BrightEy€ 10

Optical/SD SDI to Analog/SDI Converter

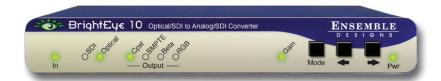
BrightEye 10 is a digital to analog video converter with both SD SDI (electrical) and fiber optic inputs. Output formats include Beta and SMPTE component, RGB, and composite (with simultaneous Y/C). Video processing, encoding and analog conversion is performed digitally at 12 bits of resolution with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

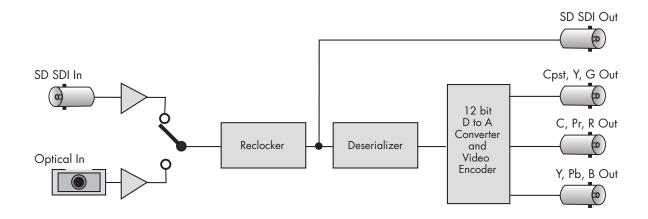
The reclocked SD SDI output follows the input selector, thus providing optical to electrical conversion when the optical input is selected. BrightEye 10 combines fiber to SD SDI conversion and QC monitoring in one compact unit.

Features

- Use with VCRs, cameras, satellite receivers
- Analog video inputs and outputs
- TBC and frame sync
- 12 bit processing
- Passes embedded audio









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Optical/SD SDI to Analog/SDI Converter

Serial Digital Input

Number One

Signal Type 270 Mb/s SD Serial Digital

(SMPTE 259M)

 $\begin{array}{ll} \text{Impedance} & 75 \ \Omega \\ \text{Return Loss} & >15 \ \text{dB} \\ \text{Max Cable Length} & 300 \ \text{meters} \end{array}$

Automatic Input Cable Equalization

Optical Input

Number One Type SD

(SMPTE 297M, optical equivalent of 259M)

Wavelength 830 to 1610 nm Receiver sensitivity -18 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

attenuation at transmit end

Connector SC

Analog Output

Number One

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

Number One

Type 270 Mb/s SD Serial Digital

(SMPTE 259M)

 $\begin{array}{ll} \text{Impedance} & 75 \, \Omega \\ \text{Return Loss} & >15 \, \text{dB} \\ \text{Output DC} & <50 \, \text{mV} \end{array}$

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 Factor <1%

ScH Phase Error <±2 degrees
Differential Phase <1 degree
Differential Gain <1%

General Specifications

Size 5.63"W x 0.8"H x 5.98"D

(143 mm x 21 mm x 152 mm)

including connectors and flange

Weight 15 oz

Power 12 volts, 4 watts

(100-230 VAC modular power supply)

Temperature Range 0 to 40° C ambient (all specs met)

Relative Humidity 0 to 95%, non-condensing

Altitude 0 to 10,000 ft.



