

# ASP-VTH

## VGA & Audio to HDMI Converter

### User Manual



Manual Number: 100809





## **Safety and Notice**

The ASP-VTH VGA & Audio to HDMI Converter has been tested for conformity to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the ASP-VTH should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

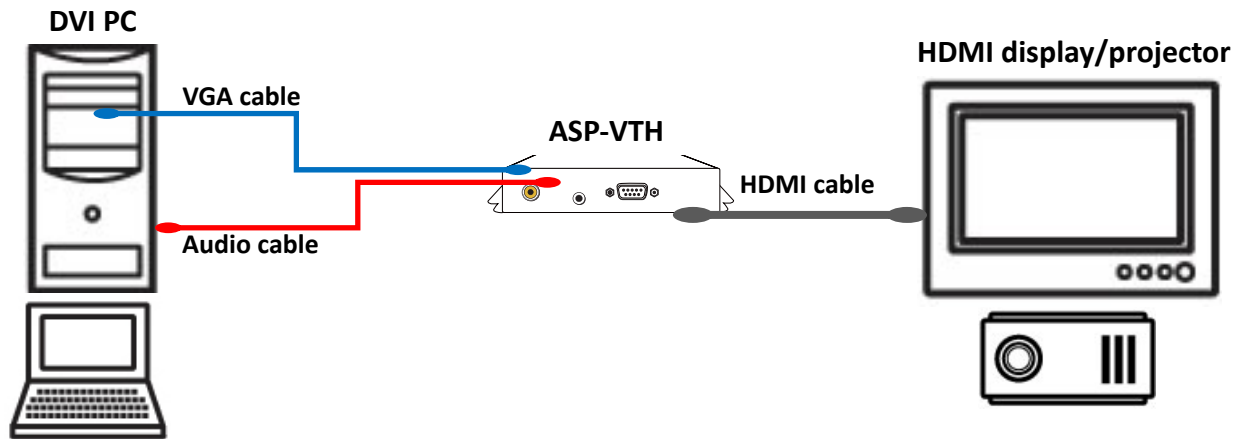
- Follow all instructions and warnings marked on this unit.
- Do not attempt to service this unit yourself, except where explained in this manual.
- Provide proper ventilation and air circulation and do not use near water.
- Keep objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the power adapter and power cords and connection cables designed for this unit.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.



### **Warning!**

***This device is served purely for conversion between video formats.  
This device CANNOT convert the input/output video resolutions.***

This ASP-VTH offers an easy and instant approach for converting analog PC video (VGA) with either digital audio (S/PDIF) or analog stereo audio to digital HDMI. With this module, VGA based devices such as PC with S/PDIF or analog stereo audio can readily connect to your HDMI TV. With such a convenience, presentations, demonstrations, or digital signage become easier and more cost effective.



## Features

---

- HDMI 1.2a Compliant
- PC video supports up to UXGA (1600x1200) or WUXGA (1920x1200)
- Supports most popular VESA resolutions from 640x480 up to WUXGA
- Front panel LED indicators
- Easy installation

# Specifications & Package Contents

| Model Name                |         | ASP-VTH   |   |
|---------------------------|---------|---|---|
| <b>Technical</b>          |         | <b>Converter</b>  |   |
| HDMI compliance           |         | HDMI 1.2a   |   |
| DVI compliance            |         | N/A   |   |
| Video bandwidth           |         | 165MHz [4.95Gbps]   |   |
| Video support             |         | Up to single link: 1080p60, WUXGA [1920x1200@60Hz], UXGA          |   |
| Audio support             |         | SPDIF/Stereo audio  |   |
| PCB stack-up              |         | 4-layer board [impedance control — differential 100Ω; single 50Ω] |   |
| Output video signal       |         | 1.2 Volts [peak-to-peak]  |   |
| Output DDC signal         |         | 5 Volts [peak-to-peak, TTL]                                       |   |
| Input                     |         | 1x VGA<br>1x RCA<br>1x 3.5mm                                      |   |
| Output                    |         | 1x HDMI   |   |
| HDMI connector            |         | Type A [19-pin female]  |   |
| DVI connector             |         | DVI-I [29-pin female digital only]                                |   |
| VGA connector             |         | HD-15 [15-pin D-sub female]                                       |   |
| RCA connector             |         | Coaxial S/PDIF digital audio [PCM 48kHz]                          |   |
| 3.5mm connector           |         | Analog stereo audio   |   |
| Control Switch            |         | 2-pin DIP switch  |   |
| <b>Mechanical</b>         |         | <b>ASP-VTH</b>  |   |
| Housing                   |         | Metal enclosure   |   |
| Dimensions<br>[L x W x H] | Model   | 126 x 102 x 25mm [5" x 4" x 1"]                                   |   |
|                           | Package | 270 x 175 x 80mm [10.6" x 6.9" x 3.1"]                            |   |
|                           | Carton  |   |   |
| Weight                    | Model   | 345g [12oz]   |   |
|                           | Package | 705g [1.6 lbs]  |   |
| Power supply              |         | 5V 2A DC  |   |
| Power consumption         |         | 4 Watts [max]   |   |
| Operation temperature     |         | 0-40°C [32~104°F]   |   |
| Storage temperature       |         | -20-60°C [-4~140°F]   |   |
| Relative humidity         |         | 20-90% RH [no condensation]                                       |   |
| <b>Package Contents</b>   |         | 1x CV-105<br>1x 5V power supply unit<br>1x User manual            | 1x ASP-VTH<br>1x 5V power supply unit<br>1x User manual |

# Resolution Support

## PC video (VGA)

|                  |                   |                   |                   |
|------------------|-------------------|-------------------|-------------------|
| 848 x 480 @60Hz  | 1024 x 768 @75Hz  | 1600 x 1200 @60Hz | 1600 x 1200 @60Hz |
| 640 x 480 @60Hz  | 1152 x 864 @75Hz  | 1792 x 1344 @60Hz | 1920 x 1080 @50Hz |
| 640 x 480 @72Hz  | 1280 x 768 @60Hz  | 1900 x 1200 @60Hz | 1920 x 1080 @60Hz |
| 640 x 480 @75Hz  | 1280 x 768 @75Hz  | 640 x 480 @60Hz   | 1920 x 1200 @60Hz |
| 800 x 600 @56Hz  | 1280 x 960 @60Hz  | 800 x 600 @60Hz   |                   |
| 800 x 600 @60Hz  | 1280 x 1024 @60Hz | 1024 x 768 @60Hz  |                   |
| 800 x 600 @72Hz  | 1280 x 1024 @75Hz | 1152 x 864 @75Hz  |                   |
| 800 x 600 @75Hz  | 1360 x 768 @60Hz  | 1280 x 768 @60Hz  |                   |
| 1024 x 768 @60Hz | 1400 x 1050 @60Hz | 1280 x 1024 @60Hz |                   |
| 1024 x 768 @70Hz | 1400 x 1050 @75Hz | 1400 x 1050 @60Hz |                   |

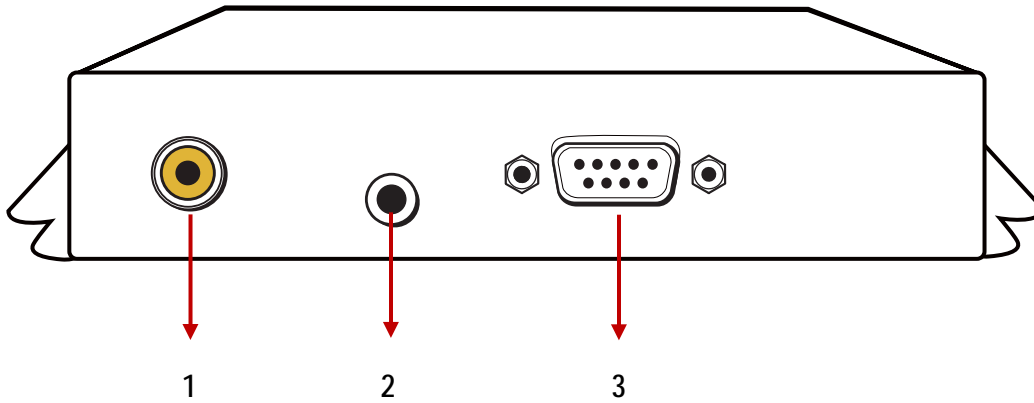


## DIP Switch

|            | Mode                                   |
|------------|--|
| 1: OFF-[↑] | Reset to default factory EDID          |
| 1: ON-[↓]  | Learn & store connected monitor's EDID |
| 2: OFF-[↑] | Analog audio input                     |
| 2: ON-[↓]  | S/PDIF audio input                     |

## Front Panel

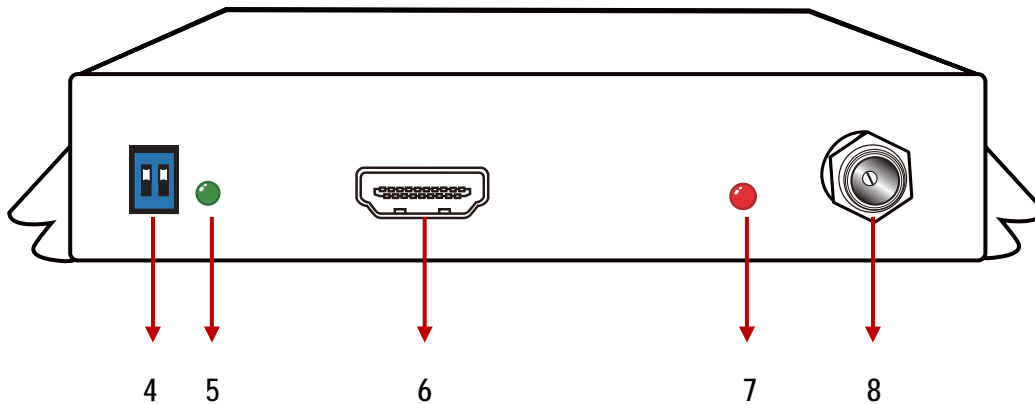
---



1. S/PDIF Input
2. Audio Input
3. VGA Input

## Rear Panel

---



4. Mode Switch
5. HDMI Detection
6. HDMI Output
7. Power Indicator
8. 5V DC

## Hardware Installation

1. Connect VGA source to the video input with a VGA cable.
2. Connect S/PDIF or stereo audio source to RCA jack or 3.5mm earphone jack respectively.
3. Connect HDMI display to the HDMI output connector with a HDMI cable
4. Power up the ASP-VTH.

## EDID Learning

1. Power up the ASP-VTH. Connect display to **HDMI Output**.
2. To learn EDID from HDMI display, pull down the **DIP switch 1 to ON [↓]**, the green light will be dark and bright to indicate the EDID learning process is complete. You DON'T NEED to pull up the DIP switch again unless you want to learn another EDID by pulling DIP switch 1 up and down.

## Notice

1. Only HDMI enabled TV sets with **underscan/overscan\*** support, the full active video can be accurately displayed. Some HDMI equipped TV sets may not support this feature. If underscan/overscan\* is NOT supported, the top, bottom, left and right border of the active video may be screened, and the S/PDIF audio may not sound right.
2. Analog stereo audio can merely support 2-channel audio. This version does NOT support 8-channel analog audio applications.
3. S/PDIF audio input supports the main 2-channel audio input
4. S/PDIF supports only 48kHz audio sample rate. Other than this rate, the input digital audio should be adjusted to 48kHz in order to get audio signal correctly sent.

*\*The **underscan mode** displays the full video frame, which reveals content on the edge that is recorded. In **overscan**, the field monitor zooms in to the area that would be visible on most televisions. Set the field monitor to underscan if your video will be viewed on a computer monitor or shown with a projector and also to look for light stands, microphones, and other unwanted objects on the edges of your shot. Set it to overscan to see how the video will look on a television.*

# Limited 3 Year Warranty

Aurora Multimedia Corp. ("Manufacturer") warrants that this product is free of defects in both materials and workmanship for a period of 3 years as defined herein for parts and labor from date of purchase. Motorized mechanical parts (Hard Drives, DVD, etc), mechanical parts (buttons, doors, etc), remotes and cables are covered for a period of 1 year. Batteries are not covered by this warranty. During the warranty period, and upon proof of purchase, the product will be repaired or replaced (with same or similar model) at our option without charge for parts or labor for the specified product warranty period.

This warranty shall not apply if any of the following:

- A) The product has been damaged by negligence, accident, lightning, water, act-of-God or mishandling; or,
- B) The product has not been operated in accordance with procedures specified in operating instructions; or,
- C) The product has been repaired and or altered by other than manufacturer or authorized service center; or,
- D) The product's original serial number has been modified or removed; or,
- E) External equipment other than supplied by manufacturer, in determination of manufacturer, shall have affected the performance, safety or reliability of the product.
- F) Part(s) are no longer available for product.

In the event that the product needs repair or replacement during the specified warranty period, product should be shipped back to Manufacturer at Purchaser's expense. Repaired or replaced product shall be returned to Purchaser by standard shipping methods at Manufacturer's discretion. Express shipping will be at the expense of the Purchaser. If Purchaser resides outside the contiguous US, return shipping shall be at Purchaser's expense.

No other warranty, express or implied other than Manufacturer's shall apply.

Manufacturer does not assume any responsibility for consequential damages, expenses or loss of revenue or property, inconvenience or interruption in operation experienced by the customer due to a malfunction of the purchased equipment. No warranty service performed on any product shall extend the applicable warranty period.

This warranty does not cover damage to the equipment during shipping and Manufacturer assumes no responsibility for such damage.

This product warranty extends to the original purchaser only and will be null and void upon any assignment or transfer.

Aurora Multimedia Corp.  
205 Commercial Court, Morganville, NJ 07751  
Phone: (732) 591-5800 Fax: (732) 591-5801  
[www.auroramultimedia.com](http://www.auroramultimedia.com)