

# USB 2.0 to VGA Video Display Graphics Adapter

USB2VGAE



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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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# Table of Contents

<b>Introduction .....</b>	<b>1</b>
Features .....	1
Package Contents .....	1
System Requirements .....	1
<b>Installation.....</b>	<b>2</b>
Quick Installation .....	2
Windows CE Installation.....	2
Windows CE Un-Installation .....	3
<b>Configuration .....</b>	<b>3</b>
Display Utility .....	3
Support Modes .....	3
Support Resolutions .....	4
USB-Graphics Card (Extended) .....	4
Mirror .....	5
USB-Graphics Card (Off) .....	5
<b>Display Properties of the USB2VGAE.....</b>	<b>6</b>
<b>Virtually Repositioning Your Displays .....</b>	<b>7</b>
<b>Appendix .....</b>	<b>8</b>
Frequently Asked Questions.....	8
Troubleshooting Tips.....	9
<b>Technical Support .....</b>	<b>10</b>
<b>Warranty Information .....</b>	<b>10</b>

# Introduction

Thank you for purchasing a StarTech.com USB2VGAE USB 2.0 to VGA Video Display Graphics Adapter. This innovative device allows you to easily add a second display without installing a new video card, while running resolutions of up to 1280x1024.

This compact USB to VGA solution supports Windows CE 5.0 and is ideal for mobile or custom installs using Windows CE.

## Features

- No power adapter required and easy to install
- Supports resolutions of up to 1280x1024
- Supports Windows 2000/XP/Vista™ and Windows CE 5.0
- Works with desktop and notebook computers

## Package Contents

- 1 x USB to VGA adapter
- 1 x Driver/Manual CD
- 1 x User Manual

## System Requirements

- Pentium 4/Celeron family or AMD K6/Athlon/Duron family with 1.5GHz
- 256MB RAM or higher
- An available USB 2.0 port (with USB 2.0 host capability - USB 1.1 will suffice, however operation will be limited)
- Windows 2000 SP4, Windows XP SP2 and Windows Vista™

# Installation

## Quick Installation

Follow these steps to quickly install your new USB 2.0 Graphics Card:

**Note: Do not plug the USB 2.0 Graphics Card into the system before the driver is finished installing.**

1. Insert the driver/manual CD and follow the instructions.
2. Turn on your second monitor and connect it to the adapter.
3. Connect the adapter to an available USB 2.0 port.
4. Once finished, you should see the extended display on the second monitor.

## Windows CE Installation

1. Copy the file *trigger.cab* (located on your software CD) to a USB 2.0 Flash drive.
2. Plug the USB 2.0 Flash drive into your device and open the *trigger.cab* file.
3. Click *Yes* to continue the installation.
4. Choose *Device* to install the USB 2.0 VGA on Windows CE, then click *Install* to complete the installation.
5. Connect the external display device to the VGA connector (DB15) of the USB2VGAE adapter and turn the display power on. Then, connect the USB2VGAE to your smart phone or PDA\*\*. Your mobile device's display should now be visible on your external display device.

**\*\*Please note** that the USB port on the Windows CE device must offer USB 2.0 Host capability. USB 1.1 can be used, but will not deliver the same performance as USB 2.0.

## Windows CE Un-Installation

1. Disconnect the USB 2.0 Graphics card from your smart phone or PDA. Select *Remove Programs* from the *Settings* menu.
2. Select *MCT Trigger USB 2.0 VGA for Win Mobile*, then click *Remove*.
3. Select *Yes* to remove the program and complete the un-installation process.

## Configuration

### Display Utility

After the driver is installed, a utility will appear in the lower right taskbar. This utility allows you to quickly change the settings and resolution of your USB 2.0 Graphics Card. Access the menu by right clicking on the icon.



### Support Modes

1. Primary
2. Extended
3. Mirror

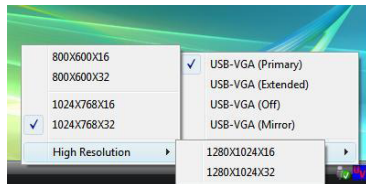
## Support Resolutions

Aspect Ratio	Resolution	Color Quality
5:4	1280 x 1024	16,32 bit
4:3	1024 x 768	16,32 bit
4:3	800 x 600	16,32 bit
4:3	640 x 480	16,32 bit

**Note:** 1280 x 768 is the ideal resolution for viewing DVDs.

## USB-Graphics Card (Primary)

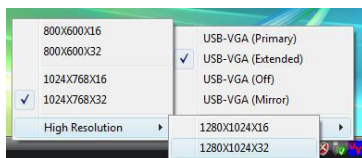
To make the USB 2.0 Graphics Card the main display adapter in the system. The system's main display (monitor) will automatically switch to being the secondary display adapter and act as the extended desktop.



You can disable the other utility (usually found in the same toolbar located on the bottom right hand corner) to make this function work properly.

**Note:** The Primary Function may disable the main display.

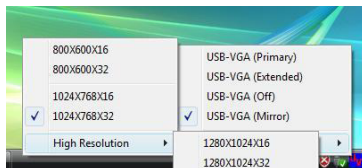
## USB-Graphics Card (Extended)



By default, USB2VGAE will *extend* your Windows desktop. You can change the relative position of this extension under the *Display Properties* (Go to *Control Panel* -> double click on the *Display* and select the *Settings* tab).

**Note:** Playback suggestion: Media Player Classic software on Windows Vista™.

## Mirror



Your USB 2.0 Graphics Card will mirror your Windows desktop. You can see the same desktop image in both monitors.

## USB-Graphics Card (Off)



This option disables the USB2VGAE on the system.



## Display Properties of the USB2VGA

To access the Display Properties for the USB2VGA, go to *Control Panel* and double click on the *Display* icon. Select the *Settings* tab.

Click on the *Display* pull-down menu and select the *Default Monitor on USB 2.0 Graphics Card-Extend*. Then, click *Extend my Windows desktop onto this monitor*. From here, you can change the resolution and color depth as desired. Click *OK* to apply the settings. You can also make these changes using the USB 2.0 Graphics Card utility.



# Virtually Repositioning Your Displays

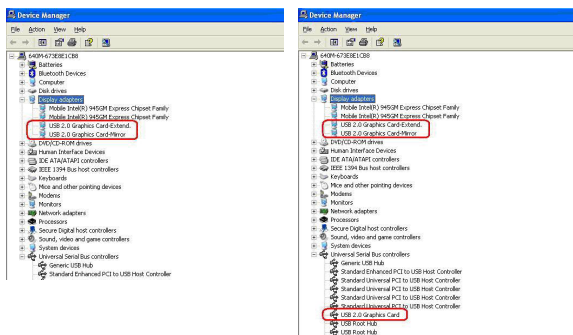
On the *Settings* tab of your Display Properties, click and drag the appropriate monitor icon (labeled 1 or 2) to the desired position. For example, the secondary display can be dragged to the left of the primary display, allowing it to be virtually on the left. Click *OK* or *Apply* to save the changes.

To make sure the USB2VGAE has been installed successfully:

1. Right-click on *My Computer* and select *Manage*, to open the Computer Management window.
2. In the left pane, click on *Device Manager*. In the right pane, double-click on *Display adapters*. Here, you will see two options:
  - USB2.0 Graphics Card- Extend
  - USB2.0 Graphics Card- Mirror

Plug-in the USB2VGAE adapter. Double-click *Universal Serial Bus controllers*, where you will see:

- USB2.0 Graphics Card.



# Appendix

## Frequently Asked Questions

**Q: Why can't I make the USB 2.0 to Graphics Card the primary display?**

A: Some video cards ship their product with a utility that prevent other video cards from being set as the primary card. Check the bottom right hand corner taskbar for the utility. Disable the utility before switching our adapter to be the primary display.

**Q: Why won't my DVD player work when I move it over to the extended display?**

A: Some DVD playback software packages do not support playing on a second display adapter of any kind.

**Q: How come my video will not play on Media Player if I move it over to the extended desktop?**

A: Check that you have moved the Media Player window completely over to the second screen.

**Q: Why does my mouse not move pass the right side of the screen as it should on extended desktop?**

A: Check the display settings and make sure that your display number '2' is on the right side of display number '1'. You can rearrange how Windows treats each display in relation to each other in the Display Properties Settings.

**Q: There are lines running horizontally up and down my screen.**

A: This is due to a low refresh rate setting. You can change this in the Display Properties Settings Advanced Monitor. Make sure you select the USB 2.0 Graphics Card first and not set the refresh rate higher than what your monitor can support. This may damage your monitor. You can also try to reset/refresh/resynchronize your monitor.

### **Q: Direct3D does not work?**

A: This is a current limitation of the adapter. Please check for driver updates in the future to add support for this. If your application requires this, please use the main display adapter.

## Troubleshooting Tips

- The following troubleshooting tips may help if you are experiencing any issues. Contact your dealer for additional help if needed.
- Check to make sure that all connectors are plugged in correctly.
- Make sure that the USB port that you are using is USB 2.0.
- Check to see that the monitor is connected correctly and the power is ON.
- Try connecting the adapter directly to the computer instead of through a hub.
- Unplug all other USB devices from the system.
- Make sure you restart your computer after the driver installation.
- Unplug the adapter and re-insert it.
- Try a different USB 2.0 port and/or computer.
- Check the website to make sure you have the latest drivers.
- Reset/refresh/resynchronize your monitor.
- If you have problems during the boot up process, start your computer in Safe Mode and uninstall the driver. Hold the CTRL key until the Windows startup menu appears and select Safe Mode.
- The USB 2.0 Graphics Card cannot be used for the viewing of DVD video movie except for the Media Player Classic software on Windows Vista™.

## 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 [www.startech.com/support](http://www.startech.com/support) and access our comprehensive selection of online tools, documentation, and downloads.

## 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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