

CV-315

3G/HD/SD-SDI to HDMI Converter

User Manual



3G HD SD HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE



Made in Taiwan



Safety and Notice

The **CV-315 3G/HD/SD-SDI to HDMI Converter** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **CV-315** should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit.
- Do not attempt to service this unit yourself, except where explained in this manual.
- Provide proper ventilation and air circulation and do not use near water.
- Keep away the objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the power adapter, power cords and connection cables designed for this unit.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.



Introduction

The CV-315 provides a cost effective way to convert 3G/HD/SD-SDI signal to HDMI compliant format. The conversion between SDI and HDMI is pure digital and guarantees no loss transformation for both audio and video. Plus, with up to 8 channels audio support, 7.1 channel or 5.1 channel audio becomes available. The CV-315 is designed in the most compact size with the inter-lock power and wall-mount ears.

Features

- Supported 3G formats(SMPTE 425M, Level A):
1080p @50/59.94/60Hz (4:2:2)
- Supported high-definition (HD) formats:
1080i @50/59.94/60Hz
1035i @50/59.94/60Hz
720p @50/59.94/60Hz
- Supported standard-definition (SD) formats:
NTSC @59.94Hz
PAL @50Hz
- Auto 3G/HD/SD-SDI detection
- External DIP Switch Configuration

Specifications & Package Contents

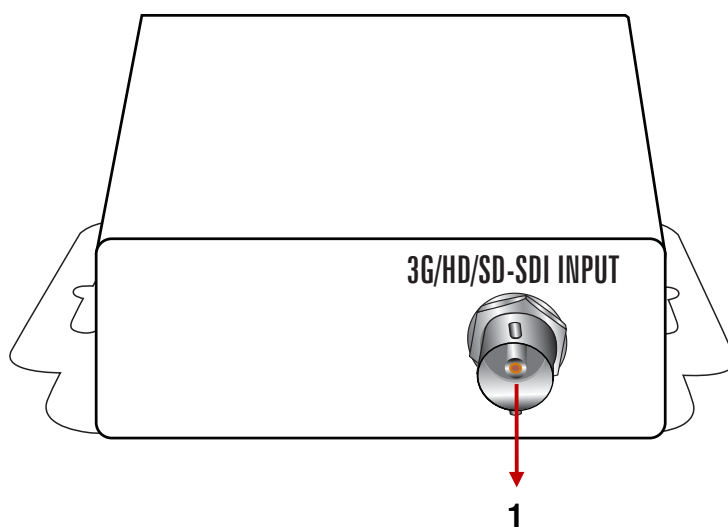
Model Name		CV-315
Technical		
Role of usage	Digital-to-digital format converter	
SDI standards	SD-SDI & HD-SDI & 3G-SDI	
Auto HD/SD-SDI detection	Yes	
Video bandwidth	2.970Gpbs, 2.970/1.001Gpbs	
Video support	[3G] 1080p @50/59.94/60Hz (4:2:2) [HD] 720p @50/59.94/60Hz, 1035i @50/59.94/60Hz, 1080i @50/59.94/60Hz, 1080p @24/30Hz [SD] NTSC @59.94Hz, PAL @50Hz	
Input signal	[SD-SDI] SMPTE 259M [HD-SDI] SMPTE 292M, 296M [3G-SDI] SMPTE 424M/425M	
Output signal	HDMI	
Audio support	7.1/5.1/Stereo	
Eye pattern characteristics	Extra low alignment jitter 0.05UI at HD	
Cable equalization	[3G-SDI] up to 60m (200ft) [HD-SDI] up to 150m (500ft) [SD-SDI] up to 300m (1000ft)	
Loop-out	N/A	
PCB stack-up	6-layer board [impedance control – differential 100Ω; single 50Ω]	
Input	1x BNC [SDI]	
Output	1x HDMI	
BNC connector	3G 75Ω inter-locked socket	
HDMI connector	Type A [19-pin female]	
DIP switch	4-pin [output format / audio format / audio group / 3G level]	
Mechanical		
Housing	Metal case	
Dimensions (L x W x H)	Model	74 x 74 x 26mm [2.9" x 2.9" x 1.0"]
	Package	140 x 200 x 75mm [5.5" x 7.9" x 3"]
	Carton	420 x 400 x 300mm [1'5" x 1'4" x 11.8"]
Weight	Model	211g [7.4 oz]
	Package	440g [15.4 oz]
Fixedness	Inter-locked power supply	
Power supply	5V 4A DC	
Power consumption	3 Watts [max]	
Operation temperature	0~40°C [32~104°F]	
Storage temperature	-20~60°C [-4~140°F]	
Relative humidity	20~90% RH [no condensation]	
Package Contents	1x CV-315 1x 5V power adapter 1x User Manual	

Supported Resolutions

3G-SDI Input	
1080p @ 60/59.94/50Hz	SMPTE 425M (4:2:2)
HD-SDI Input	
720p @ 50Hz	SMPTE 296M -3
720p @ 60 / 59.94Hz	SMPTE 296M -1, -2
1080i @ 25Hz	SMPTE 274M -6
1080i @ 30 / 29.97Hz	SMPTE 274M -4, -5
1080p @ 24 / 23.98Hz	SMPTE 274M -10, -11
1080p @ 25Hz	SMPTE 274M -9
1080p @ 30 / 29.97Hz	SMPTE 274M -7, -8
SD-SDI Input	
NTSC	
PAL B,D,G,H,I	

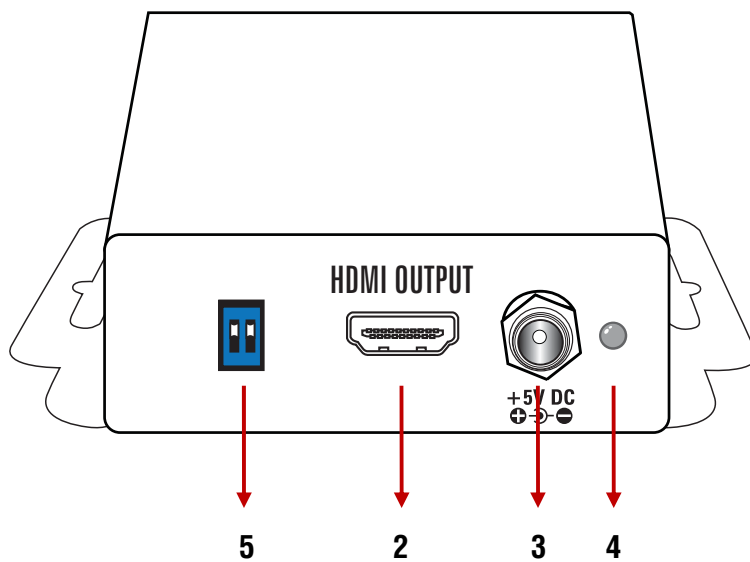
Panel Description

Front Panel



1. 3G/HD/SD-SDI Input

Rear Panel



2. HDMI output
3. Interlocked +5V power jack
4. Power & Signal LED indicator
5. DIP switch

DIP Switch

A 2-pin DIP switch is used for user interface, and users can access this switch from the bottom of the unit.

Pin #	1	2
OFF (▲)	7.1ch	Audio Group 1 & 2
ON (▼)	Stereo	Audio Group 3 & 4

Pin OFF (▲):  Pin ON (▼): 

Notice

1. Some HDMI equipped TV may not be able to decipher multiple channel audio, and therefore set DIP switch pin-1 to ON(▼) to get stereo audio work and then check if multiple channel support is available.
2. CV-305 & CV-315 support only audio sample frequency 48kHz.

Limited Warranty

The SELLER warrants the **CV-315 3G/HD/SD-SDI to HDMI Converter** to be free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, the SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surge. This warranty is offered by the SELLER for its BUYER with direct transaction only. This warranty is void if the warranty seal on the metal housing is broken.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables and power adapters are limited to a 30 day warranty and must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. Also, the technical information contained herein regarding the **CV-315** features and specifications is subject to change without further notice.

