

# BrightEye 30D

## Audio ADC and DAC Bi-directional Converter with Delay

BrightEye 30D is a flexible audio converter that can be a two channel, bi-directional ADC and DAC, or it can be configured as a four channel converter. Perfect in desktop, post and broadcast applications, 24 bit processing ensures beautiful audio.

As a bi-directional converter, two channels of analog audio are converted to AES digital audio and at the same time an AES stream is converted to two channels of analog.

Alternately, the unit can be configured as a four channel AES to analog converter or a four channel analog to AES converter.

BrightEye 30D also serves as a sample rate converter. For example, a digital 44.1 KHz signal from a CD player can be fed to the input and a digital AES3id, 48 KHz signal synchronous to the reference input will be output.

Level adjustments and delay timing are accessed through the front panel or BrightEye PC. Audio mixing and channel shuffling can be controlled with the BrightEye PC application. A variety of audio connectors and adapters are available for integrating BrightEye 30D to any type of system.

A reference input is provided which allows digital outputs to be synchronized to either a PAL or NTSC video signal or AES reference.

### ► Specifications

#### Analog Audio Inputs

Number	Four (selectable as inputs or outputs)
Type	Balanced
Impedance	>15K Ω
Maximum Input Level	24 dBu
CMRR	>60dB, 20Hz to 10KHz
Quantization	24 bits, 128x Oversampled
Sample Rate	48 KHz
Reference Level	-10 dBu or +4 dBu
Frequency Response	±0. 1dB, 20Hz to 20KHz
Crosstalk	<106 dB
Dynamic Range	>106 dB

- 2 or 4 Channel Audio Converter
- Analog and Digital Inputs
- Analog and Digital Outputs
- Bi-directional ADC/DAC
- Sample Rate Converter
- Adjustable Audio Delay

#### AES/EBU Digital Inputs

Number	Two (total of four channels) (selectable as inputs or outputs)
Type	AES3id
Connectorization	Coaxial, 75 Ω
Bit Depth	20 and 24 Bit
Sample Rate	30KHz to 96KHz (Sample Rate Converted internally to 48KHz)
Reference Level	-18 or -20 dBFS (selectable)
AC-3, Dolby-E	Supported when inputs are synchronous

#### Analog Audio Outputs

Number	Four (selectable as inputs or outputs)
Type	Balanced, transformerless
Delay Adjustment Range	0 to 1000 msec
Impedance	30 Ω
Maximum Output Level	24 dBu
Resolution	24 bits, 128x Oversampled
Reference Level	-10 dBu or +4 dBu
Frequency Response	±0. 1dB, 20Hz to 20KHz
Crosstalk	<106 dB
Dynamic Range	>106 dB

#### AES/EBU Digital Outputs

Number	Two (total of four channels) (selectable as inputs or outputs)
Type	AES3id
Connectorization	Coaxial, 75 Ω
Bit Depth	24 Bit
Sample Rate	48 KHz
Reference Level	Synchronous to Video output -18 or -20 dBFS (selectable)

#### General Specifications

Size	5.625" W x 0.8" H x 5.5" D (143 mm x 20 mm x 140 mm) including connectors
Power	12 volts, 7 watts (100-230 VAC modular power supply)
Temperature Range	0 to 40° C ambient
Relative Humidity	0 to 95° non-condensing

