

# ***SY-P295N CV/SV to HDMI 1080p Scaler Box***

*Operation Manual*



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## 1. Introduction

This Scaler Box is designed to upscale analog video signal from CV/SV input source to digital HDMI output of wide-range HDTV and PC resolutions; up to 1080p. Besides video upscaling, the scaler box also converts digital/analog audio signal to digital/analog format, then output to HDMI combining with the video, TOSLink (Optical fiber), and phone jack (L/R audio) simultaneously. This unit has a comprehensive OSD menu that allows user to select a variety of output resolutions and adjust for best picture quality.

## 2. Features

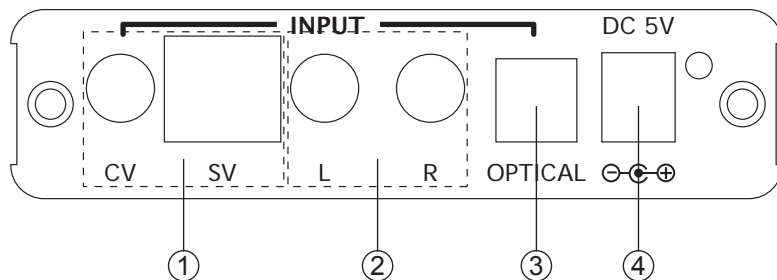
- HDMI 1.2, HDCP 1.1 and DVI 1.0 compliant.
- Scales any video resolutions to PC (VGA ~ WUXGA)/ HD (480i ~ 1080p) resolutions.
- Automatically detect the factory setting of the connected display and output the corresponding resolution and refresh rate, when the NATIVE output is selected.
- Supports 50/60 Hz frame rate conversion.
- Supports 3-D motion video adaptive, 3-D de-interlacing and 3:2/2:2 pull down detection and recovery.
- Provides output picture adjustment on contrast, brightness, hue, saturation, sharpness, RGB (color tone) level and aspect ratio size.
- Supports high resolution output (See section "7. Support Resolution" for reference.):  
PC: VGA, SVGA, XGA, SXGA, UXGA, WXGA, WSXGA, WUXGA.  
SD/HD: 480i, 576i, 480p, 576p, 720p, 1080i and 1080p
- Supports stereo LPCM analog/digital audio input and stereo LPCM analog/digital output. Simply select among the audio input sources in the OSD menu, then output the audio to HDMI, TOSLink and phone jack simultaneously.

## 3. Package Contents

- SY-P295N CV/SV to HDMI 1080p Scaler Box
- 5VDC Power Supply Adaptor
- Operation Manual
- Stereo audio cable (2RCA) x 1
- Composite video Cable X 1

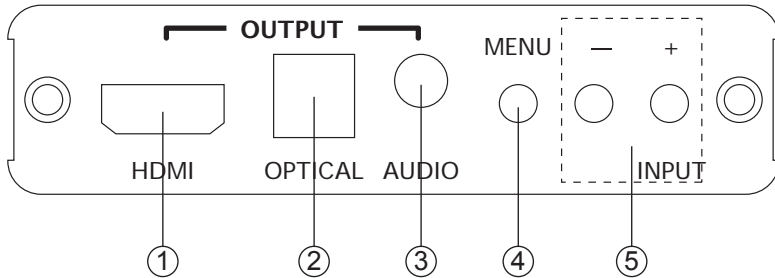
## 4. Operation Controls and Functions

### 4.1 Front Panel



- ①. CV/SV Input: Connect the CV/SV port to the input port of your source equipment such like DVD player.
- ②. L/R Input: Connect the analog audio input port to the output port of your analog audio equipment.
- ③. TOSLink (optical fiber) Input: Connect the optical input port to the digital audio output port of your source equipment.
- ④. Power: Plug the 5VDC power supply into the unit and connect the adaptor to AC wall outlet.

## 4.2 Rear Panel



- ①. HDMI Output: Connect the HDMI output port to the HDMI input port of your display such like HDTV.
- ②. TosLink (optical fiber) Output: Connect the optical output port to the digital audio input port of your amplifier.
- ③. Audio Output: Connect the PC3.5mm phone jack output port to the analog audio input port of your equipment.
- ④. Menu Button: Press the MENU button to bring up OSD operation menu. (See section “4. OSD Operation” for reference.)
- ⑤. +/- Button:
  - 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.
  - c. Without OSD menu, press (INPUT) button to switch between CV and SV.

### 4.3. OSD Operation

1st Tier Option	2nd Tier Option	Adjustment
CONTRAST	-	0 ~ 100 of Contrast Level
BRIGHTNESS	-	0 ~ 100 of Brightness Level
FINETUNE	- HUE	0 ~ 100 of Hue Level
	- SATURATION	0 ~ 100 of Saturation Level
	- SHARPNESS	0 ~ 100 of Sharpness Level
	- EXIT	Back to 1st Tier
COLOR	- RED	0 ~ 100 of Red Color Level
	- GREEN	0 ~ 100 of Green Color Level
	- BLUE	0 ~ 100 of Blue Color Level
	- EXIT	Back to 1st Tier
SIZE	-	FULL / OVERSCAN / UNDERSCAN / LETTERBOX / PANSCAN
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
AUDIO	-	EAR PHONE / OPTICAL
OSD	- HPOSITION	0 ~ 100 of OSD Horizontal Position
	- VPOSITION	0 ~ 100 of OSD Vertical Position
	- TIMER	0 ~ 100 of OSD Existing Time (sec.)
	- BACKGROUND	0 ~ 100 of OSD Transparent Level
	- EXIT	Back to 1st Tier
INFORMATION	-	SOURCE (Input Interface) INPUT (Input Resolution) OUTPUT (Output Resolution) VERSION (Firmware Version)
EXIT	-	Close OSD Menu

### 5. Reset Functionality

To reset the unit, press and hold the MENU button then re-plug the DC power into the unit to set the unit back to factory default, with output resolution as NATIVE. This feature is also useful when the output is scaled to a resolution not supported by the connected TV/monitor so no picture is shown, because the NATIVE resolution can guarantee the proper (might not be the best) output.

## 6. Specifications

### 6.1 General Specification

Input Ports	1 x CV/SV, 1 x R/L, 1 x TOSLink (optical fiber)
Output Ports	1 x HDMI, 1 x 3.5mm Phone Jack, 1 x TOSLink (optical fiber)
Power Supply	5V/2.6A DC (US/EU standards, CE/FCC/UL certified)
Remote Control	Discrete IR remote
Dimensions (mm)	187(D) x 102(W) x 25(H)
Weight(g)	405
Chassis Material	Aluminum
Silkscreen Color	Black
Operating Temperature	0°C ~ 40°C

### 6.2. Support Resolution

	CV/SV INPUT	HDMI OUTPUT	
	SD	SD/HD	PC
480I/576I (NTSC/PAL)	√	√	
480P/576P		√	
720P@(50/60)		√	
1080I@(25/30)		√	
1080P@(50/60)		√	
VGA@(60/72/75/85)			√
SVGA@(56/60/72/75/85)			√
XGA@(60/70/75/85)			√
SXGA@(60/75/85)			√
UXGA@60			√
WXGA@60(1280x800)			√
WSXGA@60(1680x1050)			√
WUXGA@60(1920x1200)			√

## 7. Connection and Installation

