

CV/SV/PC/HD/HDMI 1080p Scaler Box

Operation Manual



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1. Introduction

Cypress's CP-255I 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. Cypress CP-255I has a comprehensive OSD menu that allows user to select a variety of output resolutions and adjust for best picture quality.

2. Features

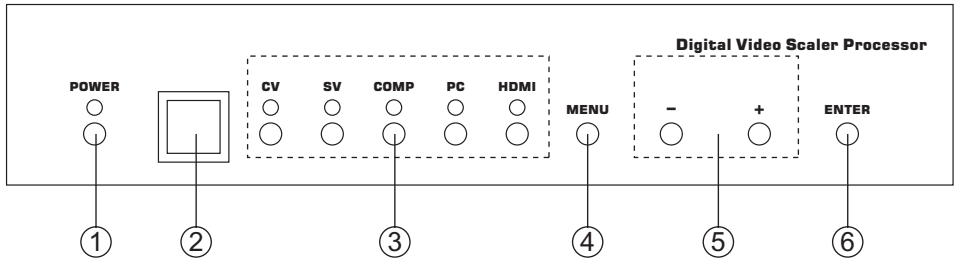
1. HDMI 1.2, HDCP 1.1 and DVI 1.0 compliant.
2. Scales any PC (VGA ~ WUXGA) /HD (480i ~ 1080p) resolutions to/from another PC/HD resolutions.
3. Automatically detect the factory setting of the connected display and output the corresponding resolution and refresh rate, when the NATIVE output is selected.
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.

3. Package Contents

1. Cypress CP-255I Scaler Box
2. 5VDC Power Supply Adaptor
3. Operation Manual

4. Operation Controls and Functions

4.1. 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 (see section "4.3 OSD Operation" for reference.)

5. +/- Buttons:

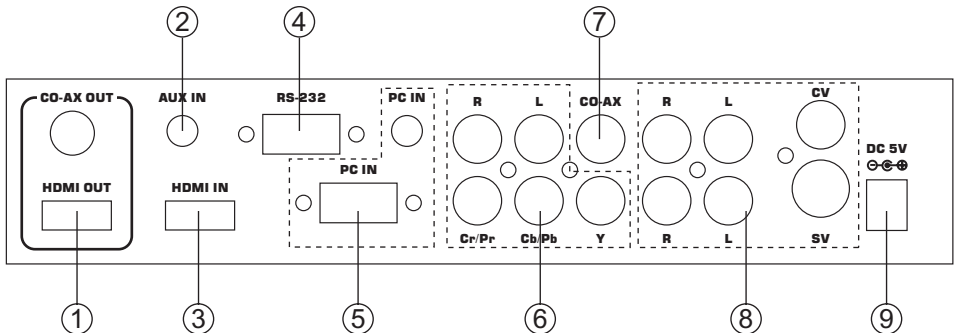
a. On the first tier of OSD menu, use + and - buttons to move up/down the highlight item for selection.

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.

4.2. 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 (see section "4.3 OSD Operation" for reference.)

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:

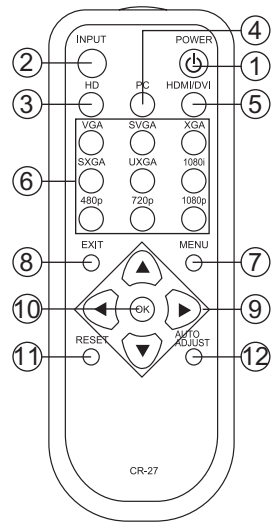
Plug the 5VDC power supply into the unit and connect the adaptor to AC wall outlet.

4.3. OSD Operation

1 st Tier Option	2 nd 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 / PANSCAN / FULL
	- NR	LOW / MIDDLE / HIGH / OFF
	- EXIT	Back to the 1 st Tier
	COLOR	- COLOR TONE
- 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 st 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 st Tier
AUDIO	- SOURCE	HDMI / L/R / COAXIAL
	- DELAY	OFF / 40MS / 110MS / 150 MS
	- SOUND	ON / MUTE
	- EXIT	Back to the 1 st Tier
INFORMATION	-	SOURCE (Input interface) INPUT (Input Resolution) OUTPUT (Output Resolution) VERSION (Firmware Version)
EXIT	-	Close the OSD Menu

4.4. Remote Control

1. **POWER:**
Press the button once to power on the CP-255I.
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.
12. **Auto Adjust:**
Press the button to optimize the position of the picture (picture centering) on the screen.



5. Specifications

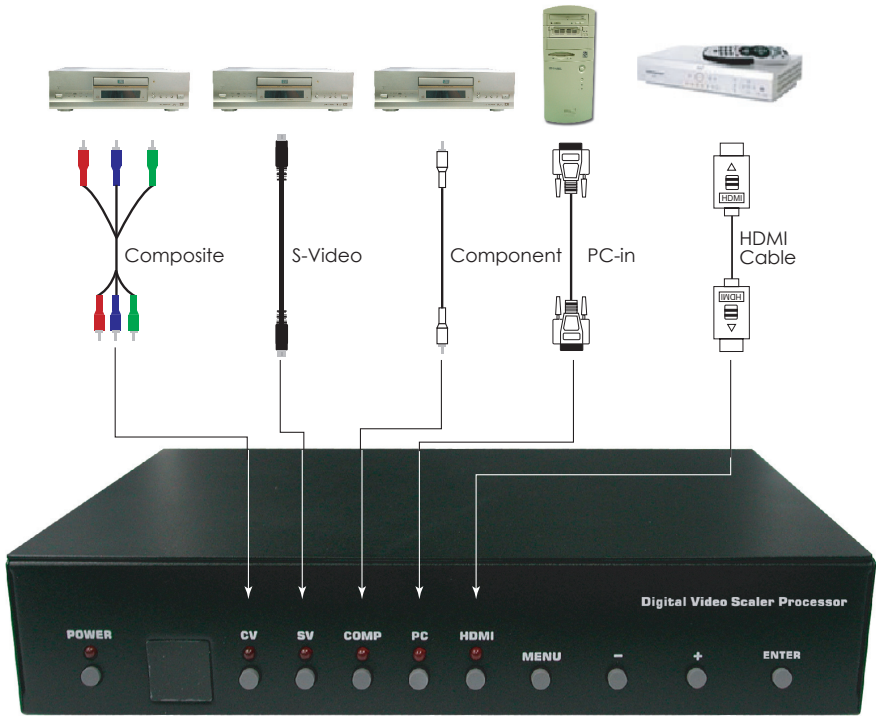
5.1. General Specification

- * 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

5.2. 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)

6. Connection and Installation



TV

Cypress Scaler Box Series:

Product	INPUT	OUTPUT	Highest Resolution
CP-259H	HDMI	HDMI	1080p
CP-255I	Video/S-Video/PC/ YPbPr/YCbCr/HDMI	HDMI	1080p
CP-255H	YPbPr/YCbCr/PC/ DVI-D/HDMI	DVI-D HDMI	1080p
CP-255D	YPbPr/YCbCr/PC/ DVI-D	PC DVI-D	1080p
CM-394	Video/S-Video/ SCART	YPbPr/HDTV RGB/PC	1080i
CM-393S	Video/S-Video/ SCART/HDMI	HDMI	1080i
CM-392	Video/S-Video	HDMI	1080i
CM-391	Video/S-Video	DVI	1080i
CM-390	Video/S-Video	YPbPr/HDTV RGB/PC	1080i
CSC-220	YPbPr/YCbCr/PC/ DVI-D	PC DVI-D	1080i
CS-720PHD	SCART	HDMI	720p (fixed)
CV-720PHD	Video/S-Video	HDMI	720p (fixed)
CP-254	DVI	DVI	1080i
CP-253	DVI	YPbPr/HDTV RGB/PC	1080i
CP-252	YPbPr/HDTV RGB/PC	DVI	1080i
CP-251F	YPbPr/HDTV RGB/PC	YPbPr/HDTV RGB/PC	1080i



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Home page: <http://www.cypress.com.tw>

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