

## Build your SDI studio with the world's most advanced and easy to use converters!

Build your SDI studio with the world's most advanced and easy to use converters. Only Mini Converters include auto SD/HD switching, redundant input, AES/EBU and analog audio on standard 1/4 inch jack connections, combined with

advanced 3 Gb/s SDI technology. There are now 9 great models to choose from. Choose from models with analog, HDMI, audio, optical fiber, up, down, cross conversion and sync generation!



#### **High Quality**

Mini Converters are built to the highest quality standards with low SDI jitter. You get the longest SDI cable lengths combined

with ultra low noise analog video and audio for a true broadcast quality solution. You also get the latest broadcast technology such as re-clocking and 3 Gb/s SDI.

#### Super Easy to Use

All Mini Converters are similar, so they're super easy to understand and use. With advanced 3 Gb/s SDI technology, every Mini Converter is fully compatible with your SD and HD equipment, and can be updated via USB. Use our Converter Utility to make adjustments right from your laptop.



#### Hardware Down Converter

you connect to analog SD equipment then you'll know how

hard it is when modern SDI equipment unexpectedly changes between SD and HD. Mini Converter SDI to Analog includes an automatic high quality down converter that supports letterbox, anamorphic 16:9 and center cut 4:3.

#### Includes AES/EBU and Analog Audio

Most Mini Converters feature 24 bit analog and 24 bit digital audio and HDMI models support HDMI audio. Unlike other converters you don't need custom audio cables and the standard 1/4 inch audio jacks switch between balanced analog audio or AES/EBU digital audio.



### Auto Switching SD and HD

Mini Converters instantly switch between all SD and HD video formats whenever the

video input changes. A huge range of standards are supported including NTSC, PAL, 1080i/59.94, 1080i/50, 1080PsF/23.98, 1080PsF/24, 720p/59.94, 720p/50 and new formats can be added via USB.

#### **Redundant SDI Input**

Mini Converters feature a unique redundant input for mission critical tasks. Connect a redundant cable to the second input, and if the main SDI input is lost, Mini Converters will automatically switch over in an instant. A loop-through SDI output is also provided for connecting to other devices.



#### New 3 Gb/s SDI Technology

With the latest 3 Gb/s SDI technology built into Mini Converters you get modern broadcast technology that's future proof.

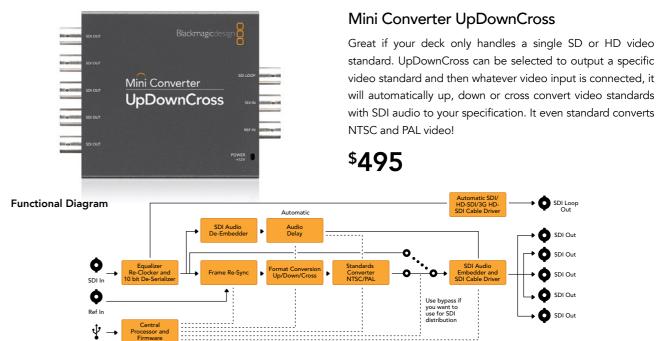
Upgrades can be loaded via the USB connection for future video format compatibility. 3 Gb/s SDI is also fully compatible with all your SD and HD equipment.

#### International Power Supply

Unlike other converters, a high quality low noise universal power supply is included with international socket adapters for all countries. To stop power accidentally being disconnected, a cable tie point is included to lock down the power connection tight and secure!



## 9 Great Converter Models!











#### Mini Converter SDI to HDMI

Converts from SDI to HDMI video out with embedded HDMI audio, plus balanced AES/EBU or analog audio out. Imagine using big screen televisions and video projectors as broadcast video monitors! Now it's incredibly easy to connect a huge range of HDMI displays to SDI based equipment.

#### Mini Converter HDMI to SDI

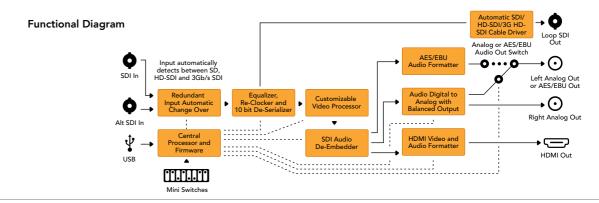
Ideal for converting from HDMI devices to SDI out with the choice to embed SDI audio from the HDMI, AES/EBU or balanced analog audio inputs. Now you can add SDI outputs to video cameras with HDMI connections, or add SDI outputs to computers with HDMI compatibility. Also includes HD to SD down converter.

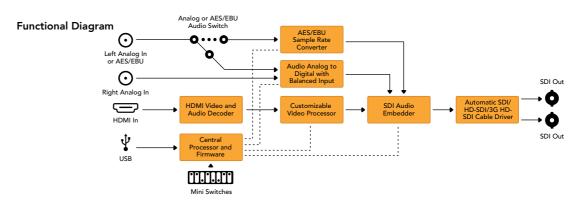
#### Mini Converter SDI to Analog

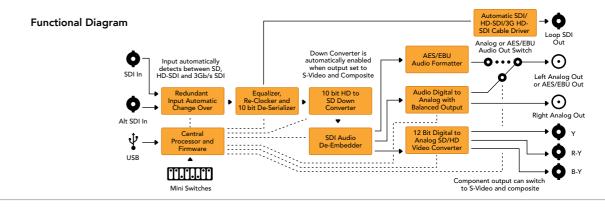
Includes everything you need to convert from SDI to analog HD/SD component, NTSC and PAL video out, plus balanced AES/EBU and analog audio out. Easily connect to Betacam SP, VHS and analog video monitors. Features hardware down converter to connect HD-SDI video to SD equipment.

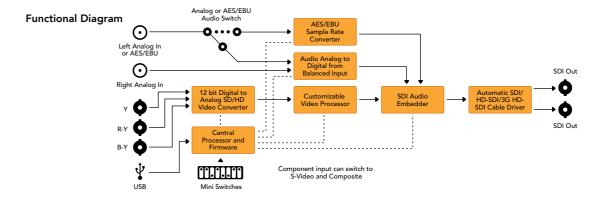
## Mini Converter Analog to SDI

Perfect for converting from analog HD/SD component, NTSC, PAL or S-Video to SDI out with balanced jack AES/EBU and analog audio embedding. Now you can convert analog devices such as Betacam SP, VHS, set top boxes, gaming consoles and HDV cameras to incredible quality SD/HD-SDI video.









Analog or AES/EBU
Ch 1 Analog or Ch 1&2 AES/EBU

Analog or AES/EBU Ch 2 Analog or Ch 3&4 AES/EBU

Analog or AES/EBU Ch 3 Analog or Ch 5&6 AES/EBU

Analog or AES/EBU
Ch 4 Analog or Ch 7&8 AES/EBU

Analog or AES/EBU Ch 1 Analog or Ch 1&2 AES/EBU

Analog or AES/EBU Ch 2 Analog or Ch 3&4 AES/EBU

Analog or AES/EBU Ch 3 Analog or Ch 5&6 AES/EBU

Analog or AES/EBU
Ch 4 Analog or Ch 7&8 AES/EBU

AES/EBU

# Mini Converters IM156576



# H 2 ANALOG OF Mini Converter Audio to SDI





#### Mini Converter SDI to Audio

Includes everything you need to de-embed 4 channels of analog audio or 8 channels of AES/EBU digital audio from any SDI video connection. Now you can easily access the audio in any SDI video connection for output to audio equipment such as audio mixers, analog broadcast decks, audio monitors and more!

#### Mini Converter Audio to SDI

Includes everything you need to embed 4 channels of analog audio, or 8 channels of AES/EBU digital audio into any SDI video connection. Embed audio from devices such as audio mixers and analog decks into SDI video connections for use with SDI routers and decks or to add extra audio channels to video converters!

## Mini Converter Optical Fiber

Now you can convert SDI to Optical Fiber, and Optical Fiber to SDI simultaneously. Mini Converter Optical Fiber automatically switches between any SD, HD, 3Gb/s HD-SDI video standards and each direction can be completely independent.

#### **Functional Diagram**

**Functional Diagram** 

Alt SDI Ir

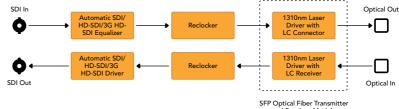
**Functional Diagram** 

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Alt SDI In

Mini Switches

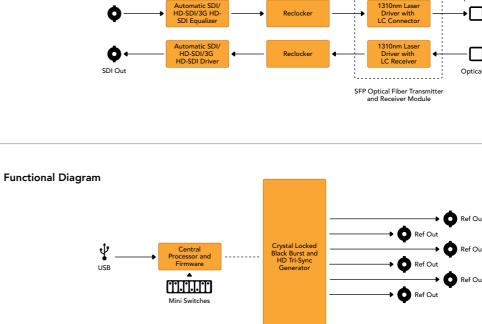
Input automatically detects between SD, HD-SDI and 3Gb/s SDI



Serializer and SDI Cable Driver

#### Mini Converter Sync Generator

Includes 6 crystal stabilized video reference outputs for referencing all the video equipment in your studio in either high definition Tri-Sync or standard definition Black Burst television standards. Perfect for small studios and outside broadcasts!



SDI to Analog	SDI to HDMI	HDMI to SDI	Analog to SDI	SDI to Audio	Audio to SDI	Optical Fiber	UpDownCross	Sync Generator	
Connections									
SDI Video Input: Switchable between SD, HD and 3 Gb/s SDI.				SDI Video Input: Switchable between SD, HD and 3 Gb/s SDI.				SDI Video Input: None	
SDI Redundant Input: Automatically switches over if main SDI input is lost.				SDI Redundant Inpo switches over if mai		SDI Redundant Input: None			
SDI Video Outputs: A	automatically matches t			SDI Video Output None					
Optical Fiber Video Input: None							Optical Fiber Video Input: None		
Optical Fiber Video Output: None Optical Fiber Video Output: None Output: Switchast between SD, HD and 3 Gb/s SDI.								Optical Fiber Video Output: None	
Multi Rate Support: Auto detection of HD or standard definition inputs.								Multi Rate Support: Via mini switches	
Updates and Configu	ration: Via USB 2.0 hig	h speed. (480 Mb/s)							
Re-clocking: Yes									
Optical Fiber Audio Input: None							Optical Fiber Audio Input: None		
Optical Fiber Audio Output: None						Optical Fiber Audio Output: 16 channel embedded.	Optical Fiber Audio Output: None		
Analog Audio: 2 channels of professional balanced analog audio with standard 1/4 inch jack connections.  Analog Audio: 4 channels of professional balanced analog audio with standard 1/4 inch jack connections.						Analog Audio: None			
AES/EBU Digital Aud jack connections.	io: 2 channels of profes	ssional balanced digital	with standard 1/4 inch	AES/EBU Digital Au professional balance 1/4 inch jack conne	ed digital with standard	AES/EBU Digital Audio: None			
HDMI: None	HDMI: Output	HDMI: Input	HDMI: None						
Analog Video: Component, NTSC, PAL and S-Video from SD-SDI input. Component HD from HD-SDI input.	Analog Video: None  Analog Video: Component SD/ HD, NTSC, PAL and S-Video.			Analog Video: None					
Reference Input: Non	e						Reference Input: Blackburst and TriSync for SD & HD.	Reference Input: None	



SDI to Analog	SDI to HDMI	HDMI to SDI	Analog to SDI	SDI to Audio	Audio to SDI	Optical Fiber	UpDownCross	Sync Generator		
Standards										
SDI Format Support: 625/25 PAL, 525/29.97 NTSC, 1080PsF23.98, 1080PsF24, 1080PsF25, 1080i50, 1080i59.94, 1080i60, 720p50, 720p59.94 and 720p60.										

SDI Compliance: SMPTE 259M, SMPTE 292M, SMPTE 296M, ITU-R BT.656, ITU-R BT.601 and SMPTE 297M for Optical Fiber SDI.

SDI Video Sampling: 4:2:2

SDI Video Rates: SDI video connections are switchable between standard definition and high definition.

SDI Color Precision: 4:2:2

SDI Color Space: YUV

SDI Audio Sampling: Television standard sample rate of 48 kHz and 24 bit.

SDI Auto Switching: Automatically selects between SD SDI, HD-SDI and 3 Gb/s SDI.

Analog Format Support: 625/25 PAL, 525/29.97 NTSC, 1080PsF23.98, 1080PsF24, 1080i50, 1080i59.94, 1080i60, 720p50, 720p59.94 and 720p60.

Analog Color Precision: 4:2:2

HDMI Format Support: 625/25 PAL, 525/29.97 NTSC, 625/50p PAL, 525/59.94p NTSC, 1080p23.98/24, 1080i50, 1080i59.94/60, 720p50 and 720p59.94/60.

HDMI Color Precision: 4:2:2 and 4:4:4

HDMI Color Space: YUV and RGB

Copy Protection: For legal reasons, capture devices from Blackmagic Design are designed not to capture, convert or transmit video or audio from copy-protected sources, e.g. video devices using HDCP.

Software Control: Mac OS X™ and Windows™ software upgrade via USB.

Settings Control: Mini Switches or USB software.

Firmware Upgrade: Via included firmware updater application.

Power Supply: +12V universal power supply included with international socket adapters for all countries. Cable tie point.

HD Down Conversion: Included	HD Down Conversion: None	HD Down Conversion: Included	HD Down Conversion: None				HD Down Conversion: Included	HD Down Conversion: None
110 Volt Power	110 Volt Power	110 Volt Power	110 Volt Power	110 Volt Power	110 Volt Power	110 Volt Power	110 Volt Power	110 Volt Power
Consumption:	Consumption:	Consumption:	Consumption:	Consumption:	Consumption:	Consumption:	Consumption:	Consumption:
83 mA	82 mA	60 mA	67 mA	53 mA	82 mA	34 mA	88 mA	36 mA
220 Volt Power	220 Volt Power	220 Volt Power	220 Volt Power	220 Volt Power	220 Volt Power	220 Volt Power	220 Volt Power	110 Volt Power
Consumption:	Consumption:	Consumption:	Consumption:	Consumption:	Consumption:	Consumption:	Consumption:	Consumption:
42 mA	41 mA	30 mA	34 mA	27 mA	41 mA	17 mA	47 mA	18 mA

Product Warranty: 3 Year Limited Manufacturer's Warranty.

