

# USB 2.0 VGA ADAPTER

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USER MANUAL

# CONTENTS

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## INTRODUCTION

Thank you for purchased the **USB 2.0 VGA ADAPTER**. The USB 2.0 VGA Adapter enables you to connect one or multiple display devices (CRT/LCD monitor, projector) to your desktop or notebook PC. The connected display can act as mirrored or extended desktop of the main display on your PC. The flexibility of the common USB 2.0 technology saves the need to open the computer or struggling with compatibility issues related to the VGA card.

## FEATURES

- ◆ Support display resolution up to 1920 x 1200
- ◆ Support the multiple display devices on one PC
- ◆ Multi graphics display modes – Primary, Extended, Mirror and Rotation
- ◆ Plug-and-Play USB connectivity
- ◆ USB 2.0 compliant

## SYSTEM REQUIREMENTS

- ◆ Pentium 4 / Celeron Family, AMD K6 / Athlon / Duron Family.  
1.0GHz or higher processor
- ◆ Single Display Setup: 512MB RAM or higher;  
Multi-Display Setup: 1GB RAM or higher  
(Higher memory recommended for optimal performance)
- ◆ Available USB 2.0 port
- ◆ Windows 2000 SP4 / Windows XP & Windows Vista (32-bit or 64-bit)

## PACKAGE CONTENTS

- ◆ USB 2.0 VGA ADAPTER
- ◆ CD (User Manual, Driver and Utility)
- ◆ Quick Installation Guide

## NOTE

- ◆ Do not plug the USB 2.0 VGA Adapter into your PC or Notebook before executing the set-up or un-installation program.
- ◆ AC power adapter is required for external USB Hub. Please be reminded that the driver allows up to 6 USB 2.0 VGA Adapters on one PC.
- ◆ Reboot the computer after all of USB 2.0 VGA Adapters have completely been installed.

## SUPPORTED COMMON DISPLAY RESOLUTION:

Aspect Ratio	Resolution		
16:10	1920 * 1200		16bit
16:9	1920 * 1080		16bit
16:10	1680 * 1050	16bit	16bit, 32
16:10	1440 * 900	16bit, 32bit	16bit, 32bit
16:10	1280 * 800	16bit, 32bit	16bit, 32bit
15:9	1280 * 768	16bit, 32bit	16bit, 32bit
5:4	1280 * 1024	16bit, 32bit	16bit, 32bit
4:3	1600 * 1200	16bit	16bit, 32bit
4:3	1400 * 1050	16bit, 32bit	16bit, 32bit
4:3	1280 * 960	16bit, 32bit	16bit, 32bit
4:3	1152 * 864	16bit, 32bit	16bit, 32bit
4:3	1024 * 768	16bit, 32bit	16bit, 32bit
4:3	800 * 600	16bit, 32bit	16bit, 32bit

## TECHNICAL SPECIFICATIONS:

Operating System	Windows 2000/XP/Vista
PCB Version	USB 2.0 -VGA
USB 2.0 Cable	Length: 500±30 mm, ( A type)
Super VGA connector	D-sub 15pin ( female)
Case Material	ABS
Power Source	Bus Powered
Working Current	500mA
Suspend Current	≤ 500mA
Monitor Refresh Frequency	60, 70, 75 & 85 (Hz)

## INSTALLATION ON WINDOWS 2000/XP

### DEVICE DRIVER INSTALLATION

Installing the device driver enables your computer's operating system to recognize the **USB 2.0 VGA Adapter** once it's connected. Please check your operating system and refer to the appropriate installation procedure to begin installing the device driver.

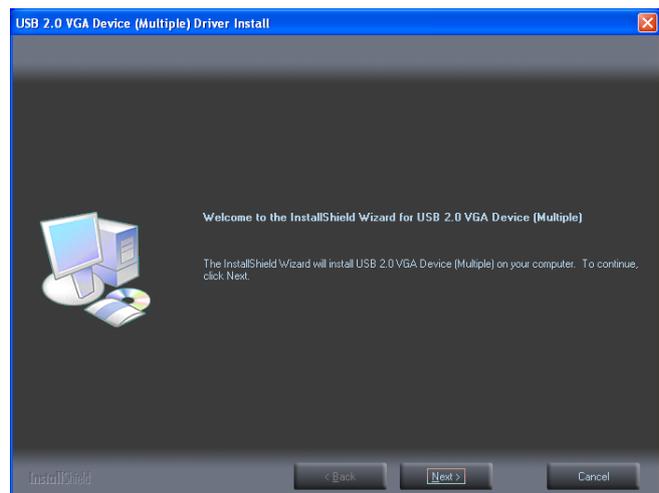
This section illustrates the simple device driver installation procedure for computer running Windows 2000 / XP operating system. **Please make sure the USB 2.0 VGA Adapter is unplugged from your PC or Notebook before executing the setup program.**

#### Step 1.

Insert the Driver CD into the CD-ROM drive; the setup program should be launched automatically. If setup program does not begin automatically, click Start, Run and double click "**D:\Setup.exe**" (where D: is the path of your CD-ROM drive).

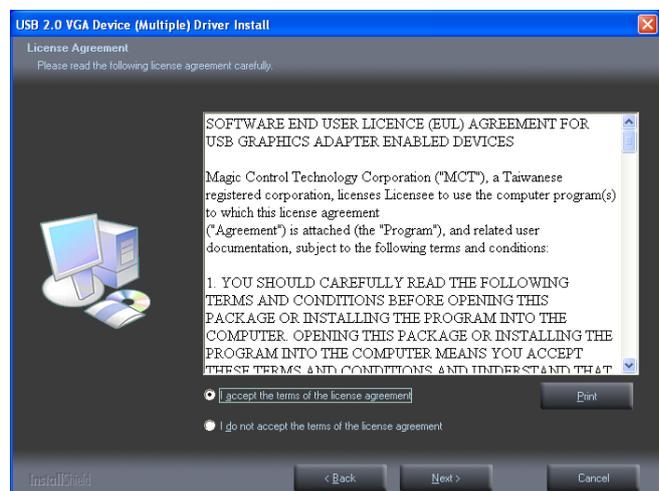
#### Step 2.

Driver Installation Wizard, click "**Next**" to continue.



#### Step 3.

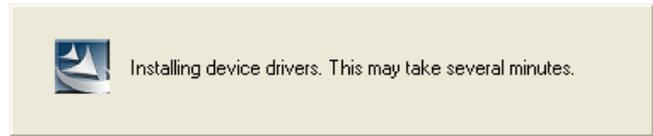
License Agreement; please read it and select "**I accept the terms of the license agreement.**" Click "**Next**" to accept the License Agreement.



**Step 4.**

Installing device drivers...

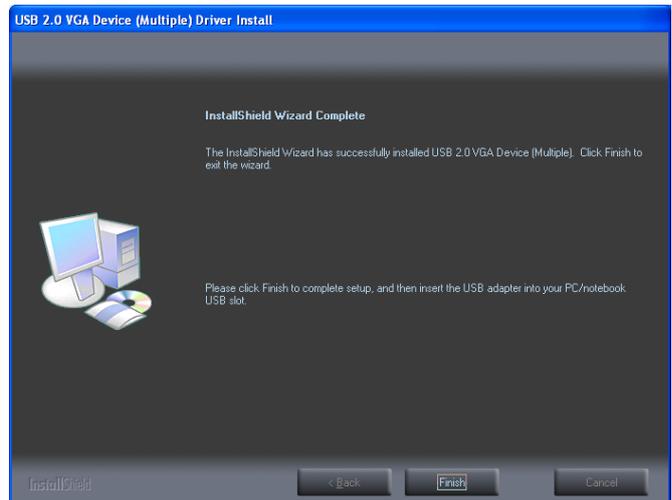
\*You may notice the screen flashed during hardware installation. It is part of the normal process.



**Step 5.**

Click “**Finish**” to complete setup.

Then, insert the USB VGA Adapter an available USB 2.0 port of your PC or Notebook.



**Step 6.**

The Microsoft Software Installation Certificate warning dialogue box, please select “**Continue Anyway**” to continue with the device driver installation. This will not affect the device driver installation and the device usage.



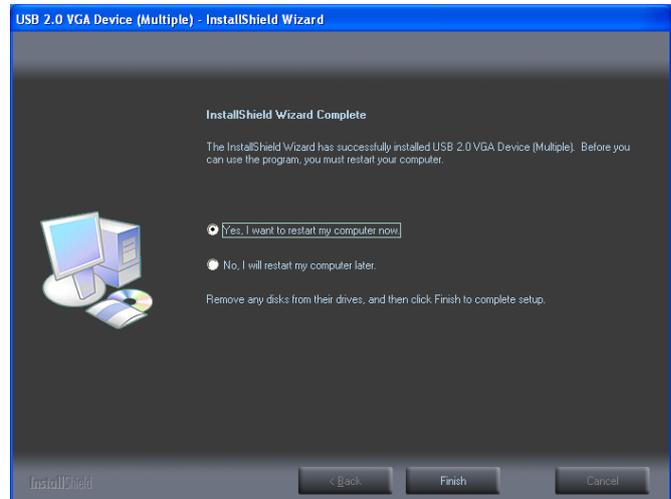
### Step 7a.

#### INSTALLATION OF SINGLE USB 2.0 VGA ADAPTER

Please select “**Yes, I want to restart my computer now.**” and click “**Finish**” to complete the driver installation.

Connect the external display device to the VGA (DB15) connector of the next USB 2.0 VGA Adapter and switch it on.

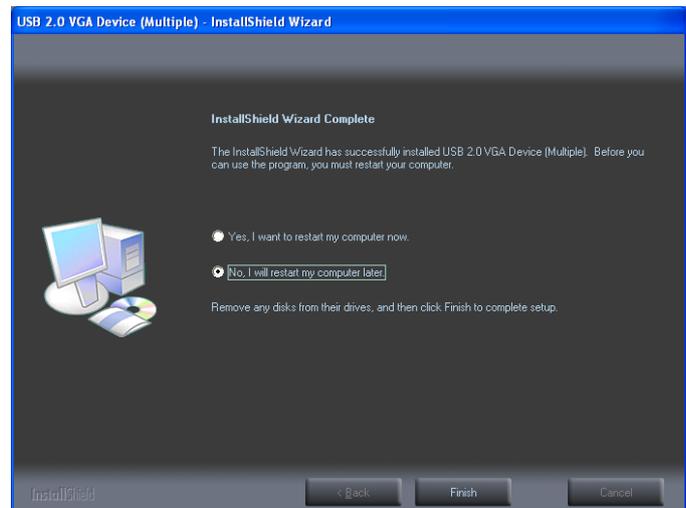
After reboot the computer, the extended display will be shown on the 2<sup>nd</sup> display device.



### Step 7b.

#### INSTALLATION OF MULTIPLE USB 2.0 VGA ADAPTERS

a. Please select “**No, I will restart my computer later.**” and click “**Finish**” to continue the installation of next USB 2.0 VGA Adapter.



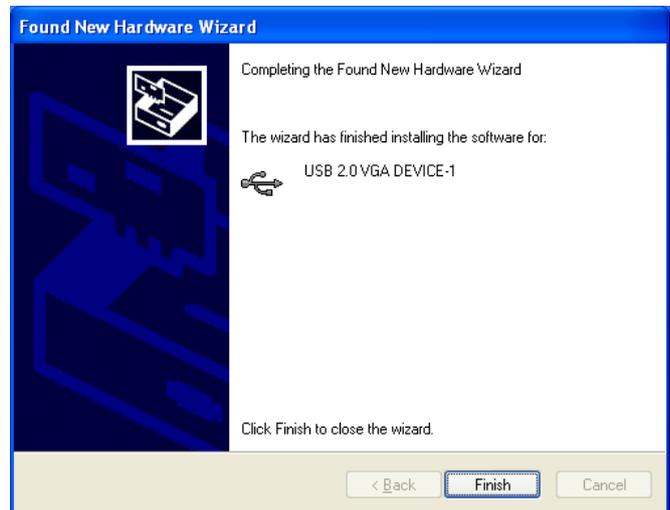
b. Connect another display device to the VGA (DB15) connector of the next USB 2.0 VGA Adapter and switch it on.

- c. Plug the USB 2.0 VGA Adapter into next available USB 2.0 port of your PC or Notebook.

The Microsoft Software Installation Certificate warning dialogue box, please select “**Continue Anyway**” to continue with the device driver installation. This will not affect the device driver installation and the device usage.



- d. It may appear the Hardware Installation Wizard, please click “**Finish**” to continue.

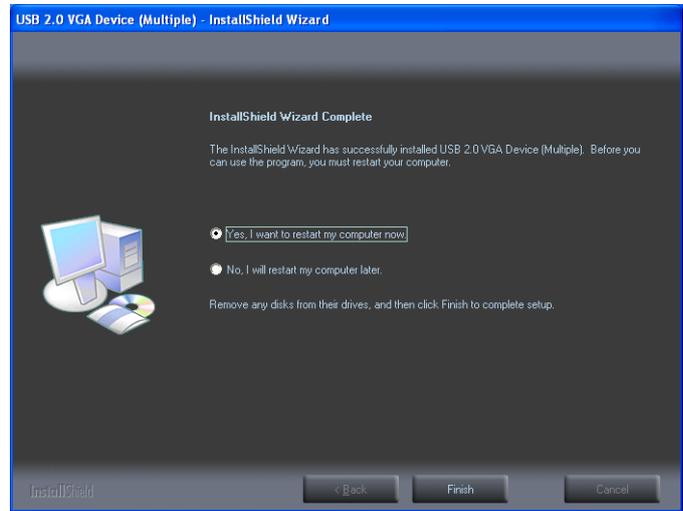


- e. Please select “**Continue Anyway**” to continue with the device driver installation. It will not affect the device driver installation and the device usage.



- f. If you wish to install additional USB 2.0 VGA Adapter, please follow the procedure **a~ e** again.
- g. Otherwise, please select **“Yes, I want to restart my computer now.”** and click **“Finish”** to complete the driver installation.

After reboot the computer, the USB extended display will be shown on the attached display devices.



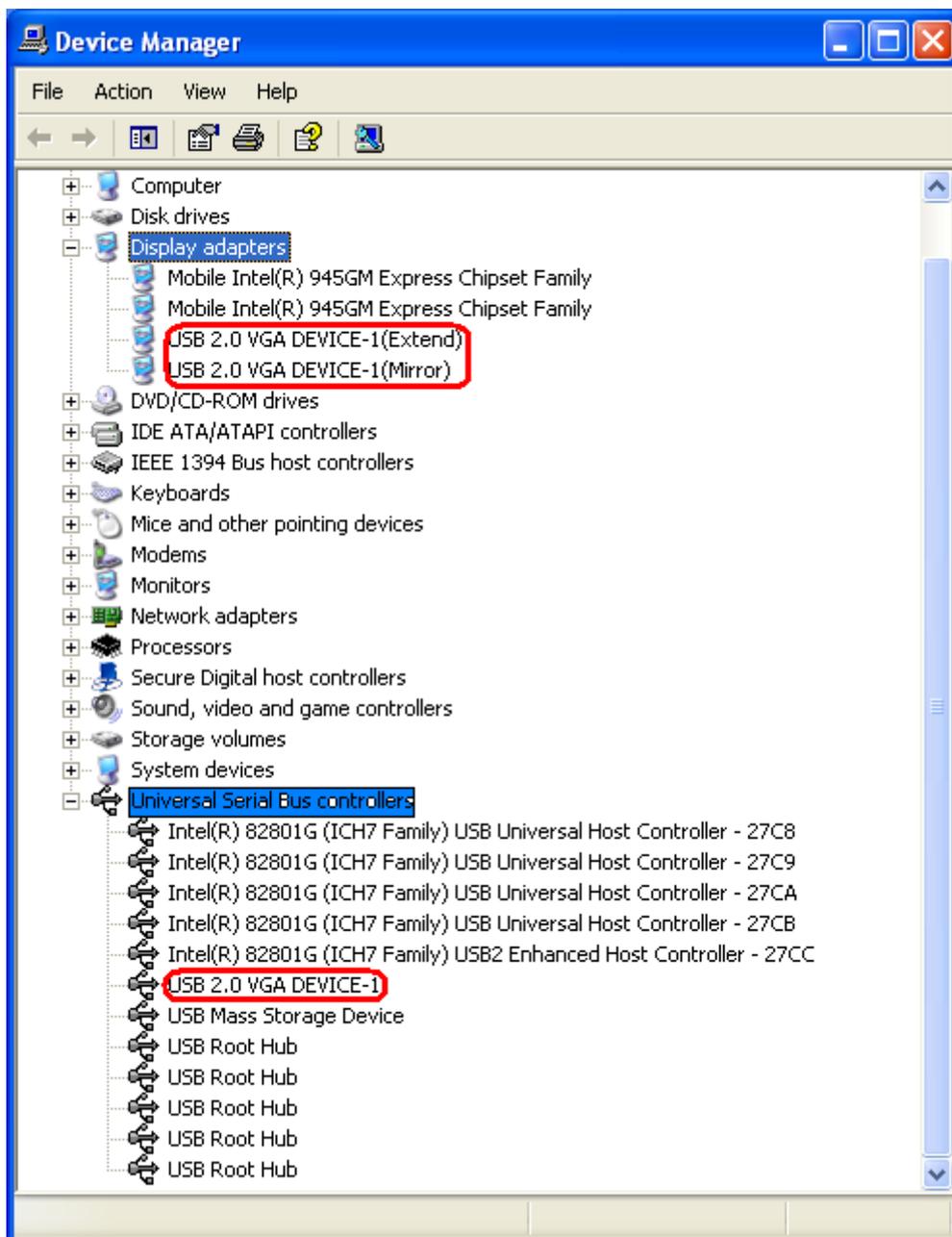
## VERIFYING DEVICE DRIVER INSTALLATION

The following procedure allows you to verify the device driver installation.

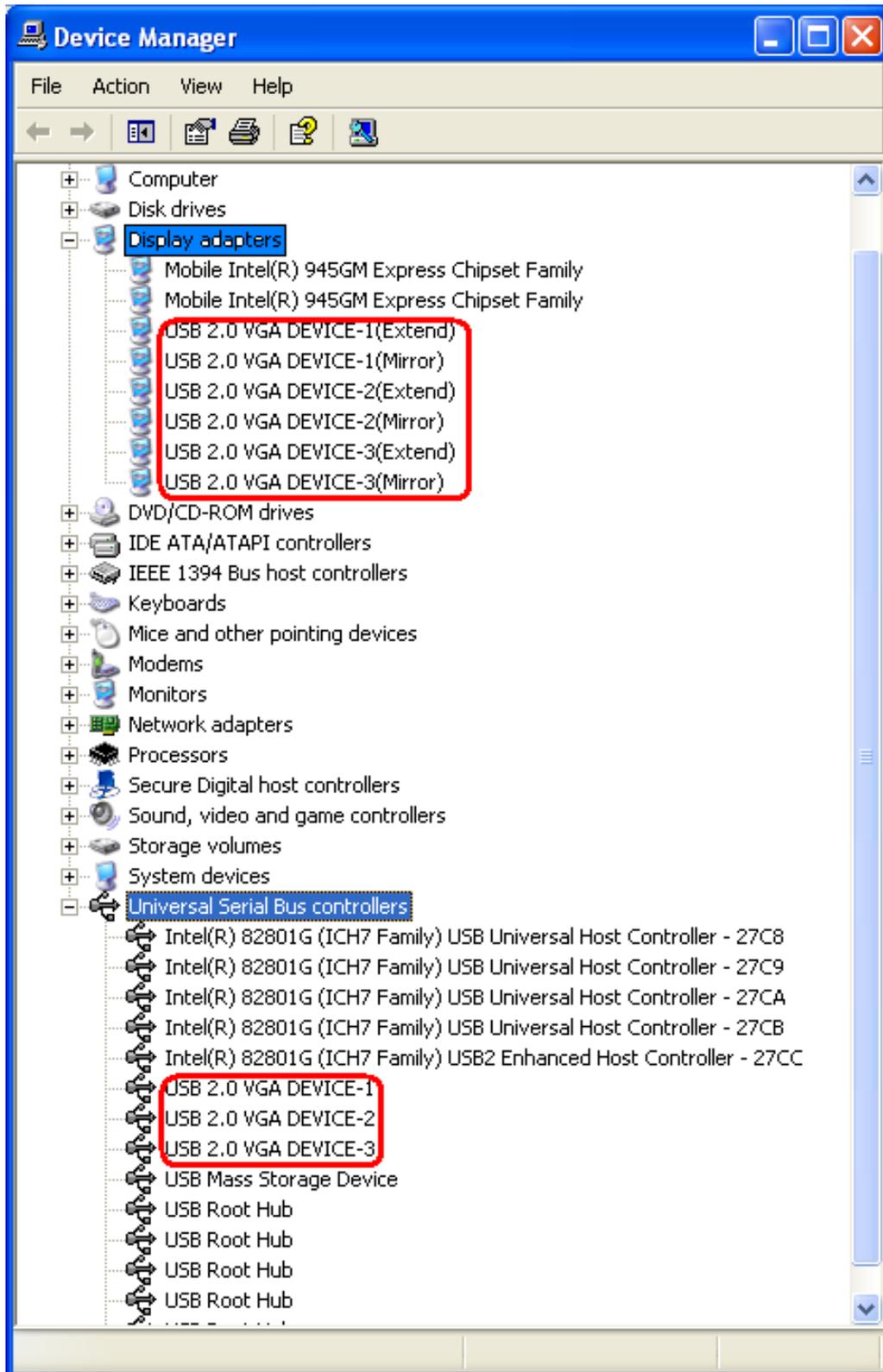
Please right click “My Computer” → “Properties” → “Hardware” → “Device Manager”.

Plug-in the USB 2.0 VGA Adapter, then double click “**Display adapters**”, and “**Universal Serial Bus controllers**”. It will show the new directions as below,

### ※ SINGLE USB 2.0 VGA ADAPTER INSTALLATION ON THE COMPUTER



※ MULTIPLE USB 2.0 VGA ADAPTERS INSTALLATION ON THE COMPUTER



## DEVICE DRIVER UN-INSTALLATION

### Step 1.

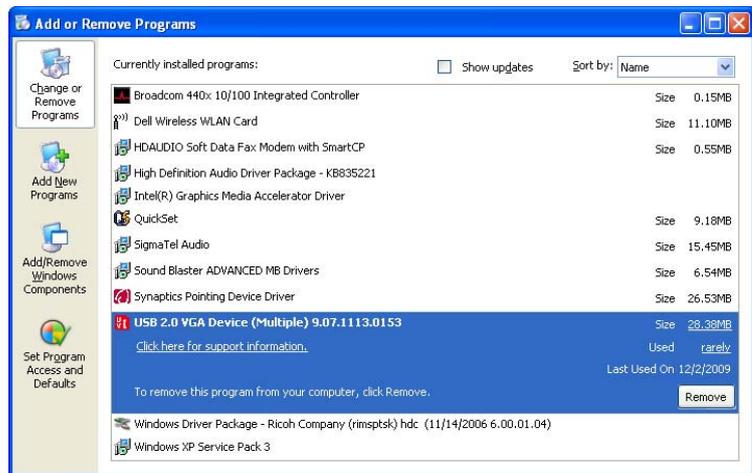
**Start menu:**

Click “**Start**” → “**Control Panel**” → “**Add or Remove Programs**”.

**Classic start menu:**

Click “**Start**” → “**Settings**” → “**Control Panel**” → “**Add or Remove Programs**”.

Select “**USB 2.0 VGA Device ((Multiple) driver version no.)**” item. Click “**Remove**” button.



### Step 2.

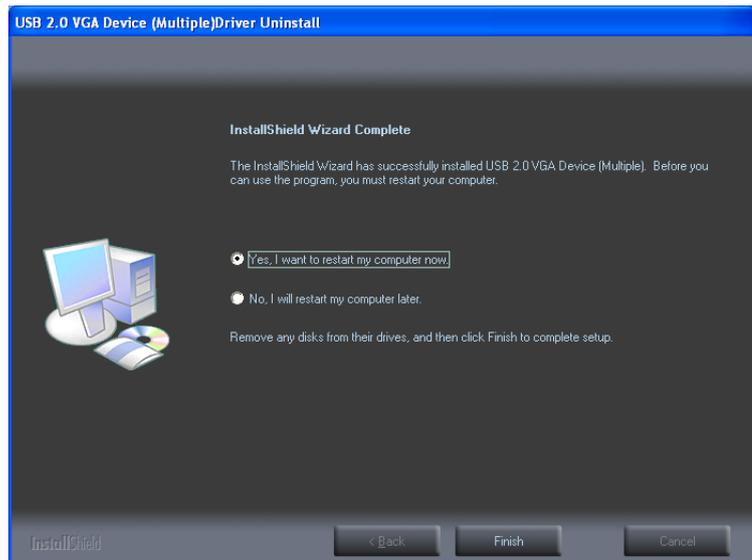
Unplug the USB 2.0 VGA Adapter and click “**OK**” to continue.



### Step 3.

Select “**Yes, I want to restart my computer now**” and click “**Finish**” to reboot.

After reboot, you will complete the driver un-installation.



## INSTALLATION ON WINDOWS VISTA

### DEVICE DRIVER INSTALLATION

Installing the device driver enables your computer's operating system to recognize the adapter once it's connected. Please check your operating system and refer to the appropriate installation procedure to begin installing the device driver.

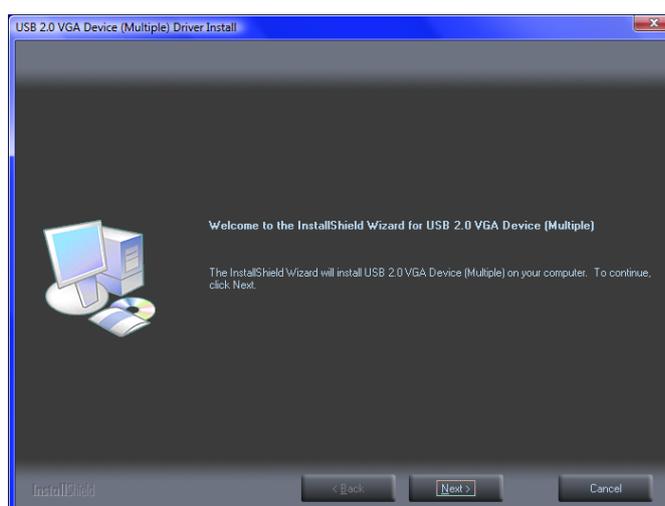
This section illustrates the simple device driver installation procedure for computer running Windows Vista operating system. **Please make sure the USB 2.0 VGA Adapter is unplugged from your PC or Notebook before executing the setup program.**

#### Step 1.

Insert the Driver CD into the CD-ROM drive; the setup program should be launched automatically. If setup program does not begin automatically, click Start, Run and double click "D:\Setup.exe" (where D: is the path of your CD-ROM drive).

#### Step 2.

Driver Installation Wizard, click "Next" to continue.



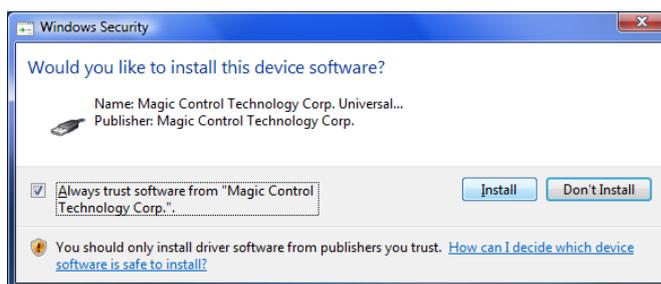
#### Step 3.

License Agreement; please review it and check "I accept the terms of the license agreement." Click "Next" to accept the License Agreement.



#### Step 4.

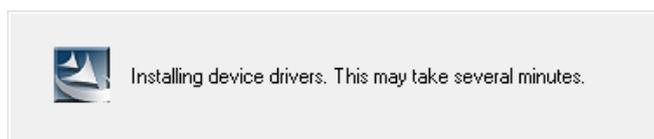
Windows Security warning dialogue box under Windows Vista, it will not affect the device driver installation and usage the device. Please select “**Always trust software from “Magic Control Technology Corp.”**”, then click “**Install**” to continue.



#### Step 5.

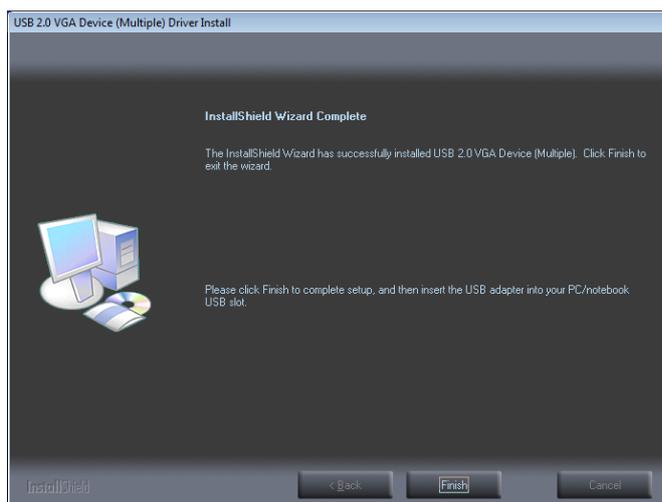
Setup is searching for installed features...

*\*Please note that this process might take several minutes depends on your host system performance. Please wait for its completion before start working on your PC.*



#### Step 6.

Click “**Finish**” to complete setup. Then, insert the USB VGA Adapter an available USB 2.0 port of your PC or Notebook.

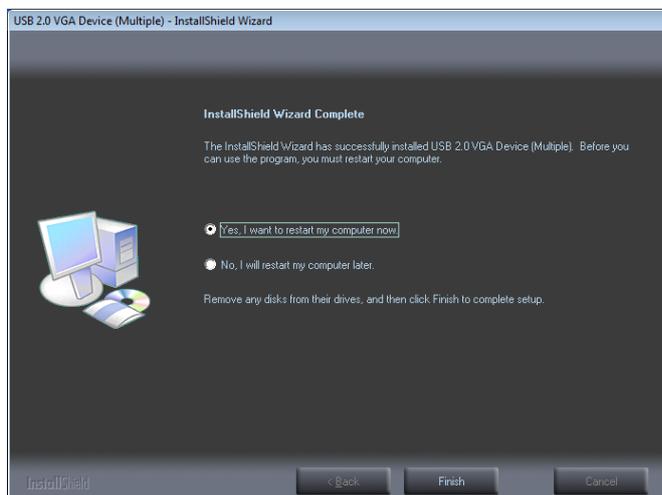


#### Step 7a.

### INSTALLATION OF SINGLE USB 2.0 VGA ADAPTER

Please select “**Yes, I want to restart my computer now.**” and click “**Finish**” to complete the driver installation.

Connect the external display device to the VGA (DB15) connector of the next USB 2.0 VGA Adapter and switch it on. After reboot the computer, the extended display will be shown on the 2<sup>nd</sup> display device.



**Step 7b.**

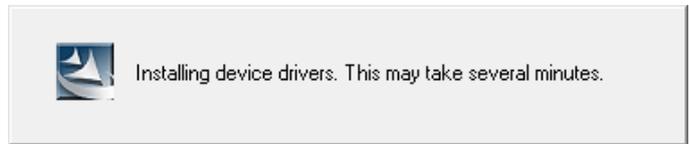
**INSTALLATION OF MULTIPLE USB 2.0 VGA ADAPTERS**

- a. Please select “**No, I will restart my computer later.**” And click “**Finish**” to continue the next installation.



- b. Connect another external display device to the VGA (DB15) connector of next USB 2.0 VGA Adapter and switch it on.

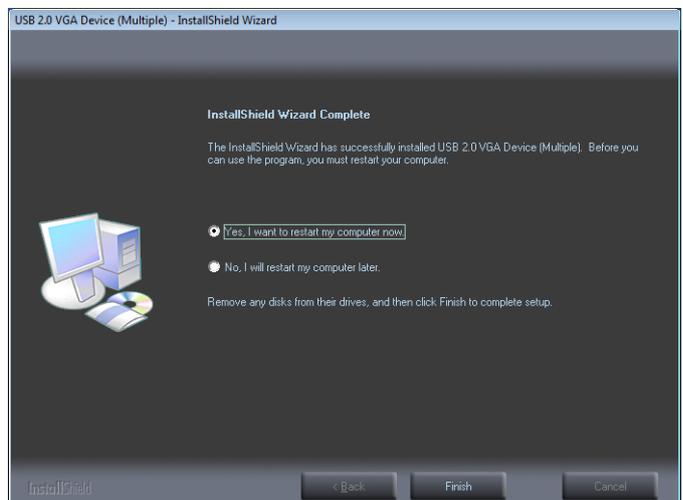
- c. Plug the USB 2.0 VGA Adapter into an available USB 2.0 port of your PC. The driver installation will be proceeding automatically.



- d. If you wish to install additional USB 2.0 VGA Adapter, please follow the procedure a~ c again.

- e. Otherwise, please select “**Yes, I want to restart my computer now.**” and click “**Finish**” to complete the driver installation.

After reboot the computer, the extended display will be shown on the display devices.



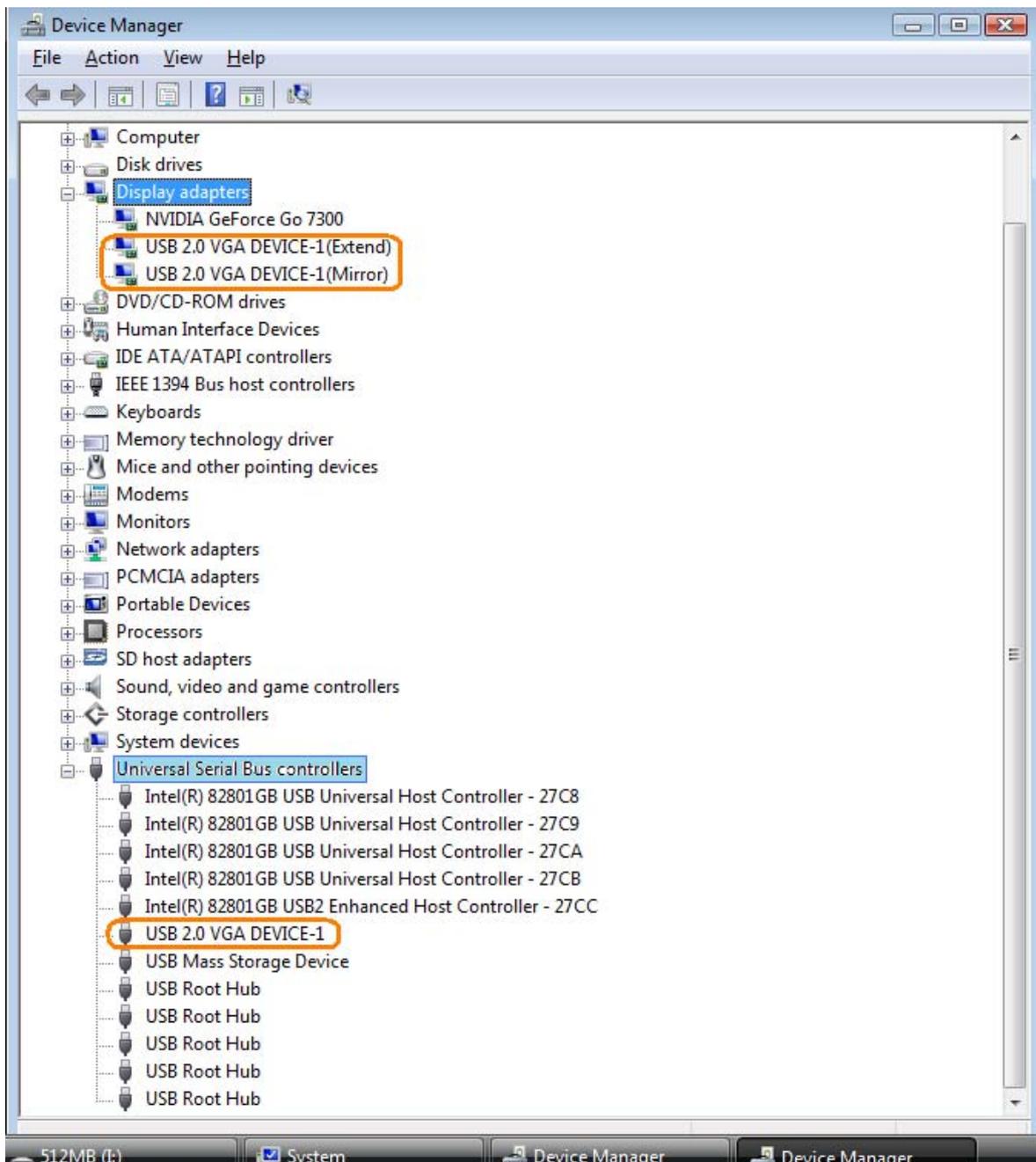
## VERIFYING DEVICE DRIVER INSTALLATION

The following procedure allows you to verify the device driver installation.

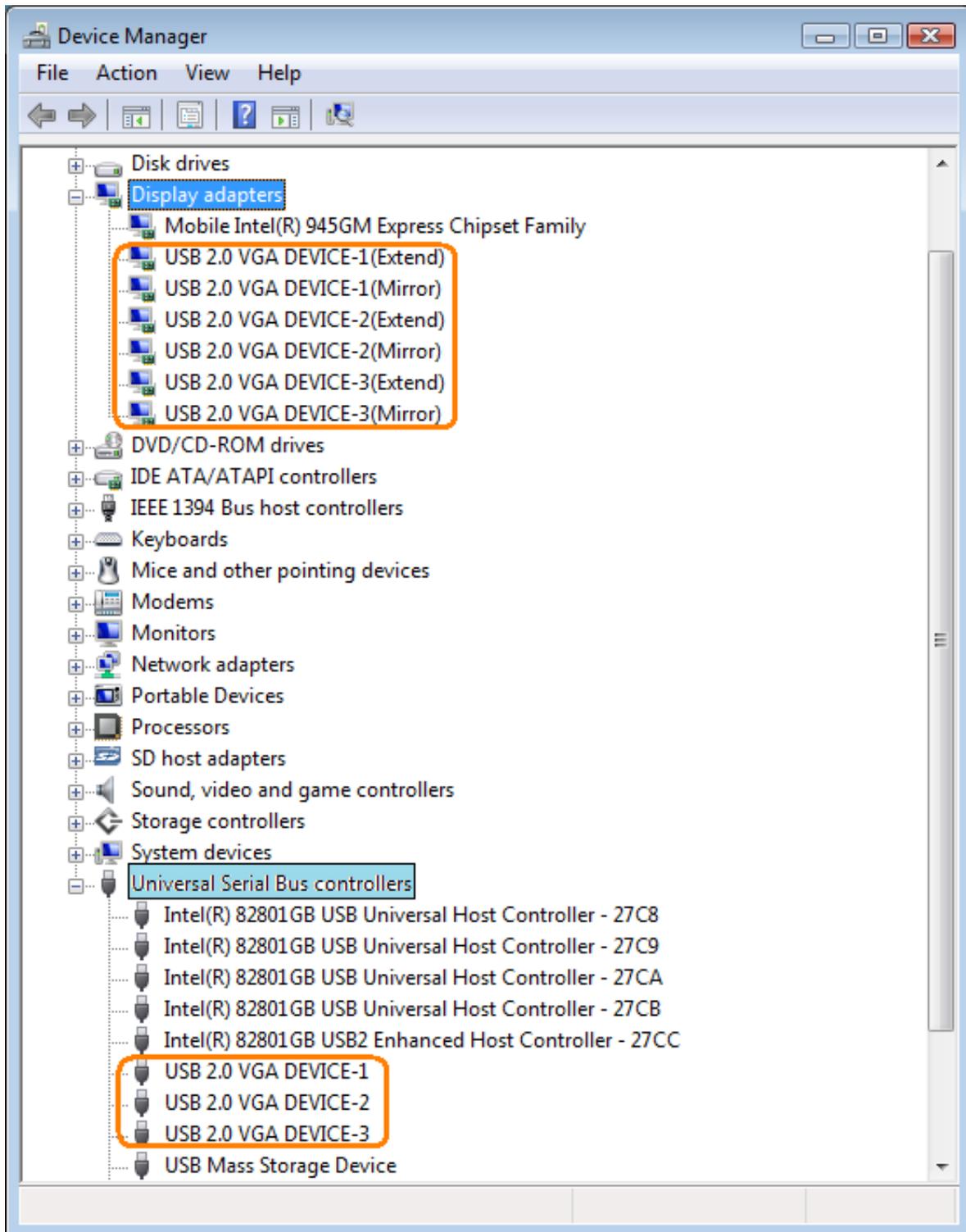
Please right click “**Computer**” → “**Properties**” → “**Device Manager**”.

Plug-in the USB 2.0 VGA adapter, then double click “**Display adapters**”, and “**Universal Serial Bus controllers**”. It will show the new directions as below,

### ※SINGLE USB 2.0 VGA ADAPTER INSTALLATION ON THE COMPUTER



※MULTIPLE USB 2.0 VGA ADAPTERS INSTALLATION ON THE COMPUTER

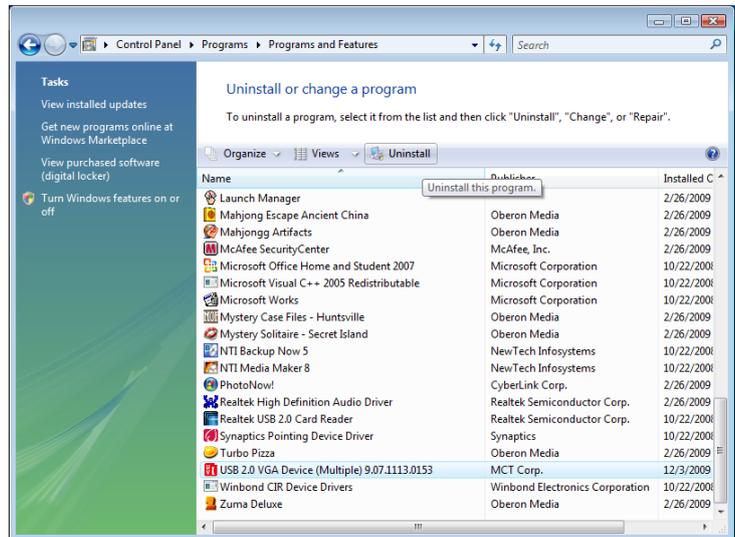


## DEVICE DRIVER UN-INSTALLATION

### Step 1.

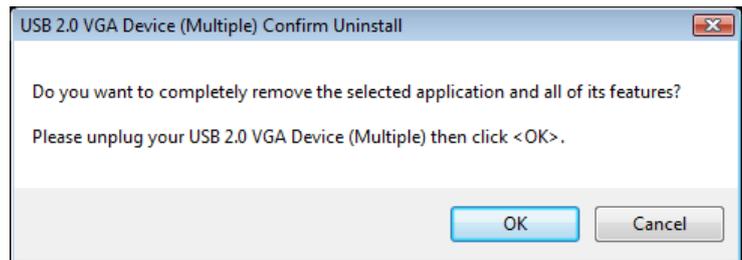
- ◆ **Start menu:**  
Please click “**Start**” → “**Control Panel**” → “**Program and Features**”.
- ◆ **Classic Start menu:**  
Please click “**Start**” → “**Settings**” → “**Control Panel**” → “**Program and Features**”.

Select “**USB 2.0 VGA Device (Multiple) (driver version number)**” item. Click “**Uninstall**” button.



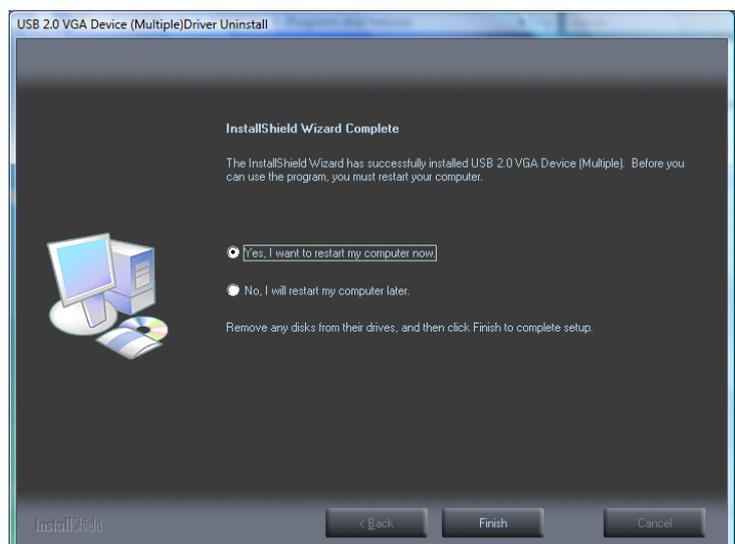
### Step 2.

Unplug the USB 2.0 VGA Adapter and click “**OK**” to continue.



### Step 3.

Select “**Yes, I want to restart my computer now**” and click “**Finish**” to reboot. After reboot, you will complete the driver un-installation.



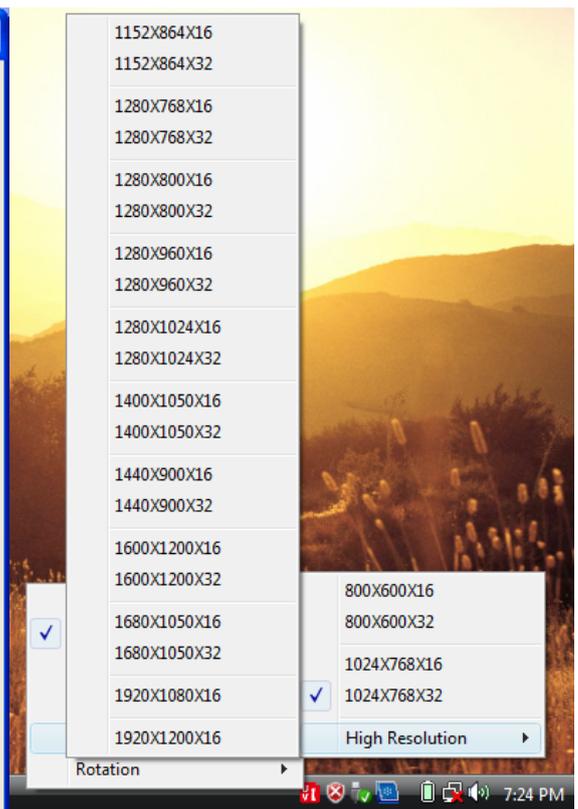
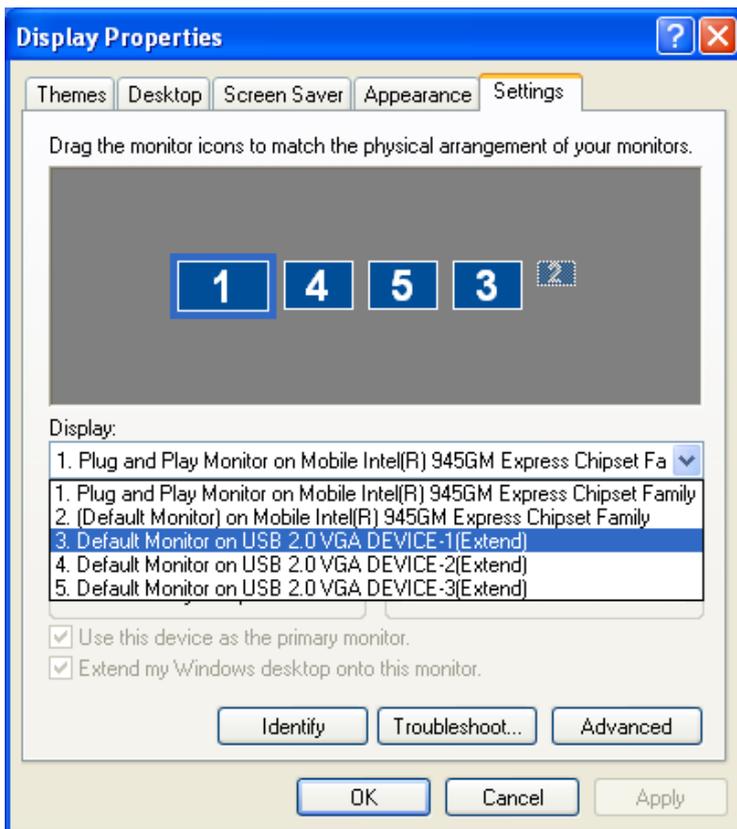
## FUNCTION DESCRIPTION

This section describes the main functions provided by the USB 2.0 VGA Adapter.

- It can support the LCD or CRT monitor; it can attach the D-SUB interface LCD or CRT monitor and it supports four kinds of selections, Primary, Extended, Mirror and Rotation by “UV” icon.

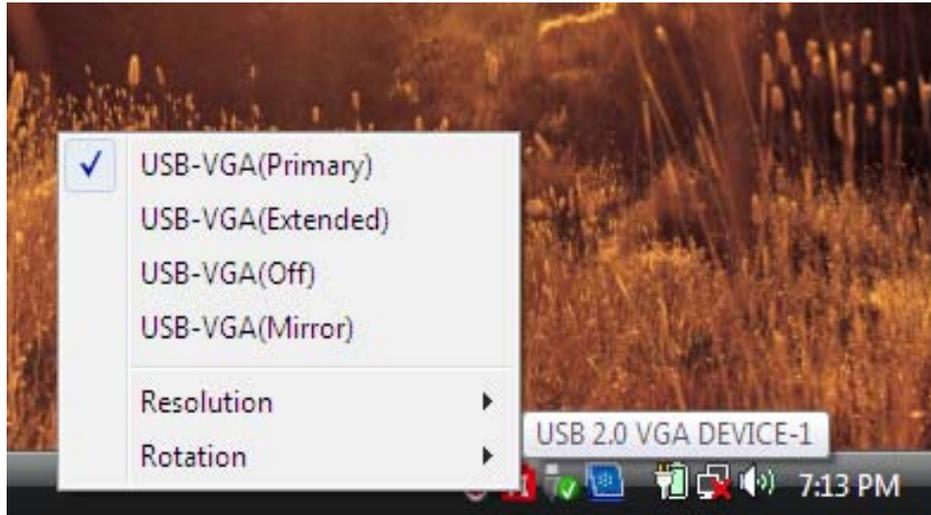


- The resolution supports from 800x600x16 bit and up-to 1920x1200x 16 bit.
- The resolution can be modified via the system tray or Display Properties.



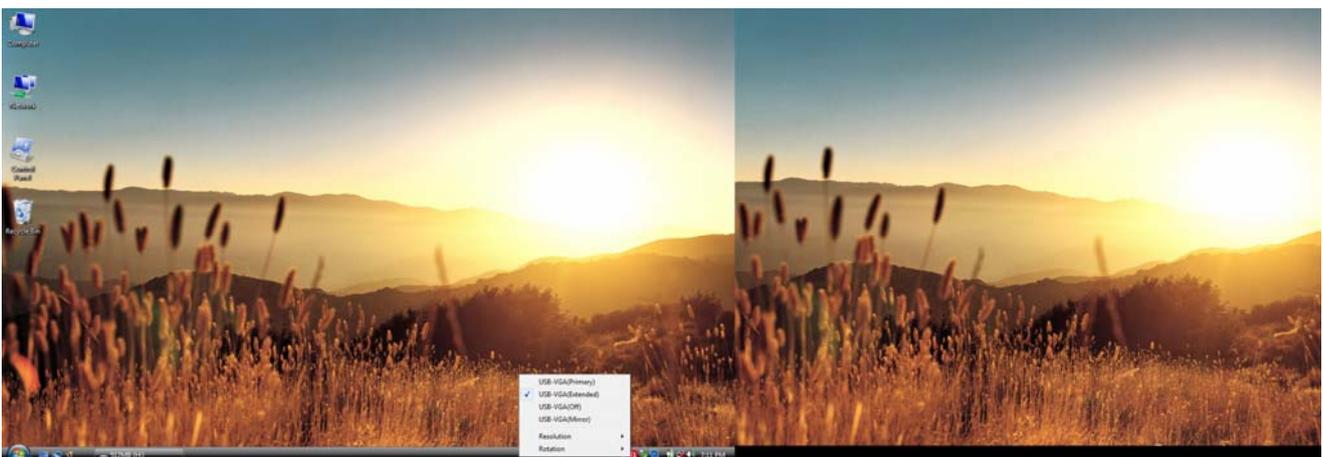
### “Primary” Mode

The system’s main graphics adapter will automatically switch to act as the secondary graphics adapter and the main screen will now work as the extended desktop. The monitor connected to the USB 2.0 VGA Adapter will now act as the primary Windows desktop. Please be advised that some display utility and drivers that shipped with certain AGP and built-in display adapters may prevent this option from working on some systems. You can disable the other utility program (usually found in the same toolbar located on the bottom right hand corner) to make this function work properly.



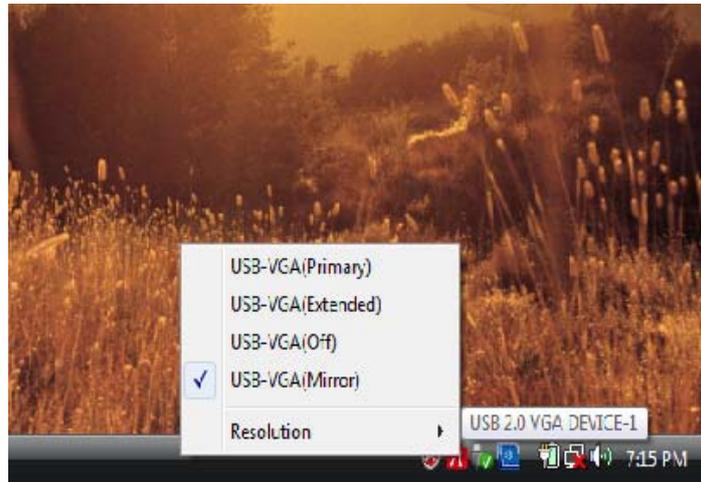
### “Extended” Mode (Default)

By default, the monitor connected to USB 2.0 VGA Adapter will work as, “Extended Desktop” which extends the primary Windows desktop of your system. You can change the relative position of this extended desktop under the Display Properties.



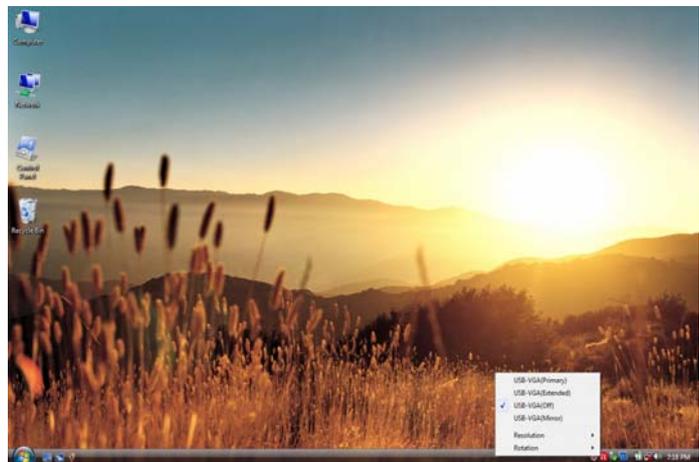
### “Mirror” Mode

By setting this mode, the Windows desktop will be mirrored / replicated to the secondary CRT/LCD monitor. The screen resolution setting on the secondary monitor will follow the primary screen’s resolution. For example, if the primary resolution is 1024x768x32bit, and the secondary monitor’s resolution will be the same. But if the selected resolution setting is not supported by the primary screen, a warning dialogue box will be displayed and the suggested screen resolution will be shown.



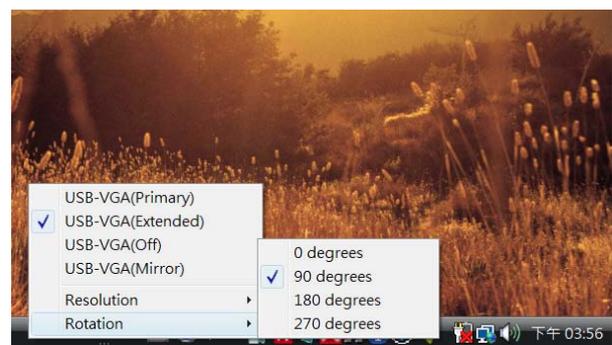
### “OFF” Mode

This option disables the USB 2.0 VGA Adapter on the system.



### “Rotation” Mode

This feature enables setting the orientation of the secondary CRT/LCD monitor. Several options such as “0 degrees”, “90 degrees”, “180 degrees” or “270 degrees” are available under the Extended or Primary mode.



## Q&A

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This section describes the common Q&A regarding to the installation or operation of the USB 2.0 VGA Adapter.

**Q:** Why can't I make the USB 2.0 VGA Adapter 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. You may try to open the program in the secondary display first before playing the DVD.

**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 VGA Device 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:** Direct 3D (Aero function) 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

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This section describes the general troubleshooting tips regarding to the installation or operation of the USB DISPLAY DEVICE.

### Known Issues

- Windows Vista Aero mode support will be available at MP version driver update (WDDM).
  - WDDM driver update is also aimed to resolve most of video playback compatibility issue under Windows Vista.
- Direct 3D is not supported under XP. It would be supported under Vista Aero mode.

### General Recommendation

- Check to make sure that the device is plugged in correctly to the host system.
- Make sure that the USB port that you are using is USB 2.0.
- Unplug the USB cable of USB graphics device and re-insert it.
- Check to see that the monitor is connected correctly and is powered ON.
- Make sure to restart your computer after the driver installation.
- Try a different USB 2.0 port and/or computer.
- Unplug all other USB devices from the system.
- Try connecting the USB cable of USB graphics device directly to the computer instead of through a hub.
- Reset/refresh/resynchronize your monitor.

### Media Playback

- During video playback on all platforms, please do not change the display mode, position or arrangement of video player window (such as dragging the video player window between main display and attached display). This usually causes the video player to have strange behavior and the video may stop playing. We suggest stopping the video playback, moving the window to the USB graphics device attached display and then selecting the video clip to start playing.
- You may experience poor video performance on USB graphics device attached display under some low-spec PC system.
- Video rendering using hardware overlays is supported.
- Some DVD playback software packages do not support playing on a second display adapter of any kind. You may try to open the media player in the secondary display first before start playing the DVD.

- Your PC may be lack of certain video codec to support playback of certain video format. Please use the link below to install license free media codec.

**K- Lite:** [http://www.free-codecs.com/download/K\\_Lite\\_Codec\\_Pack.htm](http://www.free-codecs.com/download/K_Lite_Codec_Pack.htm)

- Video/Media players have different decoding capability under different display modes. For better performance on watching DVD or certain video format on the USB graphics device attached display, it is recommended to use the following license free software.

**VLC Media Player:** <http://www.videolan.org/vlc/>

**Media Player Classic:** <http://sourceforge.net/projects/guliverkli/>

## Others

- Some graphics card, i.e. Intel, prevents other secondary graphics chipset from being set as the primary card. As the result of this, *primary mode* might not work or the display maybe disabled.
- 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.
- To verify the driver version that you installed, please click “Control Panel” → “Add or Remove Programs” to check the program: USB Display Device (Trigger 1+) 9.xx.xxxx.0159 (the number means the driver version).
- Please contact your dealer to obtain the latest driver or for additional assistance if needed.
- Some limitation exists in different media player on file format support. We enclose our compliance test result in the tables according to different operating system, main system graphics card/chipset, media players, and the supported media format. It will be updated periodically with new version of media players or our latest driver.

## REGULATORY COMPLIANCE

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### FCC

This equipment has been tested and found to comply with Part 15 / Subpart B of the FCC rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference
- This device must accept any interference received, including interference that may cause undesired operation.

### CE

This equipment is in compliance with the requirements of the following regulations:

EN 55022: 1998+A1:2000+ A2:2003,

EN 55024: 1998+A1:2001+ A2:2003), (IEC/EN 61000-4-2 /-3)

### C-Tick

This equipment is in compliance with the requirements of the following regulations:

EN 55022: 1998 + A1:2000+A2:2003, AS/NZS CISPR22 © IEC: 2005.

### VCCI

This equipment is in compliance with the requirements of the following regulations:

V-3/2006.04, TECHNICAL REQUIREMENTS

V-4/2006.04, SUPPLEMENTARY TEST CONDITIONS FOR EQUIPMENT UNDER TEST

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