

BrightEye 26

Analog Video / Audio to SD SDI / Optical Converter with TBC and Embedder

BrightEye 26 converts analog composite video to SD SDI, with simultaneous conversion of four channels of audio and embedding. It is similar to the BrightEye 25, with the addition of an optical output. 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 26 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. 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 Mac or PC software 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 Mac or PC software.



- > Optical Transmitter
- > Convert Analog Sources to Embedded SDI
- > Analog Audio and Video Inputs
- > Embedded SDI Output
- > TBC and Frame Sync
- > 12 and 24 Bit Processing

Analog Video Input

Number	One
Type	NTSC, PAL Composite
Impedance	75 Ω
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
Return Loss	>40 dB

Serial Digital Output

Number	One
Type	270 Mb/s SD Serial Digital (SMPTE 259M)
Impedance	75 Ω
Return Loss	>15 dB
Output	DC None (AC coupled)

Optical Output

Number	One
Type	SD [SMPTE 297M, optical equivalent of 259M]
Wavelength	1310 nm (non-CWDM) [1550 non-CWDM by special order]
Power	-7 dBm
Max Cable Length	20 km (For greater distances, or higher power and larger loss budgets, please contact the factory)
Fiber Type	Single Mode Multi-mode compatible with 8 dB attenuation at transmit end
Connector	SC

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 Frequency Response	>62 dB, weighted ± 0.1 dB, 0 to 5.5 MHz

Analog Audio Inputs

Number	Four
Type	Balanced
Impedance	>15K Ω
Max Input Level	24 dBu
CMRR	>60 dB, 20 Hz to 10 KHz
Quantization	24 bits, 128 x oversampled
Sample Rate	48 KHz
Reference Level	-10 dBu to +4 dBu
Frequency Response	± 0.1 dB, 20 Hz to 20 KHz
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
Weight	1 lb
Power	12 volts, 5 watts (100-230 VAC modular power supply not included)
Temperature Range	0 to 40° C ambient
Relative Humidity	0 to 95% non-condensing

