



VGA to DVI
Scaler PLUS
USER MANUAL

ASKING FOR ASSISTANCE

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Notice

Gefen Inc. reserves the right to make changes in the hardware, packaging and any accompanying documentation without prior written notice.

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INTRODUCTION

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 setop boxes.



FEATURES

Features

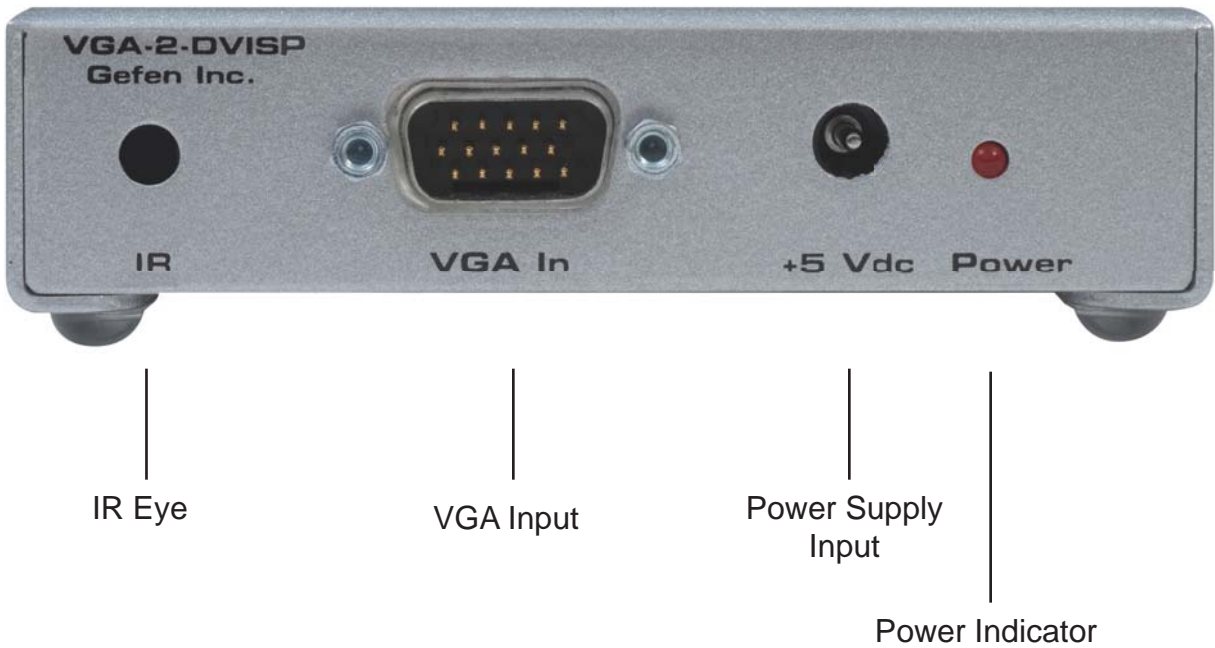
- The input is analog PC or HDTV signal in the format of either RGBHV, YPbPr or YCbCr.
- The output is digital+analog PC or HDTV signal in the format of digital RGBHV bit stream plus analog RGBHV, known as DVI-I (Integrated digital and analog)
- The input resolution is automatically detected while the 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
- IR remote control included

Includes:

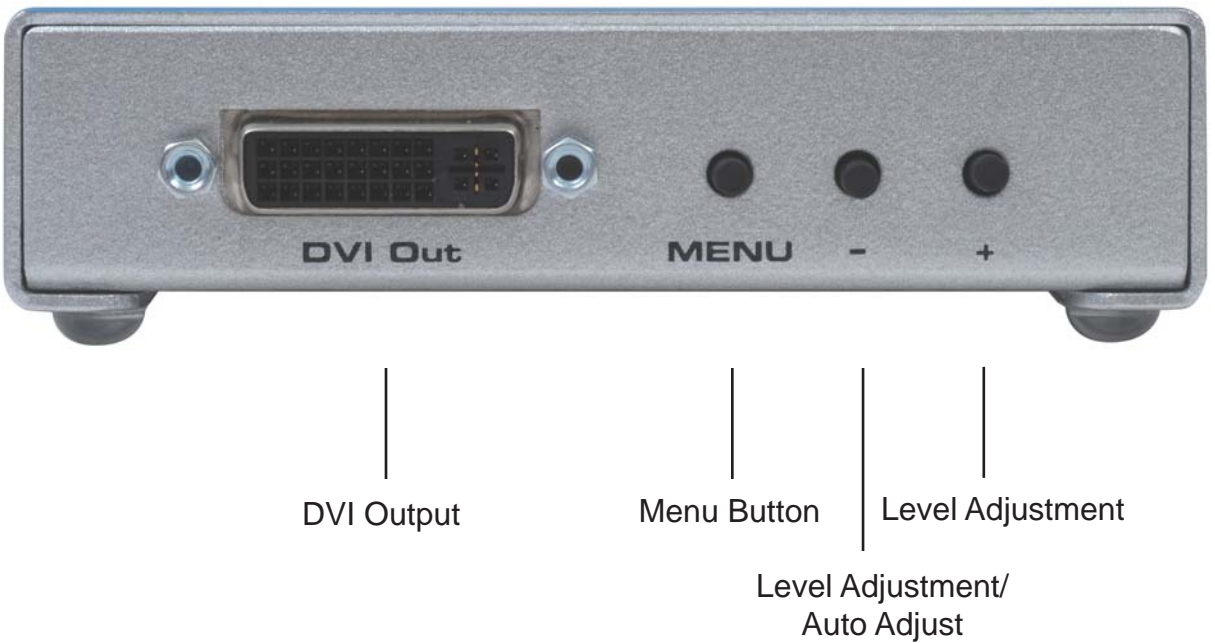
- (1) VGA to DVI Scaler PLUS
- (1) 5V Power Supply
- (1) 6 ft VGA cable (M-M)
- (1) IR Remote control
- (1) User's Manual

PANEL DESCRIPTIONS

Front view



Back view



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
MENU	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 MENU and unplug and replug the power source. After you have done that, you can release the MENU button	Resets scaler back to NATIVE resolution of the display
Auto Adjust 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	WVXGA
SXGA	1080I/60	1080I/50	NATIVE
UXGA	1080P/60	1080P/50	

MENU FUNCTIONS

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

Remote Channel:
Changes the remote channel in cases of IR conflicts (see pg. 8).

Background:
Controls transparency of OSD

RMT-SR-IR INSTALLATION

1. Remove battery cover from the back of the RMT-SR-IR remote.
2. Verify that dip switches 1 & 2 are in the down (OFF) position.
3. Insert the battery, hold the battery so that you can see the positive side facing up. The side that is not marked must be facing down.
4. Test the RMT-SR-IR remote by pressing ONLY one button at a time. The indicator light on the remote will flash once each time you press a button. **WARNING:** Do not press multiple buttons simultaneously and do NOT press buttons rapidly. These actions will cause the remote to reset and steps 1-4 will have to be repeated.

Note* The RMT-SR-IR ships with two batteries. One battery is required for operation, the second battery is complimentary.



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 replug 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.

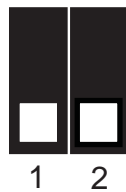
IR CODES

In the event of IR conflicts, please do the following:

1. Remove the battery cover from the back of the RMT-SR-IR remote.
2. Locate the Dip Switches above the batteries
3. Switch the Dip Switches on the RMT-SR-IR to any of the combinations pictured below to match the remote channel you set on the VGA to DVI Scaler PLUS.

Note: If you set the VGA to DVI Scaler's remote channel to "ALL", then any of the dip switch settings below will work.

Remote Channel 1:



Remote Channel 2:



Remote Channel 3:



Remote Channel 4:



SPECIFICATIONS

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 female
Power Consumption.....	10 watts (max)
Power Supply.....	5V DC
Dimensions.....	5"W x 1"H x 3.5"D
Shipping Weight.....	2 lbs.

WARRANTY

Gefen Inc. warrants the equipment it manufactures to be free from defects in material and workmanship.

If equipment fails because of such defects and Gefen Inc. is notified within two (2) year from the date of shipment, Gefen Inc. will, at its option, repair or replace the equipment, provided that the equipment has not been subjected to mechanical, electrical, or other abuse or modifications.

Equipment that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for ninety (90) days from the day of reshipment to the Buyer.

This warranty is in lieu of all other warranties expressed or implied, including without limitation, any implied warranty or merchantability or fitness for any particular purpose, all of which are expressly disclaimed.

1. Proof of sale may be required in order to claim warranty.
2. Customers outside the US are responsible for shipping charges to and from Gefen.
3. Copper cables are limited to a 30 day warranty and cable must be free from any scratches, markings, and neatly coiled.

The information in this manual has been carefully checked and is believed to be accurate. However, Gefen Inc. assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will Gefen Inc., be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. The technical information contained herein regarding VGA to DVI Scaler PLUS features and specifications is subject to change without notice.