# HD

# FFA-2004 / 5004 / 8004 HD G3 DSP

A New high quality DSP Amplifier and with clear and natural sound.

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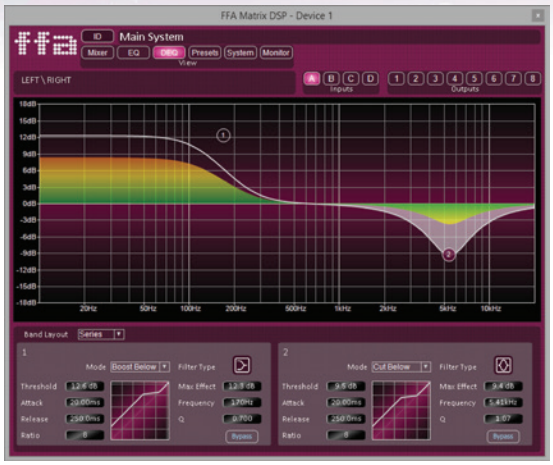


FATWARE control software for PC, Mac and iPad gives you complete control over ethernet and wifi.
Further control via third party systems such as Crestron™ is available via simple ethernet control protocol.

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## Power Amplifier Specifications

| | |
|---|---|
| **Power Ratings** | FFA-2004 HD G3 DSP – 4 x 500W ref 4 Ohms, 4 x 250W 8 Ohm 4 x 1000W ref 2 Ohms<br>FFA-5004 HD G3 DSP - 4 x 1250W ref 4 Ohms 4 x 625W 8 Ohm<br>FFA-8004 HD G3 DSP – 4 x 2000W ref 4 Ohms, 4 x 1000W ref 8 Ohms<br>**Note: Channel pairs can be bridged to drive very high power 8 Ohm subwoofers** |
| **Gain** | 32dB - For all HD G3 DSP models |
| **THD** | THD+N typical 0.03% ref 4 Ohms 1kHz |
| **Frequency Response** | 20Hz - 20kHz +- 0.5dB |
| **Controls** | 40 Point Potentiometer per channel, power on switch |
| **Indicators** | signal green = -20dB, signal yellow = -3dB, red signal = clip limiter, signal red protect = over current, low AC mains, 10 sec mute on power up |
| **Load Protection** | DC on output, precision clip limiter circuit |
| **Amplifier Protection** | Short circuit, current overload, thermal shutdown, high frequency stability circuit |
| **Audio Signal Inputs** | Analogue Balanced Neutrik® Female XLR input each channel Pin 1 - GND, Pin 2 - Hot +, Pin 3 - Cold<br>Digital Dante AES67 |
| **Audio Power Outputs** | Neutrik® speakON each channel. Channels 1 and 3 output speakON utilises 2+ and 2- connection to allow use of 4 core loudspeaker cable for bi amp loudspeaker systems. Bridged output possible |
| **Power Requirement** | 1 x Neutrik® 20A powerCON connector 1 x 16 A 230 VAC Circuit. Power range 185 V-230 VAC<br>120 V (configured at factory) |
| **System Cooling** | High CFM 80mm fan with proportional signal speed control. Rear to front airflow |
| **Dimensions** | 88mm Height x 483mm Width x 510mm Depth. Includes rear rack support. 19" rack mount enclosure |
| **Weight** | 10.5 kg |

FFA has a policy of continued product improvement and accordingly reserves the right to change features and specifications without notice.

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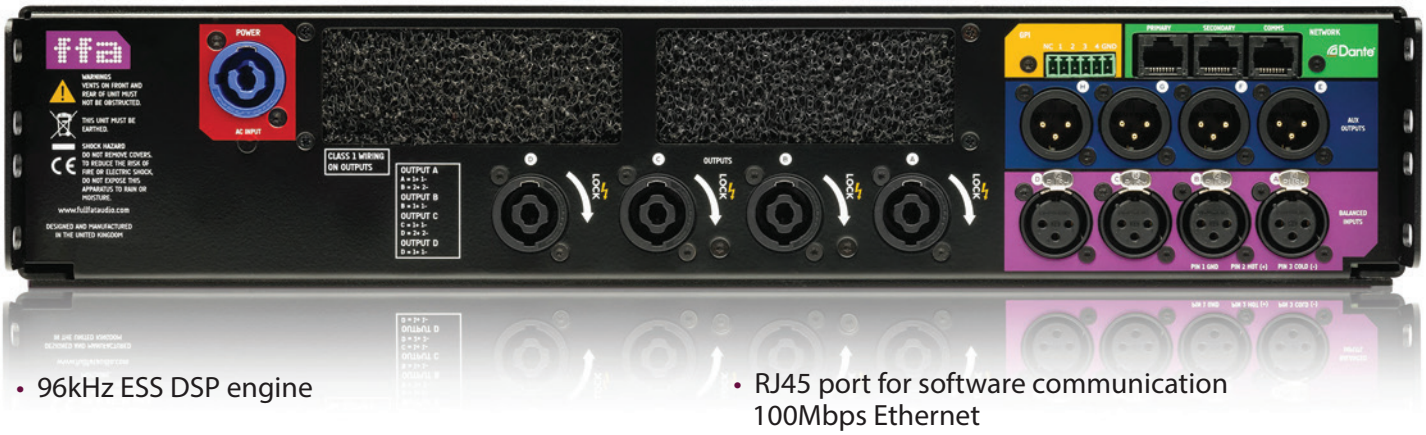
## DSP Hardware




- 96kHz ESS DSP engine
- 4 Analogue XLR input
- 4 x AUX Analogue DSP Outputs for connection to non DSP amplifiers
- 8 input digital audio over Ethernet RJ45
- 8 output digital audio over Ethernet RJ45
- RJ45 port for software communication 100Mbps Ethernet
- 2 x RJ45 ports for primary and secondary audio over Ethernet connection
- 1 x 6 way phoenix port for GPI remote control
- Up to 30 presets held in unit
- Latency 0.427ms @ 96kHz analogue input

## DSP Software Functions

- **Input Delay (per channel):** 0 to 1.3s in 10.4uS steps
- **Input Compressor (per channel):** Threshold (-30 to +22 dBu), Attack, Release, Ratio, Soft-Knee
- **Input Parametric EQ (per channel):** 8 bands – parametric, low shelf, high shelf, notch, band-pass
- **Input Dynamic EQ (per channel):** 2 bands – parametric/low shelf/high shelf, boost/cut above /below, threshold, ratio, attack, release
- **Input High-Pass Filter (per channel):** Up to 24dB/octave ( Butterworth / Bessel / Linkwitz-Riley)
- **Routing Inputs to Outputs: Full matrix mixer**

- **Output Parametric EQ (per channel):** 16 bands – parametric, low shelf, high shelf, notch, band-pass
- **Output High-Pass and Low-Pass Filter (per channel):** Up to 48dB/octave ( Butterworth / Bessel / Linkwitz-Riley)
- **Output Gain (per channel):** -30 to +15dB in 0.1dB steps, mute, phase
- **Output Delay (per channel):** 0 to 1.3s in 10.4uS steps High performance, two-stage PXL limiters ensure systems can be safely and reliably played at high level without compromising sound quality.
- **Output Limiter power amplifier (per channel):** Threshold (-50 to +14dBu), attack, release, auto attack/release option
- **Output Limiter AUX XLR output:** Threshold (-50 to +22dBu), attack, release, auto attack/release option
- **Output Delay (per channel):** 0 to 1.3s in 10.4uS steps

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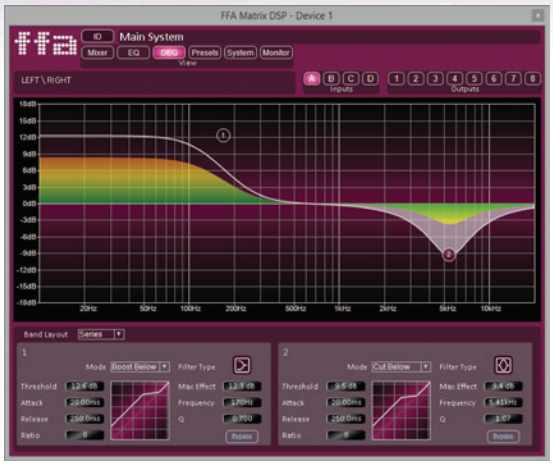


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