100% SOUND.
100% FLEXIBILITY.
100% INTELLIGENCE.

FOHNN AIREA-SERIES.
Today’s sound systems are not only expected to deliver perfect audio results. They also need to be simple and flexible to install, compact and elegant in appearance, with high levels of performance capability. Most importantly, they also need to accommodate a digital signal input and to be networked and remotely controlled. These demands have inspired Fohhn engineers to re-evaluate the current state of audio technology and to follow new and innovative paths of development.
THE HIGHLY INTELLIGENT CONCEPT.

Active Loudspeaker Concept with Digital Audio Networking Capability.

Airea is an intelligent, networkable, active loudspeaker concept specially developed for high quality, flexible, forward-looking sound reinforcement applications.

The innovative Airea-System is based on state-of-the-art loudspeakers with integrated digital amplifiers and DSP technology, and a master module with digital input and output, all linked together via a conventional network cable.

Airea active loudspeakers
Equipped with digital amplifiers and digital signal processing (DSP). Individual IDs enable each loudspeaker to be separately controlled and optimised to suit the particular room acoustic or application.

Network cable (e.g. CAT-5 / CAT-7)
The digital audio signal, power and remote control information is transmitted via a standard network cable (at least CAT-5 / AWG 24).

Airea subwoofer
Equipped with digital amplifiers and Fohhn Audio DSPs, like all other Airea loudspeakers.

Airea Master Module
Central connection hub with AES/EBU inputs, providing digital signal output as well as power supply for up to 32 active Airea loudspeakers.

Maximum 8 Airea Outputs
For connecting additional loudspeakers and external Airea Amplifier Modules.

PC with Fohhn Audio Soft
Convenient and intuitive control of all loudspeaker system components.

Digital audio source
Including the Fohhn A2-live interface used with PC or Mac for replaying audio files etc.

ID: 1
ID: 2
ID: 3
ID: 4
ID: 5
THE AIREA SYSTEM.
System components

THE AIREA LOUDSPEAKERS.
Powerful performance and perfect sound.

- Available in all RAL colors

LX-20 ASX
Ultra compact 2-way-speaker, 2 x 4\" / 0,75\" Tweeter, 100 W.

LX-10 ASX
Ultra compact 2-way-speaker, coax-design, 4\" / 0,75\" Tweeter, 50 W.

All Airea loudspeakers are equipped with an integrated 2-channel Class D amplifier plus state-of-the-art Digital Signal Processors (DSP). The two separate amplifier channels enable the speakers to run in bi-amping mode, with separate amplification of the high-frequency and low-mid drivers. Together with the integral dual-channel DSPs, this guarantees excellent audio performance, a wide dynamic range, linear frequency response and optimized protection.

The DSPs also offer high-quality audio tools such as parametric EQ, delay, dynamics, X-over etc. All Airea loudspeakers are equipped with RJ-45 input / output connectors.

THE AIREA MASTER MODULES.
Equipped with digital AES/EBU inputs, the Airea Master Modules form the main link to any digital mixing console, matrix, external sound source or digital audio network.

The signal path remains fully digital throughout the entire Airea System, so there is no loss in sound quality due to AD/DA conversion. The Airea Master Module also functions as the central power supply for up to 32 connected active loudspeakers. Because the loudspeakers do not require their own individual power supplies, the size of smaller Airea loudspeaker models could be reduced to the smallest possible dimensions. The power of each Airea Master output channel is limited to 200 W.

Network Cable (at least CAT-5 / AWG 24)
THE AIREA SYSTEM.
System components

JUST ONE CABLE!
All Airea-System components can be connected via a standard twisted pair network cable.

The network cable delivers the power, digital audio signal and remote control information, resulting in a simple, cost-effective and unobtrusive system connection – tread resistant cabling is also available for specific applications. The network cable has to be at least CAT-5 / AWG 24.

The Airea system functions as a dedicated network. This means that standard computer networks with switches cannot be used. The Airea network enables cable lengths of up to 100 m to be used. When Airea speakers or external Airea amplifiers are daisy-chained within a network the digital signal will be reinforced and even higher distances can be implemented.

SOFTWARE CONTROL.
Each Airea loudspeaker has its own ID within the network. Each individual speaker can be separately controlled by Fohhn Audio Soft.

Each loudspeaker in the system can be remotely controlled and monitored using Fohhn Audio Soft control software. The software’s intuitive, transparent interface enables each of the loudspeakers’ numerous functions to be controlled in real time. The operating status of each loudspeaker can always be seen and its condition constantly monitored, resulting in excellent ergonomics and total security.
To convert an existing installation into an active, digital Airea system, or to create an Airea system using passive loudspeakers, one or more external amplifier modules can be connected to the Airea Master module. The external amplifier modules are equipped with speakon connectors. This way, excellent sound quality, reliability and remote control can be achieved using passive systems. As with all Airea loudspeakers, the Airea amplifier module also enables any connected loudspeakers to benefit from the two-stage DSP structure of the Fohhn system.

Audio signals from a computer can be directly transmitted to Airea without any loss in sound quality or level. Designed to meet a range of professional audio requirements, the USB audio interface is equipped with an AES/EBU output. No additional driver installation is necessary.

In comparison with conventional installation solutions, Airea offers many advantages. With its remote control, signal processing and monitoring capabilities, Airea simply doesn’t compromise when it comes to sound quality, ergonomics or flexibility.

To control individual loudspeakers, it is normally necessary to use either a number of separate amplifiers, with point-to-point cabling, or an appropriate number of active systems. Both solutions can prove expensive, complex and inflexible.

By using just one cable, Airea is vastly superior to conventional active systems. As well as the possibility to daisy-chain a number of loudspeakers, it is also possible to cover distances of up to 100 metres without any problems, with individual sound, delay and dynamic settings for each speaker.

Using standard AES/EBU signal input, Airea is both versatile and open for the future: Third-party converters not only enable the simple connection of analogue audio sources, but also provide a solution for connecting to digital audio protocols including MADI, CobraNet, Dante or Ethersound, as well as those of the future.

The system’s fully digital signal path means no loss in quality, while at the same time ensuring that it is well prepared for the future.
AIREA IN 3D.
Three-dimensional images deserve three-dimensional sound.

This circular listening space offers 360° projection, with an equally impressive 3D sound system. The relatively small room has been equipped with Airea loudspeakers at both listening height and on the ceiling. In this particular situation, the advantages of Airea lie in the simple, clear structure of the system as well as the excellent sound quality due to the digital signal transfer. Airea technology also enables the function of all the system components and the quality of the sound reproduction to be constantly monitored.

Loudspeaker LX-20 ASX
These loudspeakers are installed behind the acoustically transparent projection screen and have their own specially calculated signal within the Airea network. The loudspeakers are mounted in a circle, ensuring that virtual sound sources on the listening plane can be localised.

Four passive AS-10 subwoofers with external AAX-2.300 amplifier modules
 Positioned in the “four corners” of the circular listening space are four AS-10 subwoofers with Airea AAX-2.300 external amplifier modules.

Technical room
An IOSONO 3D sound processor and three Airea Master modules form the heart of this system. The sound processor calculates an individual signal for each loudspeaker. The Airea Master modules transmit the signals to the loudspeakers, along with the necessary power. Using a laptop and Fohhn Audio Soft, the system can be set up and permanently monitored.

Low reverberation time
Absorbers are used behind the projection screen to soak up reflections from the wall and ensure that the room sounds acoustically “dry”.

19 active loudspeakers are mounted on the ceiling, enabling the localisation of sound sources beyond the listening plane.

Loudspeaker LX-10 ASX
These loudspeakers are mounted behind the acoustically transparent projection screen and have their own specially calculated signal within the Airea network. The loudspeakers are mounted in a circle, ensuring that virtual sound sources on the listening plane can be localised.

Four passive AS-10 subwoofers with external AAX-2.300 amplifier modules
 Positioned in the “four corners” of the circular listening space are four AS-10 subwoofers with Airea AAX-2.300 external amplifier modules.

Technical room
An IOSONO 3D sound processor and three Airea Master modules form the heart of this system. The sound processor calculates an individual signal for each loudspeaker. The Airea Master modules transmit the signals to the loudspeakers, along with the necessary power. Using a laptop and Fohhn Audio Soft, the system can be set up and permanently monitored.

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AIREA MAKES THE CONNECTION.
When two rooms are made into one.

Conference room project example
For this project, the planners and architects wanted an unobtrusive, de-centralized sound reinforcement solution. The system needed to be able to reproduce sound from media equipment, as well as forming part of a surround set-up and producing high levels of speech intelligibility for presentations. A dividing wall enables the room to be used as either one large or two smaller conference rooms.

A5-10 subwoofer with external AAX-2.300 amplifier module
The DSP in the amplifier module ensures that the subwoofer actively functions from 40 Hz up to 130 Hz and can be effectively aligned with the other loudspeakers.

LX-20 ASX
The loudspeaker DSP includes a high pass filter. In this case it is set to 130 Hz. This means that the loudspeaker and subwoofer together form an ideal fullrange system.

LX-10 ASX
The duration of this loudspeaker signal is optimised in such a way that the listener always hears the sound source from a front facing central position. For this particular speaker, this means a delay time of around 8ms.

LX-20 ASX
This back facing loudspeaker is used for surround sound.

LX-20 ASX
This small sound system has been set up for playback from media devices. As soon as the dividing wall is opened, the speakers function as delay lines to ensure excellent levels of speech intelligibility in this area.

FR-10 wall panel
This panel offers the possibility of switching between audio presets for controlling the system settings depending whether the dividing wall is open or closed. It also enables volume control of the loudspeakers as well as activating surround sound playback.

19” rack in technical room
The rack contains an Area Master Module with eight output lines, enabling up to four loudspeakers to be connected to each. A small installation matrix provides the necessary AES/EBU signals.

AS-10 subwoofer with external AAX-2.300 amplifier module
The DSP in the amplifier module ensures that the subwoofer actively functions from 40 Hz up to 130 Hz and can be effectively aligned with the other loudspeakers.

Laptop with A2-live
For presentations, the A2-live plug-and-play audio interface can be connected to the speaker’s computer for professional quality, fully digital audio transfer with no loss in quality.
AIREA. PERFECT SOUND RESULTS FROM A HIGHLY INTELLIGENT CONCEPT.

fohhn.com

OUR LOVE OF DETAIL GOES FAR BEYOND THIS BROCHURE:
On our website you can find detailed product descriptions, technical data, accessories and full data sheets for download, along with 360° product views, user guides, PDF brochures, CAD drawings, 2D and 3D DWG files, Fohhn software, firmware updates, EASE and ULYSSES simulation data, references and much more.

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