



# CP-304

VGA to HDMI Video Scaler



Operation Manual





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## SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

## REVISION HISTORY

VERSION NO.	DATE DD/MM/YY	SUMMARY OF CHANGE
VR0	22/01/14	Preliminary release
VS1	21/03/14	Updated text/diagrams

## CONTENTS

<b>1. Introduction</b> .....	<b>1</b>
<b>2. Applications</b> .....	<b>1</b>
<b>3. Package Contents</b> .....	<b>1</b>
<b>4. System Requirements</b> .....	<b>1</b>
<b>5. Features</b> .....	<b>1</b>
<b>6. Operation Controls and Functions</b> .....	<b>2</b>
6.1 Front Panel .....	2
6.2 Rear Panel.....	2
<b>7. Connection Diagram</b> .....	<b>3</b>
<b>8. Specifications</b> .....	<b>4</b>
8.1 Technical Specifications .....	4
8.2 Supported Resolutions .....	5
<b>9. Acronyms</b> .....	<b>6</b>



## 1. INTRODUCTION

The VGA to HDMI Video Scaler is designed to scale an analog video signal from a PC source to a digital HDMI output in a wide-range of HD and PC resolutions (up to 1080p/WUXGA RB). In addition to video scaling, the unit can convert an analog stereo audio input to digital and embed it in the HDMI output as 2-channel LPCM. This unit allows the user to select a wide range of output resolutions and features an auto adjustment feature for optimal picture quality.

## 2. APPLICATIONS

- Integrate an analog PC device into a digital HDMI system
- Analog to Digital video/audio signal conversion
- Display PC video on a High-Definition HDMI display

## 3. PACKAGE CONTENTS

- VGA to HDMI Video Scaler
- 5V/2.6A Power Supply Adaptor
- Operation Manual

## 4. SYSTEM REQUIREMENTS

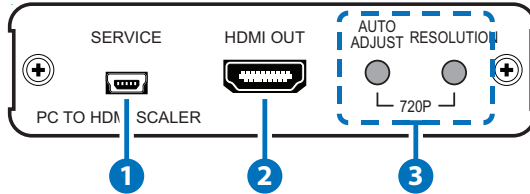
Source devices such as a PC or laptop with a D-sub 15-pin connector and an HDMI equipped display.

## 5. FEATURES

- HDMI and DVI 1.0 compliant
- Scales PC resolutions to SD/HD or PC resolutions
- Automatically detects the setting of the connected display and outputs the corresponding resolutions and refresh rate when the NATIVE output is selected
- Supports high resolution output:
  - PC: VGA, SVGA, XGA, SXGA, UXGA, WXGA, WSXGA, WUXGA(RB)
  - SD/HD: 480i, 576i, 480p, 576p, 720p, 1080i, 1080p
- Supports embedding of the stereo analog input and PC video to single HDMI output

## 6. OPERATION CONTROLS AND FUNCTIONS

### 6.1 Front Panel

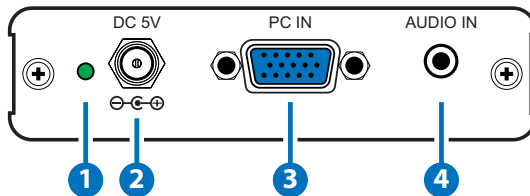


- 1 SERVICE:** Manufacturer use only.
- 2 HDMI OUT:** Connect the HDMI output to the HDMI input of a display or AV receiver.
- 3 AUTO ADJUST:** Press this button to auto adjust the image position when it does not fit the screen properly.

**RESOLUTION:** Repeatedly press this button to cycle through the resolutions to select the required output (see Section 8.2).

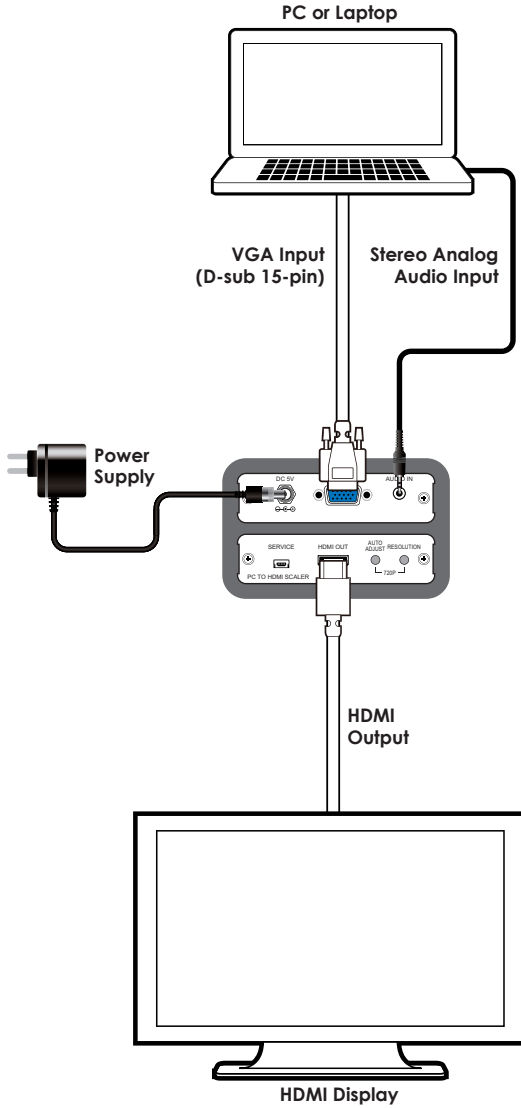
**720P:** Press both buttons simultaneously to immediately switch the output resolution to 720p@60Hz.

### 6.2 Rear Panel



- 1 POWER LED:** When the unit is connected to a power supply the LED will illuminate and the unit will switch ON automatically.
- 2 DC 5V:** Connect the DC power supply to the unit and plug the adaptor into an AC wall outlet.
- 3 PC IN:** Connect to an source device such as PC or laptop with D-sub 15-pin cable.
- 4 AUDIO IN:** Connect the 3.5mm mini-jack input to the analog audio output port of the source device.

## 7. CONNECTION DIAGRAM





## 8. SPECIFICATIONS

### 8.1 Technical Specifications

<b>Input Ports</b>	1×VGA (D-sub 15-pin), 1×3.5 mm Mini-jack
<b>Output Port</b>	1×HDMI
<b>Input Resolution</b>	Up to WUXGA (1920×1200@60RB)
<b>Output Resolution</b>	Up to 1080p & WUXGA (1920×1200@60RB)
<b>Power Supply</b>	5V/2.6A DC (US/EU standards, CE/FCC/UL certified)
<b>Dimensions</b>	102 mm(W)×102 mm(D)×25 mm(H)/Jacks Excluded 102 mm(W)×111 mm(D)×25 mm(H)/Jacks Included
<b>Weight</b>	244 g
<b>Chassis Material</b>	Aluminum
<b>Silkscreen Color</b>	Black
<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>	4.6 W



## 8.2 Supported Resolutions

INPUT (PC)	OUTPUT (HDMI)
VGA (640×480@60/72/75 Hz)	Native
SVGA (800×600@56/60/72/75 Hz)	640×480@60 Hz
XGA (1024×768@60/70/75 Hz)	800×600@60 Hz
XGA+ (1152×864@75 Hz)	1024×768@60 Hz
1280×720@60 Hz	1280×1024@60 Hz
1280×768@60/60 Hz (RB)	1600×1200@60 Hz
1280×800@60/60 Hz (RB)	1366×768@60 Hz
1280×960@60 Hz	1680×1050@60 Hz
1280×1024@60/75 Hz	1920×1200@60 Hz (RB)
1360×768@60 Hz	1280×800@60 Hz
SXGA (1400×1050@60 Hz)	1440×900@60 Hz
WXGA (1440×900@60 Hz)	1400×1050@60 Hz
UXGA (1600×1200@60 Hz)	1600×900@60 Hz
WSXGA (1680×1050@60 Hz)	480i@60 Hz
1920×1080@60 Hz	480p@60 Hz
1920×1200@60 Hz (RB)	720p@60 Hz
	1080i@60 Hz
	1080p@60 Hz
	576i@50 Hz
	576p@50 Hz
	720p@50 Hz
	1080i@50 Hz
	1080p@50 Hz

## 9. ACRONYMS

ACRONYM	COMPLETE TERM
<b>DVI</b>	Digital Visual Interface
<b>HDMI</b>	High-Definition Multimedia Interface
<b>VGA</b>	Video Graphics Array
<b>WUXGA</b>	Widescreen Ultra eXtended Graphics Array



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