

# gofanco®

## PRO-HDSDIconv

3G/HD/SD-SDI and HDMI Bi-directional Converter  
with Audio Embedder & Extractor

## User's Guide



Congratulations for owning a gofanco product. Our products aim to meet all your connectivity needs wherever you go.

Have fun with our products!

Please read this manual carefully before first use.

If you need more information about our products, please visit [www.gofanco.com](http://www.gofanco.com).

For technical support, please email us at [support@gofanco.com](mailto:support@gofanco.com).

For drivers/manuals download, please go to <http://www.gofanco.com/download>.

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## 1. Safety and Notice

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

The **PRO-HDSDIconv 3G/HD/SD-SDI and HDMI Bi-directional Converter with Audio Embedder & Extractor** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the PRO-HDSDIconv 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 objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the power adapter and 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.

## 2. Introduction

The **PRO-HDSDIconv 3G/HD/SD-SDI and HDMI Bi-directional Converter with Audio Embedder & Extractor** provides a professional way to convert HDMI to 3G/HD/SD SDI & 3G/HD/SD-SDI to HDMI in real time. 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 PRO-HDSDIconv also provides one low jitter SDI output and to provide more flexible application possibility, PRO-HDSDIconv is also equipped with high quality analog stereo embedder & extractor. With the use of PRO-HDSDIconv, the most popular uncompressed video interface in the consumer world is readily available for professional SDI equipment!

## 3. Features

- Supported 3G-SDI formats : 1080p @50/59.94/60Hz (SMPTE425M, Level A)
- Supported HD-SDI formats: 1080i @50/59.94/60Hz, 720p@50/59.94/60Hz
- Supported SD-SDI formats: NTSC @59.94Hz, PAL @50Hz
- Bit Rates for 2.97 Gbps, 2.967Gbps, 1.485 Gbps, 1.4835Gbps, 270 Mbps
- Auto 3G/HD/SD-SDI detection
- Support HDMI Deep Color
- Supports analog stereo embedder & extractor
- HDMI out is HDMI source loopout when SDI in is not used

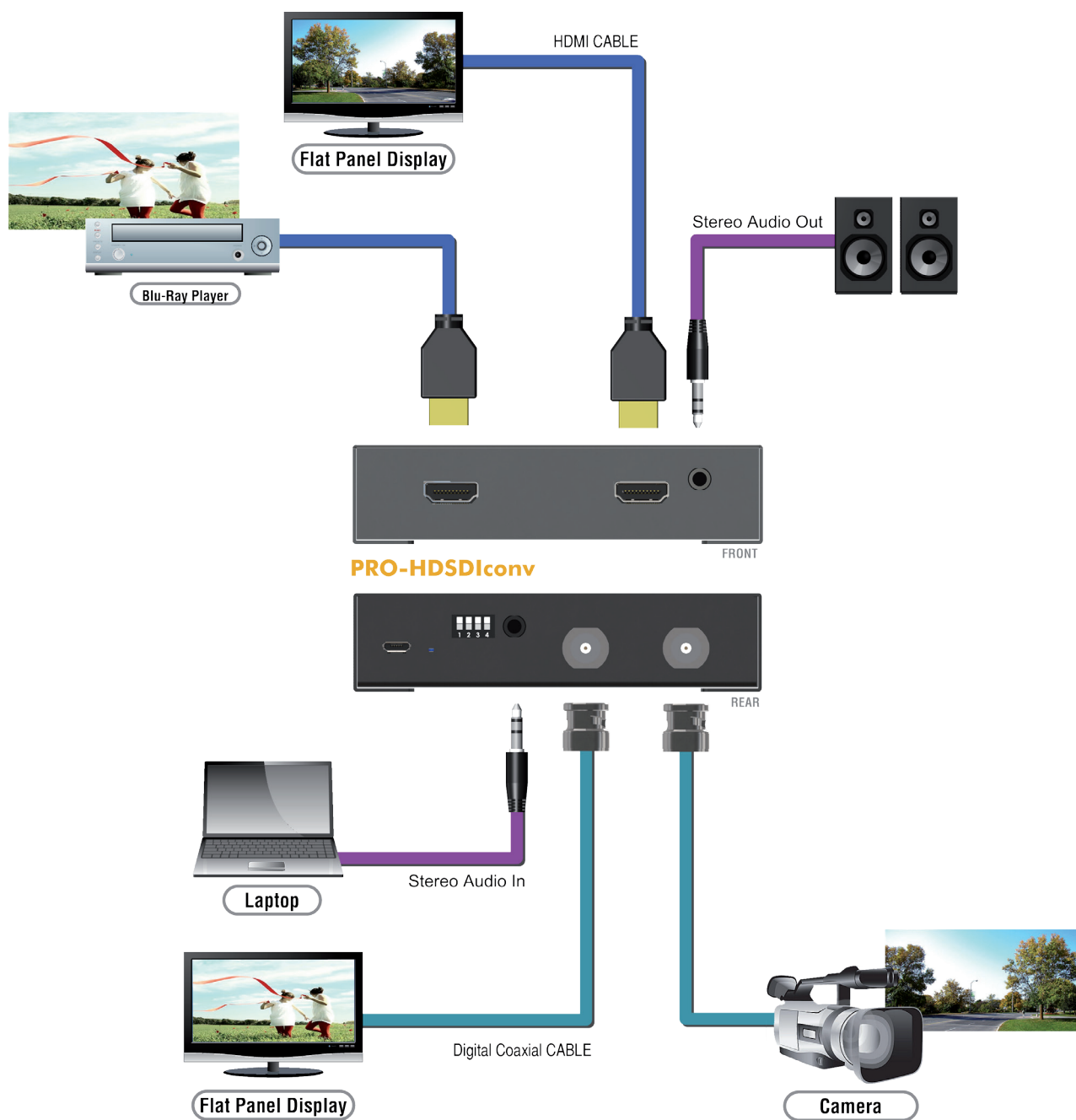
## 4. Package Contents

- 1x PRO-HDSDIconv
- 1x 5V/2A power adapter
- 2x Ear mount
- 1x User Manual

## 5. Specifications

Item		Description
<b>Technical</b>		
Auto 3G/HD/SD-SDI detection		Yes
Video bandwidth		[SDI][2.97Gbps & 2.975/1.001Gbps] [HDMI][6.75Gbps]
Video support		[3G] 1080p50/59.94/60 (4:2:2) [HD] – 720p @50/59.94/60Hz, 1080i @50/59.94/60Hz, 1080p @23.98/24/25/29.97/30Hz [SD] – NTSC @59.94Hz, PAL @50Hz [HDMI] up to 1080p60
Input signal		1x SDI + 1x HDMI + 1x Audio
Output signal		1x HDMI + 1x SDI + 1x Audio
Output impedance(SDI)		75Ω
Synchronization mode		Internal synchronization or external synchronization
Eye pattern characteristics		Extra low alignment jitter 0.05UI at HD
Cable equalization		[3G-SDI] up to 90m (300ft) [HD-SDI] up to 150m (500ft) [SD-SDI] up to 300m (1000ft)
Audio support		Yes
PCB stack-up		6-layer board [impedance control — differential 100Ω; single 50Ω]
Input		1x BNC [SDI] + 1x HDMI + 1x Audio Jack
Output		1x HDMI + 1x BNC [SDI] + 1x Audio Jack
BNC connector		75Ω inter-locked socket
HDMI connector		Type A [19-pin female]
DIP switch		4-pin [1 pin for EDID use, 2 pin for Audio use]
<b>Mechanical</b>		
Housing		Metal enclosure
Dimensions [L x D x H]	Model	114 x 108 x 26mm[4.5" x 4.3" x 1" ]
	Package	264 x 170 x 77mm[10.3" x 6.7" x 3"]
	Carton	430 x 358 x 291mm[1'4" x 1'2" x 11.5"]
Weight	Model	212g[7.5 oz]
	Package	506g[1.1 lbs]
Power supply		5V 2A DC
Power consumption		6 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]

## 6. Connection Diagram



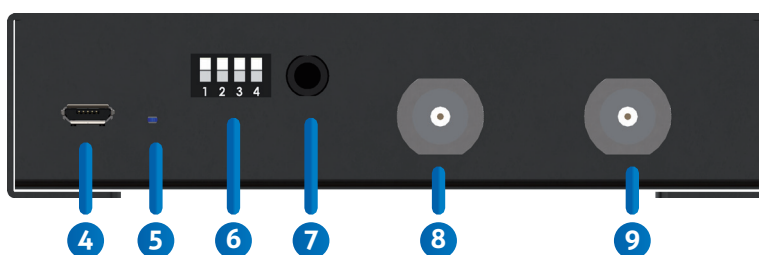
## 7. Panel Description

Front Panel



1. HDMI IN
2. HDMI OUT
3. Stereo Audio Output

Rear Panel



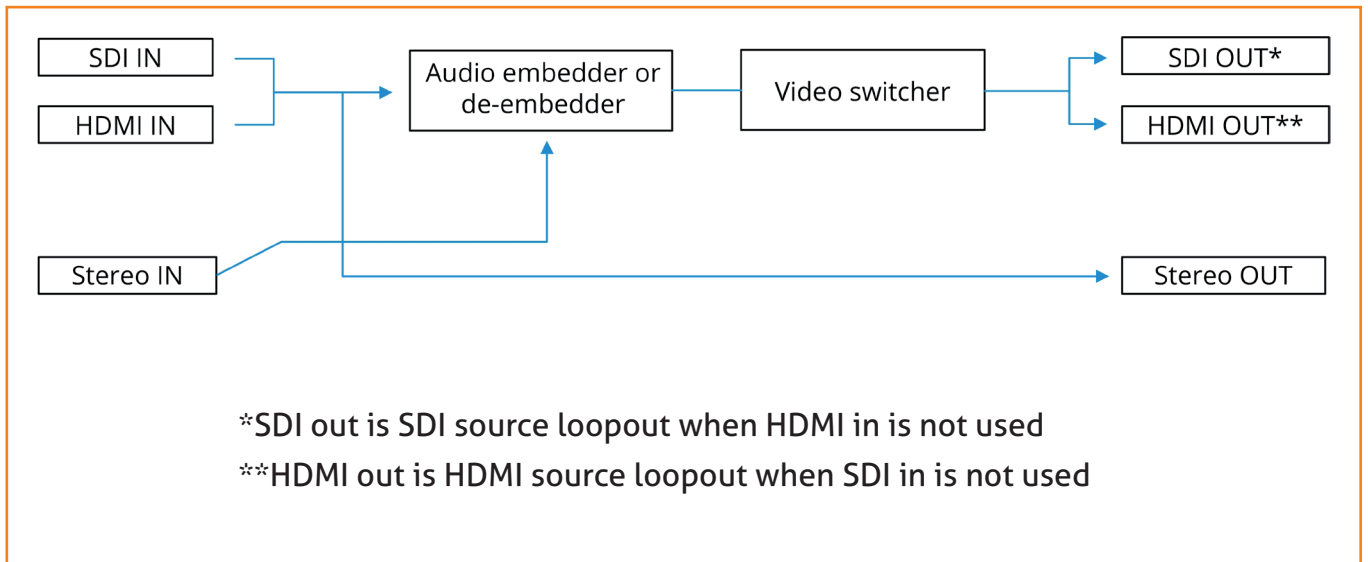
4. DC 5V micro USB power
5. Power LED indicator
6. 4-Pin Dip Switch

ON[↓] OFF[↑]

DIP Switch Position		Description
PIN#1	ON[↓]	Audio Extractor's Connector Selection – from BNC [SDI] Input
	OFF[↑]	Audio Extractor's Connector Selection – from HDMI Input
PIN#2	ON[↓]	Stereo Audio Embedder(2ch) to BNC[SDI] Output
	OFF[↑]	Disable Stereo Audio Embedder Function
PIN#3	ON[↓]	Reserved
	OFF[↑]	Reserved
PIN#4	ON[↓]	EDID-Full-HD(1080p@60) 2ch audio
	OFF[↑]	EDID-Full-HD(1080p@60) 7.1ch audio

7. Stereo Audio Input
8. SDI OUT: 3G/HD/SD-SDI output
9. SDI IN: 3G/HD/SD-SDI input

## 8. Blockdiagram

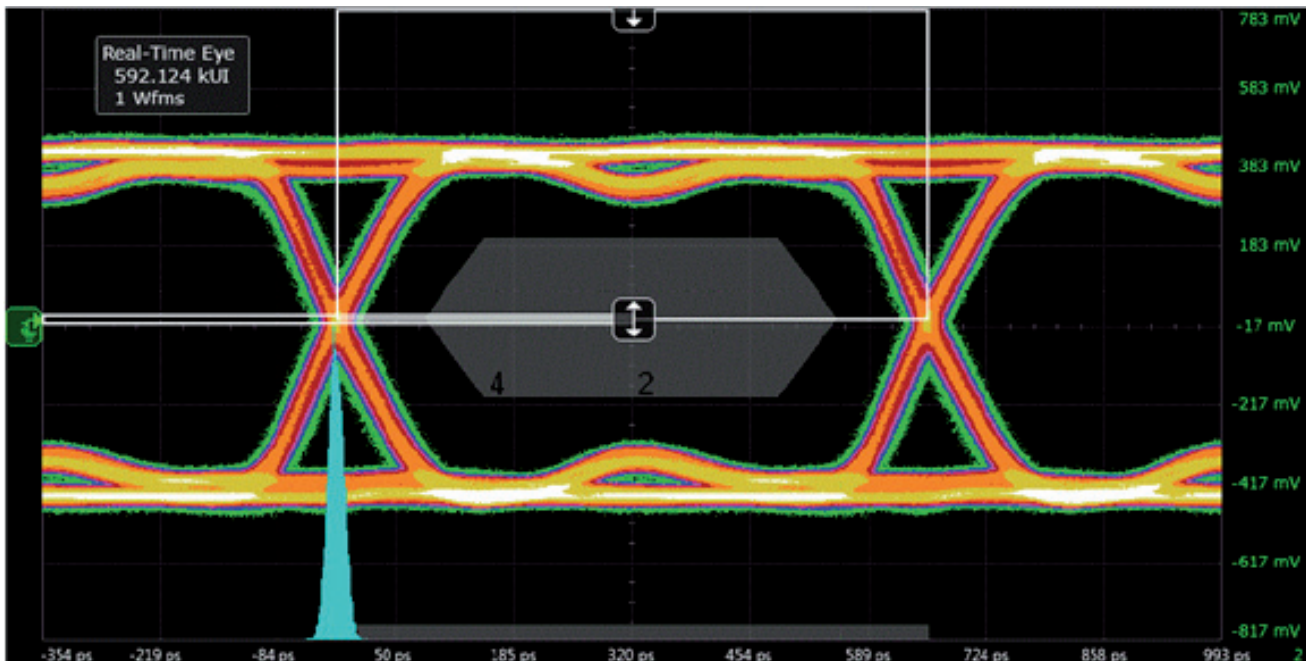




## 9. Supported Resolutions

3G-SDI Output	
1080p @ 50 / 59.94 / 60Hz	SMPTE 424M, SMPTE 425M
HD-SDI Output	
720p @ 50Hz	SMPTE 296M -3
720p @ 60 / 59.94Hz	SMPTE 296M -1, -2
1080i @ 50Hz	SMPTE 274M -6
1080i @ 60 / 59.94Hz	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 Output	
NTSC	
PAL B,D,G,H,I	

## 10. Signal Measurement



## 11. Limited Warranty

The SELLER warrants the **PRO-HDSDIconv 3G/HD/SD-SDI and HDMI Bi-directional Converter with Audio Embedder & Extractor** 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 surges.

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 are limited to a 30 day warranty and cable 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 PRO-HDSDIconv features and specifications is subject to change without further notice.

### Disclaimer

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We reserve the rights to make changes without prior notice to a product or system described herein to improve reliability, function, or design.



*Thank you for choosing gofanco*