

VIDEO SCALER



Component/Composite/S-Video to DVI-D/HDTV Scaler and Converter
Component/Composite/S-Video to VGA/HDTV Scaler and Converter

VID2DVIDTV (DVI)
VID2VGATV (VGA)

Instruction Guide



* Actual product may vary from photo

StarTech.com



The Professionals' Source For Hard-to-Find Computer Parts

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.

Table of Contents

Introduction	2
Features	2
Before You Begin	2
Package Contents	2
Site Preparation	2
Connecting Devices to the Video Scaler	3
Using the Menu Options	4
Selecting a video source	4
Using the menu system	4
Troubleshooting	6
Specifications	7
Supported Video Output Modes	7
Technical Support	8
Warranty Info	8

Introduction

Thank you for purchasing a StarTech.com video scaler. This device is designed to convert the output from a video source (DVD, video game console, VCR) and scale it for output to high-definition displays—including plasma TVs and LCD monitors—while maintaining the clarity of the image.

Features

- Get the most out of your existing video equipment by maximizing its performance on a high-definition display.
- Easy to use interface gets you up and running in minutes.
- Supports common video input standards, including NTSC and PAL.
- Adaptive digital comb filter, high-speed algorithms, and vertical temporal filter combine to provide crystal-clear output with virtually no de-interlacing artifacts.
- Choose between two models depending on your display: VGA (VID2VGATV) or DVI (VID2DVIDTV).

Before You Begin

Package Contents

- 1 x Video Scaler Unit (VGA Output: VID2VGATV DVI Output: VID2DVIDTV)
- 1 x RCA Video Cable
- 1 x YCbCr RCA to 8-pin DIN converter
- 1 x HD-15 male/male VGA cable (VID2VGATV only)
- 1 x HD-15 male to YPbPr 3-prong RCA cable (VID2VGATV only)
- 1 x DVI-D male/male DVI cable (VID2DVIDTV only)
- 1 x AC Power Adapter
- 1 x User Manual

Site Preparation

Ensure you have the necessary cables to connect your video source (such as a DVD player) to the video scaler. Note that if you have previously used the device with a standard television, you can most likely use those cables to connect the item to the video scaler. The video scaler should be in close proximity to the video source and be connected using high-quality cables for the best possible results.

Need more cables? Contact your dealer or visit **www.startech.com** for more information.

Connecting Devices to the Video Scaler



Rear Panel (VID2VGATV)



Front Panel (VID2VGATV)



Rear Panel (VID2DVIDTV)



Front Panel (VID2DVIDTV)

1. Disconnect your high-resolution display from its existing video connection.
2. Disconnect your video source (i.e. DVD player) from its existing video connection.
3. Place the video scaler near the video source and connect the power adapter to a suitable wall outlet. Connect the opposite end to the **DC 5V** connector on the rear of the video scaler.
4. Connect the cable you used to connect your video source to its previous video display (usually labeled as **VIDEO OUT**, or similar) as removed in step 2 to the **YCbCr IN**, **SV IN**, or **CV IN** connector on the rear of the video scaler as appropriate. The connector you use will depend on the type of cable the video source uses. If your device uses a YCbCr cable, you will need to use the provided adapter to convert the connectors to the 8-pin DIN connector on the **YCbCr IN** port on the video scaler.

If you are using the VGA model (VID2VGATV):

5. Using the provided HD-15 male/male VGA cable, connect one end to the **PC/HD OUTPUT** port on the front panel of the video scaler.
6. Connect the opposite end of the VGA cable to the **VIDEO IN** (or similar) connector that you removed in step 1.

If you are using the DVI model (VID2DVIDTV):

5. Using the provided DVI-D male/male cable, connect one end to the **DVI OUT** port on the front panel of the video scaler.
6. Connect the opposite end of the DVI cable to the **VIDEO IN** (or similar) connector that you removed in step 1.

Using the Menu Options

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

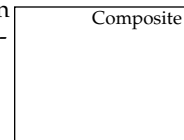
Selecting a video source

By default, the video scaler selects an output setting of XGA (1024 x 768 pixels, 60 Hz). While this setting should display an image on most computer monitors, high-definition televisions often support a different set of resolutions. The video scaler automatically detects and adjusts to NTSC (North America) or PAL (Europe and elsewhere) inputs. For easy setup, the video scaler supports a combination-key setting that can allow you set the unit to a widely-supported output resolution so that the OSD will be visible on your display:

For computer monitors: Press + and - at the same time to force the unit to XGA.

For HD televisions: Press **MENU** and - at the same time to force the unit to 480p.

1. After you have connected the video source and display to the video scaler 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 scaler (i.e. for a DVD player, insert a disc) for testing purposes.
3. Press the **INPUT** button on the front of the video scaler. The on-screen display (OSD) will show which connection is active in the upper right-hand corner of the screen. Press **INPUT** repeatedly until the OSD matches the input you are using on the rear panel of the video scaler. This is the correlation between menu settings and input connectors:



YCbCr: **YCbCr IN**

RBgS: **YCbCr IN**

S-Video: **SV IN**

Composite: **CV IN**

NOTE: RBgS is a type of composite video that carries a specific signal on the green channel. Consult the documentation of the video source to determine if you need to use this option.

4. Once the correct signal source is selected, the device will display the image source on the screen. Depending on the requirements of the high-definition 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 menu system

The video scaler 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 you followed under "Selecting a video source" 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:

Picture Adjust
Display
Advanced
System Information
Exit

1. Use the + and - keys on the front of the video scaler 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:

Picture Adjust

Brightness
Contrast
Color
Tint
H. peaking filter
Sharpness
V. peaking gain
Reset
Exit

Display

Timing
C S C (RGBH/YPbPr)

Advanced

Film Mode (Auto/OFF)
OSD Display (ON/OFF)
No Signal (Blue/Black)

System Information

INPUT Mode
Display Timing

The video scaler will store your changes until it is reset to a default setting.

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

NOTE: The **Timing** option under the **Display** menu allows you to adjust the output resolution and frequency of the video scaler. 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.

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 for your display type (see page 4) and reselect the input type as necessary.
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. Do not use converters or extension cables unless they were supplied with the video scaler.

Specifications

	VID2VGATV	VID2DVIDTV
Input Signal Levels	Video @ 1V p-p, 75 ohm, Y @ 1V p-p, 75ohm Color @ 0.7V p-p, 75 ohm, YCbCr, RGBH	
Output Format	YPbPr / HDTV	RGBHV
Output Connector	HD15 female	29-pin D-Shell
Output Signal	RGB @ 0.7v p-p, H&V Sync @ 3V p-p, Y @ 1V p-p, Pb, Pr @ 0.7V p-p, 75 ohm	Digital
Weight	8.5 oz. (240 g)	9.5 oz. (270 g)
Dimensions	5.7 x 3.0 x 1.2 in. 146 x 77 x 30 mm	6.3 x 3.0 x 1.2 in. 161 x 77 x 30 mm
Power Source	5VDC, 2A	

Supported Video Output Modes

PC Resolutions	Vert Rate	Format	Scan Type
VGA 640 x 480	50/60/72/75/85 Hz.	RGBHV	Progressive
SVGA 800 x 600	50/56/60/72/75/85 Hz.	RGBHV	Progressive
XGA 1024 x 768	50/60/70/75/85 Hz.	RGBHV	Progressive
WXGA 1280 x 768	50/60 Hz.	RGBHV	Progressive
SXGA 1280 x 1024	50/60 Hz.	RGBHV	Progressive
HDTV Resolutions	Vert Rate	Format	Scan Type
480p 720 x 480	50/60 Hz.	YPbPr, RGBHV	Progressive
576p 720 x 756	50/60 Hz.	YPbPr, RGBHV	Progressive
720p 1280 x 720	50/60 Hz.	YPbPr, RGBHV	Progressive
1080i 1920 x 1080	50/60 Hz.	YPbPr, RGBHV	Pseudo Interlace

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.

Limitation of Liability

In no event shall the liability of StarTech.com Ltd. and StarTech.com USA LLP (or their officers, directors, employees or agents) for any damages (whether direct or indirect, special, punitive, incidental, consequential, or otherwise), loss of profits, loss of business, or any pecuniary loss, arising out of or related to the use of the product exceed the actual price paid for the product.

Some states do not allow the exclusion or limitation of incidental or consequential damages. If such laws apply, the limitations or exclusions contained in this statement may not apply to you.

Revised: July 13, 2004