Video Converter & Scaler

VGA or Composite Video to DVI-I Output Converter and Scaler

VGA2DVII

Instruction Manual

Actual product may vary from photo

StarTech.com

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FCC Compliance Statement

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 and converter. This product allows you to use a flat-panel display that uses a DVI connector with a video source (computer, satellite receiver) that uses either standard VGA or composite video output. To achieve the best possible result the unit intelligently detects the input video type and scales it to an output resolution of your choosing using intuitive on-screen controls, resulting in excellent image clarity and stability.

Features

- Automatic input signal detection and multiple output resolutions supports a wide range of equipment.
- Easy to use interface gets you up and running in minutes.
- Onboard 48MB buffer for seamless frame rate conversion.
- Combines the functions of a format converter and video scaler in a single product.

Before You Begin

Contents

This package should contain:

- 1 x VGA to DVI converter and scaler
- 1 x HD-15 male/male VGA cable
- 1 x HD-15 male to YPbPr 3-prong composite RCA cable
- 1 x Power Adapter
- 1 x User Manual

Site Preparation

Place the video converter near the source device and your display. It is highly recommended that you use the cables provided in the package or other cables branded by StarTech.com for the best possible performance. If you are using cables other than those supplied in the video converter package, use the minimum amount of cable possible to complete the connections. Excess cabling makes the signal more susceptible to noise interference and may reduce performance. Need more cables? Contact your dealer or visit **www.startech.com** for more information.

Connecting Devices to the Video Converter

Front Panel

Rear Panel

WARNING: The default output signal from the video converter is 1024 x 768 (XGA) at 60 Hz. Not all HDTV devices have the capability to display this resolution, so it is advisable to consult the documentation for your display product before attempting installation. If your display does not support this resolution, you may not be able to access the menu features through the on-screen display (OSD). If necessary, connect the converter to a compatible monitor and set it to a compatible setting before following the instructions below.

1. Disconnect the flat panel display from any existing video connections (if applicable).

2. Disconnect the video source that you wish to convert (computer, satellite receiver, etc.) from its existing display (if applicable).

3. (a) If the video source uses a composite video connection, connect the provided composite-to-VGA cable's Red, Green, and Blue ends to the VIDEO OUT (or similarly marked) connections on the signal source. These will be the same connectors you disconnected in step 2 above. Connect the opposite end with the 15-pin (VGA) connector to the **PC/HD INPUT** port on the rear panel of the video scaler.

   (b) If the video source uses a VGA (HD-15) video connection, connect one end of the male-to-male VGA video cable (provided) to the VGA out connection on the computer or other video source. This will be the same connector you disconnected in step 2 above. Connect the opposite end to the **PC/HD INPUT** port on the rear panel of the video scaler.

4. Connect the display to the connector marked **DVI OUTPUT** on the front of the video scaler.

5. Connect the power adapter to a suitable wall outlet. Connect the opposite end to the **DC 5V** connector on the rear panel of the unit.

6. Power on both the video source and the flat panel display.

Using the Menu Options

The video converter uses an intuitive on-screen display (OSD) system that allows you to fine-tune the video output to the display you are using.

By default, the video converter selects an output setting of XGA (1024 x 768 pixels, 60 Hz). If the video setting you select from the OSD menu system exceeds the capabilities

of the display you are using, you can reset the video converter to the default setting by using the following button combination on the front panel:

Press **+** and **-** at the same time to force the unit to XGA, 60 Hz.

1. After you have connected the video source and display to the video converter using the directions in the previous section, power on both the device and the display.

2. The display should show a bright-blue screen. Be sure that the video source is sending a video signal to the video converter for testing purposes.

4. Once the correct a signal source is detected, the device will display the image source on the screen. Depending on the requirements of the display, you may need to adjust the output settings on the video scaler for best image quality. See the instructions below for more information.

Using the OSD

The video converter automatically interprets the input resolution and scales it to the output resolution selected in the menu system. While the default settings will provide an image, the video scaler offers several settings that will allow you to adjust the output signal for the best possible result.

NOTE: Changing the settings below may cause the signal to become unusable if the settings you select are incompatible with your display. Should this occur, repeat the steps outlined in the section above to reset the video scaler back to a compatible setting.

To activate the menu system, press the **MENU** key on the front of the video scaler once. The OSD will display the available option on the left-hand side of the screen. To navigate the menu system:

1. Use the **+** and **-** keys on the front of the video converter to move between options.
2. Use the **MENU** key to select an item to adjust or display a sub-menu.
3. Once an item is selected, use the **+** and **-** keys to adjust the setting.
4. When you are satisfied with your changes, press **MENU** to activate the setting.
5. You can continue to adjust other settings, or select Exit from the OSD menus until the OSD disappears.

The following options can be adjusted from the OSD menu system:

Input Setup (Adjusts the sampling rate)
Clock
Phase
YPBPR / RGB (selects input source)

Output Setup (Adjusts the output resolution/refresh)
DVI-A / DVI-D (use DVI-A only with monitors that do not support a digital signal)
Resolution-Refresh Rate (Hz.)

Picture Adj. (Adjusts picture quality/appearance)
Contrast

Bright(ness)
Color
Red
Green
Blue
Reset

H V Adjust (Adjusts the position of the image on the display)
H Pos(ition)
V Pos(ition)

OSD Adjust (Adjusts the position of the OSD menu on the display)
H Pos(ition)
V Pos(ition)

Auto Adjust (Resets to factory default settings when selected)

System Information (Displays the current settings of the video scaler)
INPUT [Resolution-Refresh Rate (Hz.)]
OUTPUT [Resolution-Refresh Rate (Hz.)]

The video converter will store your changes until it is reset to its default settings.

NOTES:

• The **System Information** OSD menu does not allow you to modify any settings and shows the current state of the video converter settings.

• The **Output Setup** menu allows you to adjust the output resolution and frequency of the video converter. For more information about the resolution and refresh setting supported by the device and correlating pixel counts for various settings (i.e. “SVGA”), please see the “Specifications” section of the manual. You should exercise caution in adjusting this setting, since a setting that exceeds the capabilities of your display could cause damage in some situations. Consult the documentation for your display to determine if the setting you wish to use is supported.

• Selecting **Auto Adjust** from the OSD menu is the same as using the reset procedure on the front panel.

Troubleshooting

Problem: I can’t see an image from the video source or the OSD.
Cause: The input setting or output timing (resolution and refresh rate) is incorrect.
Resolution: a) Adjust the settings back to the default setting.
b) Ensure all cables are securely connected in the proper connectors.

Problem: The image is distorted or blurry.
Cause: The output timing settings/image quality settings are not optimized, or there is interference degrading the cable signal.
Resolution: a) Adjust the timing settings and image settings using the menu system to improve image quality and ensure the video source is working normally.
b) Use the shortest cable length possible using high-quality cables.

Specifications

Input Format	RGBHV, YPbPr, YCbCr
Input Signal Levels	RGBHV @ 0.7V p-p, 75 ohm. H&V sync @ 3-5V p-p, TTL Y @ 1V p-p, 75 ohm. Pb,Cb,Pr,Cr @ 0.7V p-p, 75 ohm
Output Format	RGBHV, YPbPr
Output Signal Levels	RGB @ 0.7V p-p, 75 ohm. H&V sync @ 3-5V p-p, TTL Y @ 1V p-p, 75 ohm. Pb,Pr @ 0.7V p-p, 75 ohm
Input/Output Connectors	**Input:** HD-15 (VGA) female **Output:** DVI-I female
Controls	Front panel buttons utilizing on-screen display
Weight	10 oz. (280 g)
Dimensions (H x W x D)	1.2 x 3 x 5.75 in. (30 x 75 x 147 mm)
Power Adapter	5V DC, 2A, center positive

Supported Resolutions

PC Resolutions	**Refresh Rate**
VGA 640 x 480	60/72/75/85 Hz.
VESA85 640 x 400	85 Hz.
VGA70 720 x 400	70 Hz.
SVGA 800 x 600	60/72/75/85 Hz.
XGA 1024 x 768	60/70/75/85 Hz.
Mac 1152 x 864	70/75 Hz.
WXGA 1280 x 768	60 Hz.
1280A 1280 x 1024	60 Hz.
SXGA 1280 x 1024	60/**75** Hz.
HDTV Resolutions	**Refresh Rate**
480p 720 x 480	60 Hz.
480i 720 x 480	60 Hz.
576p 720 x 756	50/**60** Hz.
576i 720 x 756	50 Hz.
720p 1280 x 720	60 Hz.
1080i 1920 x 1080	60 Hz.

Bolded values indicate the value applies to output only.
Italicized values indicate the value applies to input only.

Accessory Products from StarTech.com

Contact your local StarTech.com dealer or visit **www.startech.com** for cables or other accessories that will help you get the best performance out of your new product.

10 ft DVI-I Dual Link Digital/Analog Extension Cable M-F
DVIIDMF10

15 ft DVI-I Dual Link Digital/Analog Extension Cable M-F
DVIIDMF15

6 ft DVI-I Dual Link Digital/Analog Extension Cable M-F
DVIIDMF6

10 ft DVI-I Dual Link Digital/Analog Flat Panel Cable M-M
DVIIDMM10

15 ft DVI-I Dual Link Digital/Analog Flat Panel Cable M-M
DVIIDMM15

20 ft DVI-I Dual Link Digital/Analog Flat Panel Cable M-M
DVIIDMM20

6 ft DVI-I Dual Link Digital/Analog Flat Panel Cable M-M
DVIIDMM6

10 ft DVI-I Single Link Digital/Analog Flat Panel Cable M-M
DVIISMM10

15 ft DVI-I Single Link Digital/Analog Flat Panel Cable M-M
DVIISMM15

6 ft DVI-I Single Link Digital/Analog Flat Panel Cable M-M
DVIISMM6

6 ft Coax SVGA Monitor Extension Cable HDDB15 M/F
MXT101HQ

25 ft. Coax SVGA Monitor Extension Cable HDDB15M/F
MXT101HQ_25

6 ft. Coax SVGA Monitor Cable HDDB15M/M
MXT101MMHQ

15 ft. Coax SVGA Monitor Extension Cable HDDB15M/F
MXT105HQ

15 ft. Coax SVGA Monitor Cable HDDB15M/M
MXT105MMHQ

Technical Support

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www.startech.com/support

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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