

CP-294 HD to HDMI 1080p Scaler Box

Operation Manual



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1. Introduction

This Scaler Box is designed to upscale digital video signal from HD input source to digital HDMI output of wide-range HDTV and PC resolutions, up to 1080p/WUXGA. Besides HD 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

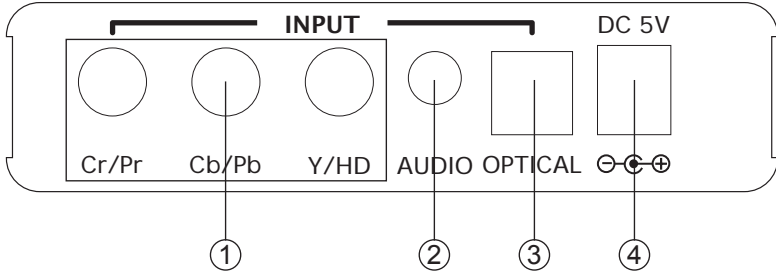
- HDMI 1.2, HDCP 1.1 and DVI 1.0 compliant.
- Scales any HD resolutions to PC (VGA ~ WUXGA)/ HD (480i ~ 1080p) resolutions.
- Automatically detect the factory setting of the connected display and output the corresponding resolution and refresh rate, when the NATIVE output is selected.
- Provides output picture adjustment on contrast, brightness, hue, saturation, sharpness, RGB (color tone) level and aspect ratio size.
- Supports high resolution output (See section “6.2. Supports 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

- HD to HDMI 1080p Scaler Box
- 5VDC Power Supply Adaptor
- Operation Manual

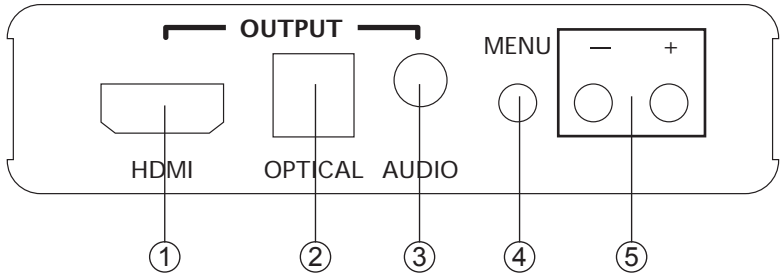
4. Operation Controls and Functions

4.1 Front Panel



- ① Cr/Pr, Cb/Pb, Y/HD Input: Connect the Cr/Pr, Cb/Pb, Y/HD input ports to your source equipment such like DVD player.
- ② Audio Input: Connect the PC in 3.5mm phone jack input port to the analog audio output port of your source 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 "4.3 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.

4.3 OSD Operation

1 st Tier Option	2 nd 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 1 st 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 1 st 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 1 st 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 Specifications

Input Ports	1 x Component (Cr/Pr, Cb/Pb, Y/HD), 1 x 3.5mm Phone Jack, 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)
Dimensions (mm)	154(D) x 100(W) x 25(H)
Weight(g)	340
Chassis Material	Aluminum
Silkscreen Color	Silver
Operating Temperature	0°C ~ 40°C

6.2. Supports Resolution

	HD INPUT		HDMI OUTPUT	
	SD/HD	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





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