

# **Video to 1080p High Definition Scaler Converter ID#498**



**Operation Manual**

## Introduction

**The Video to 1080p High Definition Converter Scaler Box** is designed to upscale digital/analog video signal from Composite, S-Video, PC, Component (HD) and HDMI input sources, to digital HDMI output of wide-range HDTV and PC resolutions, up to 1080p and WUXGA (1920 x 1200.) Besides video upscaling, the scaler box also converts digital/analog audio signal to digital format, then output either through HDMI combining with the video, or Coaxial S/PDIF separately.

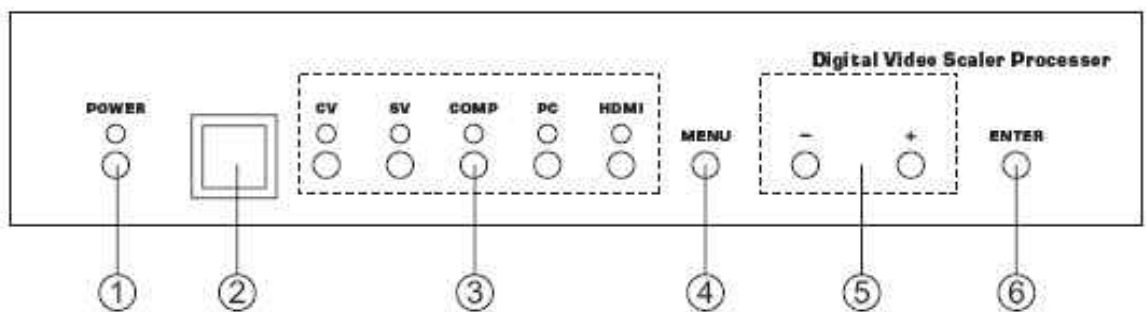
**The Video to 1080p High Definition Converter Scaler Box** has a comprehensive OSD menu that allows user to select a variety of output resolutions and adjust for best picture quality.

## Features

1. HDMI 1.2, HDCP 1.1 and DVI 1.0 compliant.
2. Scales any PC (VGA ~ WUXGA) /HD (480i ~ 1080p) resolutions to/from another PC/HD resolutions.
3. Automatically detect the factory setting of the connected display and output the corresponding resolution and refresh rate, when the NATIVE output is selected.
4. Supports 50/60Hz frame rate conversion.
5. Supports 3-D motion video adaptive, 3-D de-interlacing, and 3:2 / 2:2 pull-down detection and recovery.
6. Provides output picture adjustment on contrast, brightness, hue, saturation, sharpness, RGB (color tone) level, and aspect ratio size.
7. Supports high resolution input/output:  
PC: VGA, SVGA, XGA, SXGA, UXGA, WXGA, WSXGA, WUXGA  
HDTV: 480i, 576i, 480p, 576p, 720p, 1080i, and 1080p
8. Supports digital and analog audio input and output.

## Operating Functions and Controls

### Front Panel



**1. POWER Button and LED Indicator:**

Press the button to turn ON/OFF the power of the unit. The LED will illuminate when the power is turned on.

**2. IR remote control sensor.****3. Input Selection Buttons and LED Indicators:**

Press each of the buttons (CV/SV/COMP/PC/HDMI) to select the desired input source. The LED will illuminate when the corresponding input is selected.

**4. MENU Button:**

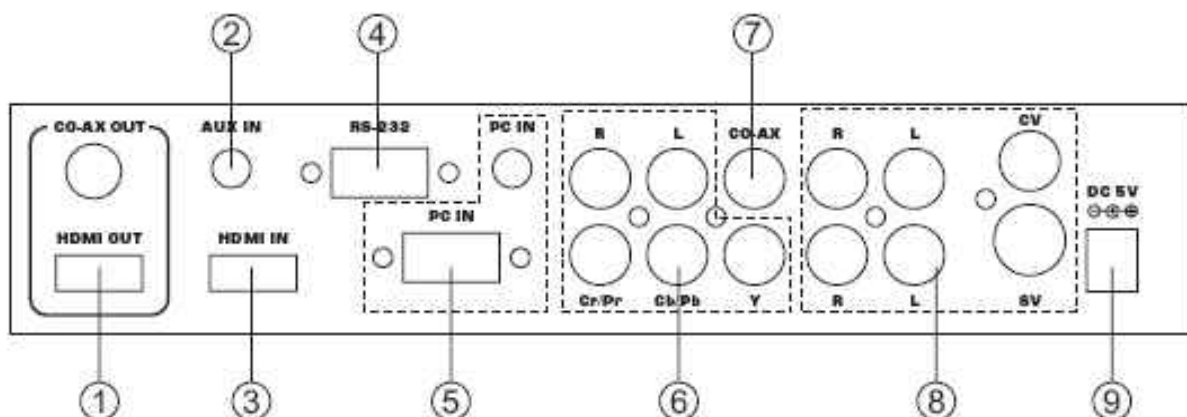
Press the MENU button to bring up OSD operation menu

**5. +/- Buttons:**

- a. On the first tier of OSD menu, use + and - buttons to move up/down the highlight item for selection.
- b. Once the desired option is selected, use + and - buttons to toggle between setting values.

**6. ENTER Button:**

In OSD menu, use the ENTER button to confirm the selection.

**Rear Panel****1. HDMI OUT and CO-AX OUT:**

Connect the HDMI OUT port to the HDMI input port of your display such as HDTV. Connect the CO-AX OUT port to the Coaxial (S/PDIF) input port of your amplifier for separate digital audio output.

**2. AUX IN Input:**

When the video signal input through the HDMI IN port is from a DVI source such as a PC, use the AUX IN port to input the audio signal.

**3. HDMI IN Input:**

Connect the HDMI IN port to the HDMI output port of your source equipment such as DVD player or Set-Top-Box. Or, use HDMI to DVI cable to connect to the DVI output of your PC.

**4. RS-232:**

The port is for firmware update only.

**5. PC IN for Video and Audio Input:**

Connect the PC IN D-Sub (15-pin) port to the D-Sub output port of your PC. And, connect the PC IN 3.5mm phone jack to the audio output port of your PC.

**6. Y Pb/Cb Pr/Cr Video and L/R Audio Input:**

Connect the Y Pb/Cb Pr/Cr (Component) 3 RCA input ports to the Component output port of your video source equipment such as DVD player or Set-Top-Box. And, connect the L/R audio input ports to the audio output port of your audio source equipment.

**7. CO-AX Input:**

The CO-AX port provides the digital audio input support, and can be used to combine with each video input signals from CV/SV/COMP/PC/HDMI ports. Once connected, please use the Audio Source Selection in the OSD menu to select between Coaxial (S/PDIF) or other audio source

**8. Composite Video / S-Video and L/R Audio Input:**

Connect the Composite or S-Video input port to the Composite or S-Video output port of your video source equipment such as DVD player or Set-Top-Box. And, connect the L/R audio input ports to the audio output port of your audio source equipment.

**9. Power:**

Plug the 5VDC power supply into the unit and connect the adapter to AC wall outlet.

## OSD Operations

1 <sup>st</sup> Tier Option	2 <sup>nd</sup> Tier Option	Adjustment
VIDEO	- PICTURE MODE	USER / STANDARD / VIVID / MOVIE
	- CONTRAST	0 ~ 100 of Contrast Level
	- BRIGHTNESS	0 ~ 100 of Brightness Level
	- HUE	0 ~ 100 of Hue Level
	- SATURATION	0 ~ 100 of Saturation Level
	- SHARPNESS	0 ~ 100 of Sharpness Level
	- SCALE	OVERSCAN / UNDERSCAN / LETTERBOX / PANSKAN / FULL
	- NR	LOW / MIDDLE / HIGH / OFF
	- EXIT	Back to the 1 <sup>st</sup> Tier
COLOR	- COLOR TONE	USER / NORMAL / WARM / COOL
	- RED	0 ~ 100 of Red Color Level
	- GREEN	0 ~ 100 of Green Color Level
	- BLUE	0 ~ 100 of Blue Color Level
	- EXIT	Back to the 1 <sup>st</sup> Tier
OUTPUT	-	NATIVE / VGA / SVGA / XGA / SXGA / UXGA / 480i / 480p / 720p@60Hz / 1080i@60Hz / 1080p@60Hz / 576i / 576p / 720p@50Hz / 1080i@50Hz / 1080p@50Hz / WXGA / WSXGA / WUXGA
OSD	- HPOSITION	0 ~ 100 of OSD Horizontal Position
	- VPOSITION	0 ~ 100 of OSD Vertical Position
	- TIMER	0 ~ 100 of OSD Show Time (sec.)
	- TRANSP	0 ~ 100 of OSD Transparent Level
	- EXIT	Back to the 1 <sup>st</sup> Tier
AUDIO	- SOURCE	HDMI / L/R / COAXIAL
	- DELAY	OFF / 40MS / 110MS / 150 MS
	- SOUND	ON / MUTE
	- EXIT	Back to the 1 <sup>st</sup> Tier
INFORMATION	-	SOURCE (Input interface) INPUT (Input Resolution) OUTPUT (Output Resolution) VERSION (Firmware Version)
EXIT	-	Close the OSD Menu

## Remote Control

### 1. POWER:

Press the button once to power on the Video to 1080p High Definition Converter Scaler Box. Press again to enter standby mode.

### 2. INPUT:

Press the button repeatedly to toggle through various input sources.

### 3. HD Input:

Press the button to directly select component input.

### 4. PC Input:

Press the button to directly select PC input.

### 5. HDMI/DVI Input:

Press the button to directly select DVI (or HDMI) input.

### 6. Output Resolution:

Press any one of the button to directly select output resolution. For other output resolutions that are not covered by these buttons please enter OSD Menu to select them.

### 7. MENU:

Press the button to bring up OSD main menu page.

### 8. Exit:

Press the button to exit from a sub menu or main menu.

### 9. Up/Down/Left/Right:

Press the Up/Down button to move the highlight bar to your desired parameter during the OSD operation. Press the Left/Right button to increase/decrease the setting value of a selected parameter.

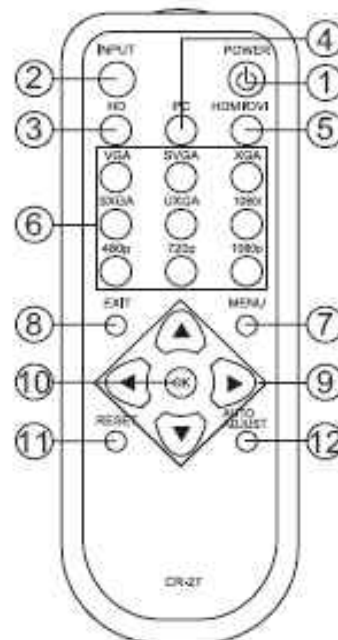
### 10. OK (Enter):

Press the button to confirm your selection.

### 11. Reset:

Press the button to reset the unit's firmware setting to the factory default value.

Press the button to optimize the position of the picture (picture centering) on the screen.



## Specifications

### General Specification

- \* **Frequency bandwidth:** 1.65Gbps (single link)
- \* **Input Ports:**
  - Composite x 1 / L/R x 1
  - S-Video x 1 / L/R x 1
  - Component (3 RCA) x 1 / L/R x 1
  - PC D-Sub (15-pin) x 1 / 3.5mm Phone Jack x 1
  - HDMI x 1 / 3.5mm Phone Jack x 1 (for DVI)
  - Coaxial (S/PDIF) x 1
- \* **Output Ports:**
  - HDMI x 1
  - Coaxial (S/PDIF) x 1
- \* **5V DC power supply**
- \* **Dimensions:** 215(W) x 154(D) x 47(H)mm
- \* **Weight:** 1Kgs

## Support Resolution

INPUT	
PC	VGA@{60/72/75/85Hz}, SVGA@{56/60/72/75/85Hz}, XGA@{60/70/75/85Hz}, SXGA@{60/75/85Hz}, UXGA@60Hz, WXGA@60Hz, WSXGA@60Hz, WUXGA@60Hz
TV	480i, 480p, 576i, 576p, 720p@{50/60Hz}, 1080i@{25/30Hz}, 1080p@{50/60Hz}
OUTPUT	
PC	VGA@{60/72/75/85Hz}, SVGA@{56/60/72/75/85Hz}, XGA@{60/70/75/85Hz}, SXGA@{60/75/85Hz}, UXGA@60Hz, WXGA@60Hz, WSXGA@60Hz, WUXGA@60Hz
TV	480i, 480p, 576i, 576p, 720p@{50/60Hz}, 1080i@{25/30Hz}, 1080p@{50/60Hz}

## ***Installation and Connection***

