BrightEye 92-A

HD Downconverter with Analog Audio

Easy To Use

BrightEye 92-A will downconvert any type of HD signal and provides both an SD SDI output and an analog composite output that are suitable for broadcast or monitoring. The built-in Frame Synchronizer allows you to feed asynchronous signals to the BrightEye 92-A. A special Mirror Output Mode can be enabled, causing the output image to be flipped left to right for use with on-camera talent. An external reference input allows genlock to a house reference. All vertical interval data and closed captioning is faithfully passed.

Downconverting to Standard Definition

BrightEye 92-A will downconvert any type of HD signal and provides both an SD SDI and an analog composite output suitable for broadcast or monitoring.

Audio Processing

BrightEye 92-A handles both embedded audio and analog audio. Sixteen channels of embedded audio are supported in BrightEye 92-A. If the incoming video has embedded audio, the audio will be safely bypassed around the video processing and lipsync will be preserved. Audio mixing is available for two of the four embedded groups of audio.

Audio Monitoring

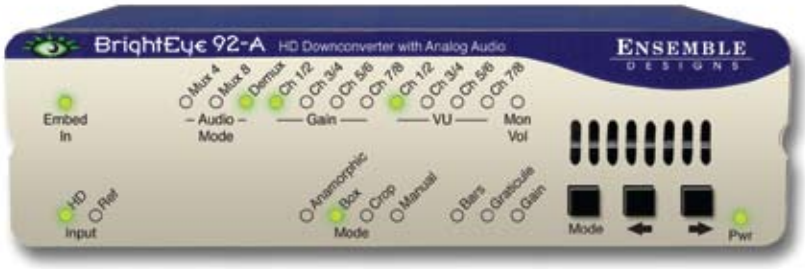
Audio monitoring is easy with BrightEye 92-A's convenient 3.5 mm mini jack. Select the audio channels you want to monitor from the front panel and plug in a headset.

Monitoring with HDMI

The HDMI connector on the rear of the unit provides a future proof monitoring interface. Plug it into most LCD monitors for confidence monitoring of your feed.

Front Panel and Software Control

Input selection, gain control, and test pattern controls are provided through the front panel interface. Audio presence LEDs indicate which channels are detected. Controls for crop, letterbox and pillarbox are accessed from the front panel or BrightEye Mac or PC software. Video and audio levels and the audio mixer can be adjusted through BrightEye Mac or PC software.



- Downconversion for monitoring or broadcast
- SD Digital and Analog Composite Video Outputs
- Analog Audio Inputs and Outputs
- Analog Audio Monitor Output
- Mirror Output Mode for On-Camera Talent
- Graticule and Safe Title Generator
- HDMI Output for Monitoring
- Frame Sync
- 12 and 16 bit processing
- Passes Embedded Audio

Specifications

Serial Digital Input

Number	One
Signal Type	1.485 Gb/s HD Serial Digital (SMPTE 274M, 292M or 296M)
Impedance	75 Ω
Return Loss	>15dB
Max Cable Length	100 meters for 1.485 Gb/s

Reference Input

Number	One
Type	1 V P-P Composite Video PAL or NTSC or Tri-Level Sync
Impedance	75 Ω
Return Loss	>40 dB

Analog Video Output

Number	One
Type	Composite PAL or NTSC
Return Loss	>40 dB
Output	DC <100 mV

Serial Digital Output

Number	Two
Type	SD Serial Digital 270 Mb/s SMPTE 259M-C
Processing	12 and 16 bit
Impedance	75 Ω
Return Loss	>15 dB
Max Cable Length	300 meters

Automatic Input Cable Equalization

HD Standards Supported
- 1080i (SMPTE 274M -4,5,6) 50, 59.94 or 60 Hz
- 720p (SMPTE 296M -1,2,3) 50, 59.94 or 60 Hz
- 1080p (SMPTE 274M -9,10,11) 23.98, 24, 25 Hz
- 1080sF (RP211 -14,15,16) 23.98, 24, 25 Hz

Analog Audio Inputs

Number	Eight (selectable as inputs or outputs)
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 or +4 dBu
Frequency Response	±0.1 dB, 20 Hz to 20 KHz
Crosstalk	<106 dB
Dynamic Range	>106 dB

Analog Audio Outputs

Number	Eight (selectable as inputs or outputs)
Type	Balanced, transformerless
Impedance	30 Ω
Maximum Output Level	24 dBu
Resolution	24 bits, 128 x oversampled
Reference Level	-10 dBu or +4 dBu
Frequency Response	± 0.1 dB, 20 Hz to 20 KHz
Crosstalk	<106 dB
Dynamic Range	>106 dB

Embedded Output (In Serial Output)

Group Assign	Two of four groups
Channels	Sixteen passed
Bit Depth	24 Bit

Monitor Output

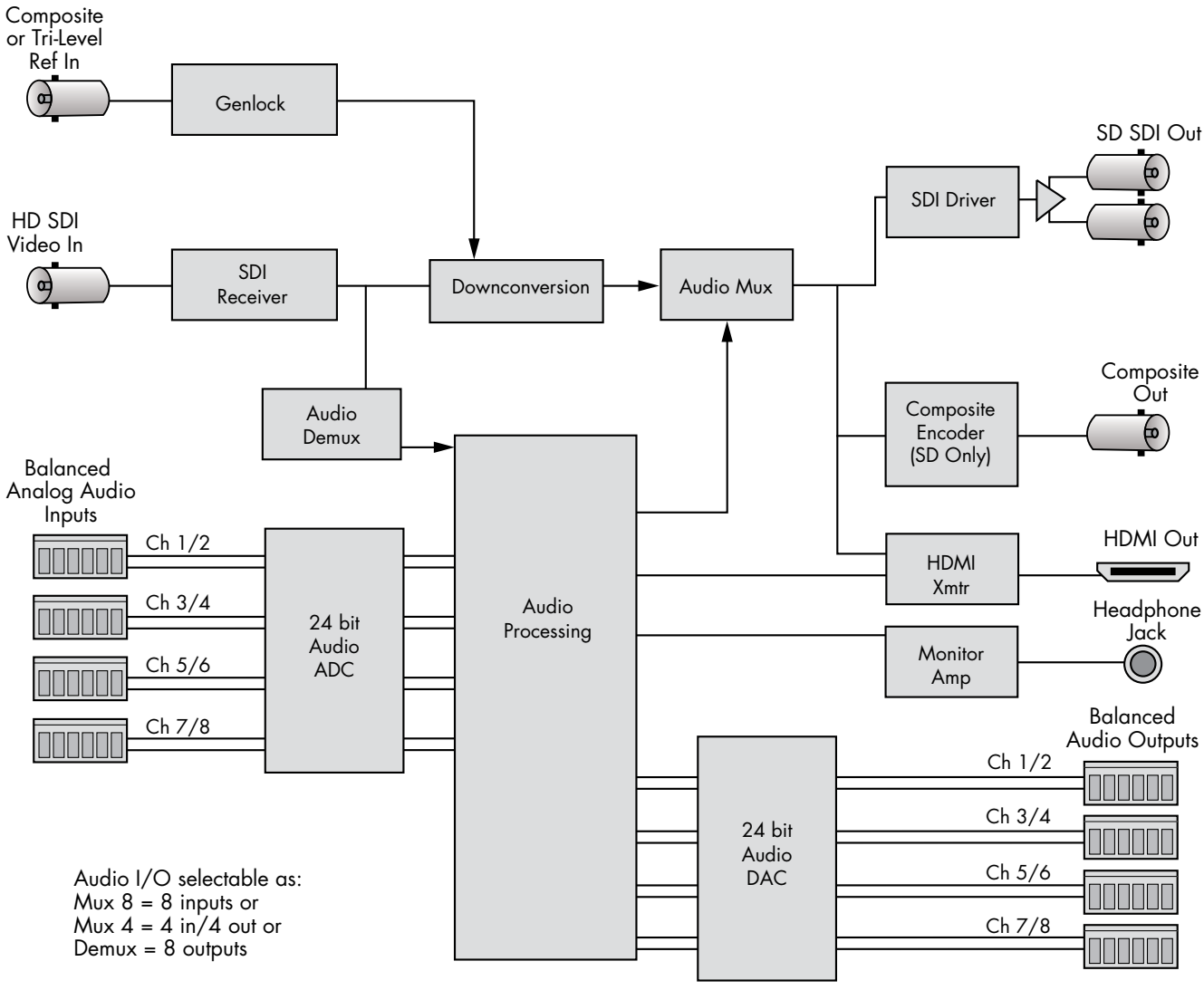
Number	One
Connector	HDMI
Type	Follows SDI out

Audio Monitoring Output

Number	One (select from eight channels)
Connector	3.5 mm stereo mini jack

General Specifications

Size	5.625" W x 1.7" H x 5.5" D (143 mm x 40 mm x 140 mm) including connectors
Power	12 volts, 12 watts (100-230 VAC modular power supply not included)
Temperature Range	0 to 40° C ambient
Relative Humidity	0 to 95%, non-condensing



Audio I/O selectable as:
Mux 8 = 8 inputs or
Mux 4 = 4 in/4 out or
Demux = 8 outputs

Provides embedded pass through of all 16 audio channels