Model VHD-HDMI

Component Video (YPbPr) or PC Video to HDMI™ Converter with Audio
Allows connection of YPbPr signal from a DVD player or VGA video from a PC to connect to the HDMI input of a Plasma or LCD screen
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1.0 General
Thank you for purchasing Hall Research Technologies’ Model VHD-HDMI VGA Video or Component Video (YPbPr) to HDMI Converter with Audio. The VHD-HDMI is used to connect the VGA video signal from a PC or the YPbPr signal from a DVD player or similar device to connect to the HDMI input of a Plasma or LCD screen. The unit takes advantage of HDMI cable’s ability to also embed the audio in the same cable with video.

In combination with Hall Research Model SW-HDMI-3A 3 input HDMI switch, you can mix and select between new HDMI enabled devices and legacy DVD players with Component outputs, or display your PC’s video on the screen.

2.0 Features
- Connects computers with analog video output or DVD players with component output to HD ready Plasma, LCD, or DLP TV
- Switch for input format selection (PC-RGB, or Component-YPbPr)
- Compliant with HDMI specifications 1.0
- Supports up to 1600x1200 @ 60 Hz VGA input or up to 1080p input

3.0 Package Contents
- One VHD-HDMI converter unit
- One Universal Switching Power Supply
- One 3.5mm (1/8”) mini-stereo phone jack to 2 RCA cable adapter
- One VGA (HD15) to 3 RCA cable
- This User’s Manual

4.0 Controls, Functions, and Indicators
Input Video Format Switch

Set this switch according to the type of input signal connected.

**YPbPr**  Component Video (YPbPr) from a DVD player or Set top Box

**RGB**  Analog Video (VGA) from a PC or Notebook Computer

Input Connector (PC/YPbPr)

Connect your video source to this input. If you are using a PC as a source, you need a male-male VGA cable (not included). If your source is a DVD player, then use the included 3 RCA to HD15 cable. Please make sure to connect the correct color RCA connectors to your source.

Input Power Jack and Indicator

Plug the included power supply to this jack. The red LED should come on indicating power is on. NEVER SUBSTITUTE ANY OTHER POWER SUPPLY AS THIS MAY DESTROY THE UNIT.

Left and Right Audio Input Connectors

Connect your audio source to this input. If you are using a PC as a source, you can use the supplied cable to make the connection. If your source is a DVD or similar device, you need a RCA to RCA cable to make the connections.

HDMI Output Connector

This is the Digital output that contains the video and the audio. Connect this to your display device using HDMI cables (cable not supplied). Contact Hall Research Technologies if you need to purchase high quality cables. Note that if your distance is longer than 15 feet, you will need a HDMI signal booster such as HRT’s Model EX-HDMI-2A extender.

### 5.0 HDMI compatibility with PC Video

The VHD-HDMI is not a scaler. This means that the resolution of the video at the HDMI output is the same as the input. Most HDMI enabled displays do not support the full complement of PC resolutions and are designed to handle HDTV input formats of (480i or p) @ 60 Hz, (576i or p) @ 50 Hz, 720p @ 60 Hz, or 1080i @ 60 Hz. So, if you set your PC at a resolution of 1024x768 (XGA), your display may not show the HDMI image. In this case you have to set your PC’s resolution to either 640x480@60 (VGA interpreted as 480p), 800x600@50 (SVGA interpreted as 576p), or 1280x720@60 (WXGA interpreted as 720p).

However, if you are converting the VGA signal from a PC and use an HDMI to DVI cable to connect it to the DVI input of an LCD, you should be able to display most, if not all, of the PC resolutions on your digital LCD.
6.0 Specifications

**Video Input**
RGB@0.7 Vp-p, HV@5 Vp-p, Y@1 Vp-p PbPr@0.7 Vp-p

**Resolutions**
Output resolution is the same as input resolution. **Supported PC Resolutions**
- VGA@60, 72, 75, 85 – SVGA@60, 72, 75, 85
- XGA@60, 70, 75, 85 – SXGA@60, 75, 85
- UXGA@60
- 1152@70, 75, 85 – XGAi@87

**Supported Component (YPbPr) Resolutions**
- 480i@60 - 576i@50 - 576p@60 - 720p@50, 60
- 1080i@50, 60 – 1080p@30, 50, 60

**Audio Input**
Stereo Analog line-level

**Temperature**
Operating: 32 to 122°F (0 to 50°C);
Storage: –40 to +185°F (–40 to +85°C)

**MTBF**
95,000 hours (calculated estimate)

**Power**
From utility-power (mains) outlet, through included external power supply. Voltage: 5 V DC Center-Positive 2000 mA

**Size**
1.2" High x 3.0" Wide x 4.2" Deep

**Weight**
8 Ounces

7.0 Connection Block Diagram