

VGA & Audio to HDMI Converter Scaler Installation Guide

Introduction

The VGA & Audio to HDMI Converter Scaler converts VGA and audio signals to HDMI.

Key Features and Benefits

- Supports PC graphics resolution up to WUXGA (1920x1200) and HDTV (1080p)
- Supports de-interlacing & video H/V mirror
- Active video area adjustment and over/ under scanning adjustable
- Supports noise reduction and video enhancement
- Stereo S/PDIF and analog Stereo audio inputs
- OSD control interface and IR remote control
- Metal housing with wall mount capability

Package Contents

- VGA & Audio to HDMI Converter Scaler
- Screw Kit and 4 rubber pads
- Power adapter (5V/2A)
- IR remote control
- Software CD and Installation guide

Layout



Figure 1: Front Layout

- S/PDIF Audio In: Connect to a digital RCA S/PDIF audio source
- DIP Switch: F/W (↑) for firmware update; NORMAL (↓) for normal operation
- LED Indicator: The upper LED lights up when powered on; the lower LED lights up when signal is detected
- IR sensor: Receives the IR commands from the included IR remote control

• Push Buttons (from left to right): Down, Up, Menu/Enter. See page 5 for more details.



Figure 2: Rear Layout

- Power Jack: Plug in the power adapter here
- Mini USB port: Connects to a USB port of a computer to control the *Scaler* via software.
- Stereo Audio In: Connects to an analog stereo audio source
- HDMI Output: Connects to an HDMI display
- VGA Input: Connects to a VGA source

Hardware Installation

- 1. Power off all devices, including the source device and display.
- 2. Connect the PC's VGA output to the *Scaler*'s **VGA Input**.

- 3. Connect the PC's analog stereo audio output to the *Scaler's* **Stereo Audio In**, or connect the PC's S/PDIF audio output to the *Scaler*'s **S/PDIF Audio In**.
- 4. Plug the included power adapter into the *Scaler's* **Power Jack**, then plug it into a reliable power outlet.
- 5. Power on all audio/video units connected to the *Scaler*. The *Scaler* is ready to use.



Figure 3: Application

Scaler Control

The *Scaler* can be controlled by the front panel push buttons, IR remote control or Scaler software.



Push Button

Press the **MENU** button to open the selection menu, see **Figure 4**. Use the **UP** or **DOWN** button to select the setting you want to change. Click **Menu** button to display the menu options.



Figure 4

IR Remote Control

Point the remote control at the *Scaler's* **IR sensor**.

Button	Function	
FREEZE	Freeze video	
ASPECT RATIO	Aspect ratio change	FREEZE ASPECT BLANK
BLANK	Blank video	
EXIT	Exit OSD	
ENTER	Enter key	EXIT ENTER
UP	Up key	
LEFT	Left key	MENU
RIGHT	Right key	
DOWN	Down key	
MENU	Menu on	
INPUT INFO	Source resolution information	
1080p60	Select 1080p60 output resolution	INFO TOSOPEO
1080i60	Select 1080i60 output resolution	
720p60	Select 720p60 output resolution	1080i60 720p60 480p60
480p60	Select 480p60 output resolution	

Figure 5

Scaler Software

Connect the *Scaler's* mini USB port to your computer's USB port using a USB cable (cable not included). Insert the included software CD to your computer, double click the **Setup** file and follow the on-screen instructions to install the driver. After completing the installation, double click the **Scaler Software** icon to launch the software.



Figure 6: Scaler Software Main Menu

- COM Port search button: Click the button to search for available COM ports.
- 2. COM Port selection menu: Select the *Scaler's* COM port from the drop down menu.
- Output Setup button: Select the output resolution, output mode, default pattern, and the EDID audio channel from the drop down menu, then click **Apply** to enforce these changes.

Output Resolution	HD(1080p)60	-	Apply
Output Mode	RGB	•	Apply
Default Pattern	Disable	•	Apply
Audio Source	Analog	•	Apply



4. Image button:

Click the **Image button** to set up your preferred display contrast, brightness, saturation, hue and other related values.

Image			×
Contrast (0~255)	<	> 128	Apply
Brightness (0~255)	<	> 128	Apply
Saturation (0~255)	<	> 128	Apply
Hue (0~255)	<	> 128	Apply
B/W Extension	Off	•	Apply
Color Tone	Off	•	Apply
Edge Enhance	Тур	•	Apply
Sharpness (0~127)	<	> 0	Apply

Figure 8

5. Adjustment Button:

Click the **Adjustment Button** to adjust the screen size, change the aspect ratio or other display settings.

Adjustment					×
Under/Over Sca	an -50%~50%	<[]— [• 0	Apply
Aspect Ratio	16:9	•			Apply
H-Mirror	Off	•			Apply
V-Mirror	Off	•			Apply
Input H adj (0~	200)	< [• 0	Apply
Input V adj (0~	100)	<		0	Apply

Figure 9

6. System Button:

Click **System button**, then click **Get** to view the current input resolution, or click **Factory Reset** to set the *Scaler* back to the default settings. The firmware can also be updated here. Please refer to the instructions on page 11.



Figure 10

- Resolution info: Displays the input/output port and screen resolution information.
- Refresh button: After making any changes, click this button to view your new configuration.
- Output Quick Selection: Shortcuts to some commonly used settings: (1) Aspect ratio: Click to switch aspect ratio between 4:3 and 16:9.

(2) Freeze: Click to freeze the display. The display will remain still until you click the **Freeze button** again.

(3) Blank: Click to disable the display. Click the **Blank button** again to return to normal operation.

(4) 1080p60, 1080i60, 720p60, 680p60: Click to change the output resolution.

Firmware Update

Note: If the **Scaler Software** is not installed, go to **Scaler Software** on page 6 now and follow the instructions to install it. Otherwise, follow the instruction below to update the firmware.

- 1. Connect the *Scaler* to your computer using a USB cable (cable not included), double click the **Scaler software** icon.
- 2. Enter the **Scaler software** main menu, select a COM port and click **Refresh** to make the connection.
- 3. Click **System button**, then click **Firmware Update**.
- 4. Click **Load file**, select the firmware file.
- 5. Set the DIP Switch up to **F/W**, unplug and plug the *Scaler's* power adapter.
- 6. Click **Burn**. Wait for the firmware update process to complete.
- 7. Power off the *Scaler*, unplug the USB cable from the computer, then set the DIP Switch back to **Normal**. The firmware update is now complete.

OSD Menu

Refer to Table 1 for the various OSD viewing options.

1st Tier Option	2nd Tier Option	Range
	Out Resolution	
	Output Mode	RGB(24bit)
		YC444(24Bit)
		YC422(16EMB)
		YC422(16SEP)
		YC422(20EMB)
		YC422(20SEP)
	Default Pattern	Disable <mark>(Default)</mark>
Output Setup		Window
		H-Ramp
		V-Ramp
		H-Gray
		V-Gray
		H-Color
		V-Color
	Audia Causa	I2S (Default)
	Audio Source	SPDIF

Table 1

1st Tier Option	2nd Tier Option	Range
	Contrast	0~255 (Default 128)
	Brightness	0~255 (Default 128)
	Saturation	0~255 (Default 128)
	Hue	0~255 (Default 128)
	R /W Extension	Off (Default)
	D/ W Extension	On
Imagon		Off (Default)
intage	Color Tone	Skin
		Green
		Typ (Default)
	Edao Enhanco	Mid
	Euge Ennance	Max
		Off
	Sharpness	0-127 (Default 0)
6	In-Sync Info	
	Firmware Version	V1.001
system	Eastary Pasat	No (Default)
	raciory Reset	Yes

1st Tier Option	2nd Tier Option	Range
Adjustment	Under/Over Scan	-50%~50% (Default Off)
	Aspect Patio	16:9 (Default)
	Aspect Kallo	4:3
	H.M.	Off (Default)
	H-MIIIOF	On
	V-Mirror	Off (Default)
		On
	Input H Adj	0~200 (Default 0)
	Input V Adj	0~100 (Default 0)

Table 1

Supported Video Resolution

Resolution	Refresh Rate
800 x 600p	56Hz / 60Hz / 72Hz / 75Hz
1024 x 768p	60Hz / 70Hz / 75Hz
1280 x 720p	60Hz
1280 x 768p	60Hz
1280 x 960p	60Hz
1280 x 1024p	60Hz / 75Hz
1360 x 768p	60Hz
1366 x 768p	60Hz
1400 x 900p	60Hz
1400 x 1050p	60Hz
1600 x 900p	60Hz
1600 x 1200p	60Hz
1680 x 1050p	60Hz
1920 x 1080p	60Hz

Technical Support and Warranty

QUESTIONS? SIIG's Online Support has answers! Simply visit our web site at *www.siig.com* and click Support. Our online support database is updated daily with new drivers and solutions. Answers to your questions could be just a few clicks away. You can also submit questions online and a technical support analyst will promptly respond.

SIIG offers a 3-year manufacturer warranty with this product. This warranty covers the original purchaser and guarantees the product to be free of any defects in materials or workmanship for three (3) years from the date of purchase of the product.

SIIG will, at our discretion, repair or replace (with an identical product or product having similar features and functionality) the product if defective in materials or workmanship. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Please see our web site for more warranty details.

If you encounter any problems with this product, please follow the procedures below.

A) If it is within the store's return policy period, please return the product to the store where you purchased from.

B) If your purchase has passed the store's return policy period, please follow the steps below to have the product repaired or replaced.

Step 1: Submit your RMA request.

Go to www.siig.com, click Support, then REQUEST A PRODUCT REPLACEMENT to submit a request to <u>SIIG RMA</u> or fax a request to 510-657-5962. Your RMA request will be processed, if the product is determined to be defective, an RMA number will be issued.

Step 2: After obtaining an RMA number, ship the product.

- Properly pack the product for shipping. All accessories that came with the
 original package must be included.
- Clearly write your RMA number on the top of the returned package. SIIG will
 refuse to accept any shipping package, and will not be responsible for a product
 returned without an RMA number posted on the outside of the shipping
 carton.
- You are responsible for the cost of shipping to SIIG. Ship the product to the following address:

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SIIG, Inc.
6078 Stewart Avenue
Fremont, CA 94538-3152, USA
RMA #: _____
```

 SIIG will ship the repaired or replaced product via Ground in the U.S. and International Economy outside of the U.S. at no cost to the customer.

About SIIG, Inc.

Founded in 1985, SIIG, Inc. is a leading manufacturer of IT connectivity solutions (including Serial ATA and Ultra ATA Controllers, FireWire, USB, and legacy I/O adapters) that bridge the connection between Desktop/Notebook systems and external peripherals. SIIG continues to grow by adding A/V and Digital Signage connectivity solutions to our extensive portfolio. SIIG products offer comprehensive user manuals, many user-friendly features, and are backed by an extensive manufacturer warranty. High quality control standards are evident by the overall ease of installation and compatibility of our products, as well as one of the lowest defective return rates in the industry. SIIG products can be found in computer retail stores, mail order catalogs, through major distributors, system integrators, and VARs in the Americas and the UK, and through e-commerce sites.

PRODUCT NAME

VGA & Audio to HDMI Converter Scaler

FCC RULES: TESTED TO COMPLY WITH FCC PART 15, CLASS B OPERATING ENVIRONMENT: FOR HOME OR OFFICE USE

FCC COMPLIANCE STATEMENT:

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.

THE PARTY RESPONSIBLE FOR PRODUCT COMPLIANCE SIIG, Inc. 6078 Stewart Avenue Fremont, CA 94538-3152, USA Phone: 510-657-8688

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