

500AMDA-AESU

Unbalanced AES Audio DAC & Distribution Amplifier



500AMDA-AESU Info

The 500AMDA-AESU is a five output reclocking and auto equalizing AES Audio DAC & Distribution Amplifier for unbalanced 750 AES signals. It is also a high quality 24-bit audio DAC. The 500AMDA-AESU automatically equalizes up to 1000m of Belden 1694A coax and provides reclocked outputs. The 500AMDA-AESU also converts AES/EBU digital signal to 2 balanced analog audio outputs. The input sample rates supported are 32kHz, 44.1kHz and 48kHz. Analog audio output levels may be set individually from the front panel.

Level control is provided via a card edge toggle. The full scale digital signal can be calibrated to produce analog peak levels ranging from 12dBu to 24.8dBu with 0.1dB resolution. The 500AMDA-AESU card edge LED indicators provide quick and accurate assessment of the incoming signal integrity. Balanced analog audio is provided via a terminal strip adapter.



VistaLINK™ Enabled

The 500AMDA-AESU is housed in the 3RU 500FR **exponent** frame that will hold up to 16 modules.

Features

- 24-bit, high-quality D/A conversion
- 32, 44.1 and 48kHz sampling rates supported
- 0dBFS programmable from 12dBu to 24.8dBu
- Support for 2 channels of balanced analog audio (1 AES/EBU)
- VistaLINK™ enabled for remote monitoring via SNMP (using VistaLINK™ PRO) when installed in 500FR frame with 500FC VistaLINK™ Frame Controller

Inputs

- SMPTE 276M standard for AES audio on 750 coax
- EQ and reclock provide extended cable length compensation (>1000m)

Outputs

- Five 750 coax outputs
- 2 balanced analog audio outputs

Card Edge LED's

- Module Health Status
- AES signal present
- Detected AES sample rate
- PCM versus non-PCM data
- Audio level bargraph with ballistics

Specifications

AES Audio Input	
Standard	SMPTE 276M, unbalanced AES
Number of Inputs	1
Connector	BNC per IEC 60169-8 Amendment 2
Signal Level	0.1 to 2.5V p-p
Equalization	>1000m @ 48kHz with 1V p-p drive and Belden 1694A or equivalent coax cable
Resolution	24-bits
Sampling Frequency	32kHz, 44.1kHz, and 48kHz; ±100ppm
Impedance	75Ω, AC-coupled
Return Loss	>25dB, 100kHz to 6.0MHz
BNC Grounding	AC-coupled (for 60Hz ground loop current protection)
AES Audio Output	
Standard	SMPTE 276M, unbalanced AES
Number of Outputs	5
Connector	BNC per IEC 60169-8 Amendment 2
Sample Rate	Same as Input
Impedance	75Ω unbalanced
Return Loss	>25dB, 100kHz to 6.0MHz
Analog Audio Output	
Type	Balanced analog audio
Number of Outputs	4
Connector	Two 3 pin removable terminal strips on BNC adapter panel
Impedance	66Ω
Output Load	600Ω or high impedance (10kΩ)
Signal Level	dB FS => +12 to 24.8dBu into 10kΩ load (user settable)
DC Offset	< ±30mV
Frequency Response	< ±0.05dB (20Hz to 20kHz)
Dynamic Range	24 bits
THD+N	< -100dB RMS @ 1kHz, with 24dBu output
SNR	> 110dB RMS (20Hz to 20kHz) "A" weighted
Inter-channel Phase Error	< ±1° (20Hz to 20kHz)
Crosstalk Isolation	> 110dB RMS (20Hz to 20kHz)
Digital to Analog Delay	0.95m sec
Electrical	
Voltage	+12V DC
Power	6 Watts
EMI/RFI	Complies with FCC Part 15 Class A, EU EMC Directive
Physical	
Number of Slots	1

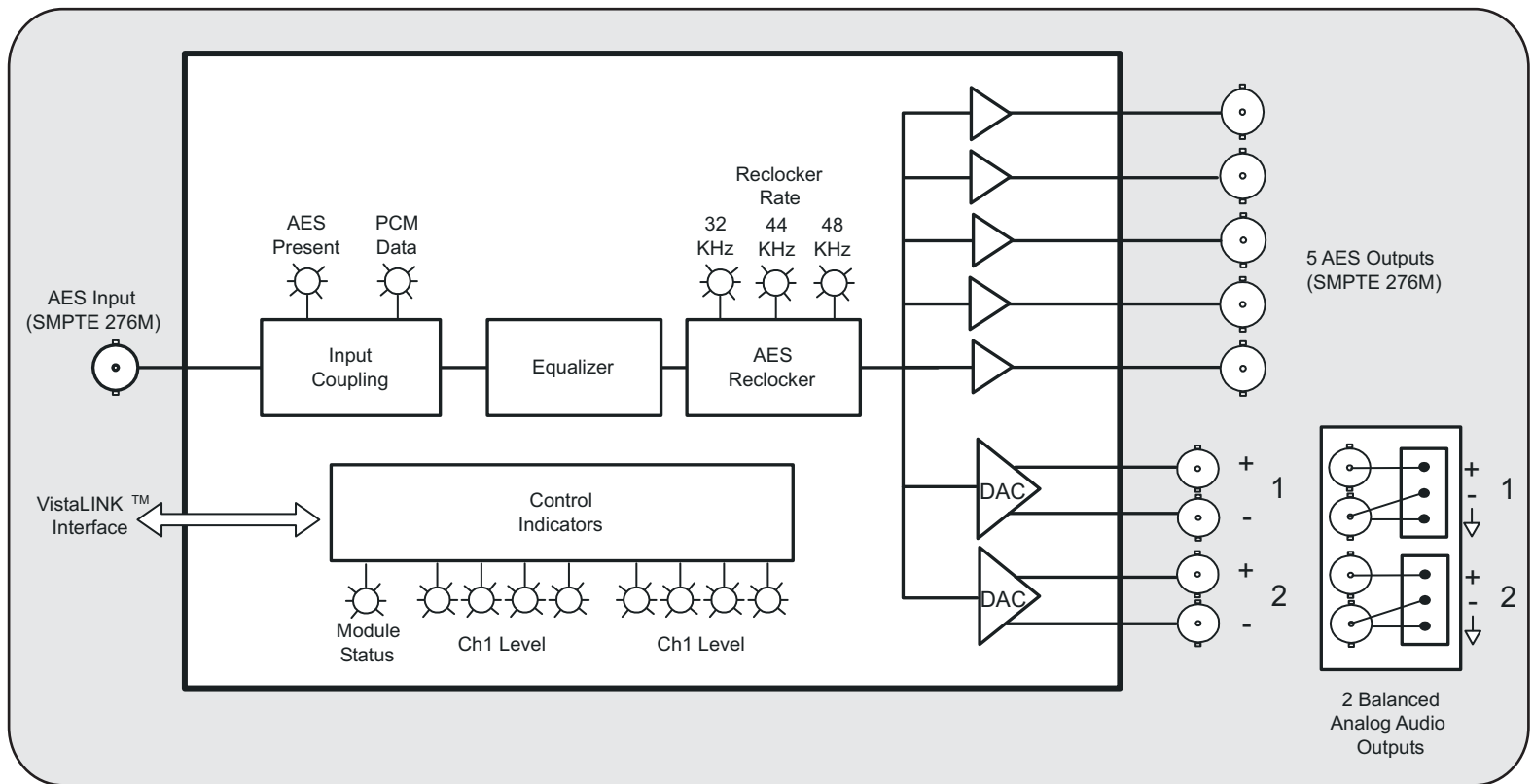
Ordering Information

500AMDA-AESU	Unbalanced AES Audio DAC & Distribution Amplifier (5 AES out & 2 balanced analog out)
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Enclosures

500FR	exponent Compact High Density Distribution Frame
S501FR	Standalone enclosure

500AMDA-AESU Block Diagram



500AMDA-AESU Rear Panel

