

**gofanco<sup>®</sup>**

## PRO-HDSDIaud

HDMI to 3G/HD/SD-SDI Converter with Audio Embedder

### 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. Introduction

The PRO-HDSDIaud [HDMI to 3G/HD/SD-SDI Converter with Audio Embedder](#) provides a professional way to convert HDMI to 3G/HD/SD SDI in real time. The conversion between SDI and HDMI is pure digital and guarantees no loss transformation for both audio and video. The PRO-HDSDIaud provides one low jitter SDI output and to provide more flexible application possibility, and PRO-HDSDIaud is also equipped with high quality analog stereo embedder. With the use of PRO-HDSDIaud, the most popular uncompressed video interface in the consumer world is readily available for professional SDI equipment!

## 2. Features

- Supports 3G-SDI formats : 1080p @50/59.94/60Hz (SMPTE 425M, Level A)
- Supports HD-SDI formats: 1080i @50/59.94/60Hz, 720p @50/59.94/60Hz
- Supports SD-SDI formats: NTSC @59.94Hz, PAL @50Hz
- Bit Rates for 2.97 Gbps, 2.967Gbps, 1.485 Gbps, 1.4835 Gbps, 270 MbpsSupports HDMI Deep Color
- Supports HDMI Deep Color conversion
- Supports analog stereo embedder
- One SDI compliant output

### 3. Specifications

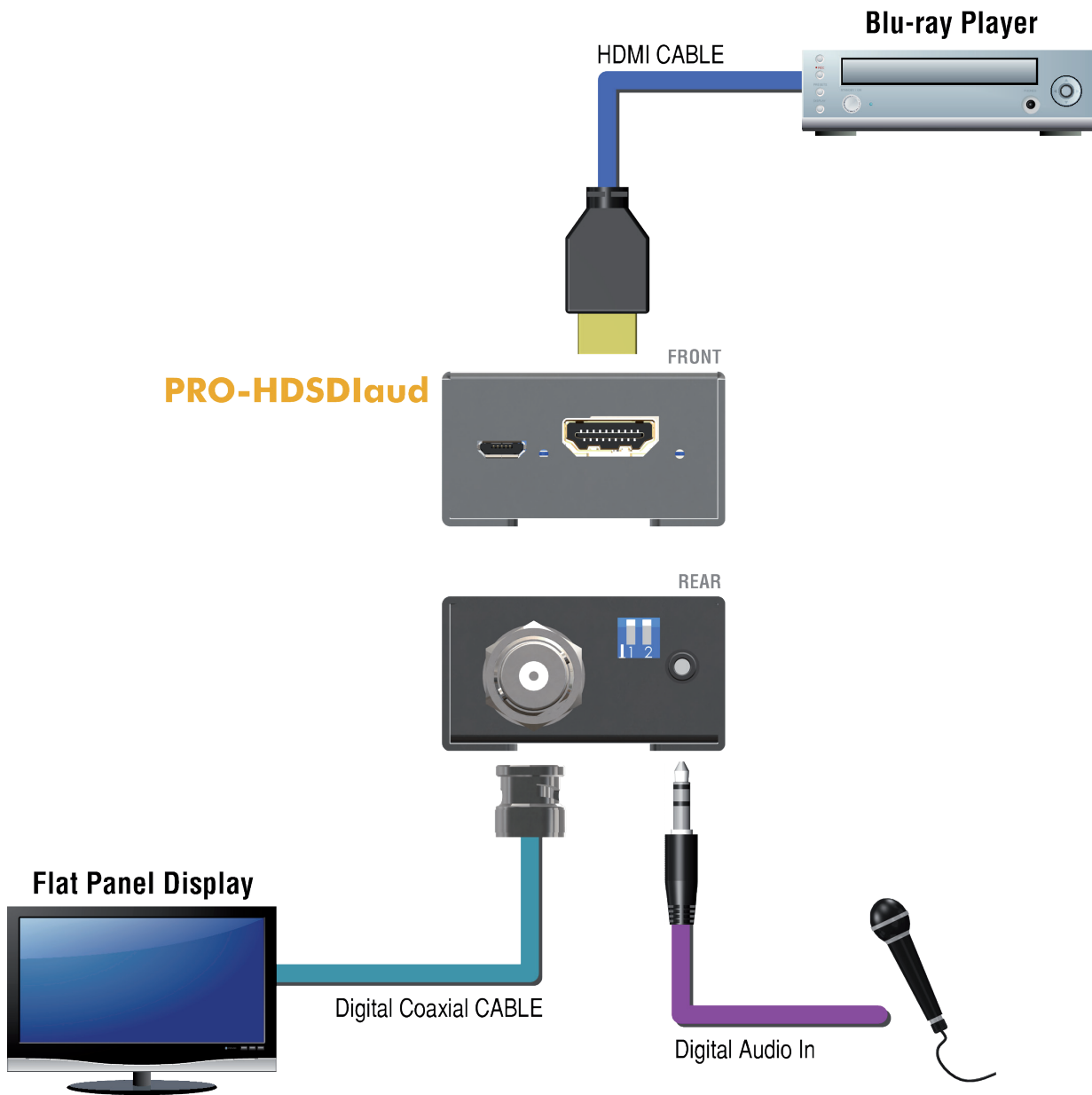
Item	Description
SDI standards	3G-SDI & HD-SDI & SD-SDI
HDMI standards	HDMI 1.3
Auto 3G/HD/SD-SDI detection	Yes
Video bandwidth	[SDI][2.97Gpbs & 2.975/1.001Gpbs] [HDMI][6.75Gpbs]
Video support	[3G] 1080p50/59.94/60 (4:2:2) [HD] – 720p @50/59.94/60Hz, 1080i @50/59.94/60Hz, 1080p @23.98/24/25/29.97/30Hz [SD] – NTSC @59.94Hz, PAL @50Hz [HDMI ] up to 1080p60
Input signal	1x HDMI + 1x 3.5mm(Audio)
Output signal	1x SDI
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 extractor support	Support 2ch
PCB stack-up	4-layer board [impedance control — differential 100Ω; single 50Ω]
Input	1x HDMI + 1 x 3.5mm
Output	1x BNC [SDI]
BNC connector	75Ω inter-locked socket
HDMI connector	Type A [19-pin female]

Mechanical		
Housing		Metal enclosure
Dimensions [L x D x H]	Model	93 x 46 x 23mm [3.7" x 1.8" x 0.9" ]
	Package	198 x 137 x 74mm [7.8" x 5.4" x 2.9"]
	Carton	420 x 400 x 300mm [1'4"x 1'3" x 11.8"]
Weight	Model	85g[3 oz]
	Package	338g[12 oz]
Power supply		5V 2A DC
Power consumption		2.5 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]

## 4. Package Contents

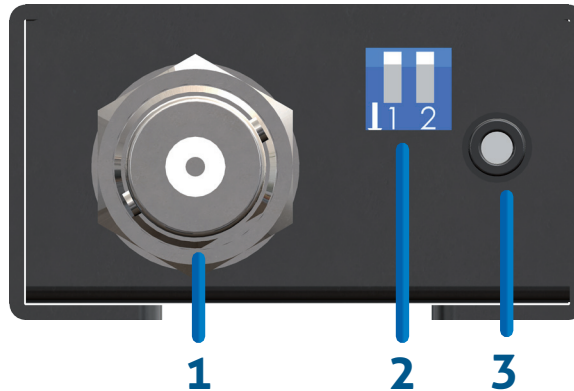
- 1x PRO-HDSDIaud
- 1x 5V/2A power adapter
- 2x Ear mount
- 1x User Manual

## 5. Connection Diagram

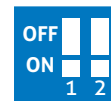


## 6. Panel Description

Front Panel



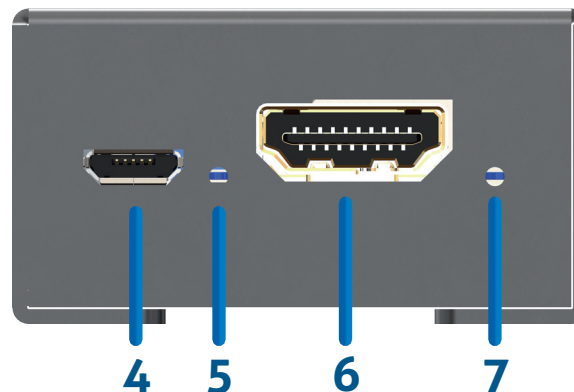
- 1. SDI OUT: 3G/HD/SD-SDI loopout
- 2. 2-Pin Dip Switch



Position	If setting	
PIN#1	OFF[↑]	Stereo Audio Embedder Function(2ch)
	ON[↓]	HDMI Audio Bypass(up to 7.1ch)
PIN#2	OFF[↑]	Reserved
	ON[↓]	Reserved

### 3. Stereo Audio Input

Rear Panel



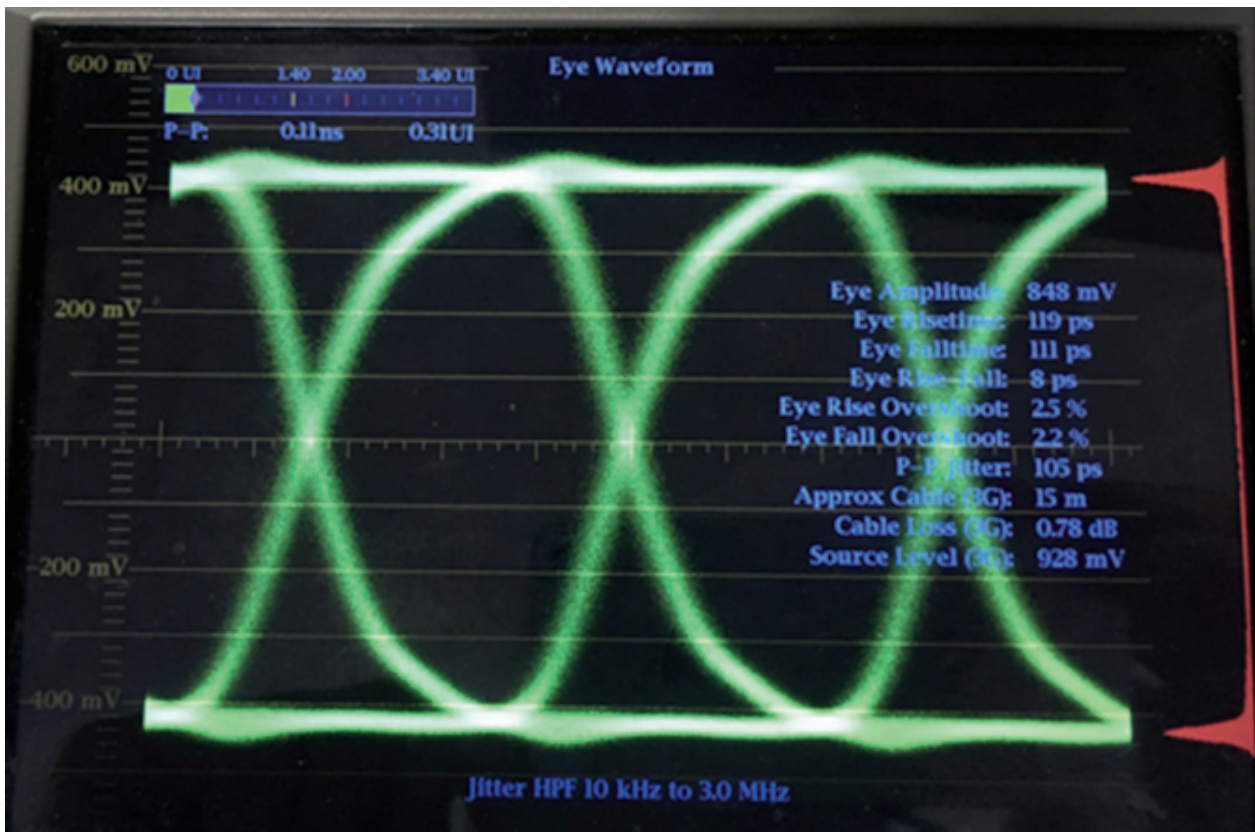
- 4. +5V DC: Connect to a 5V DC power supply
- 5. Power LED indicator
- 6. HDMI IN
- 7. Signal LED indicator

## 7. Supported Resolutions

<b>3G-SDI Output</b>	
<b>1080p @ 50 / 59.94 / 60Hz</b>	SMPTE 424M, SMPTE 425M
<b>HD-SDI Output</b>	
<b>720p @ 50Hz</b>	SMPTE 296M -3
<b>720p @ 60 / 59.94Hz</b>	SMPTE 296M -1, -2
<b>1080i @ 50Hz</b>	SMPTE 274M -6
<b>1080i @ 60 / 59.94Hz</b>	SMPTE 274M -4, -5
<b>1080p @ 24 / 23.98Hz</b>	SMPTE 274M -10, -11
<b>1080p @ 25Hz</b>	SMPTE 274M -9
<b>1080p @ 30 / 29.97Hz</b>	SMPTE 274M -7, -8
<b>SD-SDI Output</b>	
<b>NTSC</b>	
<b>PAL B,D,G,H,I</b>	



## 8. Signal Measurement



## 9. Limited Warranty

The SELLER warrants the **PRO-HDSDIaud HDMI to 3G/HD/SD-SDI Converter with Audio Embedder** 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-HDSDIaud features and specifications is subject to change without further notice.

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April, 2018 Ver. A

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