

VIDEO CONVERTER

2 Way VGA to HDTV Converter/Scaler

VGA2TV2WAY

Instruction Guide



* Actual product may vary from photo

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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 VGA to HDTV 2 way converter. This product allows you to display your computer's video signal on a HDTV-compatible display (such as a LCD or plasma television) or converts a HDTV signal for display on a computer monitor. With an easy-to-use interface and advanced conversion technology, you can now maximize your video environment with minimum effort.

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, scan converter, and video scaler in a single product.

Before You Begin

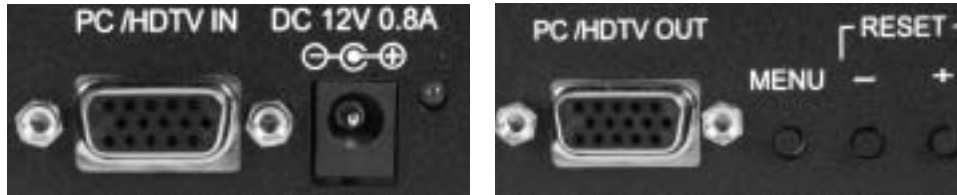
Package Contents

- 1 x VGA to HDTV 2-way converter/scaler
- 1 x HD-15 male/male VGA cable
- 2 x HD-15 male to YPbPr 3-prong composite RCA cable
- 1 x AC 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



Rear Panel

Front Panel

Connecting a VGA signal source to a HDTV display

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).

1. Disconnect the HDTV display from any existing video connections.
2. Disconnect the monitor or other display (if applicable) from the VGA signal source.
3. Use one of the provided HD-15 male to YPbPr 3-prong composite RCA cables and connect the 15-pin (VGA) connector to the **PC/HDTV OUT** port on the rear panel of the video scaler.
4. Connect the RCA composite connectors (red/green/blue) on the same YPbPr 3-prong composite RCA cable to the appropriate connectors (usually marked as **VIDEO IN** or similar) on the HDTV display. (This is the same set of connectors used by the previous display that you removed in step 1, if applicable.)
5. Connect one end of the provided HD-15 male/male cable to the VGA Out connector on the video source. (This is the same port used by the monitor you disconnected in step 2, if applicable.)
6. Connect the opposite end of the HD-15 male/male cable to the **PC/HDTV IN** port on the rear panel of the video converter.
7. Connect the AC power adapter to a suitable wall outlet. Connect the opposite end to the **DC 12V** connector on the rear panel of the unit.
8. Power on both the VGA signal source and the HDTV display.

Connecting a HDTV signal source to a VGA display

1. Disconnect the HDTV signal source (i.e. satellite receiver) from any existing displays.
2. Disconnect the VGA display from any existing signal source (i.e. computer).
3. Use one of the provided HD-15 male to YPbPr 3-prong composite RCA cables and connect the 15-pin (VGA) connector to the **PC/HDTV IN** port on the rear panel of the video scaler.
4. Connect the RCA composite connectors (red/green/blue) on the same YPbPr 3-prong composite RCA cable to the appropriate connectors (usually marked as **VIDEO OUT**

or similar) on the HDTV source. (This is the same set of connectors used by the previous display that you removed in step 1, if applicable.)

5. Connect the VGA connection from the VGA display to the **PC/HDTV** connection on the front panel of the video converter.
7. Connect the AC power adapter to a suitable wall outlet. Connect the opposite end to the **DC 12V** connector on the rear panel of the unit.
8. Power on both the HDTV signal source and the VGA 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 set up
Output set up
Picture Adjust
HV Adjust
OSD Adjust
System Information
Auto Adjust
Exit

Input Setup (Adjusts the sampling rate)

Clock
Phase

Output Setup (Adjusts the output resolution/refresh)

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, and ensure that they are of a high quality. Heavily-shielded cables with gold-plated connectors offer superior performance and signal protection.

Specifications

Input Format	RGBHV, YPbPr, YCbCr
Input Signal Levels	RGB @ 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 Connector	HD-15 (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 5.5 in. (30 x 75 x 140 mm)
Power Adapter	12V DC, 800 mA

Supported Video Modes

PC Resolutions	Vert Rate	Format	Scan Type
VGA 640 x 480	60/72/75/85 Hz.	RGBHV	Progressive
VESA85 640 x 400	85 Hz.	RGBHV	Progressive
VGA70 720 x 400	70 Hz.	RGBHV	Progressive
SVGA 800 x 600	60/72/75/85 Hz.	RGBHV	Progressive
XGA 1024 x 768	60/70/75/85 Hz.	RGBHV	Progressive
Mac 1152 x 864	70/75 Hz.	RGHHV	Progressive
WXGA 1280 x 768	60 Hz.	RGBHV	Progressive
1280A 1280 x 1024	60 Hz.	RGBHV	Progressive
SXGA 1280 x 1024	60/75 Hz.	RGBHV	Progressive
HDTV Resolutions	Vert Rate	Format	Scan Type
480p 720 x 480	60 Hz.	YPbPr, RGBHV	Progressive
480i 720 x 480	60 Hz.	YCbCr, RGBHV	Progressive
576p 720 x 756	50/ 60 Hz.	YPbPr, RGBHV	Progressive
576i 720 x 756	50 Hz.	YCbCr, RGBHV	Progressive
720p 1280 x 720	60 Hz.	YPbPr, RGBHV	Progressive
1080i 1920 x 1080	60 Hz.	YPbPr, RGBHV	Progressive

Bolded entries indicate that the value applies to output resolutions only. All other modes are supported for both input and output.

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 our Web site to access our comprehensive selection of online tools, documentation, and downloads:

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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