

### Welcome!

We greatly appreciate your purchase of the VP500-100 HDMI to VGA Converter. We are sure you will find it reliable and simple to use. Superior performance for the right price, backed by solid technical and customer support is what Altinex has to offer.

We are committed to providing our customers with Signal Management Solutions® to the most demanding audiovisual installations at competitive pricing and we welcome you to join the ranks of our many satisfied customers throughout the world.

### 1. Precautions and Safety Warnings

Please read this manual carefully before using your VP500-100. Keep this manual handy for future reference. These safety instructions are to ensure the long life of your VP500-100 and to prevent fire and shock hazards. Please read them carefully and heed all warnings.

#### 1.1 General

- Qualified Altinex service personnel or their authorized representatives must perform all service.

#### 1.2 Installation Precautions

- To prevent fire or shock, do not expose this unit to water or moisture. Do not place the VP500-100 in direct sunlight, near heaters or heat-radiating appliances, or near any liquid. Exposure to direct sunlight, smoke, or steam can harm internal components.
- Handle the switcher carefully. Dropping or jarring can cause damage.
- Do not pull any cables that are attached to the VP500-100.

### 2. Installation Procedures

Step 1. Remove the converter and all accessories from the shipping container.

NOTE: A typical setup may require video and audio adapter cables that are usually included with the purchase of the associated device: display, speakers, or amplifier. If needed, standard adapter cables can be purchased separately from Altinex:

Video: P/N CB412-003 VGA-to-VGA type cable (15-pin HD M-F)

Audio: P/N CB445-006 Audio cable (3.5 mm M-M)

Step 2. An AC to USB power adapter is provided in the event the HDMI source does not provide sufficient power for the converter. Only use this adapter if required to do so later in this installation.

Step 3. Connect the converter's video output to the VGA/analog display. Connect the converter directly or use a short VGA type cable between the converter's 15-pin HD connector and the 15-pin HD connector on the display.

Step 4. Connect the converter's audio output to the audio input of the display (if available), amplified speakers, or an amplifier.

Step 5. Connect the source's HDMI cable to the input of the converter. If the source is on and there is an active HDMI signal present, the power LED on the top of the converter should be on and solid blue. This is typical for most HDMI sources. If the LED is blinking, it is necessary to use the external power adapter provided.

Step 6. Hook & loop fastening tape is provided so the converter can be neatly attached to the back of the display and out of sight.

Step 7. Use the cable clamps provided to neatly route the cables and to provide strain relief.

Step 8. The VP500-100 Converter is now operational.

### 3. Limited Warranty/Return Policies

Please see the Altinex website at [www.altinex.com](http://www.altinex.com) for details on warranty and return policies.

### 1.3 Cleaning

- Clean only the connector area with a dry cloth. Never use strong detergents or solvents such as alcohol or thinner. Do not use a wet cloth or water to clean the card. Do not clean or touch any component or PCB.

### 1.4 FCC Notice

- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions found herein, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
- Any changes or modifications to the unit not expressly approved by Altinex, Inc. could void the user's authority to operate the equipment.

## 4. Technical Specifications

Specifications are subject to change. See [www.altinex.com](http://www.altinex.com) for up-to-date information.

Features/Description	VP500-100
General	
Inputs	
Video Input	HDMI F (1)
Power	DC jack (1)
Outputs	
RGBHV Video Output	15-pin HD F (M)
Digital/optical* & Analog Audio	3.5 mm F (1)
Compatibility	
Signal types	HDMI, HDCP, and DVI-D
Signal resolutions HDTV	480i through 1080p
RGB resolutions	Up to 1920x1080/60Hz
Digital Audio	S/PDIF
Accessories Included	
Power Adapter	+5 VDC, 1 A
DC power cable	USB to DC
Hardware	Cable clamps and hook & loop fasteners
Optional Accessories	
Audio Cable (3.5 mm)	CB445-006, 6 ft, M-M
VGA Cable (15-pin HD)	CB412-003, 3 ft, M-F

Table 1. VP500-100 General

Mechanical	VP500-100
Material	Aluminum
Color	Black
Height	0.8 in (21 mm)
Width	2.8 in (71 mm)
Depth	1.7 in (44 mm)
Weight	0.2 lb (0.1 kg)
Shipping Weight (approximate)	0.9 lb (0.4 kg)
T° Operating	10°C to 35°C
T° Maximum	0°C to 50°C
Humidity	20-90% non-condensing
MTBF (calc.)	38,000 hrs

Table 2. VP500-100 Mechanical

Electrical	VP500-100
Input	
Digital Video+ Audio	HDMI Standard
Output	
Analog Video (RGB)	0.7 Vp-p (nominal)
Sync Video (HV)	TTL
Audio (analog)	1 Vp-p typical
Power <i>(from adapter or source)</i>	
+5 VDC operational	400 mA (2 W max.)
+5 VDC standby	4 mA (20 mW max.)

Table 3. VP500-100 Electrical

\* Requires special cable.

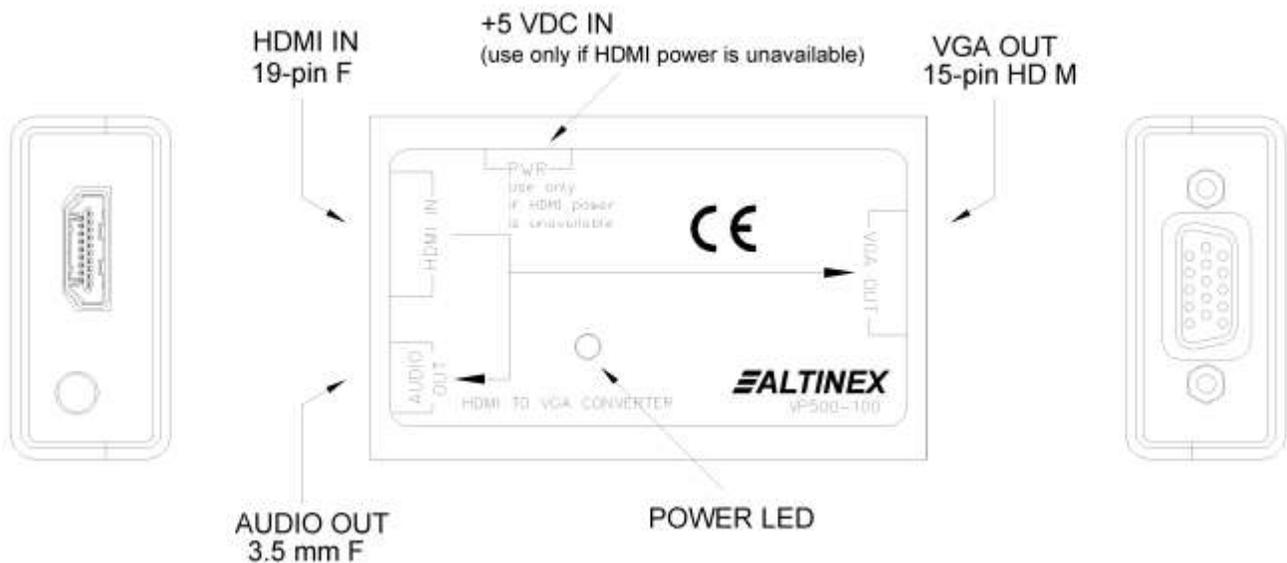
## 5. About Your VP500-100

- HDCP compatible with embedded keys
- Compatible with HDCP and non-HDCP sources
- Connects directly to display 15-pin HD input
- RGB resolutions up to 1920x1080/60Hz
- Analog and digital optical audio out
- Compact form 2.8 x 1.7 x 0.8
- Power over HDMI or external adapter

The VP500-100 is an HDMI to VGA converter is compliant with HDMI standards using embedded keys. The VP500-100 works with both HDCP and non-HDCP sources including: HD-DVD, Blu-ray, Playstation 3, etc. The VGA output connector is a standard 15-pin HD M that connects directly to the input of the VGA display. The video output supports all resolutions up to 1920x1080/60Hz.

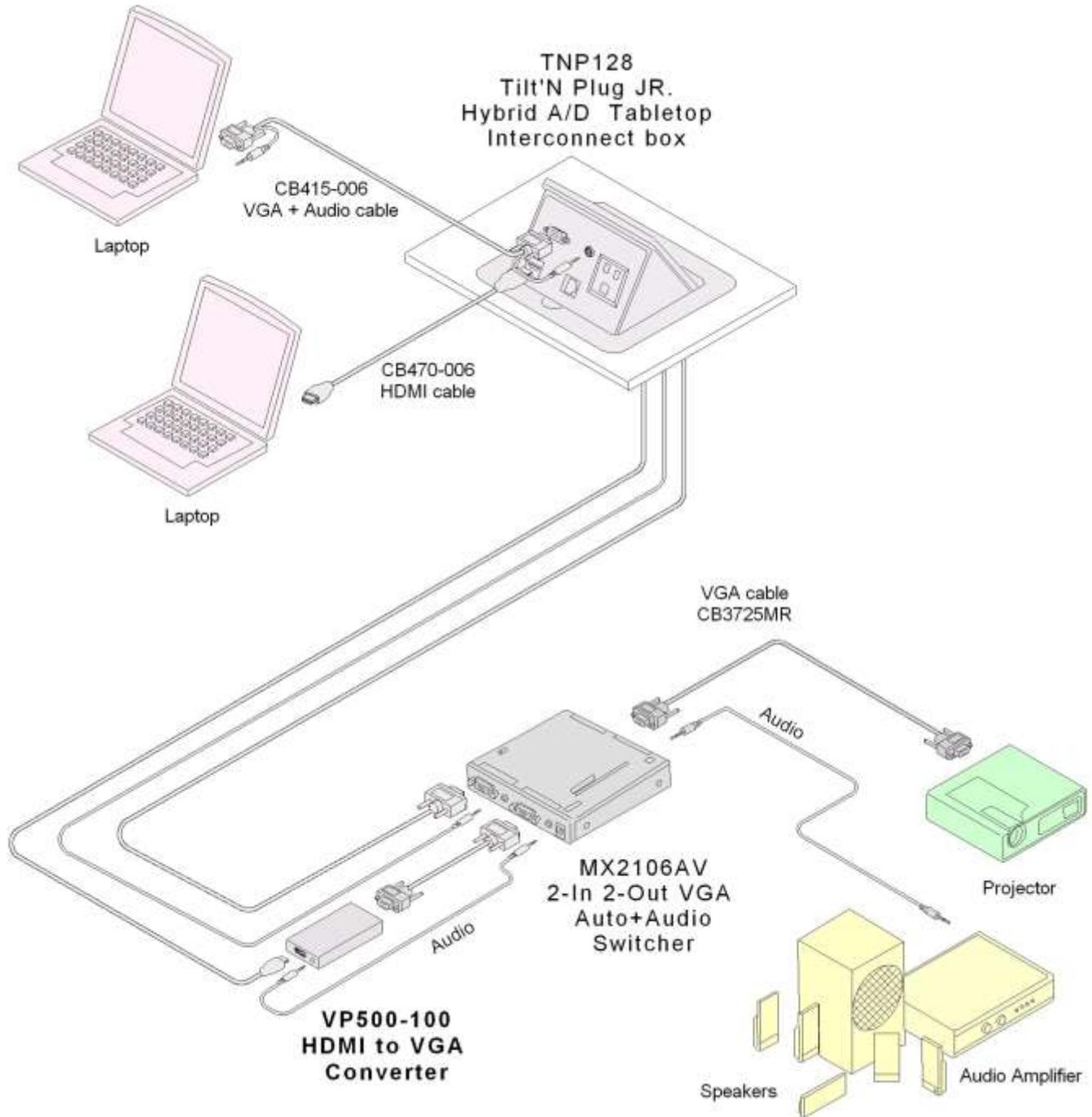
In addition to the HDMI to VGA video conversion, the VP500-100 also detects, strips, and outputs the audio from the HDMI signal in both analog and digital/optical audio formats. It is also fully compliant with High-bandwidth Digital Content Protection for both video and audio.

The VP500-100 is small and lightweight; it can easily be installed behind a display or connected directly to the display input. In most cases, the converter receives its power directly from the HDMI source over the HDMI cable. In the event the source does not supply power, or supplies insufficient power, a +5 VDC power adapter is provided. The adapter is very small with slim-profile protruding less than 1 inch from the wall outlet.



## 6. Application Diagrams

Diagram 1: Typical Setup



## 7. Operation

The VP500-100 requires no adjustments for optimal performance. Once set-up, the VP500-100 will work trouble-free without user intervention.

## 8. Troubleshooting Guide

We have carefully tested and have found no problems in the supplied VP500-100. However, we would like to offer suggestions for the following:

Converter	
Symptom	Resolution
Blue Power LED is OFF	<ol style="list-style-type: none"> <li>1. There is no HDMI signal present. Check the source and make sure it is powered.</li> <li>2. There is not enough power or the source may not supply DC power. Connect the +5 VDC adapter provided with the unit to the VP500-100.</li> </ol>
Blue Power LED is Blinking	<ol style="list-style-type: none"> <li>1. The VP500-100 is receiving an HDMI signal but is not receiving sufficient power. Connect the +5 VDC adapter provided with the unit to the VP500-100.</li> </ol>
No Display	<ol style="list-style-type: none"> <li>1. Check the source and make sure there is a signal present.</li> <li>2. Make sure the display has power and is turned on.</li> </ol>
Poor Output Image	<ol style="list-style-type: none"> <li>1. The source resolution may not be compatible with the display or other display device. Try other resolutions from the source. Remember, not all displays support 1080p.</li> <li>2. There may be insufficient power to support the full resolution. Connect the +5 VDC adapter provided with the unit to the VP500-100.</li> </ol>
No Sound	<ol style="list-style-type: none"> <li>1. Make sure the TV or other display device is not muted.</li> <li>2. Check the volume level on the TV or other device. Set it to a reasonable level or about midrange.</li> </ol>
Sound is Distorted	<ol style="list-style-type: none"> <li>1. Check the multi-channel sound settings. Do not select more than 2 channels. For multi-channel sound (more than 2) or surround sound, connect the source audio directly to the audio receiver or pre-amp.</li> <li>2. Check the volume level on the TV or other device. Set it to a reasonable level or about midrange.</li> </ol>