500AMDA-AESU

Unbalanced AES Audio DAC & Distribution Amplifier

The 500AMDA-AESU is a five output reclocking and auto equalizing AES Audio DAC & Distribution Amplifier for unbalanced 75Ω 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.

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

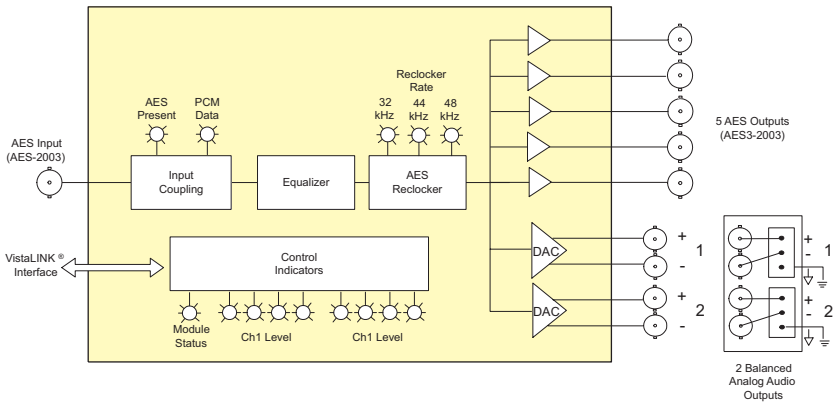
Features & Benefits

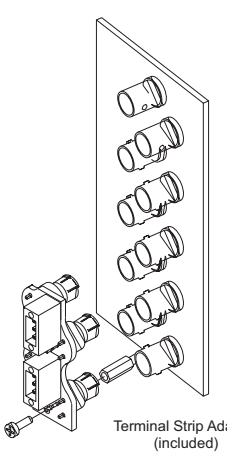
- 24-bit, high-quality D/A conversion
- 44.1kHz, 32kHz and 48kHz sampling rates supported
- 0dBFS programmable from 12dBu to 24.8dBu
- Support for 2 channels of balanced analog audio (1 AES/EBU)

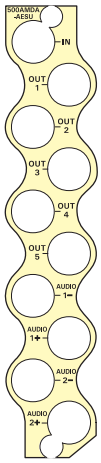
Inputs
- AES3-2003 standard for AES audio on 75Ω coax
- EQ and reclock provide extended cable length compensation (> 1000m)

Outputs
- Five 75Ω coax outputs
- 2 balanced analog audio outputs

Card Edge LEDs
- Module Health Status
- AES signal present
- Detected AES sample rate
- PCM versus non-PCM data
- Audio level bargraph with ballistics
- VistaLINK® capable for remote monitoring via SNMP (using VistaLINK® PRO) when installed in 500FR frame with 500FC VistaLINK® Frame Controller







Specifications

AES Audio Input:

Number of Inputs:	1
Standard:	AES3-2003, unbalanced AES
Connectors:	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
Sample Rate:	32, 44.1, 48 kHz; ±100 ppm
Input Impedance:	75Ω, AC-coupled
Return Loss:	> 25dB, 100kHz to 6.0MHz
BNC Grounding:	AC-coupled (for 60Hz ground loop current protection)

AES Audio Outputs:

Number of Outputs:	5
Standard:	AES3-2003, unbalanced AES
Connectors:	BNC per IEC 60169-8 Amendment 2
Sample Rate:	Same as input
Impedance:	75Ω unbalanced
Return Loss:	> 25dB, 100kHz to 6.0MHz

Analog Audio Outputs:

Number of Outputs:	2
Type:	Balanced analog audio
Connector:	Two 3-pin removable terminal strips on BNC adapter panel
Output Impedance:	66Ω
Output Load:	600Ω or high impedance (10kΩ)
Signal Level:	0dB FS ⇨ +12 to +24.8dBu into 10kΩ load (user settable)
DC Offset:	< ±30mV
Freq. 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), unweighted
Digital to Analog Delay:	0.95m sec

Electrical:

Voltage:	+12V DC
Power:	6W
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)

Enclosures	***exponent***
500FR	Compact High Density Distribution Frame
S501FR	Standalone enclosure

Compact Modular-500 & 400 Series