

AES6800+C/BD

# AES-EBU Audio Distribution Amplifiers

The AES6800+ features cable auto-equalization, data reclocking, and incoming data error detection and reporting. The error detection and reporting features use front-mounted LEDs and an external alarm reporting. This distribution amplifier meets the AES interface standards according to SMPTE 276M, AES3 1992 (r 1997), and AES3 id-2001.

## Features

- Available in balanced (AES6800+BD) and coaxial (AES6800+CD) I/O formats
  - The AES6800+BD is a balanced 9-output AES/EBU digital audio distribution amplifier
  - The AES6800+CD is a coaxial 9-output AES/EBU digital audio distribution amplifier.
- Distribution of one signal input into four or nine isolated outputs
- Input signal lock detect
- Automatic or manual EQ
- Sampling frequency from 30 kHz to 192 kHz
- Bypass mode for non-AES signals of < 30 MHz @ 50% duty cycle
- Automatic reporting of data or signal quality errors, such as
  - CRC errors
  - Validity
  - Confidence
  - Biphas encoding errors
  - Parity errors

## Specifications

### Inputs

#### AES6800+BD

Item	Specification
Number of inputs	1
Input connector	WECO
Signal type	Balanced, transformer coupled
AES frame rates	30 kHz – 192 kHz
Impedance	110W
Signal amplitude	0.2 Vp-p to 7 Vp-p
Cable EQ	0 – 984 ft (0 – 300 m) twisted pair Belden 8451 or equivalent

#### AES6800+CD

Item	Specification
Number of inputs	1
Input connector	BNC
Signal type	AC coupled
AES frame rates	30 kHz – 192 kHz

Impedance	75W
Signal amplitude	0.1 Vp-p to 2 Vp-p
Return loss	> 30 dB
Cable EQ	0 – 1969 ft (0 – 600 m) coaxial Belden 8281 or equivalent

## Outputs

### AES6800+BD

Item	Specification
Number of outputs	4 or 9
Output connector	WECO
Type	Balanced, transformer coupled
Impedance	110W
Signal amplitude	5 Vp-p $\pm$ 1 V into 110W load

### AES6800+CD

Item	Specification
Number of outputs	4 or 9
Output connector	BNC
Signal type	Uncoupled
Impedance	75W
Return loss	> 30 dB
Signal amplitude	1.0 Vp-p $\pm$ 10% into 75W load

## Performance

### AES6800+BD

Item	Specification
Jitter	< 5 ns
DC offset	0.0 V $\pm$ 50 V
Rise/fall time	5 ns to 30 ns

### AES6800+ CD

Item	Specification
Jitter	< 5 ns
DC offset	0.0 V $\pm$ 0.05 V
Rise/fall time	30 ns to 44 ns

## Images/Diagrams

