



# SDI to HDMI & AV Scaling Converter

**CB-2021**



CB-2021 is an exquisite and professional converter to convert SDI signal to HDMI and AV signals at the same time. The format of the output can realize pass through or up/down scaling and frame rate conversion. De-interlacing function and seamless conversion can also be supported to avoid jitter. It also features AES/EBU or analog audio embedding and de-embedding. All the functions can be easily set by a built-in DIP switches or PC via micro USB. CB-2021 is your ideal choice for broadcasting and AV post production applications.

## Connections

### SDI Video Input

1×SD/HD/3G-SDI(75Ω BNC)

### HDMI Video Output

1×HDMI type A

### AV Output

1× 3.5mm jack

### SDI Redundant Input

Automatically switches over if main SDI input is lost.

### AES/EBU Digital Audio Input

1×1/4" (6.35mm) TRS jack

### AES/EBU Digital Audio Output

1×1/4" (6.35mm) TRS jack

### SDI Video Loop Output

1×SD/HD/3G-SDI

### Analog Audio Input

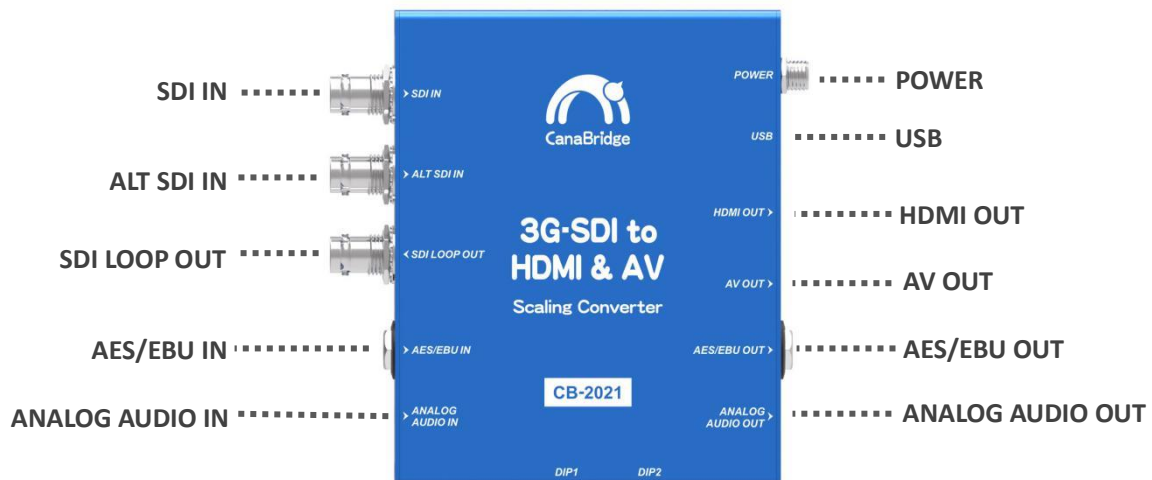
1× 3.5mm jack

### Analog Audio Output

1× 3.5mm jack

### Updates and Configuration

Micro USB



## Functions and Standards

### SDI Input Format

1080p 50/59.94/60  
 1080p 23.98/24/25/29.97/30  
 1080psF 23.98/24/25/29.97/30  
 1080i 50/59.94/60  
 720p 50/59.94/60  
 525i 59.94, 625i 50

### SDI Color Space and Precision

YCbCr 4:2:2

### SDI Standard

SMPTE ST 259,  
 SMPTE ST 292-1,  
 SMPTE ST 424

### AV Output Format

NTSC, PAL

### HDMI Color Space and Precision

RGB 4:4:4  
 YCbCr 4:2:2  
 YCbCr 4:4:4

### SDI Auto Switching

Automatically detects SD, HD and  
 3G-SDI (not support Level B)

### HDMI Output Format

1080p 50/59.94/60  
 1080p 23.98/24/25/29.97/30  
 1080i 50/59.94/60  
 720p 50/59.94/60  
 480i 59.94, 576i 50

### Analog Audio input

5dBu (Max)

### Analog Audio output

0dBu (Max)

### SDI Video Rate

SD/HD/3G-SDI

## Power

### Power

Threaded locking connector

### Power Consumption

6W (Max)

### Voltage Range

DC 6-24V

## Physical Specifications

### Dimension

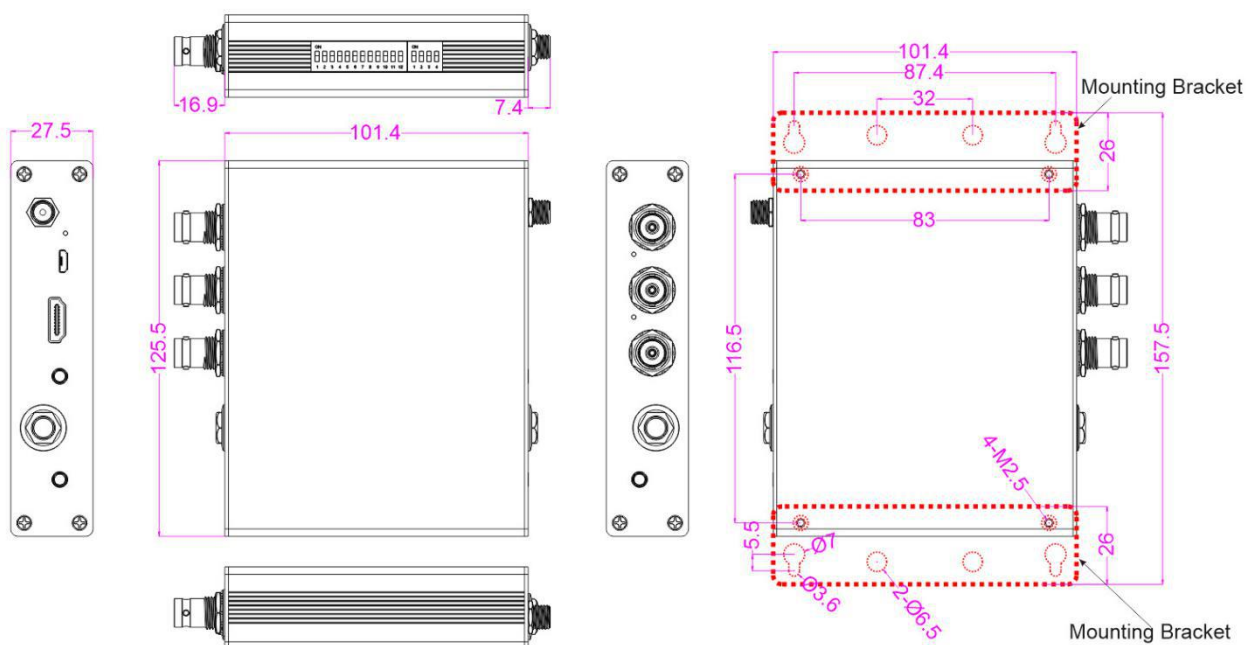
125.5×101.4×27.5mm

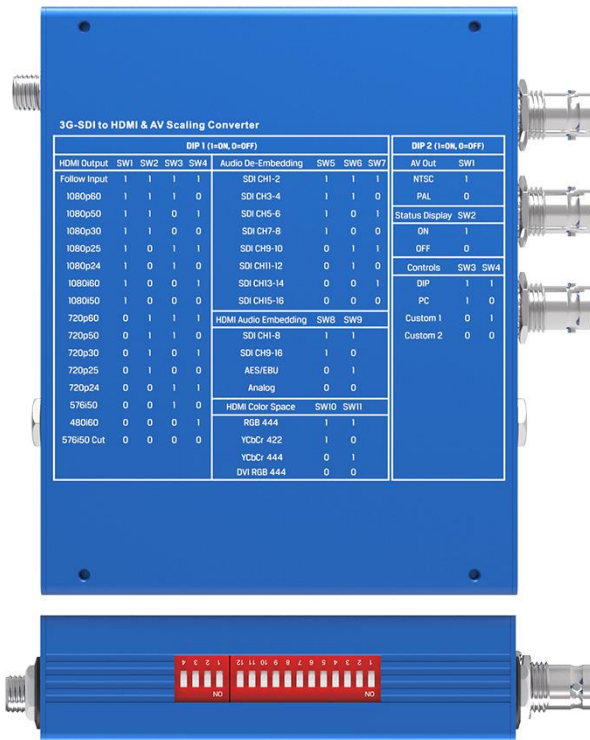
### Net Weight

310g

### Gross Weight

995g





## Dip Switches

CB-2021's Dip Switches provide the following settings (1=ON, 0=OFF):

### 1. DIP1 SW 1-4 - Up/Down Scaling and Frame Conversion

Set switches to realize pass through or up/down scaling and frame rate conversion at HDMI output.

HDMI Output	SW1	SW2	SW3	SW4
Follow Input	1	1	1	1
1080p60	1	1	1	0
1080p50	1	1	0	1
1080p30	1	1	0	0
1080p25	1	0	1	1
1080p24	1	0	1	0
1080i60	1	0	0	1
1080i50	1	0	0	0
720p60	0	1	1	1
720p50	0	1	1	0
720p30	0	1	0	1
720p25	0	1	0	0
720p24	0	0	1	1
576i50	0	0	1	0
480i60	0	0	0	1
576i50 Cut	0	0	0	0

\*Output format of 23.98/29.97/59.94Hz can be set by PC software.

To download the software, please visit [www.cana-bridge.com](http://www.cana-bridge.com).

### 2. DIP1 SW 5-7 - Audio De-Embedding

Set switches to de-embed any pair of SDI 16-channel audio to the AES/EBU and Analog audio output.

### 3. DIP1 SW 8-9 - HDMI Audio Embedding

Set switches to embed audio from SDI CH1-8, SDI CH9-16, AES/EBU or Analog audio input to HDMI signal.

### 4. DIP1 SW 10-11 - HDMI Color Space

Set switches select a color space for HDMI output from RGB 444, YCbCr 422, YCbCr 444 or DVI RGB 444.

### 5. DIP2 SW 1 - AV Out

Set switch to select a type of AV from NTSC or PAL.

### 6. DIP2 SW 2 - Status Display

Set switch to ON or OFF the status display overlay. Such as showing the information of input and output format, audio embedding or de-embedding status on the screen.

### 7. DIP2 SW 3-4 - Controls

Set switches to active the custom settings which are user defined and saved via PC software.

## Environmental Specifications

**Operating Temperature**

0°C~40°C

**Storage Temperature**

-30°C~70°C

**Relative Humidity**

0%~90% non-condensing

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## What's Included

CB-2021 (3G-SDI to HDMI & AV Scaling Converter)

2pcs Mounting Brackets with 4 screws (15g/2pcs)

DC 12V Universal Power Supply with 5 International Socket Adapters

USB Cable (150cm)

AV Cable (RCA)

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Note: Specifications are subject to change without notice.