

# 3G-SDI to HDMI Scaler with Audio (L/R + SPDIF) - ID# 901



**Operation Manual**

## Introduction

The SDI to HDMI Scaler with Audio allows SD, HD and 3G-SDI signals to be display on HDMI/SDI displays while ensuring high bit rates of 2.970 Gbps gives you fast signal transmission without signal loss. For professional this means that it is now easier to distribute and extend your SDI signal while giving you the ability to display your work on the existing HDMI displays. Further, the design of coaxial and L/R audio output allows user to output audio with both digital and analog format and the loop-through 3G-SDI design also benefit user to enjoy both SDI and PC/HD display synchronously.

## Features

- Operation at 2.970Gbps, 2.970/1.001Gbps, 1.485Gbps, 1.485/1.001Gbps and 270Mbps
- Supports SMPTE 425M (Level A and Level B), SMPTE 424M, SMPTE 292M, SMPTE 259M-C
- Equalized and re-clocked loop output
- Alternative audio output to coaxial and analog 2CH
- Integrated audio de-embedded for max 8 channels of 48k audio
- Auto video mode detection (3G/HD/SD)
- Conversion from SMPTE 425M level B to Level A for 1080p 50/59.94/60 4:2:2 10-bit

## Applications

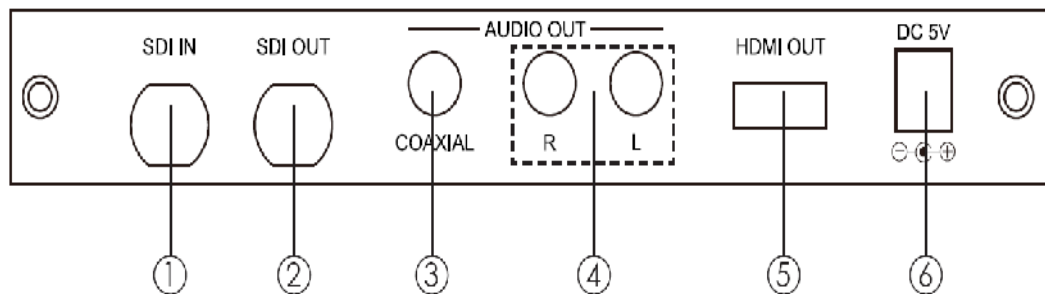
- Broadcast video signal sending to HDMI/SDI display
- Broadcast video signal extension
- 3G SDI signal convert into HDMI signal

## Operation Controls and Functions Front Panel



- ① **POWER LED:** This blue LED will illuminate when the device is connected with power supply.
- ② **3G LED:** This green LED illuminate when the input SDI signal is with 3G format.
- ③ **HD LED:** This green LED illuminate when the input SDI signal is with HD format.
- ④ **SD LED:** This green LED illuminate when the input SDI signal is with SD format.
- ⑤ **MENU:** Press this button to enter/exit the OSD menu.
- ⑥ **ENTER:** Press this button to confirm your selection. Press both ENTER and - buttons together to switch output timing to 720p instantly and press with + buttons together to switch output timing to XGA.
- ⑦ **-/+:** Press these buttons to move up or down the OSD selections.

## Back Panel



- ① **SDI IN:** This slot is where you connect the SDI source output for SDI signal sending to be display on screen.
- ② **SDI OUT:** This slot is where you connect the SDI display with SDI cable for input source display.
- ③ **AUDIO OUT COAXIAL:** This slot is where you connect the amplifier with coaxial cable and from amplifier to speaker
- ④ **AUDIO OUT R/L:** These slots are where you connect the speaker or amplifier with RCA jack for audio signal display.
- ⑤ **HDMI OUT:** This slot is where you connect the HDMI/DVI display with HDMI and or HDMI to DVI cable
- ⑥ **DC 5V:** Plug the 5V DC power supply into the unit and connect the adaptor to AC wall outlet. Blue LED will illuminate when the power is ON.

## OSD Menu

| 1st Layer | 2nd Layer        | 3rd Layer        |
|-----------|------------------|------------------|
| Display   | Output           | NATIVE           |
|           |                  | 800 x 600 @60    |
|           |                  | 1024 x 768 @60   |
|           |                  | 1280 x 768 @60   |
|           |                  | 1360 x 768 @60   |
|           |                  | 1280 x 800 @60   |
|           |                  | 1280 x 1024 @60  |
|           |                  | 1440 x 900 @60   |
|           |                  | 1400 x 1050 @60  |
|           |                  | 1680 x 1050 @60  |
|           |                  | 1600 x 1200 @60  |
|           |                  | 1920 x 1200 @60  |
|           |                  | 720 x 480p @60   |
|           |                  | 1280 x 720p @60  |
|           |                  | 1920 x 1080p @60 |
|           |                  | 720 x 576p @50   |
|           |                  | 1280 x 720p @50  |
|           |                  | 1920 x 1080p @50 |
|           |                  | 1920 x 1080i @60 |
|           | 1920 x 1080i @50 |                  |
|           | Size             | Full             |
|           |                  | Over Scan        |
|           |                  | Under 1          |
|           |                  | Under 2          |
|           |                  | Letter Box       |
|           |                  | Pan Scan         |
|           |                  | Exit             |

|               |            |            |
|---------------|------------|------------|
| 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   |            |            |

## Display



- **Output Timings:** There are total 20 timings available for user's selection.

- **Size:** Adjust the display's screen size from Full, Over Scan, Under Scan, Letter box or Pan scan to fit the different timing's display and make the viewing become more pleasure.

### Color



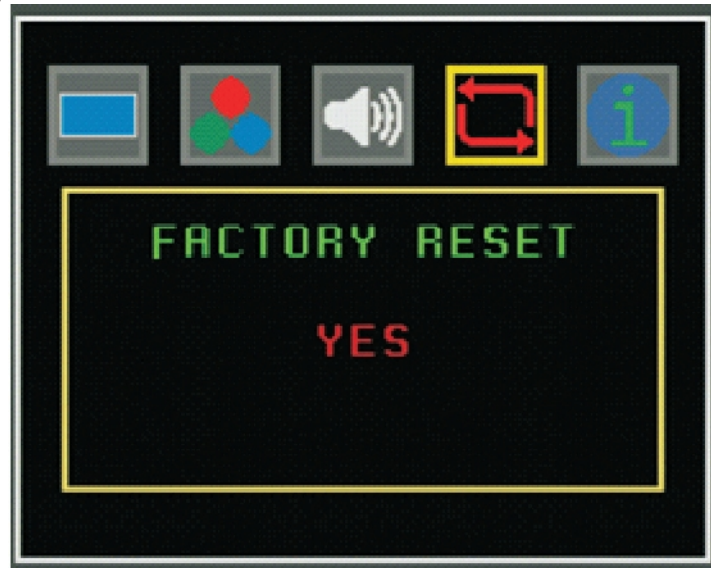
- Adjust screen color RGB's Contrast and or Brightness.

### SDI Audio



- Select SDI audio output from 4 different group and each group contents 2CH or from auto which contain up to 7.1CH follow by input source signal.

### Factory Reset



- Select YES to return to the factory setting. Factory setting on display is at 1280 x 720p @ 60Hz with full size screen, Color setting's factory default rate are as the value in the bracket ( ) of the OSD chart and SDI audio is on auto.

### Information



- Displaying both input source and output display timing with software version.

## Specifications

|                               |   |
|-------------------------------|---|
| <b>SMPTE Standard</b>         | 425M Level A & B, 424M, 292M, 259M-C  |
| <b>SDI Transmission Rates</b> | 2.970 Gbps, 2.970/1.001 Gbps, 1.485Gbps, 1.485/1.001 Gbps, and 270Mbps                |
| <b>Frequency Bandwidth</b>    | 225MHz/link (HDMI 1.3)  |
| <b>Input Port</b>             | 1 x BNC (SD/HD/3G-SDI)  |
| <b>Output Port</b>            | 1 x BNC (SD/HD/3G-SDI),<br>1 x HDMI, 1 x Coaxial, 2 x RCA Jack                        |
| <b>Video Output Supports</b>  | SDI: 480i, 576i<br>HD: 720p@50/60, 1080i 50/60,<br>1080p 24/25/30,<br>3G: 1080p 50/60 |
| <b>Power Supply</b>           | 5V DC/ 2.6A (US/EU standards, CE/FCC/UL certified)                                    |
| <b>ESD Protection</b>         | Human body model:<br>± 8kV (air-gap discharge)<br>± 4kV (contact discharge)           |
| <b>SDI Cable Distance</b>     | 3G up to 100M<br>HD up to 200M<br>SD up to 300M                                       |
| <b>Dimensions (mm)</b>        | 180(W) x 142(D) x 25(H)   |
| <b>Weight(g)</b>              | 460   |
| <b>Chassis Material</b>       | Aluminum  |
| <b>Silkscreen Color</b>       | Silver  |
| <b>Operating Temperature</b>  | 0°C ~ 40°C / 32°F ~ 104°F   |
| <b>Storage Temperature</b>    | -20°C ~ 60°C / -4°F ~ 140°F   |
| <b>Relative Humidity</b>      | 20 ~ 90% RH (Non-condensing)  |
| <b>Power Consumption</b>      | (W)4  |



# Connection



Camcorder



SDI Monitor



AMP

or



LCD TV

or



Monitor