# BrightEye™

BrightEye 25

Analog Video/Audio to SDI Converter with TBC and Embedder

BrightEye 25 converts analog composite video to SDI, with simultaneous conversion of four channels of audio and embedding. A TBC/Frame Sync is a standard feature and allows this BrightEye to work with any sort of video input. Great for broadcast and desktop applications, BrightEye 25 can be used with sources such as VTRs and incoming satellite feeds.

The analog input is converted at 12 bits of resolution and digitally decoded to 10 bit YCrCb components (601). The signal is then time base corrected and frame synchronized to the reference input. The audio is converted to digital and then it passes through the built in four channel mixer with shuffle and level control. The video and audio signals join up in an embedder which can be targeted to any of the four groups.

Basic controls are accessed on the front panel. BrightEye PC provides access to video proc functions and the built in audio mixer. The vertical interval can be passed or blanked. VU indication is provided on the front panel and through BrightEye PC.
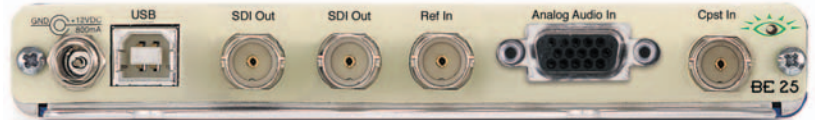
- ► Convert Analog Sources to Embedded SDI
- ► Analog Audio and Video Inputs
- ► Embedded SDI Output
- ► TBC and Frame Sync
- ► 12 and 24 Bit Processing

► Specifications

Analog Video Input

Number	One
Type	NTSC, PAL Composite
Impedance	75 Ω, BNC
Return Loss	>40 dB, DC to 5.5Mhz
Input	DC +/-1 volt DC
Input Hum	<100 mV

Reference Input

Number	One
Type	1 V p-p Composite Video, PAL or NTSC
Impedance	75 Ω, BNC
Return Loss	>40 dB

Serial Digital Output

Number	Two
Type	SMPTE 259M
Impedance	75 Ω, BNC
Return Loss	>15 dB
Output	DC None (AC coupled)

Analog Video to SDI Performance

Bit Resolution	12 bit input quantization, 4 X oversampling
Decoding	Adaptive Comb Filter, 3 or 5 line selectable
Signal to Noise	>62 dB, weighted
Freq Response	±0.1 dB , 0 to 5.5 MHz

Analog Audio Inputs

Number	Four
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

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 provided)
Temperature Range	0 to 40° C ambient
Relative Humidity	0 to 95° noncondensing

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D E S I G N S

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