

Connections

SDI Video Outputs

2 x SDI Video Outputs.

Analog Video Inputs

NTSC, PAL, S-Video and Component SD/HD input.

Analog Audio Inputs

2 channels of balanced analog audio.

Digital Audio Inputs

2 channels of balanced AES/EBU audio.

Multi Rate Support

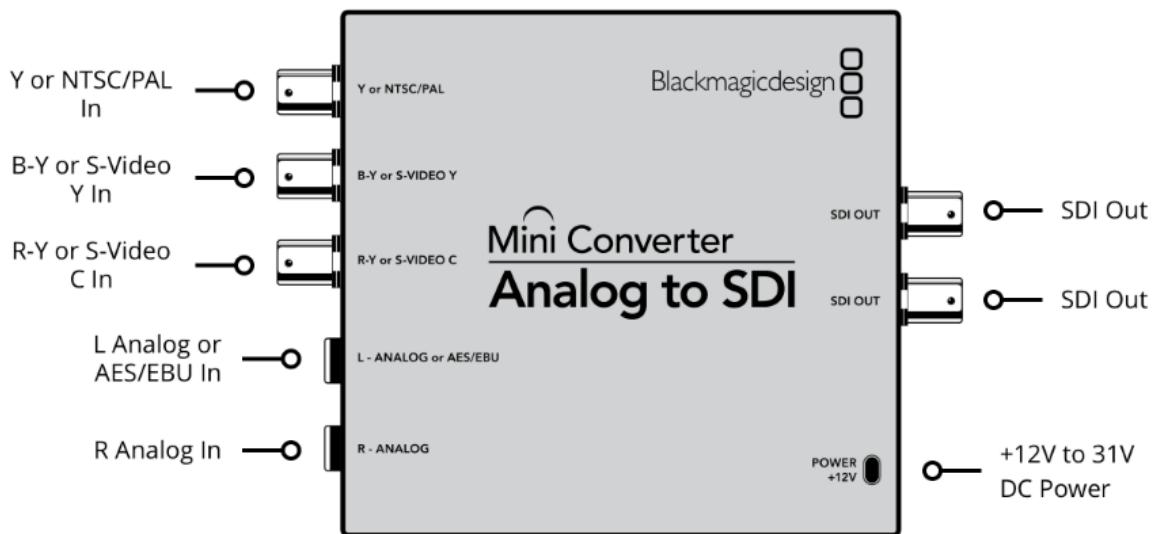
Auto detection of SD or HD.

Updates and Configuration

Via USB 2.0 high speed. (480 Mb/s)

Reclocking

Yes



Standards

SD Video Standards

525i59.94 NTSC, 625i50 PAL

HD Video Standards

720p50, 720p59.94, 720p60

1080i50, 1080i59.94, 1080i60

SDI Compliance

SMPTE 259M, SMPTE 292M, SMPTE 296M, ITU-R BT.656 and ITU-R BT.601.

SDI Video Rates

SDI video connections are switchable between standard definition and high definition.

SDI Video Sampling

4:2:2

SDI Audio Sampling

Television standard sample rate of 48 kHz and 24 bit

SDI Color Precision

4:2:2

SDI Color Space

YUV

SDI Auto Switching

Automatically follows format of analog input.

Analog Video Standards

525i29.97 NTSC, 625i25 PAL

Analog Color Space

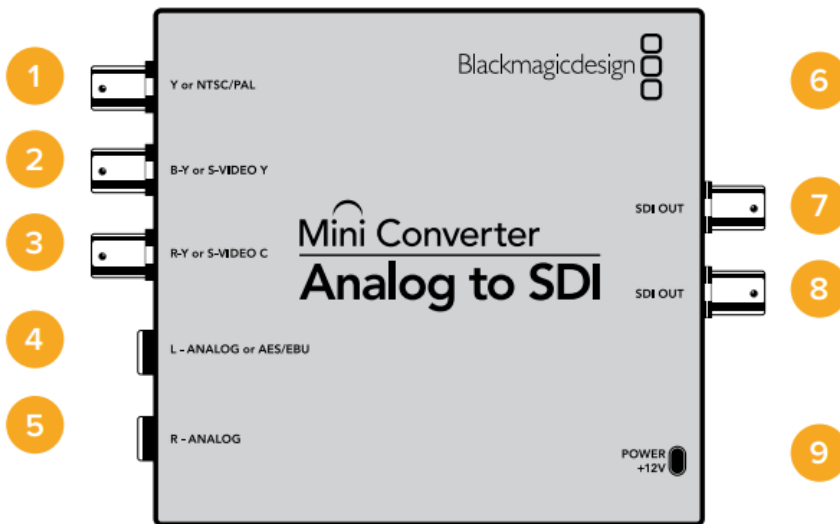
YUV

Analog Color Precision

4:2:2

Mini Converter Analog to SDI

With your Mini Converter Analog to SDI and the Analog to SDI Heavy Duty model you can convert video and audio from analog equipment such as Betacam SP decks, HDV cameras and game consoles to SD/HD-SDI video. A choice of analog and digital formats is supported, including component SD/HD, S-Video, or composite NTSC and PAL. The converter's HD-SDI outputs include the option to embed digital AES/EBU or analog audio.



Connectors

- 1 Y or NTSC/PAL**
Analog component Y, or composite NTSC/PAL input BNC connector.
- 2 B-Y or S-VIDEO Y**
Analog component B-Y, or S-Video Y input BNC connector.
- 3 R-Y or S-VIDEO C**
Analog component R-Y, or S-Video C input BNC connector.
- 4 L - ANALOG or AES/EBU**
Balanced left channel analog audio, or AES/EBU digital audio input 1/4" jack connector.
- 5 R - ANALOG**
Balanced right channel analog audio input 1/4" jack connector.
- 6 MINI-B USB PORT**
Connects to the Converters Setup software via your Mac OS X or Windows computer. The Mini Converter's internal software is also updated using the USB port.
- 7 SDI OUT**
SDI video output BNC connector.
- 8 SDI OUT**
Second SDI output.
- 9 POWER +12V**
12 volt power supply input.

Switches

TIP On the Mini Converter Heavy Duty model, the switches are protected by a rubber dust cover. Simply lift the edge of the cover to access the switches.

Mini Converter Analog to SDI's switches provide the following settings:

Switch 8 - Analog Audio, AES/EBU Audio

Set switch 8 to OFF to select balanced analog audio, or to ON for digital AES/EBU audio input.

Switch 7 - 7.5 IRE - 0.0 IRE

The USA and countries using NTSC with 7.5 setup should set switch 7 to OFF. If you're working in countries not using 7.5 setup, for example Japan, set switch 7 to ON. This setting only affects composite or S-Video outputs.

Switch 6 - SMPTE Levels - Betacam Levels

This setting selects between SMPTE or Betacam video levels. Set switch 6 to OFF for SMPTE levels, or to ON for Betacam levels. SMPTE levels are more common and even Betacam SP decks can use SMPTE levels so only switch this to Betacam if you are sure that Betacam levels are being used.

Switch 5 - Component, Composite or S-Video

Set switch 5 to OFF to select analog component video input, or to ON for composite video and S-Video analog inputs.

Mini Converter Analog to SDI		
	OFF	ON
8	ANALOG AUDIO	AES/EBU AUDIO
7	7.5 IRE	0.0 IRE
6	SMPTE LEVELS	BETACAM LEVELS
5	COMPONENT	COMPOSITE or S-VIDEO
4	COMPOSITE	S-VIDEO
3		
2		
1	PROCESSING OFF	PROCESSING ON

The switch legend on the base of your converter gives you all the information you need to change conversion settings.

Switch 4 - Composite - S-Video

Set switch 4 to OFF to select composite video input, or to ON for S-Video input.

Switch 1 - Processing Off - Processing On

This switch is not used.

Mini Switch Settings Example

Experiment with the switches by setting your Blackmagic Mini Converter to Component and Analog Audio input by setting switches 8 and 5 to the OFF position.

Blackmagic Converters Setup Settings

The Converters Setup utility can be used to change settings and update your Mini Converter's software. You can access these settings by moving between the 'video,' 'audio,' and 'about' tabs.

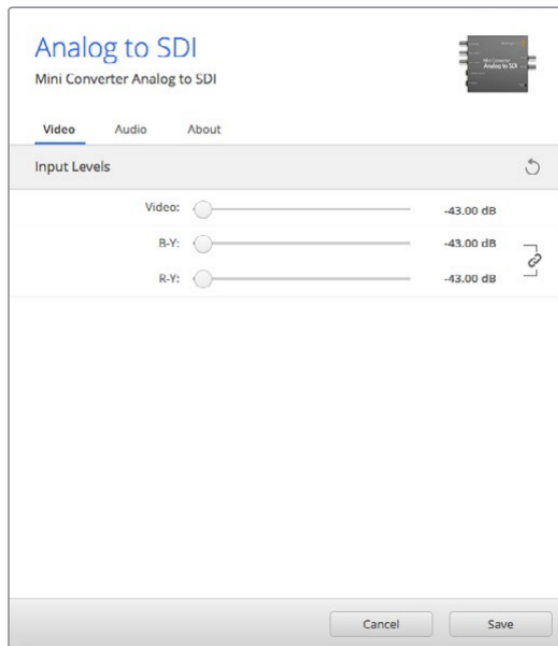
The 'about' tab is detailed in the 'changing settings' section in this manual.

The 'video' tab for Mini Converter Analog to SDI contains the following settings.

Input Levels menu

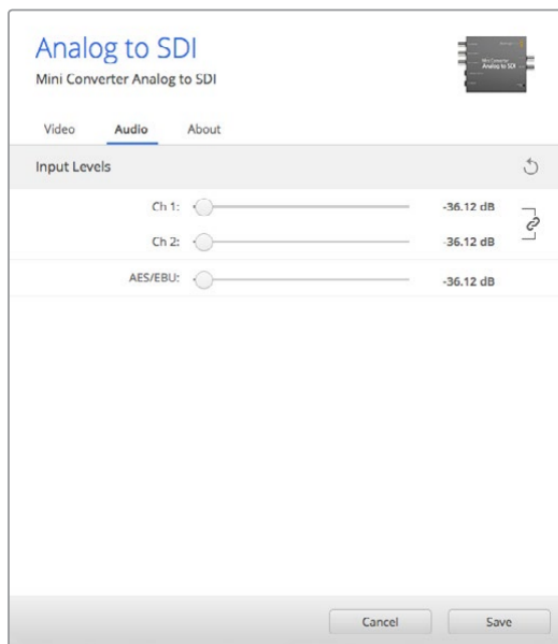
This lets you set the luminance and chroma levels, and the B-Y and R-Y component levels independently.

The 'audio' tab for Mini Converter Analog to SDI contains the following settings.



Input Levels menu

This menu allows you to adjust the gain on the audio input. You can adjust audio levels independently per channel, or together by clicking the 'link' icon next to their sliders. To reset all audio levels back to 0 dB click the 'reset' button at the top of the 'input levels' menu.



Use the 'audio' tab in Converters Setup to adjust analog audio levels.

Mini Converter Analog to SDI Block Diagram

