

BrightEye Mitto

3G / HD / SD Scan Converter

YouTube™ Video to Air Made Simple

BrightEye™ Mitto is a high performance scan converter that supports SD, HD and 3G video signals.

For broadcasters who find they are relying on video content from the web, BrightEye Mitto offers the best way to take computer video to air. Video that once seemed constrained by your computer desktop can now be used for the most demanding broadcast and display applications.

Exclusive Filtering and Scaling Technology

A superior quality scan converter, BrightEye Mitto has the advantage of proprietary scaling technology and exclusive multi-tap filtering. The region selected for output determines if Mitto acts as an upconverter or downconverter. The filters automatically adjust in accordance with the conversion being performed.

Bringing progressive images from the desktop into the interlaced world of video used to be a compromise between sharp details versus interfield flicker. Mitto's advanced filtering satisfies both of these seemingly contradictory requirements. The result is that the output looks as good, or better, than the original and passes the most stringent testing.

Digital and Analog Video and Audio

The intuitive front panel interface makes it easy to choose the desired video output format. Choices are 1.5 and 3 Gb/s HD SDI and SD SDI. Composite video is simultaneously output on a separate BNC. The genlock reference input allows the video outputs to be timed to house.

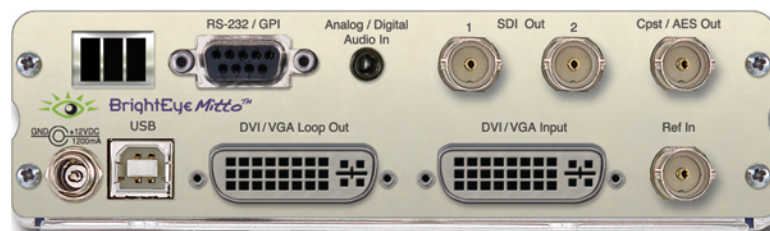
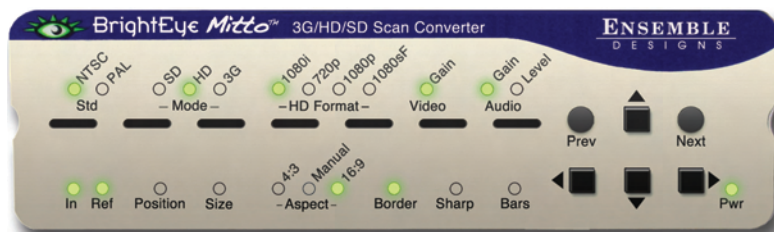
The audio input accepts either AES digital audio or analog audio. Audio is embedded into the SDI outputs which is required for many high-end applications.

Amazingly Simple and Effective User Interface

BrightEye Mitto is easy to use, both from the software interface and the front panel. The included Mac/PC application let's you simply use your mouse to click and drag over the specific portion of computer video that you want to output. The beauty of this user interface is that you can see which parts of the screen you don't want to output, as well as the parts you do want to use. The perspective of seeing the whole screen gives you the ability to choose exactly which portion of the video you want to output. And it's easy to use. Whether you output the entire screen of just a selected portion, you'll be able to see exactly what you are doing. Plus, presets enable you to store your favorite settings.

Free Software Upgrades Forever

BrightEye Mitto's software is easily upgraded through the unit's USB port. Software upgrades are available for no charge for the life of the product and are conveniently downloadable from the Ensemble Designs web site. Every unit comes with a five-year warranty.



- ▶ High performance scan converter
- ▶ Proprietary scaling and multi-tap filtering system provides maximum detail, flicker-free video output
- ▶ Easy-to-use Mac/PC user interface and front panel controls
- ▶ Outputs 1.5 and 3 Gb/s HD, SD SDI and composite video
- ▶ DVI and VGA I/O, HDMI support with an adaptor
- ▶ Analog audio and AES digital audio input
- ▶ Use a mouse to select what part of the video you want to output
- ▶ Intuitive front panel controls
- ▶ Easily adjust video parameters and select video output format
- ▶ Genlock and time to house reference, fully timeable
- ▶ Rackmountable
- ▶ Memory presets for your favorite settings
- ▶ 5-year warranty and free software upgrades

► Specifications

Computer Input

Number	One
Type	DVI or VGA (Supports HDMI with adaptor) DVI-I
Connector	
Resolution	Up to 1920 x 1200

Reference Input

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

Analog Audio Inputs

Number	One stereo pair
Connector	1/8" mini jack
Impedance	>15K Ω
Max Input Level	24 dBu
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

AES/EBU Digital Inputs

Number	Two (four channels)
Type	AES3id, S/PDIF
Connector	1/8" mini jack
Bit Depth	20 and 24 Bit
Sample Rate	30 KHz to 192 KHz (Sample Rate Converted Internally to 48KHz)

Serial Digital Output

Number	Two, BNC
Signal Type	1.485 Gb/s HD, 2.97 Gb/s HD or 270 Mb/s SD SDI Embedded
Audio	75 Ω
Impedance	>15 dB to 1.485 GHz
Return Loss	>10 dB to 2.97 GHz
Output DC	None (AC coupled)

SDI 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
3 Gb/s Level A or Level B (SMPTE 424M, 425M)	
525i, 625i (SMPTE 259M)	

Analog Video Output

Number	One, BNC
Type	Composite PAL or NTSC (when SD is selected on the SDI output)
Return Loss	>40 dB
Output DC	<100 mV

Computer Monitor Output

Number	One, looping
Type	DVI or VGA (Supports HDMI with adaptor)
Connector	DVI-I
Format	Follows input

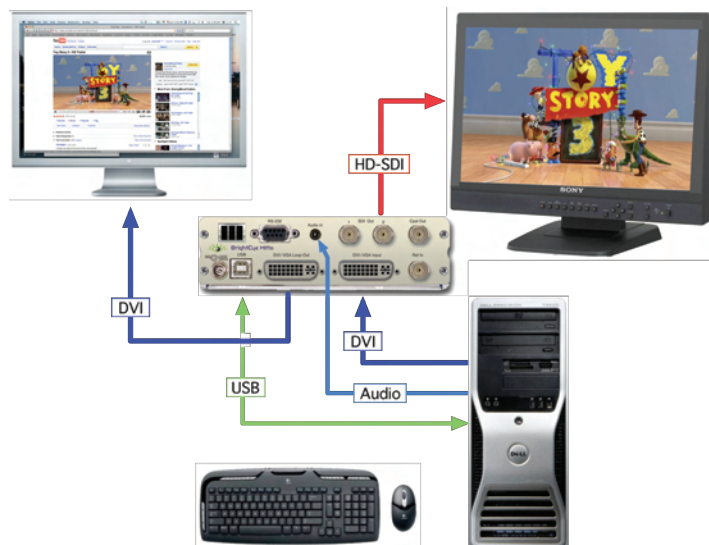
RS-232 Control

Number	One
Connector	9 pin D

General Specifications

Size	5.625" W x 1.6" H x 5.5" D (143 mm x 20 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

► Sample Application



Mitto Defined:

- comes from the Latin root for *transmit* or *send*
- it's also the root word of *uncompromising*