

# DSP Amplifiers

## DI-4.2000

Digital DSP amplifier, 4 × 2000 W, 2 U, 19"



Analog

AES/EBU

 Dante™

# DSP Amplifiers DI-4.2000

The DI-4.2000 is a digital 4-channel amplifier Made in Germany. The DSP amplifiers developed and manufactured by Fohhn offer high power density and excellent sound. The amplifiers are designed for mobile sound systems and fixed installation. They provide all the essential features and almost limitless connectivity in terms of audio inputs. Whether AES/EBU, Dante or Analogue – they offer maximum flexibility thanks to exchangeable connection modules. Corresponding speaker presets ensure optimum performance and reliability.



## Main features

- Output power: 4 × 2000 W / 4 ohms / 100 V / 70 V
- Can be remotely operated and controlled over Fohhn Net
- Extensive DSP, controllable in real time with the Fohhn Audio Soft
- Maintains peak power over several seconds
- Temperature controlled, low noise fan
- Auto Power Save for minimum standby power requirements
- Installation size: 2 U / 19"
- Light weight, only 9.9 kg

Available with the following color options



Black



Equipped with the following Fohhn technologies



Fohhn DSP  
inside



100 V optional

Possible input interfaces for this product

Analog

AES/EBU

 Dante™

# Technical data

## Features

|                        |                              |
|------------------------|------------------------------|
| weight                 | 9.9 kg                       |
| dimensions (W × H × D) | 2 U / 19", 485 × 89 × 425 mm |

## Electronic features

|                      |   |
|----------------------|---|
| amplifier technology | Class D   |
| amplifier outputs    | 4   |
| DSP routing (matrix) | 4 × 4   |
| frequency response   | 20 Hz – 20 kHz  |
| signal/noise ratio   | >100 dB/A   |
| THD+N                | 0.15 % (1 kHz, 8 ohms, 3 dB below clipping)   |
| dynamic range        | >120 dB   |
| password protection  | yes   |
| auto power save      | adjustable from 1 s to 12 h, or never active  |
| protective circuit   | over voltage protection, over current protection, over temperature protection, short-circuit protection, DC protection, power on delay, soft start and inrush current limit |
| power supply         | 100 – 240 V AC 50/60 Hz, universal power supply with Power Factor Correction (PFC)  |
| power consumption    | Maximum (RMS) 1800 W, idle state 90 W, auto power save 10 W, standby 5 W, power on/off switch / remote power off 2 W  |
| heat dissipation     | Maximal 300 W, 1020 BTU/h, 258 kcal/h (Pink Noise, 6 dB crest, 1/4 Pmax)  |
| temperature range    | 0 – 40 °C   |
| cooling              | temperature-controlled fan  |
| output power         | 4 × 2000 W / 4 ohms / 100 V / 70 V, 4 × 1000 W / 8 ohms (1 kHz, THD+N <1 %)   |
| minimum impedance    | 4 ohms  |
| input channels       | 4   |

## Controller

|                              |  |
|------------------------------|--|
| digital signal processors    | 2  |
| independent limiters         | 20   |
| FIR filter                   | yes  |
| input gain                   | -80 dB – +12 dB  |
| routing gain                 | -80 dB – +12 dB  |
| output gain                  | -80 dB – +12 dB  |
| EQ                           | 8 × 10 fully parametric filters, Gain +/-12 dB, Frequency 10 Hz – 20 kHz, Q 0.1 – 100          |
| selective 3-band limiting    | bass / mid / high  |
| limiter / compressor         | 8  |
| noise gate                   | 8  |
| delay                        | 4 × 0 – 350 ms (0 – 120 m) outputs, 4 × 0 – 88 ms (0 – 30 m) inputs                            |
| X-over                       | 8 × Linkwitz-Riley 4th order (24 dB/octave), high pass 10 Hz – 20 kHz, low pass 10 Hz – 20 kHz |
| user presets                 | 100  |
| speaker presets              | 100  |
| system latency               | 1.2 ms   |
| band-specific time constants | yes  |
| filter technology            | 80-bit double precision  |
| input                        | AES/EBU 32 kHz – 96 kHz, 16/24 bit   |
| Input DSP processing         | yes  |

## Remote control and remote monitoring

|                       |  |
|-----------------------|--|
| remote control        | Fohhn-Net over RS-485, Fohhn Audio Soft, USB-C                           |
| remote monitoring     | temperature, protect, signals, power supply, Fohhn Net, Fohhn Audio Soft |
| fault message contact | 1 × Relais, 2 × UM, 3-pin Phoenix  |
| switching contact     | load preset, standby on/off  |

## Display (front)

|                    |   |
|--------------------|---|
| receive / send LED | remote control, Fohhn-Net   |
| ready LED          | blue = Power on, blue flashing = Sign                                     |
| protect LED        | red = Error / Protect / Standby   |
| input LED          | 4 × input signal LED, white = signal (> -50 dBFS), red = clip (> -3 dBFS) |
| output LED         | 4 × output signal LED, white = signal (> -50 dBFS)                        |
| USB Config LED     | configuration via USB   |

## Connections and controls

|  |                     |
|--|---------------------|
| controls   | Power on/off Switch |
| USB Config                                       | 1 × USB-C socket    |
| remote power in / out                            | 2 × Phoenix 2-pin   |
| power supply for extern small devices 24 V / 5 W | 1 × Phoenix 2-pin   |
| 24 V / 5 W power LED                             | green = on          |
| mains connection                                 | 1 × PowerCON        |
| fault contact (open/close)                       | 1 × Phoenix 3-pin   |
| switching contact 1 and 2                        | 1 × Phoenix 3-pin   |

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