

# Unbalanced AES Audio Distribution Amplifier

## Model 500DA-AESU

The 500DA-AESU is a nine output reclocking and auto equalizing DA for unbalanced 75Ω AES signals. The DA automatically equalizes up to 1500m of Belden 1694A coax and provides reclocked outputs with sampling frequencies of 32kHz, 44.1kHz, 48kHz and 96kHz.

The 500DA-AESU card edge LED indicators provide quick and accurate assessment of the incoming signal integrity.

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

## Features

- Data reclocking provides jitter reduction

### Inputs:

- SMPTE 276M standard for AES audio on 75Ω coax
- EQ and reclock provide extended cable length compensation (>1500m)
- Transformer coupled 75Ω unbalanced input

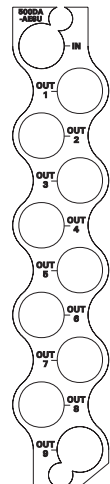
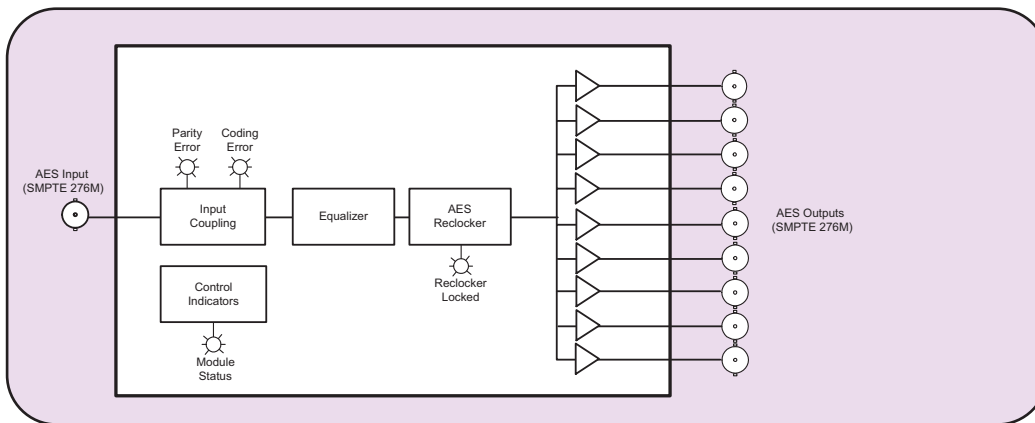
### Outputs:

- Nine 75Ω coax outputs

### Card Edge LEDs:

- Module Health Status
- Error LED indication for input PLL out of lock, parity error or biphasic coding error
- Reclocker locked

## 500DA-AESU Block Diagram



## Specifications

### AES Input:

**Standard:** SMPTE 276M  
**Number of Inputs:** 1  
**Connector:** BNC input per IEC 169-8  
**Input Level:** 1V p-p  
**Coupling:** Transformer  
**Input Impedance:** 75Ω  
**Return Loss:** >25dB 100kHz to 6MHz  
**Equalization:** Automatic to 1500m with Belden 1694A (or equivalent) @ 48kHz AES signal  
**Sampling Frequency:** 32kHz, 44.1kHz, 48kHz and 96kHz

### AES Output:

**Number of Outputs:** 9 Unbalanced AES  
**Connector:** BNC per IEC 169-8  
**Output Level:** 1V p-p  
**Output Impedance:** 75Ω  
**Return Loss:** >25dB 100kHz to 6MHz

### Physical:

**Number of Slots:** 1

### Electrical:

**Voltage:** +12VDC  
**Power:** 5 Watts  
**EMI/RFI:** Complies with FCC Part 15 Class A  
EU EMC Directive

### Ordering Information:

**500DA-AESU** Unbalanced AES Audio Distribution Amplifier (1x9)

### Enclosure:

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