

Globalmediapro SVGA-101

HD-SDI to VGA Converter

Operation Manual

CONTENTS

1. Introduction	1
2. Applications	1
3. Package Contents	1
4. System Requirements	1
5. Features	2
6. Operation Controls and Functions	3
6.1 Front Panel	3
6.2 Rear Panel.....	4
7 OSD Menu and Functions	5
7.1 Display	6
7.2 Color	7
7.3 SDI Audio	7
7.4 Factory Reset.....	8
7.5 Information.....	8
8. Connection Diagram	9
9. Specifications	10
10. Acronyms	11

1. INTRODUCTION

The SDI to VGA Scaler allows SD, HD and 3G-SDI signals to be shown on PC/HD display. This means that it is now easier for professionals to distribute and extend their SDI signal while giving the ability to display work on PC/HD display. Furthermore, thanks to coaxial (S/PDIF) and L/R audio outputs users can output audio in both digital and analog formats while the loop-through 3G-SDI design benefits users by letting them simultaneous show content on both SDI and PC/HD displays.

2. APPLICATIONS

- Broadcast video signal sending to SDI display
- 3G-SDI signal convert into PC/HD signal

3. PACKAGE CONTENTS

- SDI to PC/HD Scaler with Audio
- 5 V/2.6 A DC Power Adaptor
- Operation Manual

4. SYSTEM REQUIREMENTS

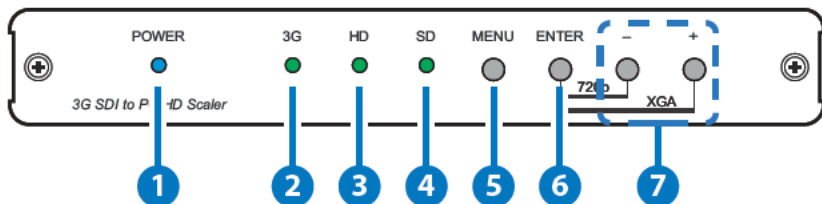
Input source equipment such as SDI cameras or any SDI signal with connection cables and output to LCD TV or SDI monitor with connection cables.

5. FEATURES

- Supports SD-SDI, HD-SDI and 3G-SDI input signals with auto-detection
- Supports PC/HD and SDI (bypass) output simultaneously
- SDI interface operates at bitrates of 2.970 Gbit/s, 2.970/1.001 Gbit/s, 1.485 Gbit/s, 1.485/1.001 Gbit/s and 270 Mb/s
- Supports SDI input/output distance up to 100 meters (3G-SDI), 200 meters (HD-SDI), or 300 meters (SD-SDI)
- Scale any SDI signal to PC/HD:
 1. PC timings: VGA@60 Hz ~ WUXGA@60 Hz (RB)
 2. HDTV timings: 480i/576i ~ 1080p@50/60 Hz
- Supports SDI input modes:
 1. SD-SDI (SMPTE 259M-C, at bitrates of 270 Mbit/s)
 2. HD-SDI (SMPTE 292M, at bitrates of 1.485 Gbit/s and 1.485/1.001 Gbit/s)
 3. 3G-SDI (SMPTE 424M/425M-AB, at bitrates of 2.970 Gbit/s and 2.970/1.001 Gbit/s)
- Equalized and re-clocked loop output
- Alternative audio output to coaxial and analog 2CH

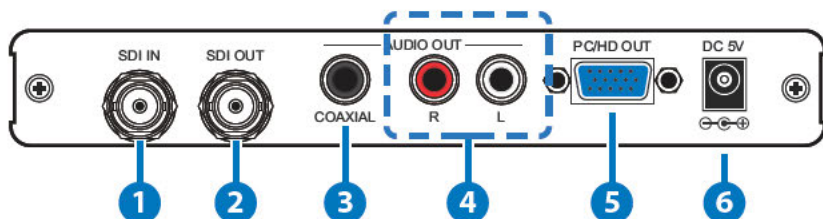
6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel



- 1 Power LED:** The LED will illuminate blue when the device is connected to a power supply.
- 2 3G LED:** This LED illuminate green when a 3G-SDI input signal is detected.
- 3 HD LED:** This LED illuminate green when a HD-SDI input signal is detected.
- 4 SD LED:** This LED illuminate green when a SD-SDI input signal is detected.
- 5 MENU:** Press this button to enter/exit the On-Screen Display (OSD) menu.
- 6 ENTER:** Press this button to confirm your selection. Press both ENTER and 'Minus' (-) buttons together to switch the display output to 720p or press both ENTER and 'Plus' (+) buttons together to switch to XGA. After making the selection, press ENTER to confirm the output format.
- 7 -/+:** Press these buttons to move up or down the OSD selections.

6.2 Rear Panel



- 1 SDI IN:** Connect to the SDI output of the SDI source device. Accepts SD,HD or 3G SDI signals.
- 2 SDI OUT:** Provides a 'loop-through' SDI signal output for connection to a SDI display.
- 3 AUDIO OUT COAXIAL:** Digital Audio output (SP/DIF). Connect to an amplifier or recording device with a suitable digital coaxial input.
- 4 AUDIO OUT R/L:** Analogue audio output (L/R Stereo). Connect to an amplifier or recording device with a suitable analogue input.
- 5 PC/HD OUT:** Connect to a PC display with D-Sub 15-pin VGA cable or HD (Component) display with D-Sub to 3 RCA adaptor cable.
- 6 DC 5V:** Plug the 5V DC power supply into the unit and connect the adaptor to an AC outlet. The 'POWER' LED will illuminate blue when the power is ON.

7 OSD MENU AND FUNCTIONS

First Layer	Second Layer	Third Layer
Display	Output PC Timing with D-Sub 15pin VGA cable	640×480@60
		800×600@60
		1280×720@60
		1024×768@60
		1280×768@60
		1360×768@60
		1280×800@60
		1280×1024@60
		1440×900@60
		1400×1050@60
		1680×1050@60
		1600×1200@60
		1920×1200@60
		1920×1080@60
	Output HD Timing with D-Sub to 3 RCA cable	720×480p@60
		1280×720p@60
		1920×1080p@60
		720×576p@50
		1280×720p@50
		1920×1080p@50
		1920×1080i@60
		1920×1080i@50
	Size	720×576i@50
		720×480i@60
		Full
		Over Scan
		Under 1
	Exit	Under 2
		Letter Box

Color	Contrast	0~255(105)
	Brightness	0~192(96)
	R	0~255(128)
	G	0~255(128)
	Brightness	0~255(128)
	R Offset	0~64(32)
	G Offset	0~64(32)
	B Offset	0~64(32)
	Exit	
SDI Audio	Group 1	
	Group 2	
	Group 3	
	Group 4	
	Auto	
	Off	
Factory Reset	Yes	
Information	Input, Output and Revision	

7.1 Display



- **Output Timings:** There are a total of 24 timings available for selection.
- **Size:** Adjusts the displayed screen size from Full, Over Scan, Under Scan, Letter box or Pan scan to fit the current display size or aspect ratio.

7.2 Color



- Adjusts the screen's RGB Color, Contrast and/or Brightness.

7.3 SDI Audio



- Selects the SDI audio output from 4 different audio groups and each group's 2CH contents. If no audio output is required, the audio can also be muted by selecting 'OFF'.

7.4 Factory Reset



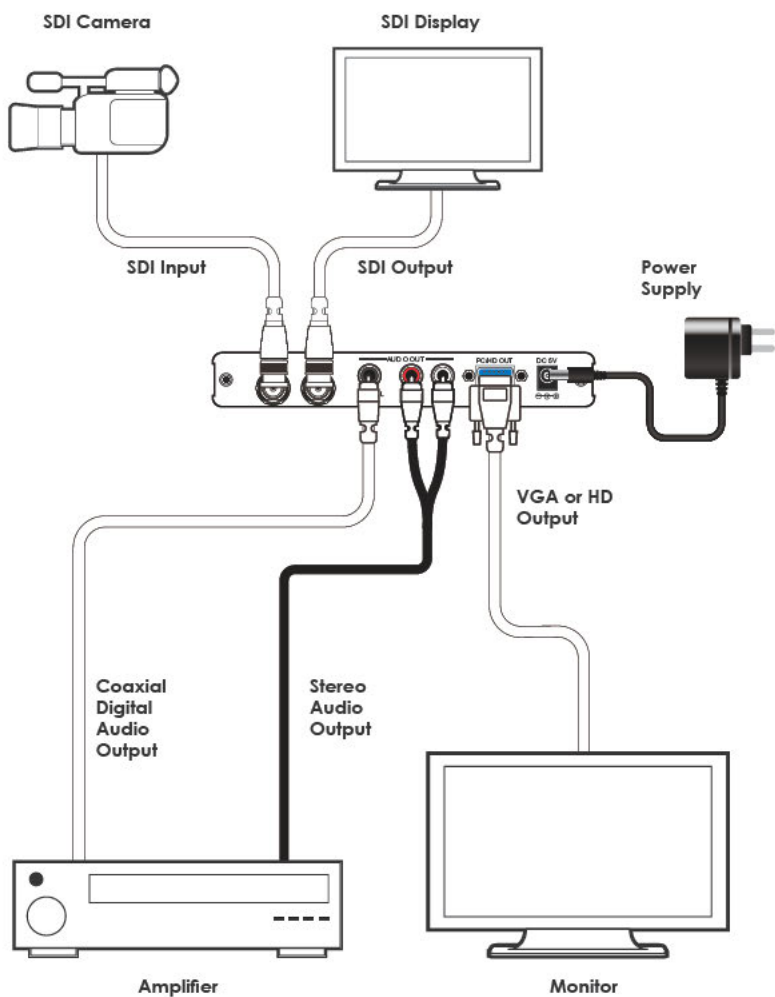
- Selects YES to return the unit to the factory settings. The default Factory Setting for Video display is 'Full Screen' (1024×768@60Hz), Color setting's factory default rate is the same as shown on the OSD and SDI audio is 'AUTO'.

7.5 Information



- Displays the source input format, the output display format and the unit's software version.

8. CONNECTION DIAGRAM



9. SPECIFICATIONS

SMPTE Standard	425M Level A & B, 424M, 292M, 259M-C
SDI Transmission Rates	2.970 Gbps, 2.970/1.001 Gbps, 1.485 Gbps, 1.485/1.001 Gbps, and 270 Mbps
Input Port	1×BNC (SD/HD/3G-SDI)
Output Port	1×BNC (SD/HD/3G-SDI bypass), 1×D-Sub 15-pin, 1×Coaxial, 2×RCA Jack
Video Output Support	PC: VGA ~ WUXGA@60RB HD: 480p~1080p
SDI Timing Support	SD-SDI: SMPTE 259M-C, at bitrates of 270 Mbit/s HD-SDI: SMPTE 292M, at bitrates of 1.485 Gbit/s and 1.485/1.001 Gbit/s 3G-SDI: SMPTE 424M/425M-AB, at bitrates of 2.970 Gbit/s and 2.970/1.001 Gbit/s
Power Supply	5 V DC/ 2.6 A (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human-body Model: ±8kV (air-gap discharge) ±4kV (contact discharge)
SDI Cable Distance	3G up to 100m (BELDEN 1694A Cable) HD up to 200m (BELDEN 1694A Cable) SD up to 300m (BELDEN 1694A Cable)
Dimensions	180mm (W)×142mm (D)×25mm (H)
Weight	435g
Chassis Material	Aluminum
Silkscreen Color	Silver
Operating Temperature	0 °C~40 °C/32 °F~104 °F
Storage Temperature	-20 °C~60 °C/-4 °F~140 °F
Relative Humidity	20~90% RH (Non-condensing)
Power Consumption	9.3W

10. ACRONYMS

ACRONYM	COMPLETE TERM
3G	Bandwidth 2.97G bps \approx 3G
SDI	Serial Digital Interface
HD	High Definition