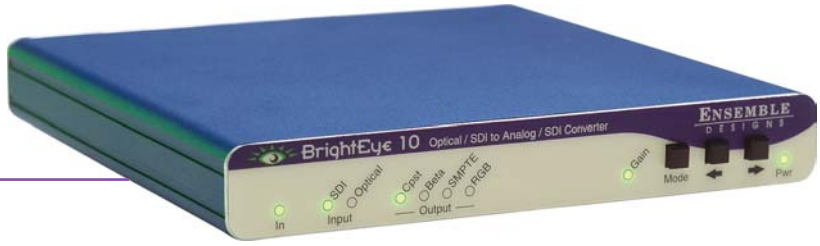
BrightEye 10

Optical/SDI to Analog/SDI Converter



BrightEye 10 is a digital to analog video converter with both SDI (electrical) and fiber optic inputs. Output formats include Beta and SMPTE component, RGB, and composite (with simultaneous Y/C). Video processing, encoding and analog conversion is performed digitally at 12 bits of resolution with 8 times oversampling.

Front panel controls select between the optical and SDI input, choose the analog output format, and adjust gain. Video levels can be adjusted through BrightEye PC.

The reclocked SDI output follows the input selector, thus providing optical to electrical conversion when the optical input is selected. BrightEye 10 combines fiber to SDI conversion and QC monitoring in one compact unit.

- Optical or SDI Input
- SDI Output
- Analog Composite Output
- Component, S-Video Output

Specifications

Serial Digital Input

Signal Type	SMPTE 259M
Impedance	75 Ω
Return Loss	>15 dB
Max Cable Length	300 meters

Optical Input

Type	SMPTE 297M (optical equivalent of 259M)
Wavelength	1310 nm
Receiver sensitivity	–18 dBm
Maximum length	20km
Fiber Type	Multi or Single Mode
Connector	SC

Analog Output

Type	Beta/SMPTE, Y, Pr, Pb RGB NTSC. PAL Composite NTSC, PAL S-Video
Return Loss	>40 dB
Output DC	None (AC coupled)

Serial Digital Output

Type	SMPTE 259M
Impedance	75 Ω BNC
Return Loss	>15 dB
Output DC	<50 mV

SDI to Analog Performance

Bit Resolution	12 bit output reconstruction 8 X oversampling
Signal to Noise	>65 dB
Frequency Response	±0.1 dB, 0 to 5.5 MHz
K Factors	<1%
ScH Phase Error	<±2 degrees
Differential Phase	<1 degree
Differential Gain	<1%

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

ENSEMBLE DESIGNS