

## 12G-SDI TO HDMI CONVERTER SERIES



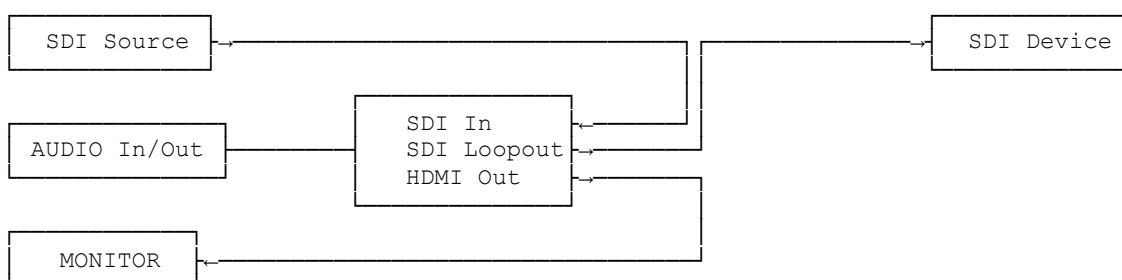
SDI01A-12G converts from 12G-SDI to HDMI 2.0 which enabling users to use cost effective HDMI display to SDI based equipment. It also provides XLR and AES audio input / output. The application could be using for professional broadcast equipment.

**SDI01A-12G** 12G-SDI TO HDMI 2.0 converter with audio embedded/extractor

### Features:

- Maximum resolution supports 4096x2160@60Hz 4:2:2 10Bit or 4096x2160@30Hz 4:4:4 12Bit
- SDI input resolution supports 12G, 6G, 3G, 1.5G
- SDI input could be coaxial or optical,
- Supports loop out function
- HDMI output supports HDMI 2.0, HDCP 2.2
- HDMI output supports scaler function, can set and fix HDMI output resolution
- Support audio extraction function, can output SDI audio by XLR, AES or earphone
- Support audio embedding function, XLR, AES, RCA, MIC audio can be embedded into HDMI
- MIC input supports 48V phantom power

### Installation:



1. Connect 12G-SDI source to SDI01A-12G by 12G RG6U cable (BELDEN 4694 or higher).
2. Connect 4K 6G HDMI monitor to SDI01A-12G by HDMI 2.0 premium cable.
3. Connect 12G-SDI monitor to SDI01A-12G by 12G RG6U cable (BELDEN 4694 or higher).
4. Connect AUDIO INPUT/OUTPUT between SDI01A-12G and audio equipment by XLR cable.
5. Connect DC 12V power adaptor to SDI01A-12G and turn on POWER switch.

## Recommend Cable:

Link cable recommend to use high quality 75Ω Coaxial Cable, low quality coaxial cable may case signal loss and effect transmission distance and reliability.

## LED Indication:

Front Panel LED	Function	ON	Blink
Green ON	Power	Power Good	
Green SIGNAL	SDI Signal Indicator	Signal Locked	
Green HDMI	HDMI Output Indicator	HDMI Outputted	Resolution not supported
Blue 12G/6G	12G/6G Indicator	12G-SDI	6G-SDI
Blue 3G/1.5G	3G/1.5G Indicator	3G-SDI	1.5G-SDI
Blue 270M	270M Indicator	270M-SDI	
Green XLR	XLR Input Indicator	XLR Input	
Blue AES	AES Input Indicator	AES Input	
Red MIC	Mic Input Indicator	Mic Input	

Rear Panel LED	Function	ON
Green READY	System Ready Indicator	System Ready
Blue SDI	Coaxial Indicator	Coaxial Input
Blue Optical	Optical Indicator	Optical Input
Green XLR	XLR Output Indicator	XLR Output
Blue AES	AES Output Indicator	AES Output

## Panel View:



### SDI Input:

- Coax/Optical

### SDI Loop out:

- Coax/Optical:

### Audio Input:

- SDI 8 Channel by Group selection
- 2 CH XLR / RCA / 6.5mm phone jack/ AES

### Audio Output (simultaneously):

- HDMI
- 2 Channel XLR / 6.5 mm phone jack/ AES

### Micro USB:

- Firmware update
- System setting
- HDMI audio mapping

### Mechanical Dip Switch:

- Select audio interface
- Select HDMI resolution
- HDCP On / off

## Dip Switch Setting:

No.	Function	↑ OFF	↓ ON
1	Video Input Select	Coaxial Input	Optical Input
2	Audio Mode	Audio Extractor	Audio Embedder
3	Audio Select	4↑ 3↑ = XLR	4↑ 3↓ = RCA
4		4↓ 3↑ = MIC	4↓ 3↓ = AES
5	Scaler Setting	6↑ 5↑ = Pass Through	6↑ 5↓ = 1080p@60Hz
6		6↓ 5↑ = 3840x2160@60Hz	6↓ 5↓ = User Define Default 4096x2160p@60Hz
7	Reserve		
8	HDCP Setting	Without HDCP	With HDCP

※ Please adjust the DIP switch when power off then turn on to take effect.

## Phantom Power Voltage Setting:

Jumper No.	Phantom Voltage
JP5 Short	48V
JP6 Short	24V
JP7 Short	18V (OEM Version)
JP5, JP6, JP7 All open	12V

## Support Format:

### SDI Standard

SMPTE 2082-10 Mode 1 (12G-SDI)

SMPTE 2081-10 Mode 2 (6G-SDI)

SMPTE 425-1 3GA & 3GB (3G-SDI)

SMPTE 425-1 3GB-DS (3G-SDI)

SMPTE 292 (1.5G-SDI)

### SDI Resolution and Frame Rate

4096x2160 60p, 59.94p, 50p, 48p, 47.95p, 30p, 29.97p, 25p, 24p, 23.98p

3840x2160 60p, 59.94p, 50p, 48p, 47.95p, 30p, 29.97p, 25p, 24p, 23.98p

2048x1080 60p, 60i, 59.94p, 59.94i, 50p, 50i, 48p, 48i, 47.95p, 47.95i, 30p, 30psf, 29.97p, 29.97psf, 25p, 25psf, 24p, 24psf, 23.98p, 23.98psf

1920x1080 60p, 60i, 59.94p, 59.94i, 50p, 50i, 48p, 48i, 47.95p, 47.95i, 30p, 30psf, 29.97p, 29.97psf, 25p, 25psf, 24p, 24psf, 23.98p, 23.98psf

1280x720 60p, 59.94p, 50p, 48p, 47.95p, 30p, 29.97p, 25p, 24p, 23.98p

### SDI Sampling

4:4:4 and 4:2:2

### SDI Audio

32 Channel 48KHz 24-Bit

## HDMI Resolution and Frame Rate

4096x2160	60p, 59.94p, 50p, 48p, 47.95p, 30p, 29.97p, 25p, 24p, 23.98p
3840x2160	60p, 59.94p, 50p, 48p, 47.95p, 30p, 29.97p, 25p, 24p, 23.98p
2048x1080	60p, 60i, 59.94p, 59.94i, 50p, 50i, 48p, 48i, 47.95p, 47.95i, 30p, 29.97p, 25p, 24p, 23.98p
1920x1080	60p, 60i, 59.94p, 59.94i, 50p, 50i, 48p, 48i, 47.95p, 47.95i, 30p, 29.97p, 25p, 24p, 23.98p
1280x720	60p, 59.94p, 50p, 48p, 47.95p, 30p, 29.97p, 25p, 24p, 23.98p

## HDMI Audio

8 Channel 48KHz 24-Bit

## Scaler Resolution and Frame Rate

4096x2160p	60, 50Hz
3840x2160p	60, 50Hz
1920x1080p	60, 50Hz
1280x720p	60, 50Hz
720x576p	50Hz
640x480p	60Hz

## Trouble Shooting:

1. SD-SDI (480i & 576i) in the SMPTE 292 standard 270M is not supported.
2. Any change of HDCP settings must be reboot to take effect

## Specification:

ITEM	SDI01A-12G
Standard	SMPTE 2082-10 Mode 1 (12G-SDI) SMPTE 2081-10 Mode 2 (6G-SDI) SMPTE 425-1 3GA & 3GB (3G-SDI) SMPTE 425-1 3GB-DS (3G-SDI) SMPTE 292 (1.5G-SDI)
Input Resolution	Up to 4096x2160@60Hz 4:2:2 10Bit or 4096x2160@30Hz 4:4:4 12Bit
Output Resolution	Up to 4096x2160@60Hz
Coaxial Connector	75Ω 12G-SDI BNC x 2
Optical Connector	Video SMPTE SFP+ x 1 (12G/6G/3G/1.5G)
HDMI Connector	HDMI A Type x 1
XLR Connector	XLR Male Jack x 2, XLR Female Combo 6.4 Jack x 2
RCA Connector	10KΩ RCA x 2
Other Connector	Micro USB x 1 (for Console, Setting, FW Update)
DC Jack	5.5mm * 2.1mm / DC 12V Regulated
Power Consumption	xW
Ambient Temperature	0 ~ 50 °C °C
Dimensions (mm)	aa x bb x cc
Weight (g)	xxx