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PRO-ScalerSDIHD
3G-SDI to HDMI converter with scaler and monitor
User's Guide

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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.

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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-ScalerSDIHD 3G-SDI to HDMI converter with scaler and monitor** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the PRO-ScalerSDIHD 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-ScalerSDIHD 3G-SDI to HDMI converter with scaler and monitor** is an advanced SDI monitor with multi-format and multi-pattern support. Not only can it receive SDI signals, the PRO-ScalerSDIHD can also bypass SDI input to SDI output. It is equipped three buttons and a 3.5" panel to ease the control. With a 3.5" panel, the output signal can be monitored and controlled through OSD, such as resolution and image adjustments.

This device can also be used as a tool for eye diagram scanning to check the quality of the SDI cable input. In addition, it provides a variety of test patterns, which can be used as a simple SDI pattern generator. Our PRO-ScalerSDIHD provides a cost effective way to monitor the video devices and displays.

3. Features

- OSD control interface
- Push button control
- SDI loop-out
- Supports eye diagram scanning
- Supports audio level bars
- Supports cable length indicator
- Supports output test patterns
- Input bandwidth 2.970Gbps
- Output maximum pixel rate: 165MHz
- Multiple VESA standards support for output video resolutions
- Deinterlacing supported
- Supports noise reduction and video enhancement features
- Video H/V mirror supported
- Active video area adjustment supported
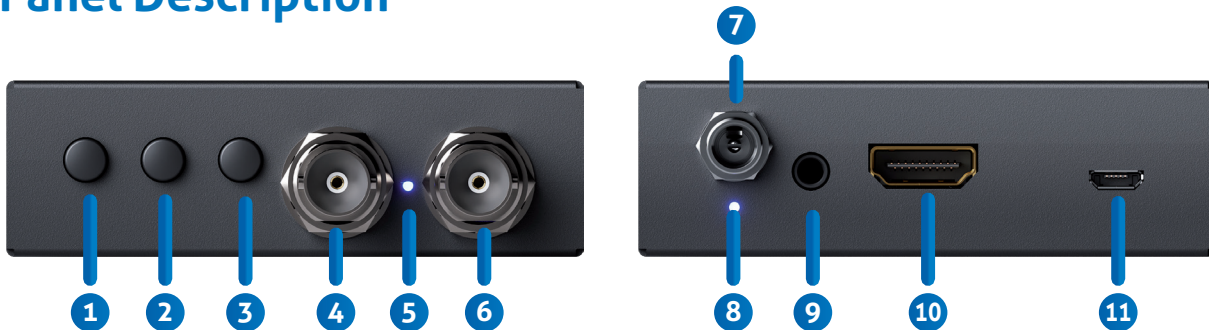- USB firmware upgradable for expanded compatibility

4. Package Contents

- 1x PRO-ScalerSDIHD
- 1x DC 5V 2A
- 1x User Manual

5. Specifications

Item	Description
Technical	
Role of usage	SDI to HDMI Converter with 3.5" LCD monitor
SDI standards	SD-SDI, HD-SDI & 3G-SDI
Input Video bandwidth	2.970 Gbit/s, 2.970/1.001 Gbit/s
Input Video support	[3G] 1080p @50/59.94/60Hz (4:2:2) [HD] 720p @50/59.94/60Hz, 1080i @50/59.94/60Hz, 1080p @24/30Hz [SD] NTSC @59.94Hz, PAL @50Hz
Output Video Frequency bandwidth	165MHz
Audio support	PCM (48KHz only up to 8 channel)
ESD protection	[1] Human body model - ±19kV [air-gap discharge] & ±12kV [contact discharge] [2] Core chipset - ±2kV
PCB stack-up	4-layer board [impedance control — differential 100Ω; single 50Ω]
Firmware update	Feasible via USB Port
CEC Channel	N/A
Input	1x BNC [SDI]
Output	1x HDMI + 1x BNC [SDI loop-out] +1x 3.5mm(Stereo)
BNC connector	3G 75Ω inter-locked socket
HDMI connector	Type A [19-pin female]
USB connector	Micro USB
Mechanical		
Housing		Metal enclosure
Dimensions [L x D x H]	Model	144 x 82 x 24mm[5.6" x 3.2" x 0.9"]
	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	300g[10.6 oz]
	Package	534g[1.2 lbs]
Fixedness		Wall-mounting case with screws
Power supply		5V DC
Power consumption		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]

6. Panel Description

1. **Push Button:** OSD up or Volume up (for stereo out)
2. **Push Button:** OSD down or Volume down (for stereo out)
3. **Push Button:** OSD Menu or Selection
4. **SDI In:** Connect to a 3G/HD/SD-SDI source
5. **LED Indicator:** Input signal indicator LED
6. **SDI Loopout:** Connect to a 3G/HD/SD-SDI display
7. **Power Jack:** 5V DC power
8. **Power LED:** Power LED indicator
9. **Stereo Audio Out:** Connect to analog stereo audio speaker
10. **HDMI Out:** Connect to an HDMI display
11. **Micro USB:** F/W update

7. Connection Diagram

SDI In   SDI Loopout   Audio Out   HDMI Out

SDI Camera   Display   Speaker   Display

8. OSD Menu

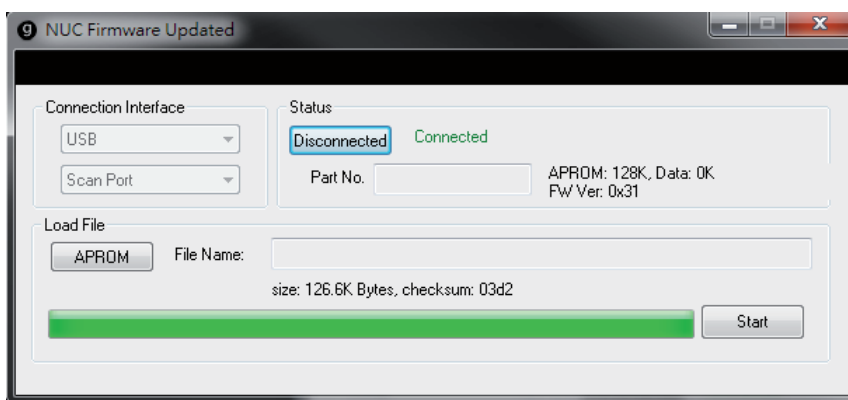|		
1.Output Setup	Output Format	Bypass, 600x480, 800x600, 1024x768, 1152x864, 1280x768, 1280x1024, 1360x768, 1440x900, 1600x1200, 1680x1050, SD (480p, 576p, 480i, 576i), HD (720p, 1080i, 1080p)
	Test Pattern	Disable, Diagonal, W-VRamp, W-HRamp, H-Ramp, Window, Gray, Color, Hatch, Cross, White
	Audio Mute	Off, On
2.Image	Contrast	0~255 of Contrast Level
	Brightness	0~255 of Brightness Level
	Saturation	0~255 of Saturation Level
	Hue	0~255 of Hue Level
	Gamma Adjust	Off, 1.1, 1.3, 0.7, 0.9
	Color Tone	Off, Green, Skin
	Edge Enhance	Off, Max, Mid, Min
3. Adjustment	H-Mirror	Off, On
	V-Mirror	Off, On
	H-Shift	0~200 of H-Shift Level
	V-Shift	0~100 of V-Shift Level
4. System	Input Format	Input Format information
	F/W Version	Firmware Version information
	Factory Rest	No, Yes
	Eye Diagram	Quit, Scan
	OSD Enabled	All Enabled, All Disabled, Only Audio, Only Format, Format & Audio, Format & Range*
5. Exit		

* The display of Range depends on the characteristics, length and quality of the coaxial cable. Take the Belden 1694A coaxial cable as an example. For the length of 1m, 5m, 50m, 100m, the range will display short, short, long and long.

9. Resolution Specifications for PRO-ScalerSDIHD

Input	Output
480i @ 60 576i @ 50 720p @ 60/59.9/50 1080i @ 60/59.9/50 1080p @ 60/59.9/50/30/29.9/ 25/24/23.9	**[SD]** 480i @ 60 576i @ 50 480p @ 60 576p @ 50 **[HD]** 720p @ 50/59/60 1080i @ 50/59/60 1080p @ 23/24/25/29/30/50/59/60 **[Other]** 640x480 @ 60/72/75 800x600 @ 60/72/75 1024x768 @ 60/70/75 1152x864 @ 75 1280x768 @ 60/75 1280x1024 @ 60/75 1360x768 @ 60 1366x768 @ 60 1440x900 @ 75 1600x1200 @ 60 1680x1050 @ RB

10. Firmware Update Steps

1. Remove the power adapter from the PRO-ScalerSDIHD.

2. Connect the PRO-ScalerSDIHD to a PC/laptop via micro USB cable.

3. Open update tool (NUC Firmware Updated) and load the firmware file.

4. Click connect, then plug the power adapter.

5. Click start to activate the firmware update process.

6. Power cycle the PRO-ScalerSDIHD.

11. Limited Warranty

The SELLER warrants the **PRO-ScalerSDIHD 3G-SDI to HDMI converter with scaler and monitor** 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-ScalerSDIHD features and specifications is subject to change without further notice.**

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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.

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