

HDMI to 3G-SDI & 3G-SDI to HDMI Full HD Converter

User manual

1. About

Product model and standard

HDMI to 3G/HD SDI converters, which can convert full HD HDMI signal to 3G/HD SDI signal, support maximum 8-channel HDMI embedded audio output. This converter has one HDMI input port, two 3G/HD SDI outputs. It is suited for HDMI cameras or other HDMI video sources to connect SDI video recorders or monitors.

SDI to HDMI converters, which can convert 3G/HD SDI signal to HDMI signal. This converter has one 3G/HD SDI input port, one 3G/HD SDI loop output. It is suited for SDI camera or other SDI video sources to connect HDMI video recorders or monitors.

Product model:

Model	Part number	Audio SRC
HDMI to SDI	Model A	8ch
	Model B	2ch
	Model C	No SRC

Model	Part number	3G SDI	SDI loop output
SDI to HDMI	Model A	Yes	Yes

Main features:

- **HDMI to SDI**
 - HDMI 1.3a input, 3G SDI output

- Full 10bit color converting
- Support maximum 8-channel HDMI embedded audio
- SRC function is optional, it supports multiple HDMI audio inputs
- SDI PLL clock filter, ultra low jitter 3G SDI output
- HDMI HDCP1.2 local decode
- Power and video indicators
- Industrial metal case, easy to install

➤ **SDI TO HDMI**

- SMPTE425M-AB input
- Full HDMI 1.3a formats, support 24bit, 30bit, 36bit color, 2-8 channels embedded audio
- SDI PLL clock, support long distance 3G SDI cable
- Power and video indicators
- Industrial metal case, easy to install

Parameters:

➤ **HDMI TO SDI**

Interface	1 HDMI input port (female type A with holes); 2 SDI outputs (female type-BNC); 5V DC in (Ø3);
Power consumption	<1.85W
Dimension	(L x W x H): 82 x 55 x 30mm
Net weight	0.15kg per unit
Input video formats	HDMI v1.3a, 30/36 bits per pixel, RGB or YUV, SD, HD,525i, 625i, 720p 50/59.94/60,1080i 50/59.94/60,1080p23.98/24/25/29.9/30/50/59.94/60

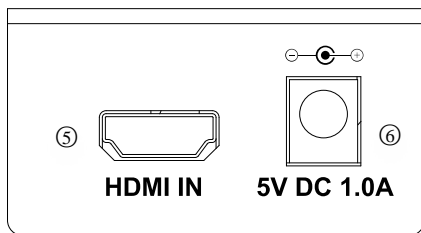
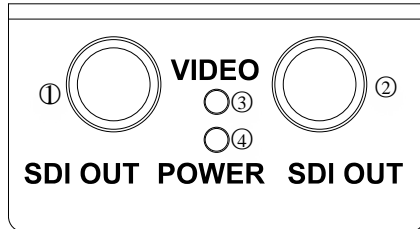
	HDMI Standard Type A connector
Output video formats	3G, HD, and SD-SDI (auto-selected), SMPTE-259/274/292/296/372/424/425, 2x BNC
Input audio formats	HDMI embedded audio, 24 bit/48KHz or any less than 96kbps audio sample rate that HDMI audio input (with SRC function). Maximum 8 channels
Output audio formats	SDI embedded audio, 24 bit/48KHz, 8 channels max
Indicators	Power-Green, Video link-Yellow
Temperature range	0~40°C (operation), -20~60°C(stock)
Compliance	FCC; CE

➤ SDI TO HDMI

Interface	1 SDI input port (female type-BNC); 1 SDI loop output port (female type-BNC); 1 HDMI input port (female Type A); 5V DC in (Ø3);
Power consumption	<1.3W
Dimension	(L x W x H): 82 x 55 x 30mm (not include SDI connectors)
Net weight	0.175kg per unit
Input video formats	3G, HD, and SD-SDI (auto-selected), SMPTE-259/274/292/296/372/424/425, 2x BNC
Output audio formats	HDMI v1.3a, 30/36 bits per pixel, RGB or YUV, SD, HD,525i, 625i, 720p 50/59.94/60,1080i 50/59.94/60,1080p23.98/24/25/29.9/30/50/59.94/60 HDMI Standard Type A connector
Input audio formats	SDI embedded audio, 24 bit/48KHz, 8 channels max
Output audio formats	HDMI embedded audio, 24 bit/48KHz, 8 channels max
Indicators	Power-Green, Video link-Yellow
Temperature range	0~40°C (operation), -20~60°C(stock)
Compliance	FCC; CE

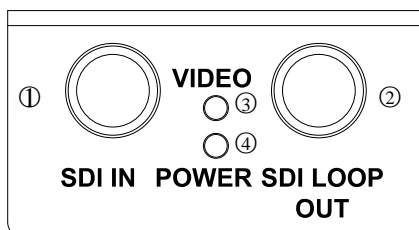
Product introduction

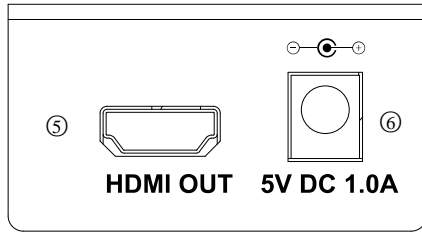
➤ HDMI TO SDI converter



1. SDI output port 1
2. SDI output port 2
3. Video link indicator
4. Power indicator
5. HDMI input port
6. 5V DC input

➤ SDI to HDMI converter





SDI input port

SDI loop output port

Video link indicator

Power indicator

HDMI output port

5V DC input

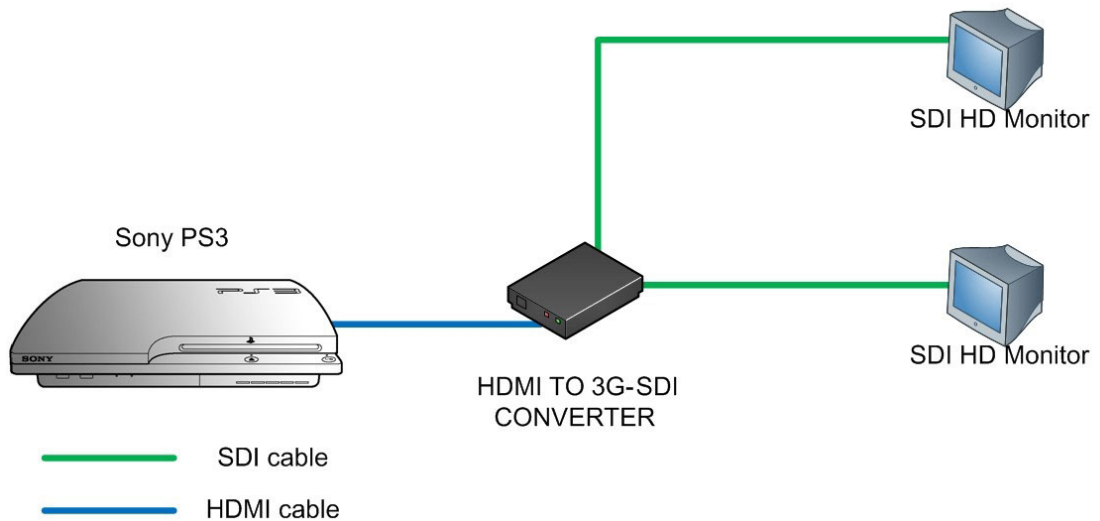
Packing list

- 1 unit HDMI to 3G-SDI converter or 3G-SDI to HDMI converter
- 2 type-L metal brackets, used for install on walls
- 1 unit DC 5V 1A adapter
- 103*137*45mm carton packing

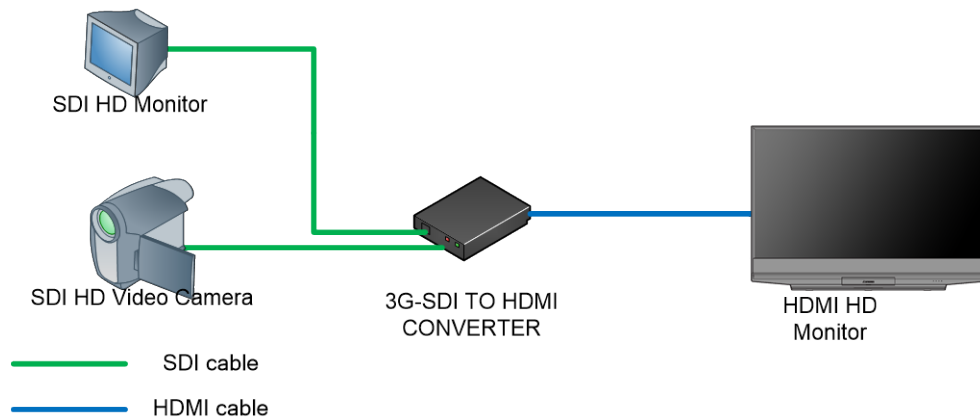
3. Installation

Typical installation instruction

➤ HDMI to 3G-SDI converter application diagram



➤ 3G-SDI to HDMI converter application diagram



Note: In 3G-SDI mode, the maximum length of SDI cable is 100m based on 1080p60 3G SDI video with Belden 1694A cable.

- Install products on walls or frames

There are type-L metal brackets. It is easy to fix transmitters or

receivers on walls.

4. Operation instruction

Getting started

- a) Ensure the video source and the display terminal are power on, and all input, output cables are connected, then power on.
- b) It takes about 2~3 seconds to finish EDID and other initialization automatically. Then 'Video' indicator will light, it means input video signal is OK.
- c) At this time, display terminal will show the same format video that video source send out.

EDID function

Our HDMI to 3G-SDI converters have EDID function. When HDMI video source request EDID, converters will send internal EDID automatically. Ensure maximum compatibility.

Audio SRC function (HDMI to SDI converter only)

HDMI video sources support different audio sampling rate, but SDI monitors accepts 48KHz audio sampling rate. It caused audio problems in some situations. SRC means sampling rate selection, it can fix audio sampling rate problem, and it is automatically, choosing right part number if you request SRC function.

5. Trouble shooting

Normal problems

a) No output on display

Check power first, then check 'Video' indicator. If 'Video' indicator is not light, check cable and video source please. If there are no problems, check SDI cable connection. Confirm SDI cable length is less than maximum number.

b) No output on SDI loop output port (SDI to HDMI converter only)

Check power first, then check 'Video' indicator. If 'Video' indicator is not light, check SDI cable and SDI video source please. If there are no problems, check SDI loop output cable connection. Confirm loop output SDI cable length is less than maximum number.

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