

# Video Scaler/Converter

DVI to VGA Video Scaler Converter

DVI2VGA

Instruction Manual



**StarTech.com**

The Professionals' Source for Hard-to-Find Computer Parts

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This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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## **Introduction**

Thank you for purchasing a StarTech.com video scaler. This product allows you to convert between DVI and VGA video formats and resolutions. The input resolution is automatically detected while the output resolution and refresh rate can be selected through an on-screen menu with the buttons located on the front of the panel.

## **Features**

- Converts DVI-D video input to Analog RGBHV or YPbPr output. A DVI source can be displayed onto a VGA or HDTV display using a VGA connector or component RCA connectors
- 48MB frame memory for frame rate conversion
- On-screen display allowing adjustments to brightness, contrast, color and Horizontal/Vertical positioning

## **Before You Begin**

### **System Requirements**

- A DVI video source
- A display capable of using a RGBHV or YPbPr signal (15-pin connector)
- Cables necessary to make connections between input, scaler and VGA/HD display

### **Contents**

- 1 x DVI Cable
- 1 x 5V DC 2Amp Power Adapter
- 1 x User Manual

## Installation

These instructions assume that the display has at least one available input that uses either VGA Video or YPbPr, and that all the devices have their cables attached. You may need to disconnect an existing device from the display to make an input available and re-connect that device using the video scaler.



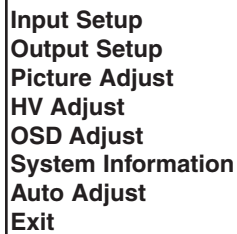
### Connecting Devices to the Scaler

1. Place the scaler near the display and the devices you wish to use with the scaler.
2. Using the PC/HD Output port on the front of the scaler, onnect the input device (i.e. a DVD player, satellite receiver) to the connector labeled **DVI Input** on the back of the video scaler.
3. Connect the scaler to the display device. If you require a VGA resolution output, use a 15-pin D-Sub VGA cable to connect the VGA input on the display to the PC/HD output on the scaler. If you require an HDTV resolution output, use a 15-pin D-sub to YPbPr/ RCA adaptor cable to connect the PC/HDTV output to the YPbPr input of an HDTV device.
4. Connect the power adapter (provided) to the port marked **DC 5V** on the back of the video scaler. Connect the opposite end to a wall outlet or other suitable power source. The light on the back of the scaler will illuminate, once the unit is powered.

The DVI to VGA scaler is now ready to use.

## Using the Video Scaler

Once you have connected the desired input and output devices to the video scaler, you can proceed to test the connection to the television or other display. Turn on the display, and select the input to which you connected the video switch. Consult the documentation for your display if you are unsure on how to select A/V inputs. Usually, there will be a button on the display's remote or front panel labeled **INPUT** or **A/V**. If the display has multiple inputs, you will need to ensure the input you have selected corresponds to the connectors on the television you used for the scaler. Power on the devices you connected to the video scaler. Pressing the **MENU** button will bring up the on-screen display controls on the screen as follows:



Input Setup  
Output Setup  
Picture Adjust  
HV Adjust  
OSD Adjust  
System Information  
Auto Adjust  
Exit

Using the + or - buttons, move the cursor to your desired selection, then press **Menu** to confirm your selection and enter the corresponding sub-menu.

### Input set up

When selected, a sub-menu for choosing either YPbPr or RGB as your input signal will appear. Using the + or - buttons on the front of the scaler, select the signal format that matches the format of your input. Pressing **Menu** will save your selection and exit this sub-menu.

### Output set up

When selected, a sub-menu will appear giving you options as to the desired refresh rate and resolution. Use the + or - buttons to choose the correct resolution/refresh rate. Pressing **Menu** will save your selection and return you to the main menu.

### Picture Adjust

This sub-menu allows you to adjust the contrast, brightness and color of the displayed image. Using the + and - buttons, select the attribute you wish to change, and use the **Menu** button to confirm your selection. Use the + or - buttons to increase or decrease the amount of the element you are modifying, followed by the **Menu** button to save. Repeat this procedure for each element as desired. Once you have made the necessary adjustments, use the + or - button to navigate to the **Exit**, which will take you back to the main menu. **NOTE:** using the **Reset** feature will return all adjustments back to the factory reset values.

### HV Adjust

When chosen, a sub-menu will appear, allowing you to adjust the best horizontal and vertical position of the picture, using the + or - buttons.

### OSD Adjust

Allows you to adjust the horizontal and vertical position of the on-screen menu.

**System Information**

Displays the current software version as well as the input and output resolutions and the corresponding refresh rates.

**Auto Adjust**

When chosen, the scaler will automatically adjust all parameters to the factory preset values.

**Exit**

When selected, exits the on-screen display

## Specifications

### Input Resolutions:

Digital	PC (RGBHV)	HDTV (YCbCr, YPbPr, RGBHV)	
VGA	640x480@85Hz	<b>1080i</b>	1920x1080@60Hz
VESA85	640x400@85Hz	<b>720p</b>	1280x720@60Hz
VGA70	720x400@70Hz	<b>576p</b>	720x576@50Hz
SVGA	800x600@60/72/75/85Hz	<b>480p</b>	720x480@60Hz
XGA	1024x768@60/70/75/85Hz	<b>576i</b>	720x576@50Hz
Mac	1152x864@70/75Hz	<b>480i</b>	720x480@60Hz
WXGA	1280x768@60Hz		
1280A	1280x960@60Hz		
SXGA	1280x1024@60Hz		

### Output Resolutions:

Analog	PC (RGBHV)	HDTV (YCbCr, YPbPr, RGBHV)	
VGA	640x480@60/72/75/85Hz	<b>1080i</b>	1920x1080@60Hz
VESA85	640x400@85Hz	<b>720p</b>	1280x720@60Hz
VGA70	720x400@70Hz	<b>576p</b>	720x576@50Hz
SVGA	800x600@60/72/75/85Hz	<b>480p</b>	720x480@60Hz
XGA	1024x768@60/70/75/85Hz		
Mac	1152x864@70/75Hz		
WXGA	1280x768@60Hz		
1280A	1280x960@60Hz		
SXGA	1280x1024@60/75Hz		

**Input Format:** Digital RGBHV, YPbPr or YCbCr

**Input Signal:** Digital RGB data bitstream

**Input Connector:** 24-pin DVI-D connector

**Output Format:** Analog RGBHV, YPbPr

**Output Signal:** RGB: 0.7Vp-p, 75 ohm H/V: 3 to 5 Vp-p TTL

**Output Connector:** HD 15-pin female

**Power:** 5V 2A center-positive

## Troubleshooting

If you're having difficulty using the video scaler, try the following solutions based on the nature of the problem.

### ***No image is being shown on the display.***

- 1) Ensure the video scaler is plugged in and receiving power. One LED indicator on the front panel will be lit when the switch is receiving power.
- 2) Try selecting another input on the display and verify which input the scaler is connected to. Most displays will have their A/V inputs marked with a number, so ensure the input selected on the screen matches the physical connection between the scaler and the display.
- 3) Verify cable connections between the input device, video scaler and display are snug.

### ***Video quality is poor.***

- 1) Verify cable connections between the input device, video scaler and display are snug.
- 2) Using lengthy cables may cause signal degradation. Try to locate the scaler as close to the input device and display, as possible.
- 3) Enter the **Picture Adjust** sub-menu, ensure that Contrast, Brightness and Color are set appropriately.

## **Accessory Products from StarTech.com**

Contact your local StarTech.com dealer or visit [www.startech.com](http://www.startech.com) for cables or other accessories that will help you get the best performance out of your new product.

### **MXT101**

6 ft. VGA Monitor Extension Cable

### **MXT105**

15 ft. VGA Monitor Extension Cable

### **ZENDVI1**

Cable ZEN 3.3 ft (1m) DVI Digital Video Cable

### **ZENDVI2**

Cable ZEN 6.6 ft (2m) DVI Digital Video Cable

### **ZENDVI4**

Cable ZEN 13.1 ft (4m) DVI Digital Video Cable

## **Technical Support**

StarTech.com's lifetime technical support is an integral part of our commitment to provide industry-leading solutions. If you ever need help with your product, visit [www.startech.com/support](http://www.startech.com/support) and access our comprehensive selection of online tools, documentation, and downloads.

## **Warranty Information**

This product is backed by a one-year warranty. In addition, StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

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