 x XS-30 active

Installation by

Petri Konferenztechnik, Roßtal-Buchschwabach



Petri Konferenztechnik is a certified "Fohhn Sound Expert" for Linea Focus and Arc Series products.



Presenters need freedom to move around the room, as shown here at a leading pharmaceutical company event. A 45 metre long room presents a challenge for any sound designer, unless of course you have Linea Focus!



20. CATHOLIC CHURCH OF ST. EHRARD, OHU-AHREIN, GERMANY

ONE CAN SOMETIMES BE BETTER THAN SIX – BUT ONLY IF IT'S THE RIGHT ONE.

This church's existing sound facilities, comprising a standard 100V system with 6 small speakers, had seen better days. During a site visit, our Fohhn Partner took some frequency-related measurements of the reverberation times, in order to gain an overall impression of the acoustic conditions.

- * The results were typical for this kind of church: a long reverberation time that would adversely affect levels of speech intelligibility.

Three different systems were compared during a series of tests in the church's main aisle: the existing set-up using 6 speakers, a solution

involving 4 modern line array systems and, last but definitely not least, a single Linea Focus LFI-220. The importance of directly targeting the congregation soon became apparent. The simplest solution, involving the single electronically steerable LFI-220 line array, produced the best results in terms of speech intelligibility, location and even coverage.

Church representatives decided to go with the acoustic concept of a single line array and have since been delighted with the results. Even with less experienced orators, every word can be clearly heard and understood, right at the very back of the church.

System

- * Linea Focus: 1x LFI-220 (main aisle)
- * Linea AL-Series: 2x AL-50 (gallery)
- * Amplifier: 1x D-2.750

Installation by

Jaggo Media, Sinzing



Jaggo Media is a certified "Fohhn Sound Expert" for Linea Focus and Arc Series products.



It's hard to believe that just a single loudspeaker can cover the whole of this long, wide and high church. However, the electronically steerable Linea Focus LFI-220 has proved perfect for the job.

MORE SUCCESSFUL PROJECTS USING LINEA FOCUS.

MOBILE APPLICATION



ASAM CHURCH, INGOLSTADT

Clearly defined speech reproduction stands out amid the more elaborate Baroque setting of Ingolstadt's famous church.

System

- * Linea Focus: 2x LF-220 white finish
- * Designer stands

Supplied by: Show EM Veranstaltungstechnik

MOBILE APPLICATION



MOBILE SOUND FOR INDUSTRY CONFERENCE

The position of the projection screen gives an idea of the length of this room in which a presentation was held. Two line array systems were placed at the front, producing outstanding speech intelligibility.

System

- * Linea Focus: 2x LF-220

Supplied by: Petri Konferenztechnik

MOBILE APPLICATION



RADIO BERG OUTSIDE BROADCAST

When Radio Berg is out and about, live sound is provided by two mobile Linea Focus systems. The speakers themselves are visually unobtrusive and, most importantly, don't interfere with the actual broadcast.

System

* Linea Focus: 2x LF-220

Supplied by: B&R Medientechnik

MOBILE APPLICATION



BAYERISCHER RUNDFUNK

Bayerischer Rundfunk does a number of live broadcasts from various towns and cities. As always, the broadcast sound must not be affected by any other sound systems. This means that the loudspeakers used for audience coverage need to be targeted very directly.

System

* Linea Focus: 2x LF-220

* Subwoofer: 2x XS-30 active

Supplied by: Petri Konferenztechnik

GREAT SOUND AT OTHER EVENTS.

SYSTEM INTEGRATION



MAX PLANCK INSTITUTE DRESDEN

The inner reception area of the institute is regularly used for presentations and lectures. Two line array systems have been installed near the main projection screen, enabling sound to be directly steered onto the audience. Perfect results, in spite of the difficult acoustics.

System

* Linea Focus: 2x LFI-120

Installation by: Mediatronic, Dresden

MOBILE APPLICATION



A KICK INTO THE FUTURE

For this up-and-coming show, Linea Focus systems have been teamed with XS-30 subwoofers to prove their powerful sound capabilities.

System

* Linea Focus: 2x LF-220

* Subwoofer: 2x XS-30 active

Supplied by: B&R Medientechnik

MOBILE APPLICATION



BAYER MEETING

When Bayer AG hosts its general meeting of shareholders, it's expected that everyone will be able to hear the main speakers perfectly.

System

* Linea Focus: 2x LF-220

Supplied by: B&R Medientechnik

MOBILE APPLICATION



PUMA PRESS CONFERENCE

At a company press conference, the famous brand featuring its familiar big cat is represented using sleek visuals and powerful sound.

System

* Linea Focus: 2x LF-220

Supplied by: Petri Konferenztechnik

AT A GLANCE: JUST SOME OF THE PROJECTS DONE DURING THE LAST 365 DAYS.

System installations

Albertinum, Dresden, Germany
BGG / Gospelforum, Stuttgart, Germany
City Hall, Copenhagen, Denmark
Danish Parliament, Copenhagen, Denmark
German Hygiene Museum, Dresden
Mainz Cathedral, Germany
Ev. Church Neuenstein, Germany
Ev. Lutheran Church of St. Simeon, Hamburg-Osdorf, Germany
Ev. Christen Gemeinde e.V., Andernach, Germany
VU University, Amsterdam, The Netherlands
Humboldt University, Berlin, Germany
St. Ehrhard Catholic Church, Ohu-Ahrein, Germany
St. Jodok Catholic Church, Ravensburg, Germany
St. Johannes Catholic Church, Neckarsulm, Germany
Neukenroth Catholic Church, Germany
Church of the Mosteiro de Montariol Monastery, Braga, Portugal
Kurländer Palace, Dresden, Germany
Lang AG, Lang Akademie, Lindlar, Germany
Marienborg, Denmark – Summer Residence of the Danish Prime Minister
Max Planck Institute, Dresden, Germany
Richard Wagner Museum, Graupa, Germany
State Grid Pavilion, EXPO 2010 Shanghai, China

University of Heidelberg, Germany
University of Siegen, Germany
University of Tübingen, Germany
University of Wuppertal, Germany
VCC Vogel Convention Centre, Würzburg, Germany
Visitor Centre Volkswagen AG, Wolfsburg, Germany
Zhejiang Provincial Party School, Hangzhou, China

Mobile sound projects

Former Parliament Building, Bonn, Germany
Assam Church, Ingolstadt, Germany
Audio Urban Future Award, Venice, Italy
Bayer AG, Company Meeting, Exhibition Halls, Cologne, Germany
Bayerischer Rundfunk BR3, TV Show, Munich, Germany
Copper 2010 Conference, Handelskammer, Hamburg, Germany
Heino & Franz Lambert Church Concert Tour 2009 / 2010 / 2011
Papal Mass, Porto, Portugal
Pharmaceutical Company Event, Palma, Majorca
Porsche Panamera Presentation, Porsche Headquarters, Stuttgart, Germany
PUMA Press Conference, Herzogenaurach, Germany
Radio Berg Outside Broadcast, Kürten, Germany
SAT 1 "The Duel", Germany v. Holland, Hangar 2, Berlin Tempelhof, Germany
SAT 1 "The Duel" Germany v. Turkey, Düsseldorf, Germany

IT'S GREAT TO BE A WINNER

TOP MARKS FOR LINEA FOCUS

Excerpt from a review of professional systems
by Prof. Dr.-Ing. Anselm Goertz (05/2010)

"As expected, rather than simply being a "me too" product, the Linea Focus series is equipped to the highest standards with a range of state-of-the-art, DSP-based functions. From high quality drivers to excellent processing capabilities, great software and accurate beam forming, every detail is taken care of. The product's south German roots can be viewed here in a very positive light, together with the fact that almost every aspect has been developed in house at Fohhn. This clearly shows the advantages of keeping every development and manufacturing stage of such a high-end product very firmly under one roof, also enabling it to be constantly perfected."



Audio industry "Grammy" for Linea Focus.

Fohhn's Linea Focus systems are rewarded for their innovative technology. We are immensely proud to have won a coveted Musikmesse International Press Award (MIPA). 111 international audio publications can't all be wrong as they vote Fohhn Linea Focus winner of the "Portable Sound" category.

Perfection to Detail. Visit us at: www.fohnn.com to see even more!

Our website contains detailed product information, technical data, accessories, comprehensive datasheets for download, 360° product views, user manuals, PDF brochures, CAD designs, 2D and 3D DWG files, Fohhn software, firmware updates, EASE and Ulysses simulation data, projects and much more.

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