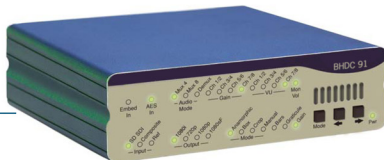




BHDC 91

Analog & SDI to HD-SDI upconverter



Easy To Use

The BHDC 91 is an upconverter with analog composite and SD SDI inputs. Feed the analog composite or SD SDI output of a camera to the BHDC 91 and upconvert to HD. You can take the HD signal from the BHDC 91 into a switcher or projection system. Upconverting existing SD equipment lets you leverage the equipment you already have and operate in the HD domain. An external reference input allows genlock to a house reference. All vertical interval data and closed captioning is faithfully passed.

Upconvert Before Distribution

While some cameras may have firewire out, using the video output and upconverting before distribution is preferable since longer cable runs can be achieved and quality is superior. Additionally, the BHDC 91's reference input allows you to time the upconverted video output for use with a production switcher.

Audio Processing

The BHDC 91 handles both embedded audio and discreet AES digital audio inputs. Sixteen channels of embedded audio are supported in The BHDC 91. 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 The BHDC 91's convenient 3.5mm mini jack. Just select the audio channels you want to monitor from the front panel and plug in a headset.

- ▶ Use with Cameras and Projection Systems
- ▶ Turn Analog Camera Into Digital HD Source
- ▶ SD Digital and Analog Composite Video Inputs
- ▶ AES Inputs
- ▶ Analog Audio Monitor Output
- ▶ HDMI Output for Monitoring
- ▶ Frame Sync
- ▶ 12 and 16 bit processing

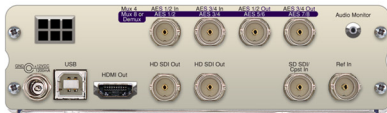
Monitoring with HDMI

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.





► Specifications

Analog Video Input

Number	One
Type	Analog Composite PAL or NTSC
Resolution	Digitized at 12 bits
Impedance	75 Ω
Return Loss	>40 dB
Input DC	+/-1 volt DC
Input Hum	<100 mV

Serial Digital Input

Number	One
Signal Type	270Mb/s SD Serial Digital (SMPTE 259M)
Impedance	75 Ω
Return Loss	>15dB
Max Cable Length	300 meters for 270 Mb/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

Serial Digital Output

Number	Two
Type	HD Serial Digital 1.485 Gb/s SMPTE 274M or 296M or 12 and 16 bit
Processing	75 Ω
Impedance	>15 dB
Return Loss	100 Meters for HD
Max Cable Length	[Belden 1694A or equiv.]

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, 25Hz

AES/EBU Digital Inputs

Number	Four [total of eight channels] [selectable as inputs or outputs]
Type	AES3id
Connectorization	Coaxial, 75 Ω
Bit Depth	20 and 24 Bit
Sample Rate	30KHz to 96KHz
[Sample Rate Converted]	internally to 48KHz]
Reference Level	-18 or -20 dBFS [Selectable]

AES/EBU Digital Outputs

Number	Four [total of eight channels] [selectable as inputs or outputs]
Type	AES3id
Connectorization	Coaxial, 75 Ω
Bit Depth	24 Bit
Sample Rate	48 KHz
Reference Level	Synchronous to video output
	-18 or -20 dBFS (selectable)

Embedded Output [In Serial Output]

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

Monitor Output

Number	One
Connectorization	HDMI

Audio Monitoring Output

Number	One
[Select from eight channels]	
Connectorization	3.5mm 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, 7 watts [100-230 VAC modular power supply not included]
Temperature Range	0 to 40° C ambient
Relative Humidity	0 to 95% non-condensing