



**VGA to DVI  
Scaler PLUS**  
USER MANUAL

## ASKING FOR ASSISTANCE

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# INTRODUCTION

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Congratulations on your purchase of the Gefen VGA to DVI Scaler Plus. Your complete satisfaction is very important to us. Gefen's line of KVM (Keyboard Video & Mouse), DVI, ADC, USB, switches, extenders, converters and hubs is designed to make computer use more comfortable, more productive and less expensive.

KVM switches allow access to multiple computers from a single keyboard, while the extenders give the user control over a computer up to 330 feet away from the work area.

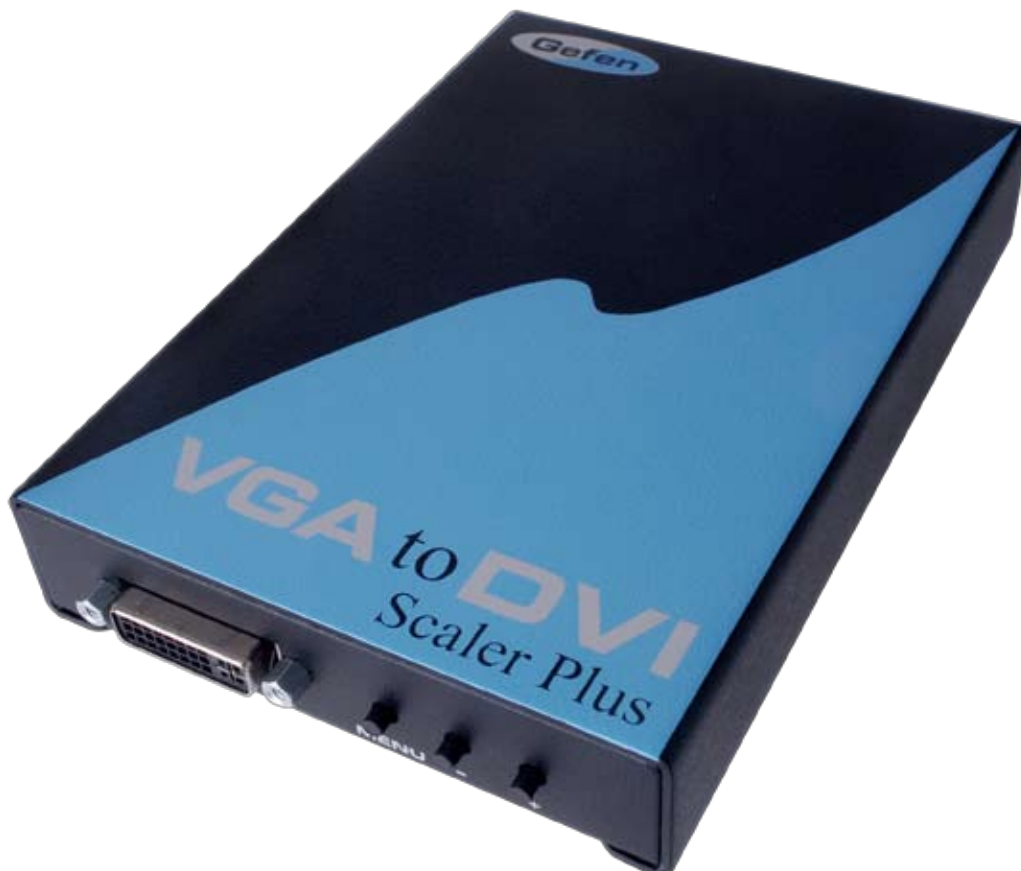
The line offers solutions for noise, space and security concerns, data center control, information distribution, conference room presentation, and school and corporate training environments.

## Our Commitment

Gefen will always offer the finest quality product at the best possible price. Included in that price is a lifetime of free support from a team of outstanding engineers.

## Introduction

The VGA to DVI Scaler PLUS connects traditional analog video graphic cards (VGA) to DVI compliant digital monitors. The VGA to DVI Scaler PLUS, enables users to connect laptops or legacy PC computers equipped with HD-15 video connections, to the new DVI (digital visual interface) video display format. The VGA to DVI Scaler PLUS will also work with component video sources such as DVD players and set top boxes.



# FEATURES

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## Features

- The input is analog PC or HDTV signal in the format of either RGBHV, YPbPr or YCbCr.
- The output is digital+analog PC or HDTV signal in the format of digital RGBHV bit stream plus analog RGBHV, known as DVI-I (Integrated digital and analog)
- The input resolution is automatically detected while the output resolution and refresh rate can be selected through OSD menu and front panel push buttons.
- 48MB frame memory for frame rate conversion.
- Output picture adjustment on brightness, contrast, color, RGB level and H-V position.
- DVI output enables an all digital rendering of video without the losses associated with an analog interface and is an ideal for use with digital display such as LCD, Plasma and DLP projectors.
- High performance Scaler that converts and scales analog RGB inputs to DVI-I (digital or analog) outputs
- Output resolution can be easily selected using the OSD (On Screen Display)
- Supports input/output computer resolutions up to 1920x1200 at 60Hz
- Supports HDTV resolution up to 1080p as input and output.
- Supports DDWG standard for DVI compliant monitors
- Aspect ratio control for native and full view modes

## Includes:

- (1) VGA to DVI Scaler PLUS
- (1) 5V Power Supply
- (1) 6 ft VGA cable (M-F)
- (1) User's Manual

# PANEL DESCRIPTIONS

## Front view



VGA Input

Power Supply Input

Power Indicator

## Back view



DVI Output

Menu Button

Level Adjustment

Level Adjustment/  
Auto Adjust

# CONNECTING AND OPERATING THE VGA TO DVI SCALER PLUS

## How to Connect the VGA to DVI Scaler PLUS

- 1- Connect your analog video card to the HD-15 female connector at the input side of the VGA to DVI Scaler Plus. (Note: The Menu button of the VGA to DVI Scaler PLUS will not work without a source plugged in)
- 2- Connect the DVI (M-M) cable between the DVI connector on the digital display and the DVI output of the VGA to DVI Scaler PLUS.
- 3- Connect the power supply.

\*Note: The default resolution is set to NATIVE mode.

## Operating the VGA to DVI Scaler PLUS

Button	Function
<b>MENU</b>	Shows and Hides the On Screen Menu / Menu and Item Selection
+	Moves menu cursor DOWN the menu / Increases adjustment values
-	Moves menu cursor UP the menu / Decreases adjustment values
Hold <b>MENU</b> and unplug and re-plug the power source. After you have done that, you can release the <b>MENU</b> button	Resets scaler back to NATIVE resolution of the display
<b>Auto Adjust</b> Press the - button	Tunes picture to displays optimum settings

Output resolutions that are supported:

VGA	480I	576I	WXGA
SGA	480P	576P	WSXGA
XGA	720P/60	720P/50	WUXGA
SXGA	1080I/60	1080I/50	NATIVE
UXGA	1080P/60	1080P/50	

# MENU FUNCTIONS

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## PC Menu

**Contrast:**  
Adjusts the picture contrast

**Brightness:**  
Adjusts the picture brightness

**H POS:**  
Adjusts the picture's Horizontal Position

**V POS:**  
Adjusts the picture's Vertical Position

**Clock:**  
Clock adjustment for focus

**Phase:**  
Phase adjustment for focus

**Scale:**  
Aspect ratio control

## Color Menu

**Red:**  
Adjusts the picture's red color saturation

**Green:**  
Adjusts the picture's green color saturation

**Blue:**  
Adjusts the picture's blue color saturation

**Color Temp:**  
Adjust the color tone

## System Information Screen

**Source:**  
Displays what source is connected

**Input:**  
Displays the current Input resolution

**Output:**  
Displays the current Output resolution

**Version:**  
Displays the current Firmware version

## OSD (On Screen Display) Adjust Menu

**H POS:**  
Adjusts the Horizontal Position of the On Screen Display

**V POS:**  
Adjusts the Vertical Position of the On Screen Display

**Timeout:**  
Controls the time the OSD stays on the display

**Background:**  
Controls transparency of OSD

## No Picture appears on bootup:

If no picture appears on bootup, first reset the VGA to DVI Scaler PLUS to the native mode of the display it is connected to.

Monitors without an internal scaler (Any Apple Display as well as the Dell 30" monitor) require the VGA to DVI Scaler PLUS to output the monitor's exact native resolution to display a picture. To set the Scaler to the correct resolution, do the following:

1. Reset the scaler to the native resolution of the display by first holding down the **MENU** button.
2. While holding the **MENU** button down remove the power supply from the scaler.  
  
Note: The **MENU** button does not work without a source plugged in.
3. Wait 3 seconds and re-plug the power supply to the unit.
4. After you have inserted the power supply, let go of the **MENU** button.
5. Wait 3 seconds and the scaler will then reset to the displays native resolution.
6. If you need to start over for any reason, unplug and re-plug the power on the VGA to DVI Scaler PLUS and then repeat steps 1-5.

## How to use the Auto-Adjust:

If for any reason you need to Auto-Adjust the display, you can do so by pressing the "-" button once. Give the scaler 3 seconds to Auto-Adjust itself.

1. While the unit is powered on, press the - button with both source and display connected and powered on as well.
2. Wait three seconds for the unit to adjust itself to the displays optimum settings.
3. After you have pressed the - button, a small dialog box will appear to show that you are auto-adjusting the picture. It will disappear when the scaler is done.

## SPECIFICATIONS

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DVI Video Amplifier Bandwidth.....	1.65 Gbps
VGA Amplifier Bandwidth.....	350 Mhz
Input Video Signal	
RGBHV.....	0.7 Vp-p 75 ohm
H/V.....	3 to 5 Vp-p TTL
Y.....	1 Vp-p 75 ohm
Pb/Cb, Pr/Cr.....	0.7 Vp-p 75 ohm
Input DDC Signal.....	5 volts p-p (TTL)
DVI Connector.....	DVI-I (29 pin) female
VGA Connector.....	HD-15 male
Power Consumption.....	10 watts (max)
Power Supply.....	5V DC
Dimensions.....	5"W x 1"H x 3.5"D
Shipping Weight.....	2 lbs.