

# BrightEye 16

## SD SDI to Analog Video Converter with Frame Sync/Genlock and Audio Disembedder

BrightEye 16 is a digital to analog video converter with a timeable output. It's perfect for feeding analog switchers and routers, where signal timing is required. It's also a disembedder and provides four analog audio outputs.

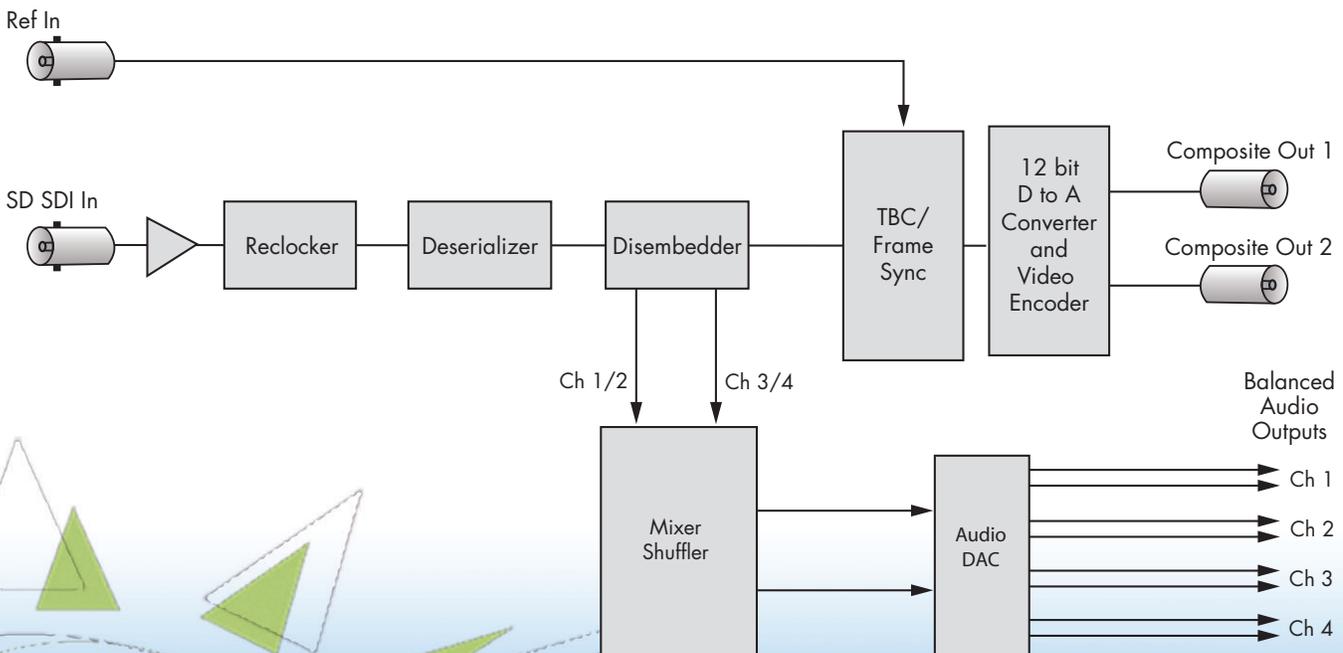
With timing controls, proc adjustments, and a built-in audio mixer, BrightEye 16 provides a complete solution for digital to analog conversion.

BrightEye 16 has an SDI video input and a reference input. The input signal is converted to analog composite and synchronized (genlocked) to the reference signal. The analog composite output is fully timed with respect to the reference, including Sch phase. Audio is disembedded with 24 bit precision and converted to analog.

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.

### Features

- Feed analog switchers and routers
- SD SDI input
- Analog video output
- Timing control for output
- Audio disembedding
- Analog audio outputs



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**Serial Digital Input**

Number	One
Signal Type	270 Mb/s SD Serial Digital SMPTE 259M
Impedance	75 $\Omega$
Return Loss	>15dB
Max Cable Length	300 meters
Automatic Input Cable Equalization	

**Reference Input**

Number	One
Type	1 V P-P Composite Video, PAL or NTSC
Impedance	75 $\Omega$
Return Loss	>40 dB

**Analog Video Output**

Number	Two
Type	Composite PAL or NTSC (follows input)
Delay	Adjustable from < 90 $\mu$ Sec to 1 frame
Return Loss	>40 dB
Output	DC < 100 mV

**SDI to Analog Performance**

Bit Resolution	12 bit output reconstruction 8 x oversampling
Signal to Noise	>65 dB
Timing Window	Infinite (with respect to reference)
Output	ScH Phase matches reference
Timing Resolution	Adjustable to within 1 degree of subcarrier
Frequency Response	$\pm 0.1$ dB, 0 to 5.5 MHz
K Factor	<1%
ScH Phase Error	< $\pm 2$ degrees
Differential Phase	<1 degree
Differential Gain	<1%

**Analog Audio Outputs**

Number	Four
Type	Balanced, transformerless
Impedance	30 $\Omega$
Max Output Level	24 dBu
Resolution	24 bits, 128 x oversampled
Reference Level	-10 dBu to +4 dBu
Frequency Response	$\pm 0.1$ dB, 20 Hz to 20 KHz
Crosstalk	<106 dB
Dynamic Range	>106 dB

**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	1 lb
Power	12 volts, 5 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.