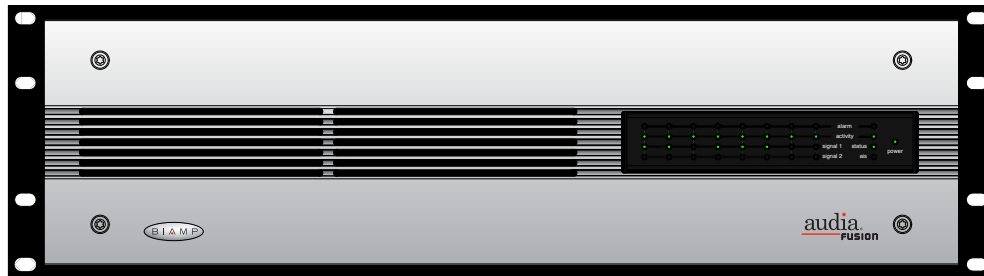




AudiaFUSION Networked Amplified Processor



AudiaFUSION is the newest member of the Audia® family, bringing together open-architecture DSP, Multi-Channel Amplifier technology, and device- and load-monitoring capabilities. AudiaFUSION features an 8-channel modular amplifier, 16x16 I/O via CobraNet® and DSP with support for channel-to-channel and device-to-device failover. AudiaFUSION can support up to 8 amplifier cards that are individually software configurable from 100-600 watts for up to 2400 watts of power, with software-selectable 70V, 100V and low impedance outputs per card. Intuitive software provides audio system design via PC and allows easy selection, viewing and calibration of numerous audio components: mixers, combiners, matrixes, equalizers, filters, crossovers, dynamics, routers, delays, meters, generators, diagnostic tools, and more. Once a system design is compiled, it is downloaded into AudiaFUSION, where it can be controlled via AMX®, Crestron®, other third-party control system, or via computer running daVinci™ control software. When installed in a system together, AudiaFLEX and AudiaFUSION processing resources are allocated as needed, making the whole system more efficient.

FEATURES

- Modular based design
- Amplification modules have software configurable power levels/load options
 - 8 amplification modules per frame with 100 to 600 Watts per module (maximum of 2400W per chassis)
 - 70V or 100V with direct drive capability, or low-impedance (4 or 8Ω) operation
 - Maximum of 2400 Watts of power in 3 rack spaces
- TCP/IP Network controllable
- LED Indication:
 - Signal present
 - Peak present
 - Clip present
 - Heat sink temperature fault
 - Amplifier failure
 - Fan stuck-rotor
- Internal amplifier module failover mode
- Entire device failover mode
- Software Monitoring Features:
 - Peak present
 - Heatsink temperature value, warning and fault
 - Short circuit on output
 - Amplifier failure
 - Impedance min/max threshold warning in low-impedance mode
 - Excessive clipping
 - Fan stuck-rotor
- Seamless integration with CobraNet-enabled Audia systems
- CobraNet Interface (16 channels in/16 channels out)
- CobraNet latency 5-1/3, 2-2/3 or 1-1/3 ms, software configurable
- Dual CobraNet ports for redundancy
- Selectable 115/230 volt operation
- Control via RED-1, daVinci or third party control systems
- **CE** marked, **UL** listed & **RoHS** compliant
- Covered by Biamp Systems' warranty

ARCHITECTS & ENGINEERS SPECIFICATION

The modular amplifier shall be designed exclusively for use with Biamp® Audia® systems. The amplifier shall be modular and support software configurable power levels/load options of 8 amplification modules per frame with 100 to 600 Watts per module (maximum of 2400W per chassis) and 70V or 100V with direct drive capability, or low-impedance (4 or 8Ω) operation. The amplifier shall provide control data and digital audio over CobraNet®. The amplifier shall provide dual CobraNet ports for redundant network connection. The amplifier shall provide front-panel LED identification of amplifier and card failure, signal present, clip present, fan stuck-rotor fault, heatsink temperature fault, and provide additional software monitoring features including short circuit on output fault. The amplifier shall be rack mountable (3RU) and feature software-configurable signal processing including volume control, filters, compressor/limiting, delay, speaker equalization, and output sensitivity. The amplifier shall support channel-to-channel and chassis-to-chassis failover. The amplifier shall be CE marked, UL listed and shall be compliant with the RoHS directive.

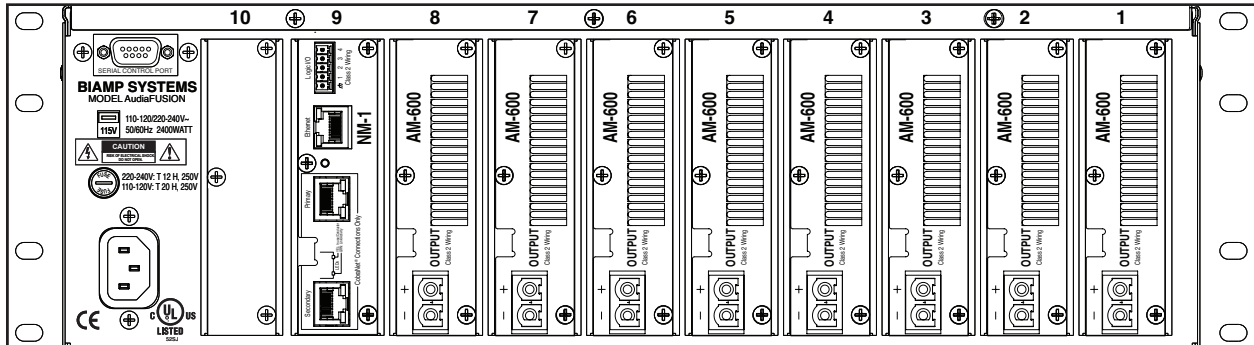
The amplifier shall be an AudiaFUSION.

AudiaFUSION SPECIFICATIONS

Inputs: 20 bits, 48 kHz, supported CobraNet latency 5-1/3, 2-2/3 or 1-1/3 ms software configurable	Power: 110~120 & 220~240 VAC switch selectable, 50/60Hz
Outputs: Supported Loads: 4Ω or 8Ω or 70-Volt Line, or 100-Volt line direct drive Continuous Operation ¹ : 1 kHz continuous sine wave indefinitely Frequency response: 20 Hz – 20 kHz (+/- 1dB) Signal-to-Noise Ratio (unweighted, 22 Hz – 22 kHz): 4 Ohm 8 Ohm 70V 100V 100W – 600W >95dB >95dB >100dB >101dB THD + N: ≤0.3% (20 Hz - 20kHz) all loads & power levels Intermodulation distortion (SMPTE): <0.2% Inter-channel Isolation: >-75dB (20Hz - 2-kHz, full power out) DC offset: <10 mV	Overall Dimensions: Height: 5.25 inches (133mm) Width: 19 inches (483mm) Depth: 17.25 inches (438mm) Weight: Chassis: 50 lbs. (22.68 kg) AM-600 card: 1.25 lbs. (0.57 kg)
Connection: RJ45 with shielded Ethernet cable (CAT5, CAT5e, CAT6, or CAT7)	Environment: Ambient Operating Temperature Range: 32-95 degrees F (0 – 35° C) Ambient intake humidity: 0 – 100% non-condensing Altitude: 0 – 10,000 Feet MSL
	Compliance: EU Directive 2002/95/EC, RoHS directive UL listed, CE marked

AudiaFUSION BACK PANEL

1. In chassis with fans running normally and unrestricted intake and exhaust



AudiaFUSION BLOCK DIAGRAM

