



**NETWORK
TECHNOLOGIES
INCORPORATED**

1275 Danner Dr Tel:330-562-7070
Aurora, OH 44202 Fax:330-562-1999
www.networktechinc.com

VGACMP-HD

PC/YUV to HDMI Format Converter with Audio



Operation Manual

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.



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1. INTRODUCTION

The PC/YUV to HDMI Format Converter allows analog PC RGBHV or YUV signals to be converted to digital HDMI format with embedding of analog stereo audio at the same time. Connect your analog RGBHV/YUV output from a PC or Component Video source to the digital HDMI input of the latest HD ready plasma, LCD or DLP displays. Its high bandwidth capability supports a wide range of PC and HDTV resolutions. Further, its phase enhancement function allows users to freely adjust phase to stabilize image quality.

2. APPLICATIONS

- Integrate analog PCs into HDMI Systems
- Integrate YUV sources into HDMI systems
- RGB signal conversion to HDMI display
- Component (YUV) signal conversion to HDMI signal
- Embedding Audio to HDMI

3. PACKAGE CONTENTS

- PC/YUV to HDMI Format Converter with Audio
- 1×3 RCA to D-sub 15-pin Adaptor Cable
- 1×5 V/1.2 A DC Power Adaptor
- Operation Manual

4. SYSTEM REQUIREMENTS

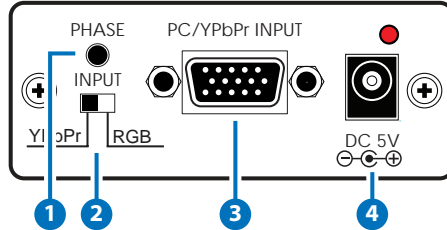
PC source with 15-pin D-Sub/RGB cable or YUV source with 3 RCA to D-Sub 15-pin adaptor cable and HDMI Display, AV receiver or system.

5. FEATURES

- Supports a wide range of YUV resolutions (480i-1080p)
- Supports analog audio 2CH (48kHz sampling rate)
- Supports hot plug detection
- Support YCbCr to RGB color space conversion
- Supports input format of RGBHV or YPbPr
- Supports input resolutions up to 1920×1200@60RB for PC and 1080p for HD
- Supports phase adjustment

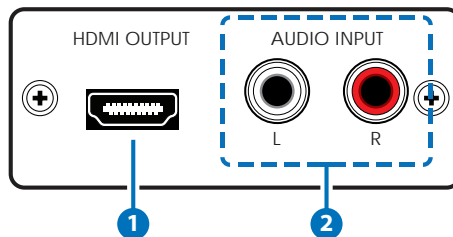
6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel



- 1 PHASE:** Adjusts the output image when it appears to be blurry or shaking.
- 2 YPbPr/RGB INPUT:** Switches between RGBHV and YPbPr signal input formats.
- 3 PC/YPbPr INPUT:** Connect the 3 RCA to VGA adaptor cable (included in the package) when the source is component (YUV) or use a 15-pin D-Sub cable when the source is VGA.
- 4 DC 5V:** Connect to the supplied 5V DC power supply and connect to an AC wall outlet. The red LED will light when powered.

6.2 Rear Panel

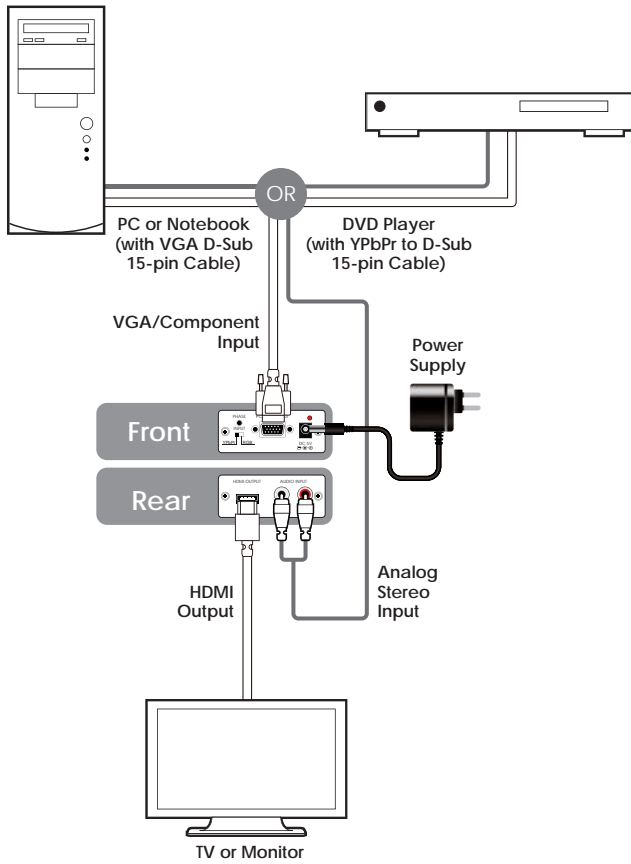


- 1 HDMI OUTPUT:** Connect to an HDMI display or AV Receiver system.
- 2 L/R AUDIO INPUT:** Connect to the audio output of the source device such as PC or Blu-ray player for stereo audio input. The Audio will be embedded in the HDMI output.

6.3 Resolution Support

Resolution	Input Format	RGB	YPbPr
480i/p@60			✓
576i/p@50			✓
720p@50/60		720p@60	✓
1080p@24/25/30			✓
1080i@50/60			✓
1080p@50/60		1080p@60	✓
640×480@60/72/75/85		✓	
720×400@70		✓	
800×600@56/60/72/75/85		✓	
1024×768@60/70/75/85		✓	
1152×864@75		✓	
1280×720@60 cvt		✓	
1280×768@60/60 (RB)		✓	
1280×800@60/60 (RB)/75		✓	
1280×960@60		✓	
1280×1024@60/75/60 cvt		✓	
1366×768@60/60 (RB)		✓	
1440×900@60/60 (RB)/75		✓	
1600×1200@60		✓	
1680×1050@60/60 (RB)		✓	
1920×1080@60 cvt		✓	
1920×1200@60 (RB)		✓	

7. CONNECTION DIAGRAM



8. SPECIFICATIONS

Video Frequency	165MHz
Input Port	1×D-Sub 15-pin, 1×L/R RCA jack
Output Port	1×HDMI
Input Signal	RGB: 0.7, Vp-p 75 ohm, H+V:3~5Vp-p or Y: 1Vp-p 75 ohm, Pv/Pr: 0.7 Vp-p, 75 ohm
Audio Input	Analog audio L/R
ESD Protection	Human body model: ±8kV (air-gap discharge) ±4 kV (contact discharge)
Power Supply	5 V/ 1.2 A DC (US/EU standards, CE/FCC/UL certified)
Dimensions	76 mm (W)×105 mm (D)×30 mm (H)
Weight	190g
Chassis Material	Aluminum
Silkscreen Color	Silver
Power Consumption	3.6 W
Operating Temperature	0 °C~40 °C / 32 °F~104 °F
Storage Temperature	-20 °C~60 °C / -4 °F~140 °F
Relative Humidity	20~90 % RH (non-condensing)

9. ACRONYMS

ACRONYM	COMPLETE TERM
HDMI	High-Definition Multimedia Interface
LCD	Liquid Crystal Display
LED	Light-Emitting Diode
RGB	Red Green Blue
YUV	Component Video
YPbPr	High-Definition Component Video

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