Fohhn®
WWW.FOHHN.COM

Amp Contoller-Series
DSP-Amplifiers + DSP-Controller.

D-2.750 DSP amplifier

Digital 2-channel DSP amplifier, class D, extremely lightweight (only 9.8 kg), in a 2HE designer housing, blue 4-line front display, operation or remote control via a laptop.

Description
Perfectly adapted amplifiers and DSP technology.

Fohhn® D-2.750 DSP-controlled CLASS D amplifier was developed, to fulfil the most demanding requirements concerning sound quality and reliability. Fohhn DSP amplifiers guarantee an excellent sound quality, maximum reliability and offer a host of possibilities for adapt your sound system to various room acoustics. The D-2.750 is extremely lightweight (only 9,8 kg), 2 channel digital amp, 2x 750 W / 4 ohms, 2x 390 W / 8 ohms, integral Fohhn Audio DSP, with blue 4-line front display, operation or remote control via a laptop.

Sound quality. Reliability. Intelligent control.
* **State-of-the-art CLASS D amplifier technology**
* **Integrated Fohhn DSPs guarantee maximum sound performance**
* **5 premium audio tools such as Parametric EQ are integrated**
* **Integral speaker database for maximum operating reliability**
* **Remote monitoring/operation, network-compatible**
* **Minimal heat development, extremely quiet fans**
* **Fohhn® Mains Control - integrated mains supply monitoring**

Plug & Play
With remarkable reductions in generated heat and an incredibly low weight and compact dimensions combined with characteristically high levels of output power, we recommend this new Class D DSP amplifier for an unlimited range of applications, including AV & media, concerts, opera houses, theatres, churches, cinemas, theme parks, television studios, delay lines, stage monitoring and industrial applications. Rapid DSP access via the 4-line display transforms a mobile application into a simple, reliable Plug&Play system. The D-2.750 is extremely quiet thanks to temperature-controlled ventilators and an adjustable noisgate!

The new amplifiers save you having to use/adapt external DSPs, EQs and crossovers as well as using cables, and in smaller installations, you can also realise your projects quickly and reliably with a comparatively simple microphone mixer.

Remote control / Remote monitoring
The system´s network compatibility and remote control options via a laptop provide you with assistance while you work. You also have the option of linking the D-2.750 to a media control system.

The Fohhn Audio DSP.
Dual DSP power for excellent sound quality and optimal reliability.

Integrated Fohhn DSP technology offers a host of possibilities for implementing your sound concepts. The equipment includes two separate stereo DSP engines and integrated speaker database for all Fohhn speaker types, which is what makes our amplifiers so unique.

The speaker database is based on an algorithm specially developed for each speaker, which protects bass, mid and high frequency drivers in all performance classes and guarantees outstanding sound and maximum operational reliability.

5 professional audio devices offer valuable benefits on an every day working level: 10-band parametric EQ, delay, compressor/limiter, noise gate and crossover allow the user to adapt the audio system perfectly to sound requirements, room acoustics or personal preferences. Cable faults, cumber some rack cabinets and tangled cablesare a thing of the past. The integrated technology reduces the weight and dimensions of the unit and guarantees stress-free operation. In addition, the operating status display gives you complete control in monitoring the temperature and operating time.

Accessories
User software, USB adapter, Ethernet adapter

Applications
Perfectly adapted amplifiers and DSP power for all your mobile and fixed installation projects with Fohhn speaker systems.

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Technical specifications

Type	D-2.750
amplifier technology	Class D
EIA amplifier power	2x 750 W / 4 ohms
	2x 390 W / 8 ohms
	(1 kHz, THD+N < 1%, 230 V mains)
minimum impedance	4 ohms
outputs	2
inputs	2
DSP channels, Fohhn Audio DSP	2
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
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	termperature-controlled fan
weight	9,8 kg
dimensions (W x H x D)	2HE, 88,9 x 483 x 380 mm
controller	2 digital signal prozessors
	8 independent limiters
	selektive 3-band limiting (bass/mid/high)
	band specific time constants
	56-bit double precision filter technology
	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-termperature indicator LED
	receive/send remote control LED

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

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 VAC), the supply will be interrupted. During power up it also minimizes the input surge current by switching on at the mains Vage zero crossing.
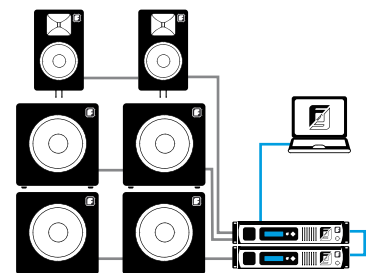
4x Sub *passive* **/ 2x Top** *passive*
2x DSP amplifier (D-Series)

Fohhn system DSP amplifiers

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

Fohhn System DSP amplifier are offering following advantages:

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

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

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

Fohhn® dual DSP technology

DSP-1: Integrated digital audio devices
Each amplifier channel has a:
- programmable 10 band parametric EQ,
- compressor/limiter/noise gate,
- delay,
- X-over function,
- top-quality pink noise and sweeptone generator

DSP-2: Speaker management
An integrated speaker database guarantees excellent sound quality and protection for all Fohhn speaker types. A sophisticated algorithm developed by Fohhn engineers and adapted to each speaker allows the individual monitoring and adjustment of bass, mid and high ranges.

The unique Fohhn 2-stage DSP concept:

DSP-1: Integrated digital audio devices

High-quality audio devices. Settings can be modified and saved as presets. Auxiliary status display and sound generator.
- 10-band parametric EQ
- Compressor / limiter / noise gate
- Delay
- Crossover
- Status display: operating time

DSP-2: Speaker Management System

Fixed default programs. Updatable.
Select at the touch of a button.

- Speaker database for all Fohhn speakers. Specially developed algorithm for maximum protection and sound quality.

Fohhn Audio DSP

D-2.750 DSP amplifier
CLASS D, 2 channel operation, 2x 750 W /
4 ohms, 2x 390 W / 8 ohms
Fohhn Audio DSP, display, remote control

Front view D-2.750

Rear view D-2.750

FR-10

remote control wall panel designed for the remote operation of Fohhn devices with integrated DSP.

Description

The FR-10 is a wall mount remote control module designed for the remote operation of Fohhn DSP amplifiers, DSP controllers and active Fohhn speakers systems. The FR-10 is extremely easy to operate because the controls are so well arranged. It is virtually impossible for the end customer to make operating errors because the only operating elements are the 8 labelled buttons.

Easy handling

Control up to 32 Fohhn devices individually with this stylish FR-10 wall panel. 8 programmable buttons can be configured to control the overall volume of a system, the volume in different zones or presets for different room effects, for example. The system also has a special function that confirms whether all commands have been executed successfully. The buttons indicate this by changing red or green shortly after they are pressed. For example, if a device is not switched on, the button changes red to indicate that a command could not be executed. This additional monitoring function ultimately contributes to the overall operating reliability of your system. The wall panel is easy to configure using a standard computer with intuitive Fohhn-Net Remote software installed.

Connections

Two terminal strips (paralelled). Alternative connection via standard 4-wire telephone cable.

Applications

The FR-10 is ideal for training rooms, hotels, churches, halls, restaurants or any venue where a simple, efficient system is required to control your audio equipment from a central location.
The FR-10 is also ideal for projects where complex media control systems are not viable or inappropriate, but the user wishes to control the speaker system centrally.

FR-20

19" remote control unit can be controlled via conventional external buttons or switches.

customer-specific switches

GND — 1 2

Compatible with media control systems.

Description

The FR-20 can be controlled via conventional external buttons or switches (e.g. Jung, Vitra, etc.) or switching contacts (e.g. media control system). Buttons and switches may come in the form of a wall installation module or an individually manufactured control panel, for example.
Presets stored in the connected Fohhn DSP devices are activated simultaneously and settings for different scenarios such as speech, music, empty room, full room, etc are loaded when the buttons/switches are pressed. You can also adjust the volume quickly and easily in 1 dB increments using the FR-20. A maximum of 31 Fohhn devices connected to the network can be activated simultaneously at the press of a single button.

Integration in a media control system

The FR-20 allows the convenient integration of all DSP-controlled Fohhn devices into media control systems (e.g. AMX, Crestron) by means of 8 switching contacts or RS-485 interface.

Integration in a EIB bus technology

One building, one concept, one system.
Fohhn systems equipped with a FR-20 distribution switch comply with the „European installation bus technology" standard, including all operating comforts.

Applications

The FR-20 is ideal for training rooms, hotels, churches, halls, restaurants, clubs, bars and many other venues.
For simple, reliable remote operation of your audio system without having to install complex, expensive media control systems.

Fohhn Audio Soft - the intuitive user software

Maximum control

Easy, convenient handling. Laptop and Fohhn Audio Software for intuitive control and monitoring of all connected Fohhn audio devices with integrated DSP. Clear graphical user interface for rapid access to the speaker database, status display and all audio devices integrated in the Fohhn DSP. A sound generator with pink noise and sweeptone function is also integrated. Connection via WLAN adapter, Fohhn USB adapter or Ethernet adapter.

Software updates for free at:
www.fohhn.com / Downloads

Fohhn Audio Soft

Easy, convenient handling Laptop and Fohhn Audio Software for intuitive control and monitoring of all connected Fohhn audio devices with integrated DSP. Clear graphical user interface for rapid access to the speaker database, status display and all audio devices integrated in the Fohhn DSP.

NA-1

USB adapter and Fohhn Audio Soft on CD Rom. Extensionable with XLR microphone cable. Aluminium housing and adapter cable.

NA-3

NA-3 Fohhn-Net Ethernet Adapter for local Ethernet network, Fohhn Audio Soft on CD Rom. Extensionable with XLR microphone cable. Aluminium housing, adapter cable and power adapter.

Amplifier Recommendations

| | Linea – Arc-Tops | | | | | | | | | | | | Linea – X-Tops | | | | | | | | | | Road Perform Tops | | | | Arc-Subs | | | | X-Subs | | Road Perform Subs | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AT-05, CS-04 | AT-061 | AT-07 | AT-08, CS-08 | AT-09 | AT-10 | AT-201 | AT-30 | AT-35 | AT-40 | AT-50 | AT-66 | AL-10-150 | LX-100, 150 | LX-10/11 | LX-500/501 | LX-600/601 | XT-1 | XT-10 | XT-22 | XT-33 | XT-4/XM-4 | XT-5 | RT-4 | AS-10, ASP-10 | AS-20, ASP-20 | AS-30, ASP-30 | AS-40, ASP-40 | XSP-10 | XSP-2 | XSP-3 | XS-30 passive | XS-4 passive | RS-4 | PS-7 |
| **D-2.750** | x | x | x | x | x | x | x | x | | | | | x | x | x | | | x | x | x | | | | | x | x | | | x | x | | | | | |
| **D-4.750** | x | x | x | x | x | x | x | x | | | | | x | x | x | | | x | x | x | | | | | x | x | | | x | x | | | | | |
| **D-2.1500** | | | | | | | | x | x | x | x | x | | | | x | x | x | x | x | x | | | | | | x | x | x | x | x | x | x | x | x |
| **D-4.1200** | | | | | | | | x | x | x | x | x | | | | x | x | x | | x | | | x | | | | x | | x | x | x | x | x | x | x |

Front view
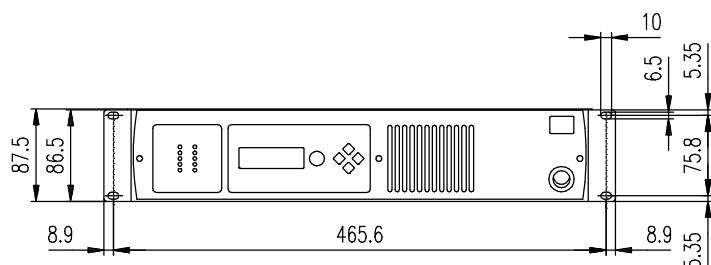
Rear view
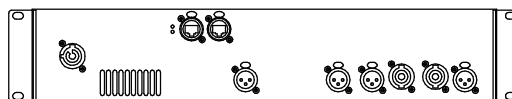
Top view
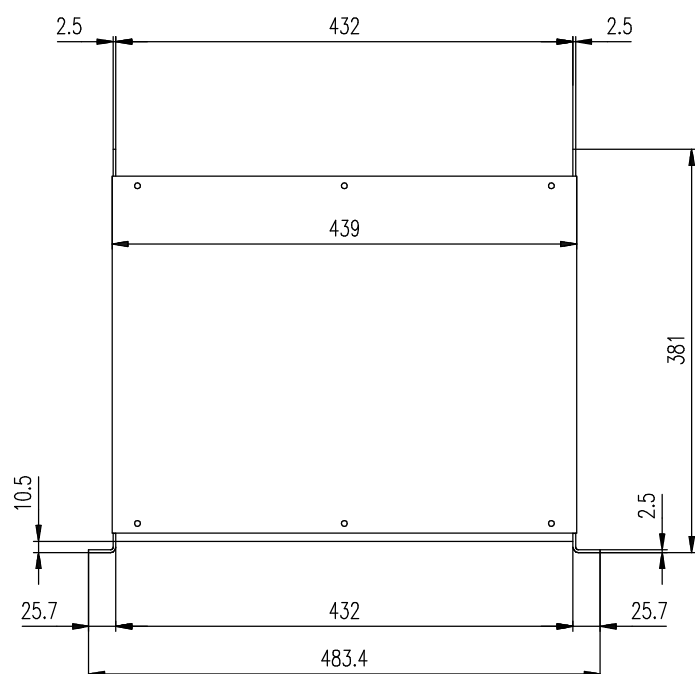
Side view
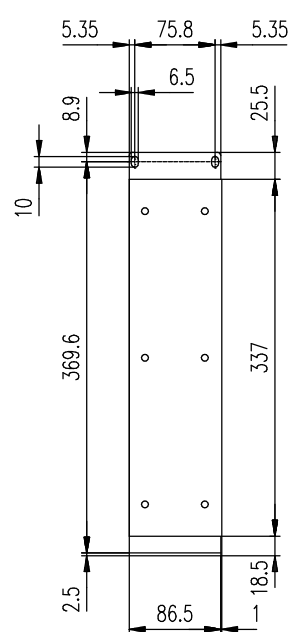
## Digital 2 channel DSP amplifier with network connection

High efficient digital DSP amplifier with 2 channels. Class D construction with 750 W at 4 ohms per channel. 19"/2 HE design enclosure with blue backlit display and control elements to adjust all audio parameters. Remote controlling and monitoring via external controller possible. Network compatible in connection with all active Fohhn devices. Integrated two-stage Fohhn Audio DSPs per output channel with all necessary tools for a perfect adjustment of the speaker system: full-parametric 10-band EQ, delay, variable high-/lowpass-filter, dynamic processor with compressor and noisegate, 180° phase inversion, sinus and noise generator. In addition, the operating status display gives complete control in monitoring the temperature and operating time. Integrated management system with factory presets for all Fohhn speakers to protect the connected speakers via multiband-limiting separately for the high-, mid- and low frequency band. Perfect for mobile applications because of an incredibly low weight and maximum power efficiency for fixed installations.

|	
amplifier technology	Class D
EIA amplifier technology	2x 750 W / 4 ohms,
	2x 390 W / 8 ohms,
	(1 kHz, THD+N < 1%, 230 V mains)
minimum impedance	4 ohms
outputs	2 speakon connectors
inputs	2 XLR
DSP channels, Fohhn Audio DSP	2
amplification	32 dB
input sensitivity	1,4 V
frequency response	20 Hz - 20 kHz
signal / noise 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	9,8 kg
dimensions (W x H x D)	2 HE, 88,9 x 483 x 380 mm
controller	2 digital signal processors, 8 independent limiters,
	selective 3-band limiting (bass/mid/high)
	band specific time constants
	56-bit double precision filter technology
	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-termperature indicator LED,
	receive/send remote control LED
make	**Fohhn Audio AG**
type	**D-2.750**

TECHNOLOGY BY FOHHN®

D-SERIES

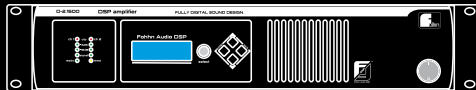**SOUND QUALITY. RELIABILITY. INTELLIGENT CONTROL.**
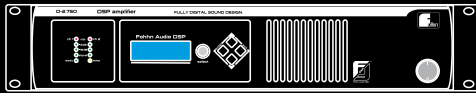
D-2.750 DSP amplifier
CLASS D, 2 channel operation, 2x 750 W /
4 ohms, 2x 390 W / 8 ohms
Fohhn Audio DSP, display, remote control
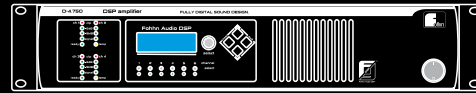
D-4.750 DSP amplifier
CLASS D, 4+2 channel operation, 4x 750 W /
4 ohms, 4x 390 W / 8 ohms
2x DSP line out channels for controlling a
conventional amplifier
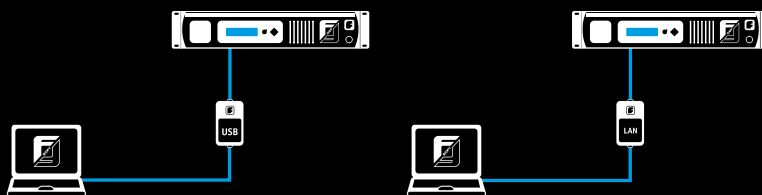Fohhn Audio DSP, display, remote control

D-2.1500 DSP amplifier
CLASS D, 2 channel operation, 2x 1500 W /
4 ohms, 2x 900 W / 8 ohms
Fohhn Audio DSP, display, remote control

D-4.1200 DSP amplifier
CLASS D, 4+2 channel operation, 4x 1200 W /
4 ohms, 4x 750 W / 8 ohms
2x DSP line out channels for controlling a
conventional amplifier
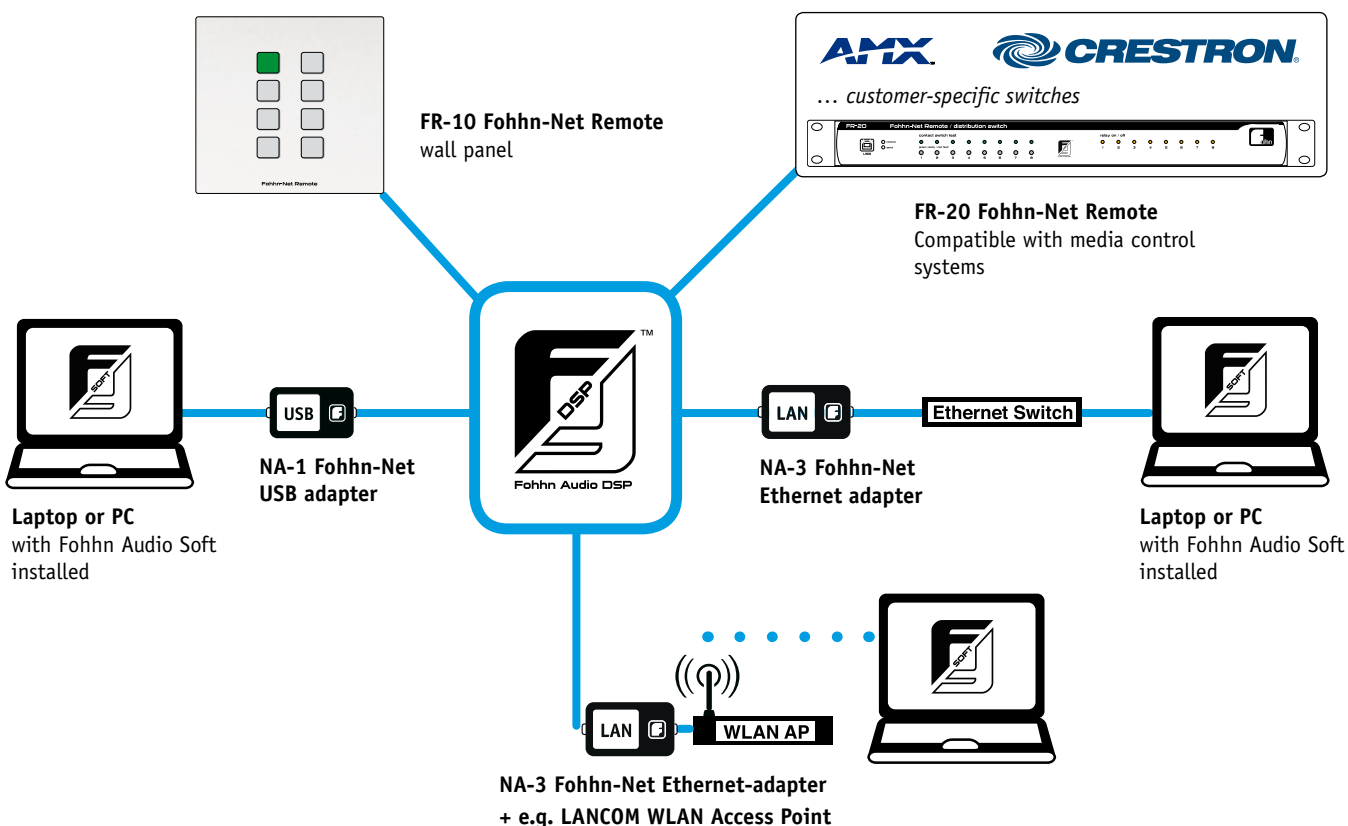Fohhn Audio DSP, display, remote control

USB

LAN

Net Remote-Series

The intuitive Fohhn operating concept incorporates cable connected and wireless remote control options for fixed and mobile Fohhn sound systems. The remote control devices are extremely user-friendly and give the user complete control over the audio system from a central location. Individual devices and entire systems can be operated synchronously from one of several devices, opening up a whole range of different application possibilities.

All Fohhn active speaker systems, DSP amplifiers and DSP controllers are equipped with two Fohhn-Net network interfaces as standard, which can be used to monitor and remotely operate each individual device. If you are using several Fohhn devices, you can easily interlink and monitor or remotely operate them from a central location.

The Fohhn-Net system is nothing more than a control network, no audio data is transferred, only control data. Fohhn-Net can operate a maximum of 254 devices simultaneously via cable at distances of up to 1800 m. At live events, you can use any available microphone cable or your multicore and for fixed installations, you can use conventional telephone or network cables.

Bus or star networks are also an option here. A circular cabling arrangement will achieve additional redundancy and ensure that the star network will function correctly if interrupted at any point. The Fohhn-Net was designed in line with established industrial standards and is very reliable due to a stable transfer protocol and permanent monitoring (continuous feedback during data transfer).

FR-10 Fohhn-Net Remote
wall panel

FR-20 Fohhn-Net Remote
Compatible with media control systems

... customer-specific switches

NA-1 Fohhn-Net
USB adapter

Laptop or PC
with Fohhn Audio Soft installed

NA-3 Fohhn-Net
Ethernet adapter

Ethernet Switch

Laptop or PC
with Fohhn Audio Soft installed

NA-3 Fohhn-Net Ethernet-adapter
+ e.g. LANCOM WLAN Access Point

WLAN AP

SOUNDS PERFECT. IS PERFECT.

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