



Full Fat Audio's four channel amplifiers are now available with on board digital signal processing (DSP). The DSP controlled amplifier provides a cost effective solution for sound system design and can be used for installation or temporary sound systems. The DSP is accessed by an Ethercon connector on the rear of the amplifier and controlled and programmed by PC based software.

The DSP has two audio input's which are analogue or selectable AES/EBU digital. Unusually there are 6 audio output channels, 4 assigned to the FFA-4004 or FFA-6004 and 2 assigned to a pair of male XLR connection on the rear of the amplifier. These extra processed outputs can be used for example for a 3 way stereo system of bass, mid and high frequency where the 2 outputs drive a 2 channel bass amplifier.

The DSP features useful compressor/limiter functions on the audio input's and audio output's which aid system protection against overdrive and also for environmental noise considerations. The DSP is accessed via an Ethercon connector on the rear panel of the amplifier and connected using a CAT5 Ethernet cable direct to a personal computer (MAC or PC) or via an Ethernet Hub or router. The DSP is password protected and allows the designer to keep interference from unauthorised persons whom may change parameters and either damage the loudspeaker system or exceed set enviromental noise levels.

Voltage amplifier control:

The DSP amplifiers also now include a VCA control port. All 6 outputs can be accessed by VCA and volume can be controlled by an external potentiometer. The VCA's can be paralld or individually consigned.

FEATURES AT A GLANCE

- 10 band parametric EQ per channel, low/high shelving, bell, notch filters, all pass, band pass
- Audio input and output compressor/limiter
- Variety of cross over filter types 6,12,18,24 dB Octave But, Bes, LR
- Delay - up to 2 seconds, (feet, inch, mm, meters, millisecond).
- 2 audio inputs, 6 audio outputs.
- AES/EBU digital input selectable by a switch on the rear panel
- Ethernet network
- DSP defeat switch so that the amplifier easily reverts back to a 4 input analogue amplifier.
- Front panel level trim using analogue potentiometer, front panel LED signal potentiometers.



Exceptional Audio Efficiency

Amplifier Specifications

FFA-4004 DSP FFA-6004 DSP



Power Ratings	FFA - 4004 DSP - 4 x 600W 8 Ohm, 4 x 1000W 4 Ohm FFA - 6004 DSP - 4 x 800W 8 Ohm, 4 x 1500W 4 Ohm
Gain	32 dB
THD	Typical 0.05 4 Ohm 1kHz THD+N
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, signal red protect = over current, low AC mains or 3 sec. mute on power up
Load Protection	DC on output, side chain TCA clip limiter circuit
Amplifier Protection	Short circuit, current overload, thermal shutdown, high frequency stability circuit
Audio Signal Inputs	Balanced Neutrik® Female XLR input connected Pin 1 - GND, Pin 2 - Hot +, Pin 3 - Cold - . XLR Male signal throughput each channel
Audio Signal 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 system for example stage monitor system
Power Requirement	1 x Neutrik® 20A powerCON connector 1 x 16A 240 VAC Circuit. Power range 185V-240VAC
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	9 kg

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