USB 2.0 VGA ADAPTER

USER MANUAL

CONTENTS

INTRODUCTION

Thanks for purchasing the **USB 2.0 VGA ADAPTER.** The USB 2.0 VGA ADAPTER allows you to attach additional display to PC or laptop without annoying of taking your computer apart. You can effectively multiply working space through USB 2.0 port. **P**rimary, **E**xtended, **M**irror and **R**otation modes are available for your preference for productive job.

FEATURES
- USB 2.0 compliant
- Support display resolution up to 1920 x1200
- Plug-and-Play USB connectivity
- Support Function
  - Display Modes: Primary, Extended, Mirror
  - Display Rotation: 0°, 90°, 180°, 270°
- Friendly software targeted to ease your daily USB Display experience
  - Identify Monitors
  - Multi-Display Control Panel
  - Shortcut to access Windows Display Setting dialog
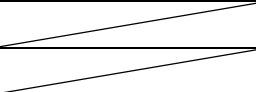
SYSTEM REQUIREMENTS
- Available USB 2.0 port
- Minimum Requirement to use one (1) USB Display Adapter:
  - CPU: Intel/AMD Single Core 1.2 GHz or higher processor
  - RAM: 512MB memory or higher
- 2~3 Displays: (additional USB display adapters)
  - CPU: Intel/AMD Single Core 1.6 GHz or higher processor
  - RAM: 1GB memory or higher
- 4~6 Displays: (additional USB display adapters)
  - CPU: Intel/AMD Dual Core 1.8 GHz or higher processor
  - RAM: 1GB memory or higher
- Windows 2000 SP4 & Windows XP / Vista / 7 (32-bit or 64-bit)

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

SUPPORTED COMMON DISPLAY RESOLUTION

Aspect Ratio	Resolution		
16:10	1920 * 1200		16bit
16:9	1920 * 1080		16bit
16:10	1680 * 1050	16bit	16bit, 32bit
16:9	1600 * 900	16bit	16bit, 32bit
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 SP4/XP/Vista/7
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	$\leq$ 500mA
Monitor Refresh Frequency	60, 70, 75 & 85 (Hz)

INSTALLATION ON WINDOWS 2000/XP/VISTA

DEVICE DRIVER INSTALLATION

Installing the device driver enables your computer's operating system to recognize the **USB 2.0 VGA Adapte**r 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).
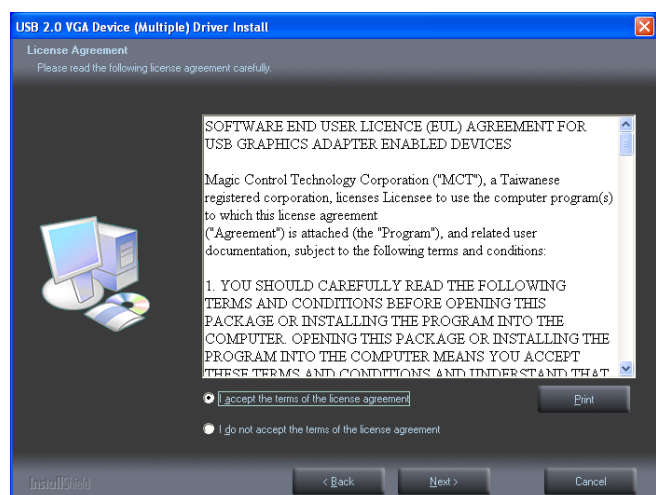
Step 2.
Driver Installation Wizard, click "**Next**" to continue.
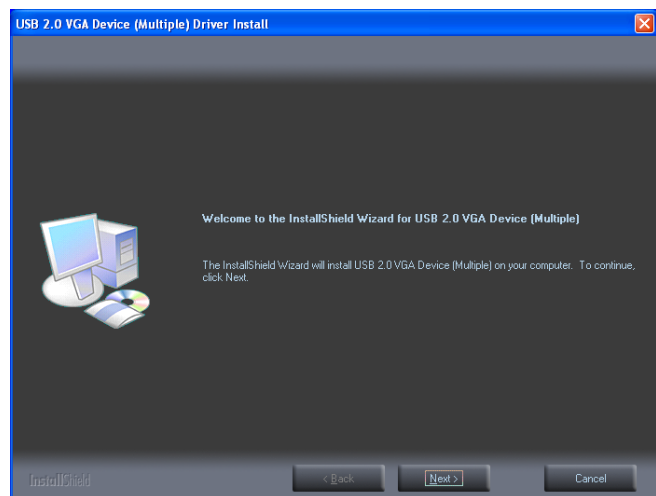
Step 3.
License Agreement; please read it and select **"I accept the terms of the license agreement**." Click "**Next**" to accept the License Agreement.
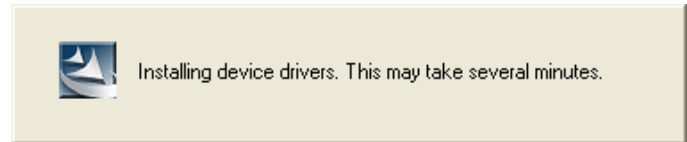
Step 4.

Setup is searching for installed features.....

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

※ When the Microsoft Windows Security warning dialogue box appears, please select "**Continue Anyway**" to continue with the driver installation.

*This will not affect the device driver installation and the device usage

Step 5.

Click "**Finish**" to complete setup. Then, insert the USB VGA Adapter an available USB 2.0 port of your PC or Notebook.
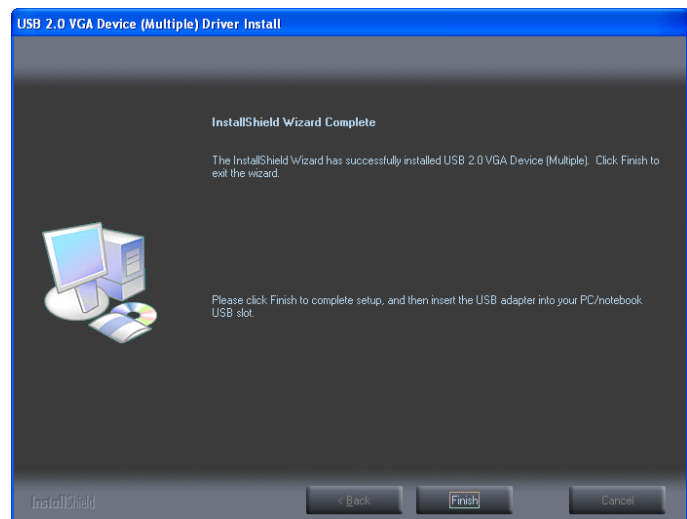
※ When the Hardware Installation Wizard dialog appears, please click "**Next**" to continue.

Step 6a.
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.
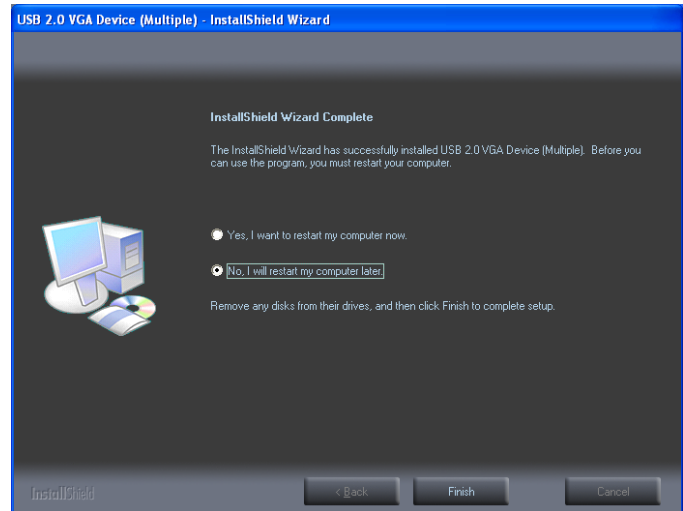
After reboot the computer, the extended display will be shown on the 2nd display device.
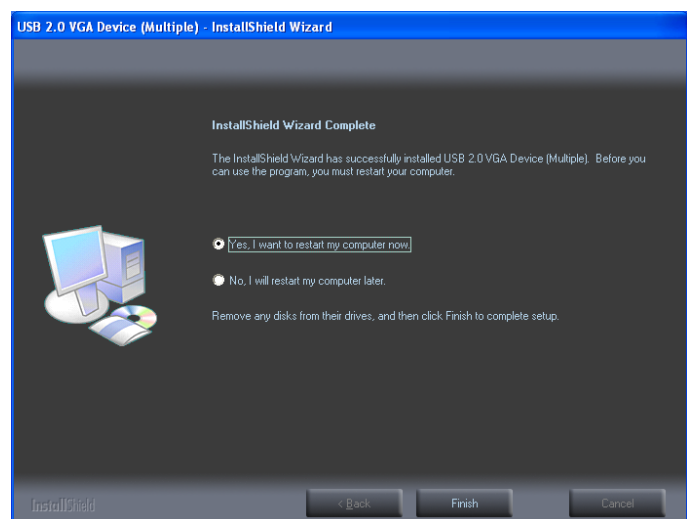
Step 6b.
INSTALLATION OF MULTIPLE USB 2.0 VGA ADAPTERS

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.   Then, plug the USB 2.0 VGA Adapter into next available USB 2.0 port of your computer.

c.   Setup is searching for installed features…....
You may notice the screen flashed during hardware installation.   It is part of the normal process.
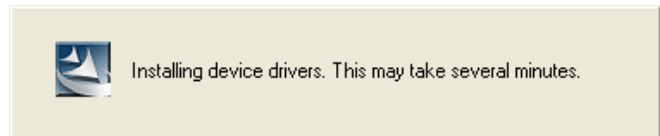
d.   If you wish to install additional USB 2.0 VGA Adapter, please follow the procedure **a~ c** again.

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 USB extended display will be shown on the attached display devices.
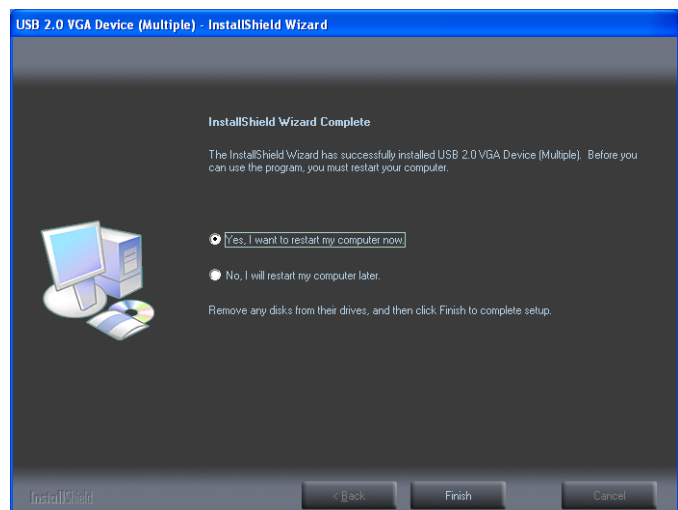
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VERIFYING DEVICE DRIVER INSTALLATION

The following procedure allows you to verify the device driver installation.
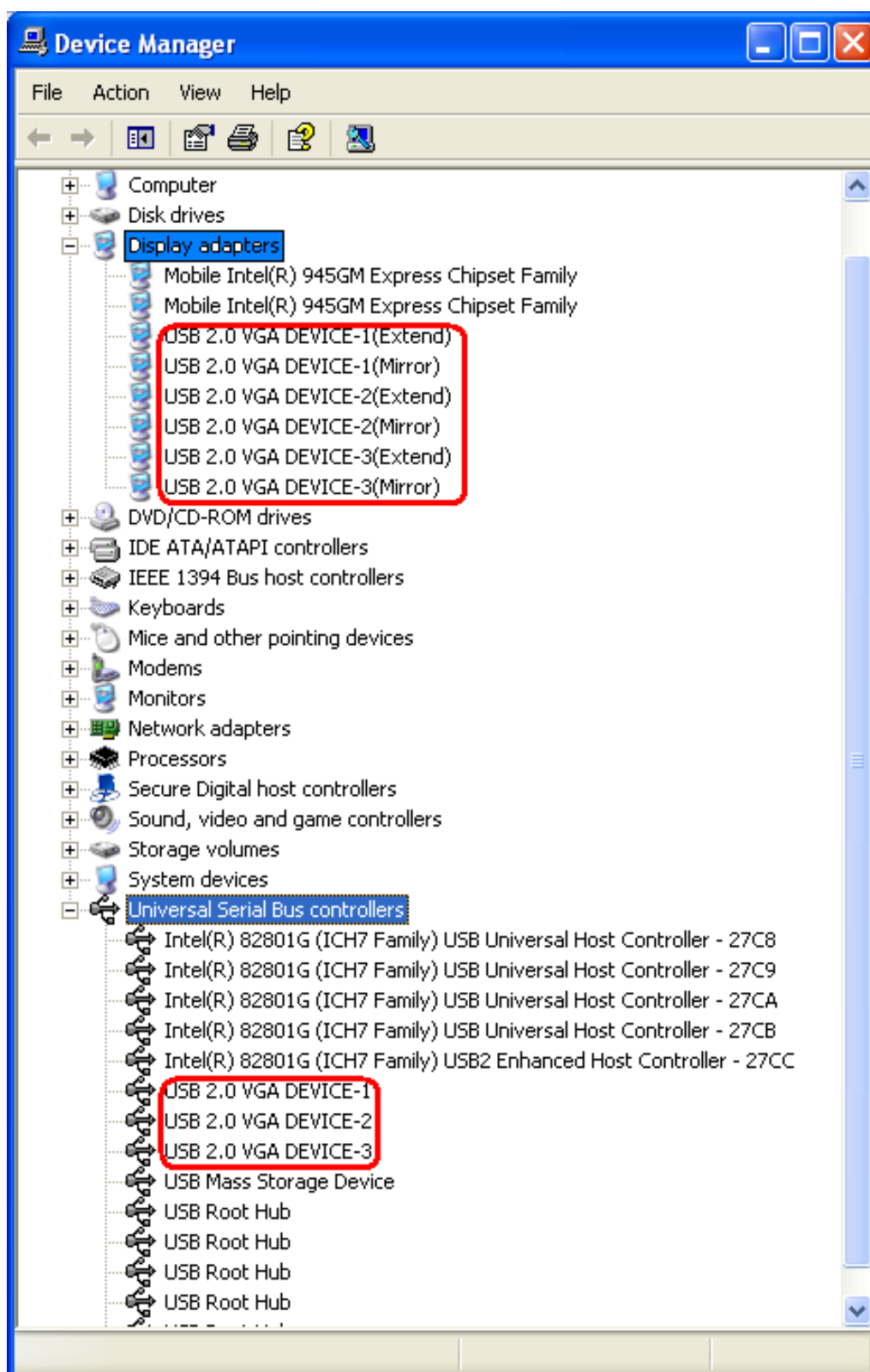
Please right click "My Computer" → "Properties" → "Hardware" → "Device Manager".

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
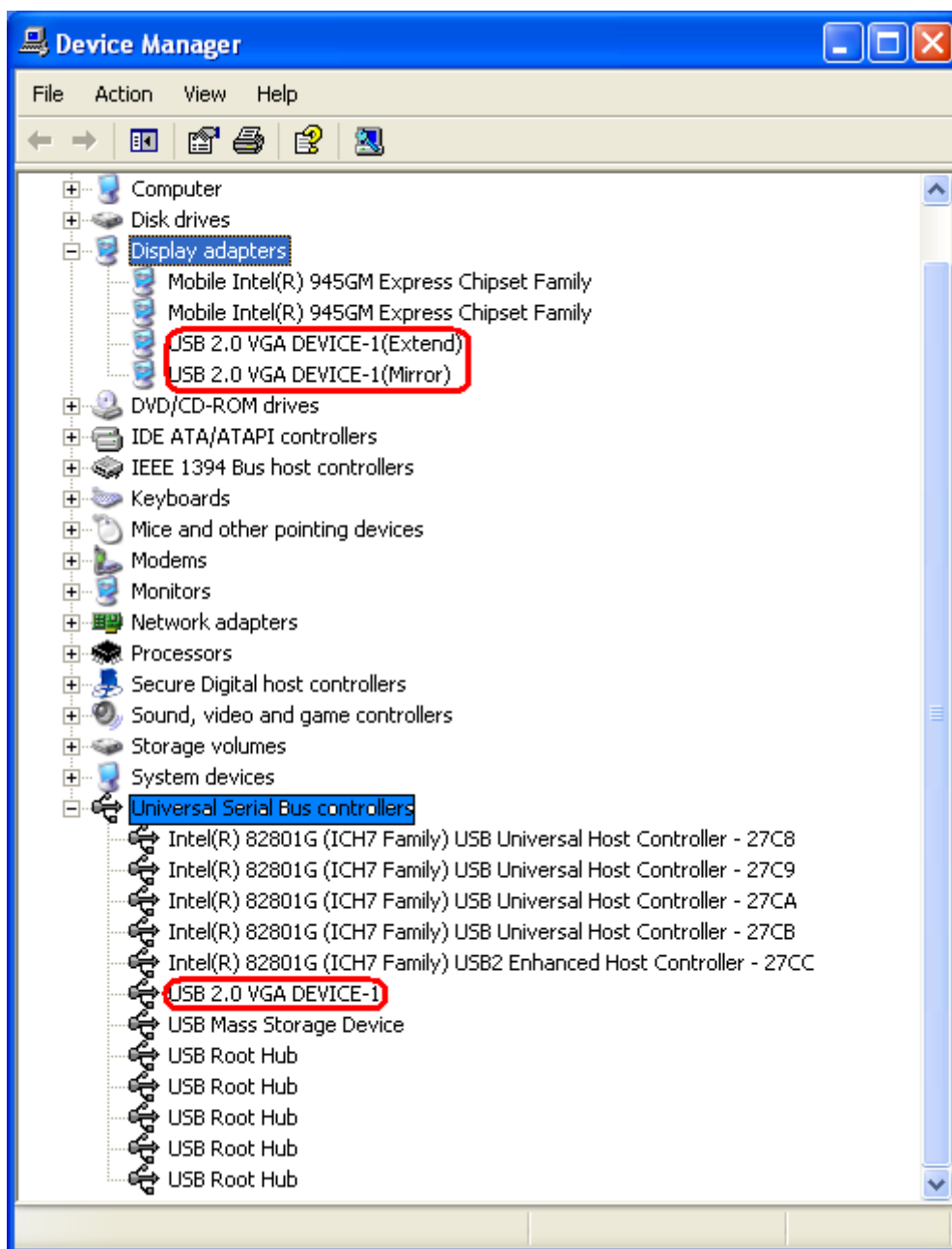
※ MULTIPLE USB 2.0 VGA ADAPTERS INSTALLATION ON THE COMPUTER
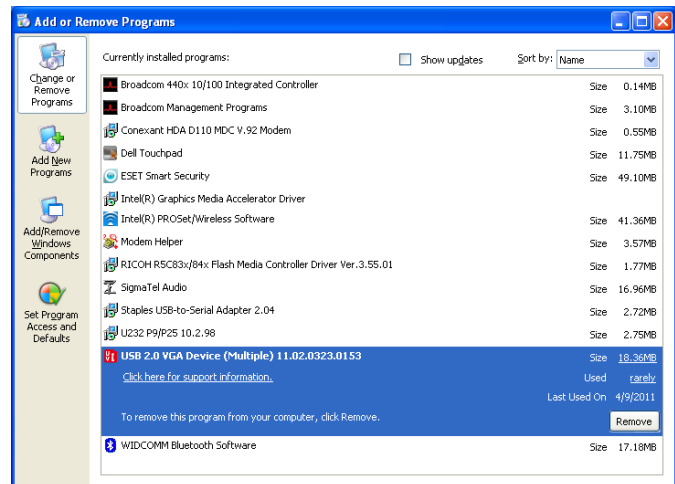
DEVICE DRIVER UN-INSTALLATION

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) 11.xx.xxxx.0153 (driver version number)**"**.   Click "**Remove**" button.
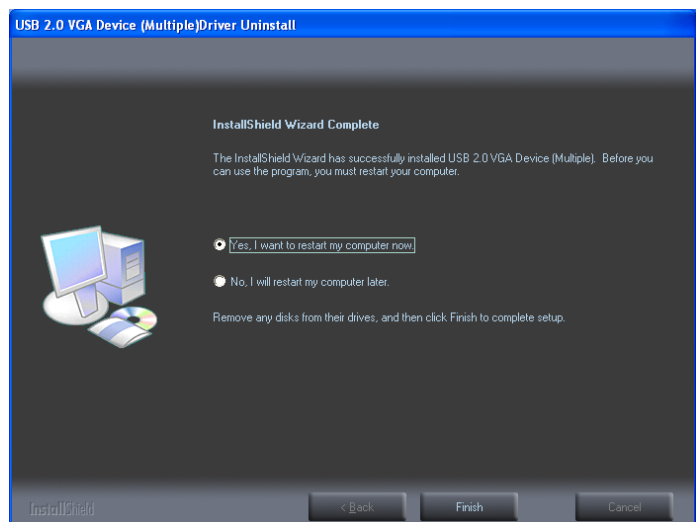
Step 2.
Unplug the USB 2.0 VGA Adapter and click "**OK**" to continue.
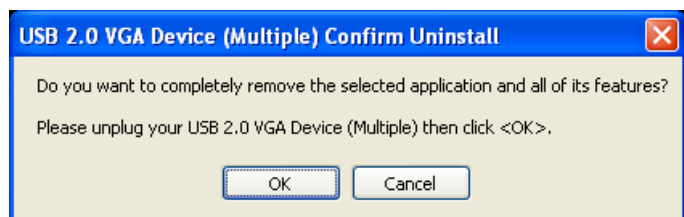
Step 3.
Select "**Yes, I want to restart my computer now**" and click "**Finish**" to reboot.

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

INSTALLATION ON WINDOWS 7

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).
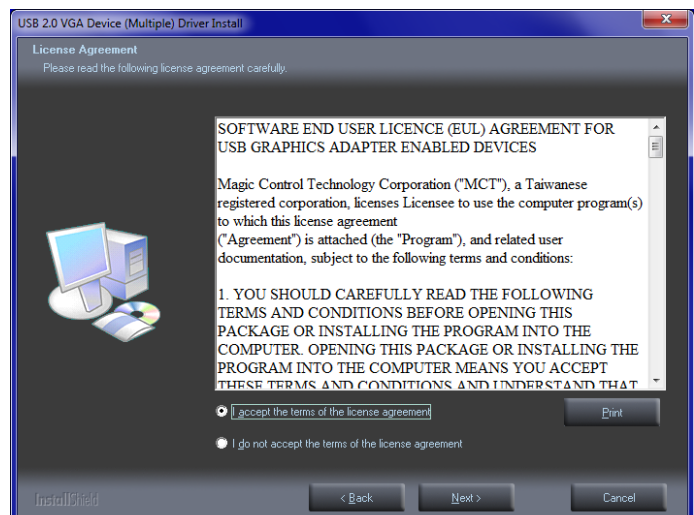
Step 2.
Driver Installation Wizard, click "**Next**" to continue.
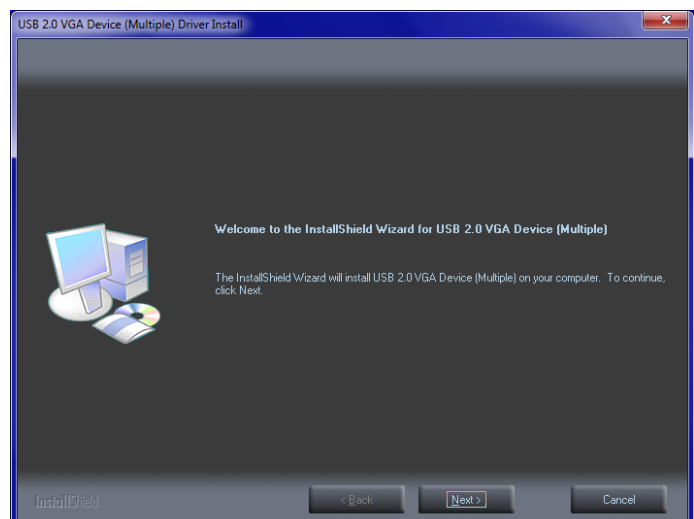
Step 3.
License Agreement; please review it and check "**I accept the terms of the license agreement.**"   Click "**Next**" to accept the License Agreement.
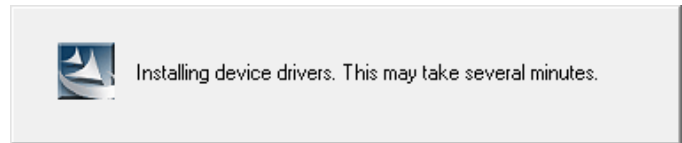

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Step 4.

Setup is searching for installed features…

*You may notice the screen flashes during hardware installation.   It is part of the normal process.*
※ When the Microsoft Windows Security warning dialogue box appears, please select "**Continue Anyway**" to continue with the driver installation.
*This will not affect the device driver installation and the device usage

Step 5.

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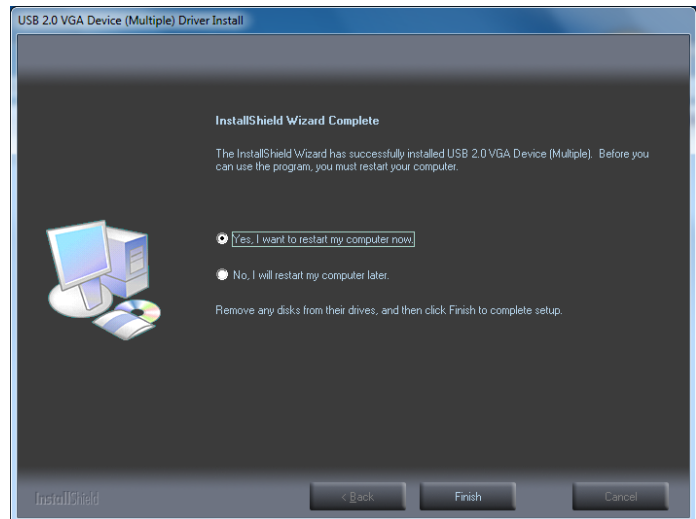

Step 6. (After system reboot)
Connect the external display device to the VGA (DB15) connector of the next USB 2.0 VGA Adapter and switch it on.

Then, plug the USB 2.0 VGA adapter into an available USB 2.0 port of your PC or notebook.   The hardware driver will begin automatically.

You may notice the screen flashes during hardware installation.   It is part of the normal process.
After the driver is configured, you may begin to use the USB 2.0 VGA Adapter with your display device.
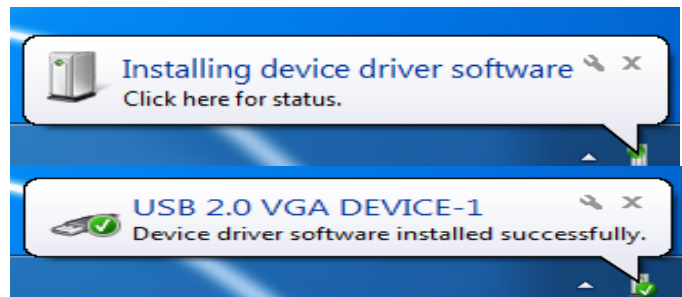
Step 7. INSTALLATION OF MULTIPLE USB 2.0 VGA ADAPTERS

Please plug the additional **USB 2.0 VGA ADAPTER** into another available USB 2.0 port of your PC or Notebook.   The setup process will begin automatically.   You may see below notification balloons for each additional USB 2.0 VGA Adapter.
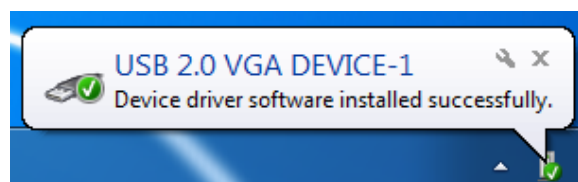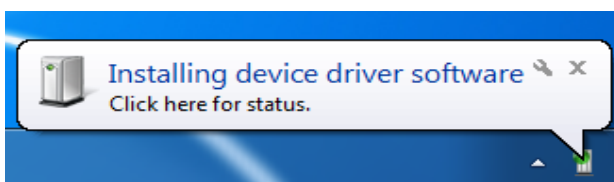
If the extended display come out with the blind screen, please right click on the desktop of your system, it will pop up a screen and select **"Screen resolution" (a),** or go to **"START"→ "Control Panel"→ "Appearance and Personalization"→ "Adjust screen resolution" (b).** Then, select **"Extend these displays" (c)** on the Display Property.
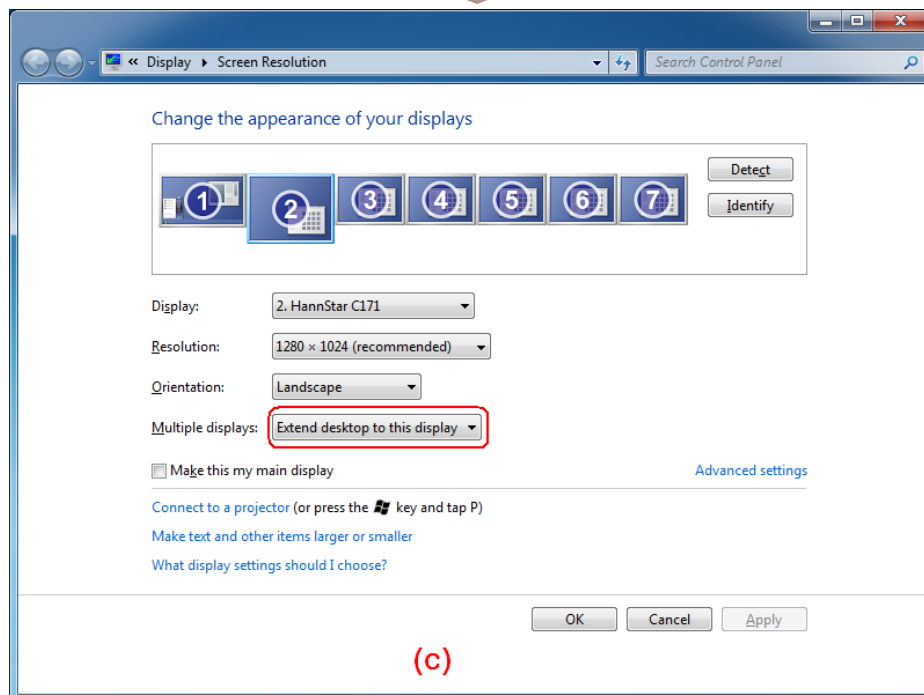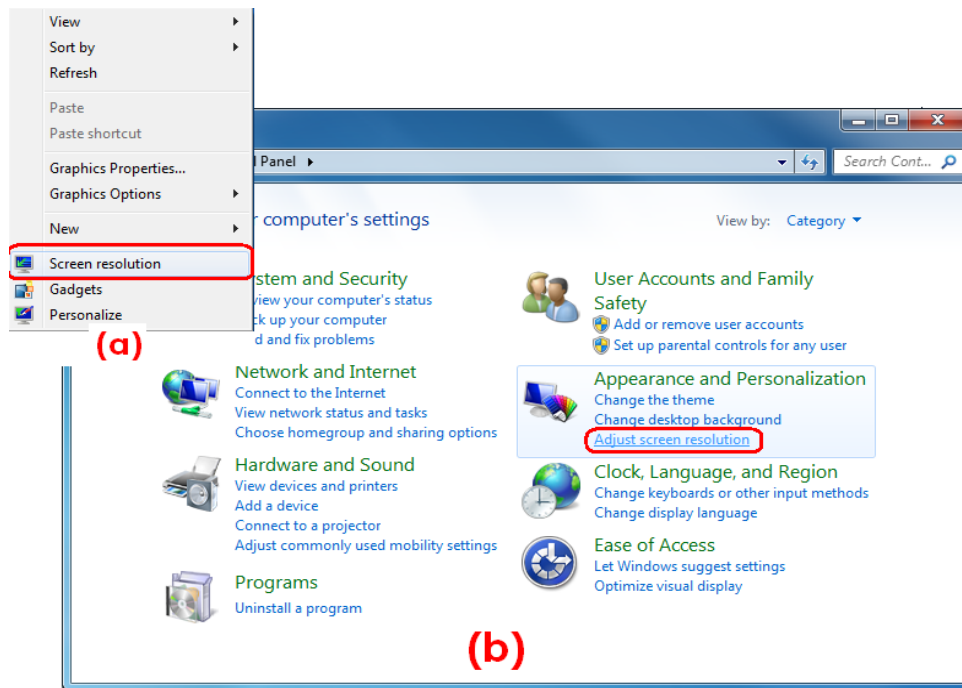
VERIFYING DEVICE DRIVER INSTALLATION

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 "**Universal Serial Bus controllers**".   It will show the new directions as below,
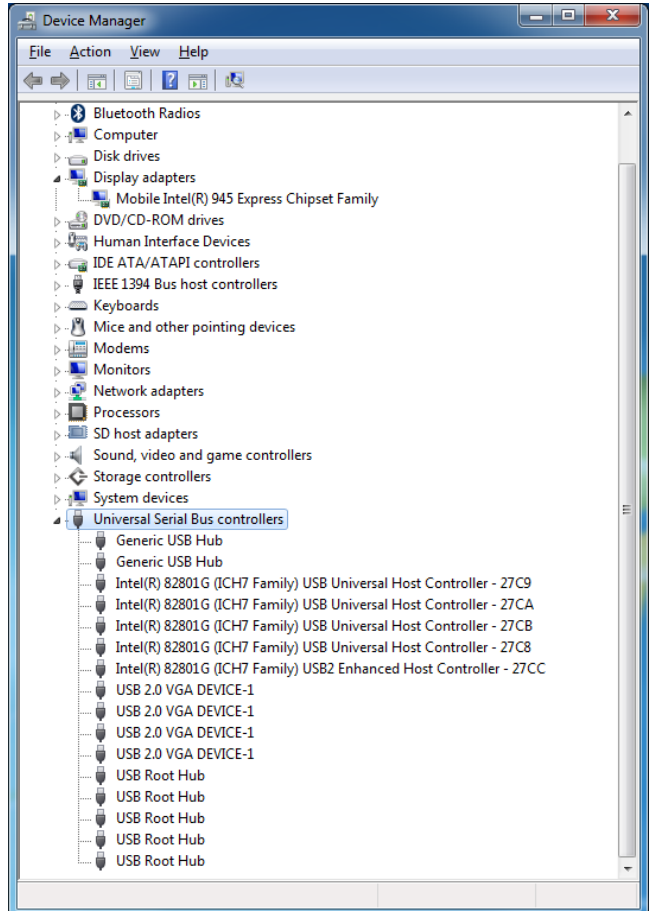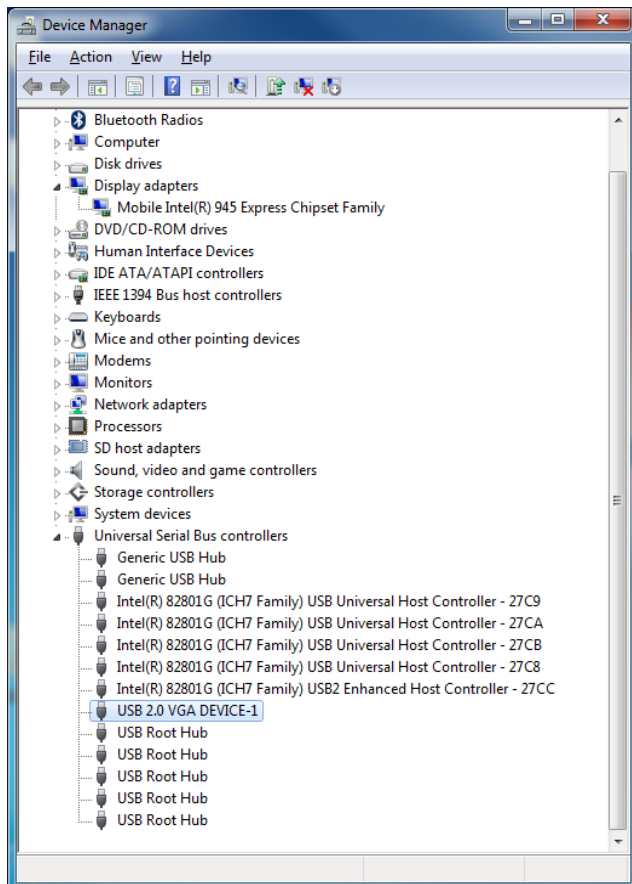
DEVICE DRIVER UN-INSTALLATION

Step 1.

◆ **Start menu**:
Please click "**Start**" → "**Control Panel**" → "**Program and Features**".

◆ **Classic Start menu:**
Please click "**Start**" → "**Settings**"→ "**Control Panel**" → "**Program and Features**".
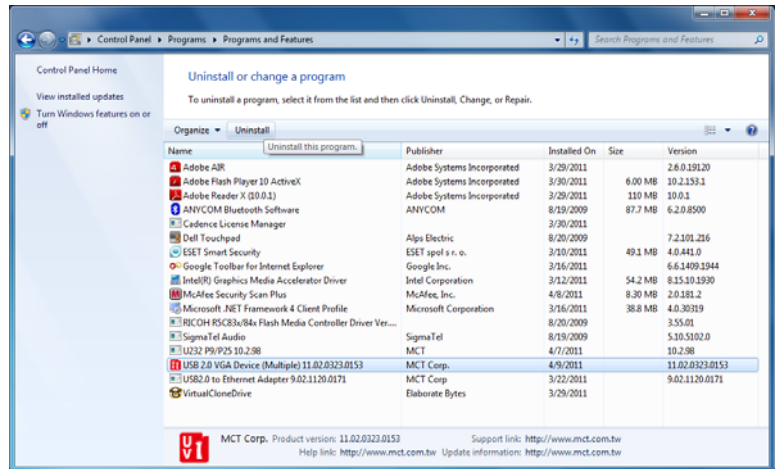
Select " **USB 2.0 VGA Device (Multiple) 11.xx.xxxx.0153** (driver version number)" item. Click "**Uninstall**" button.

Step 2.
Unplug the USB 2.0 VGA Adapter and click "**OK**" to continue.
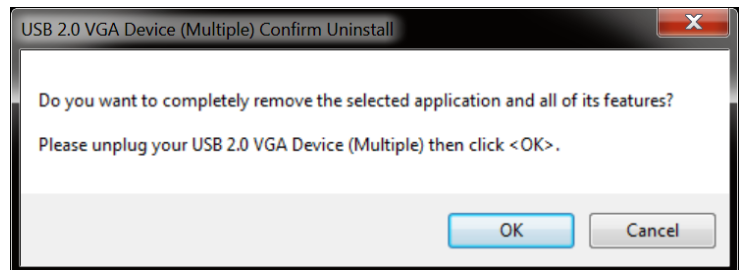
Step 3.
Select "**Yes, I want to restart my computer now**" and click "**Finish**" to reboot. After reboot, you will complete the driver un-installation.
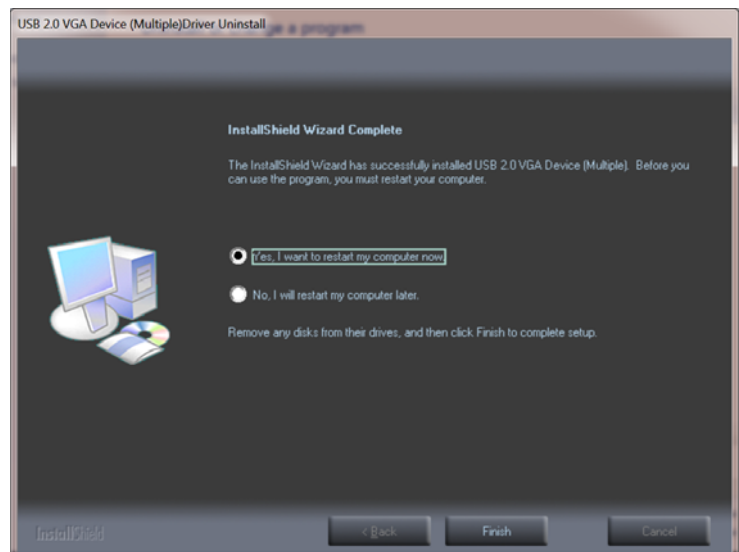
FUNCTION DESCRIPTION

This section describes several friendly functions provided by the **USB 2.0 VGA ADAPTER** designed to ease your single or multiple USB display experience.

ACCESS USB-VGA ADAPTER UTILITY

Make sure the USB 2.0 VGA ADAPTER is attached to the PC.

Look for these two icons ![icon] & ![icon] at the lower right toolbar on Windows 2000/XP/Vista or an icon ![icon] "Super Utility" on Windows 7.
Right-click these two icons to access the variety of functions associated to the device.

UTILITIES

➢ IDENTIFY MONITOR

Easy display identification via a serial number will be showed on the upper right corner of all attached display devices.

➢ MULTI-DISPLAY CONTROL PANEL

An unique feature to allow much quicker and simpler working experience under multi-display environment.   A series of hotkey to quickly move active window or cursor to the desired display device (either on-board or each USB Display enabled devices).

The default setting of hotkeys can be found on the Hotkey List of "Multi-Display Control Panel".

For example: Ctrl +3 means: to move the window to the Display 3.
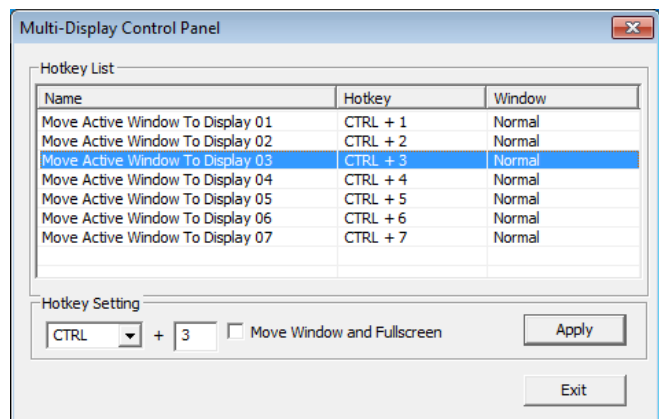
➢ **DISPLAY SETTINGS**

Fast access to the system "Display Settings".
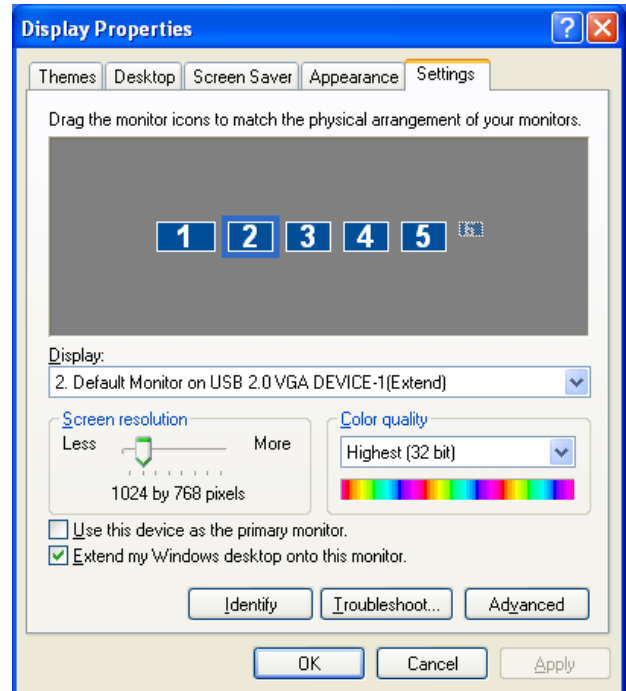
➢ **FIXED POSITION**

It remains the prior setting of display location after restart the computer.

*We recommend you to select the "Fixed Position" after setting the "Display location".

*Make sure to remove the seclection of "Fixed Position" before re-setting the new display location.
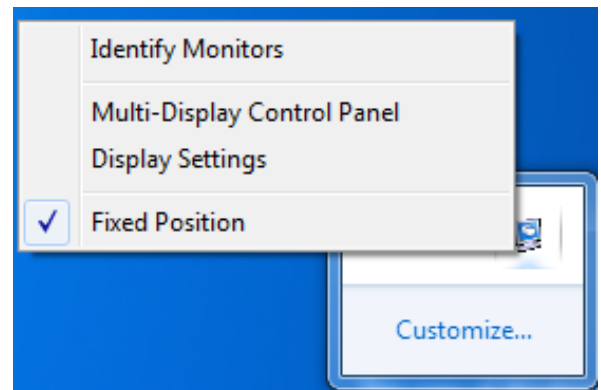
DISPLAY MODES

◆ **"EXTENDED" DISPLAY MODE (DEFAULT)**

A default display mode; this feature allows the attached USB Display enabled display device to work as "Extended" display of the on-board screen. The extended working space improves work efficiency.

You may change the relative position of this extended USB Display enabled display device under the Display Settings.
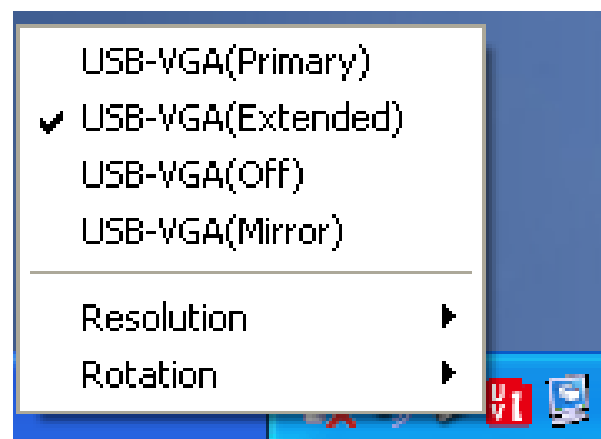
◆ **"MIRROR" DISPLAY MODE**

This feature allows the same contents of on-board screen to be displayed (mirroring) to the USB Display enabled display device.

The screen resolution setting on the USB Display enabled device will follow the on-board screen's resolution. For example, if the on-board screen's resolution is 1024x768x32bit, and the USB Display enabled device will set as the same resolution.
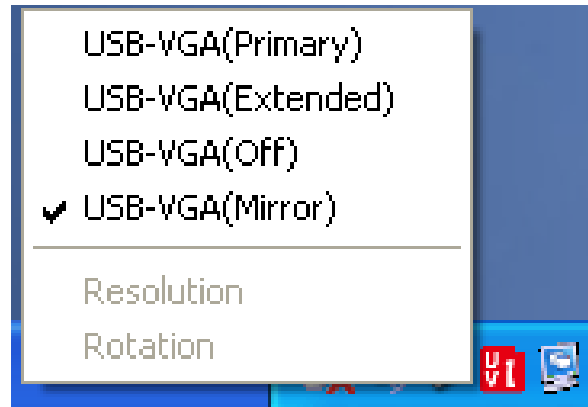
◆ **"PRIMARY" DISPLAY MODE**

A unique feature to allow USB Display enabled device to act as the main working display. The USB 2.0 VGA Adapter will work as the main graphics adapter of the system. The on-board screen will work as the extended display.
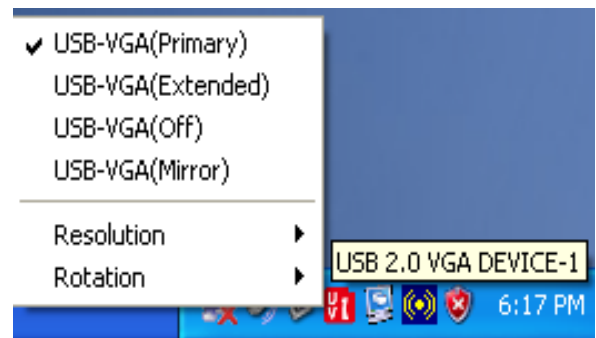
*Please be advised that some display utility and drivers that shipped with certain AGP and built-in display adapters may prevent this option from working on some systems. You may disable the other utility program (usually found in the same toolbar located on the bottom right hand corner) to make this function work properly.

◆ **"OFF" DISPLAY MODE**

This option disables the video output from **USB 2.0 VGA ADAPTER**.

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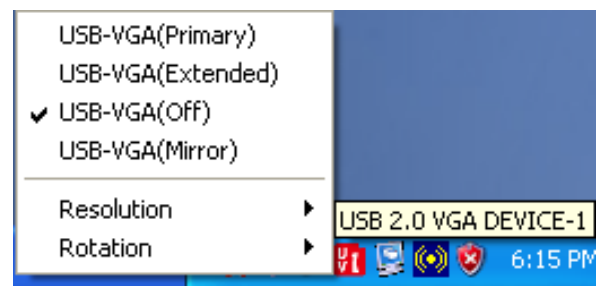
Q&A

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

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

Known Issues

- WDDM driver resolves most of video playback compatibility issue under Windows 7.
- Direct 3D is not supported under 2000/XP/Vista.   It supported on Windows 7 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

- 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 2.0 VGA Device (Multiple) 11.xx.xxxx.0153 (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

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

Disclaimer

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