

# USB 2.0 DVI-I ADAPTER

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USB 2.0 EXTERNAL GRAPHICS CARD WITH DVI INTERFACE

USER MANUAL

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## INTRODUCTION

Thank you for purchased the **USB 2.0 DVI-I ADAPTER**. The USB 2.0 DVI-I 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 VGA: 1920 x 1200 / DVI: 1600 x 1200
- ◆ USB 2.0 compliant and Plug-and-Play USB connectivity
- ◆ VGA and DVI outputs compliant
- ◆ 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 DVI-I ADAPTER
- ◆ USB 2.0 cable
- ◆ DVI to VGA connector
- ◆ CD (User Manual, Driver and Utility)
- ◆ Quick Installation Guide

## SUPPORTED COMMON DISPLAY RESOLUTION:

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

## TECHNICAL SPECIFICATIONS:

Operating System	Windows 2000/XP/Vista/7
PCB Version	UDA200 Version:1.1
USB 2.0 Cable	Length: 100± 5 cm, ( min B -A type)
DVI connector	DVI-I (DVI Digital & Analog) Dual Link ( female)
Case Material	ABS
Power Source	Bus Powered
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 DVI-I Adapter once it's connected. Please check your operating system and refer to the appropriate installation procedure to begin installing the device driver.

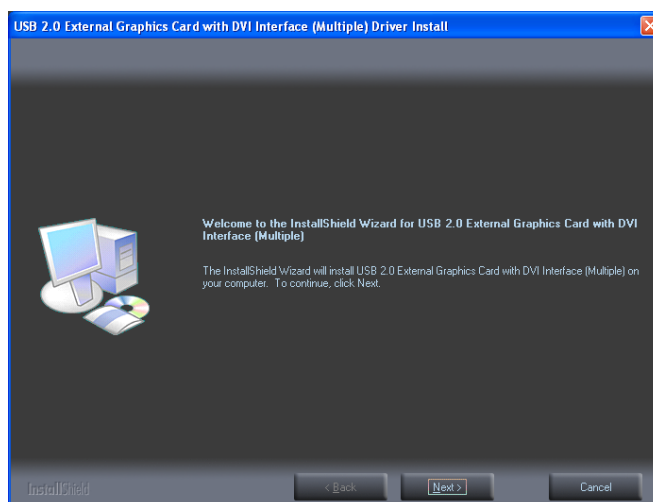
This section illustrates the simple device driver installation procedure for computer running Windows 2000/XP/Vista operating system. **Please make sure the USB 2.0 DVI-I Adapter is unplugged from your PC or Notebook before executing the setup program.**

### 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).

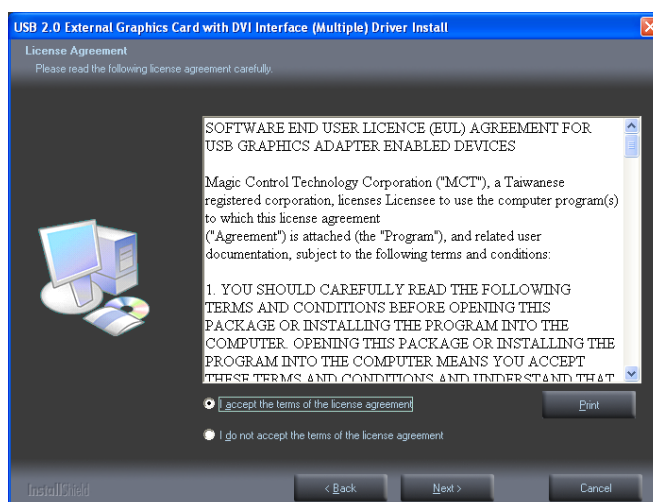
### Step 2.

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



### Step 3.

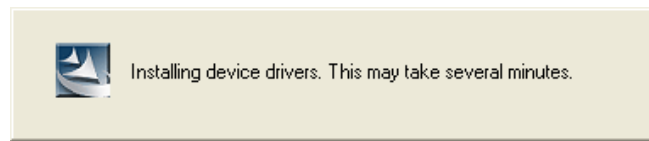
License Agreement; please read it and select "**I accept the terms of the license agreement.**" Click "**Next**" to accept the License Agreement.



#### Step 4.

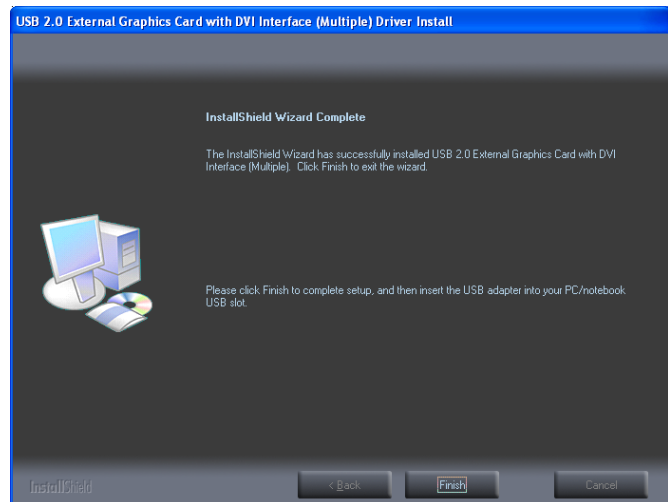
Installing device drivers...

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



#### Step 5.

Click “**Finish**” to exit the Driver Wizard. Then, insert the USB 2.0 DVI-I Adapter into an available USB 2.0 port of your PC or Notebook.



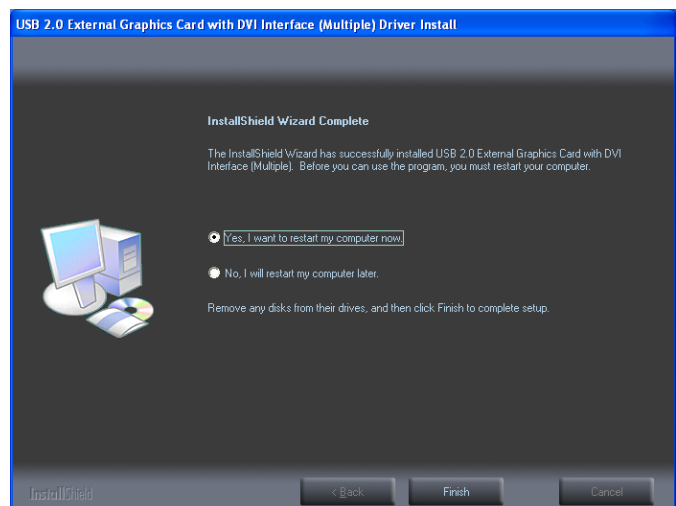
#### Step 6a.

### INSTALLATION OF SINGLE USB 2.0 DVI-I ADAPTER

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

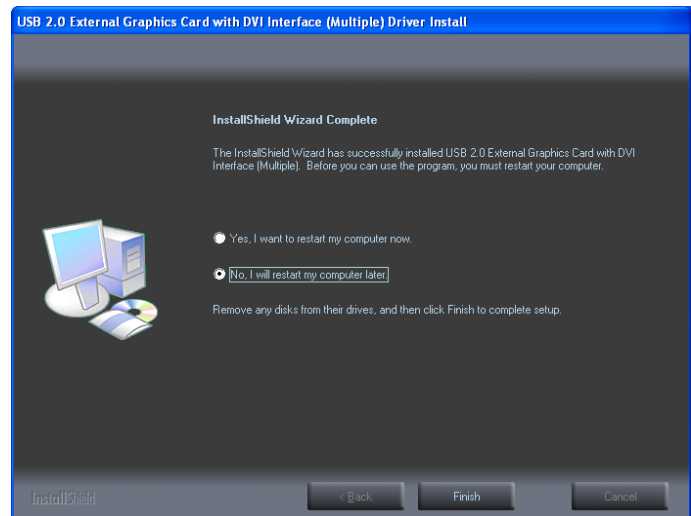
Connect the external display device (monitor/projector) to the DVI connector of **USB 2.0 DVI-I Adapter** and switch it on.

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

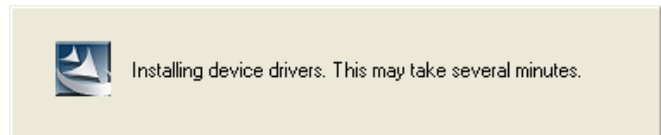


**Step 6b.****INSTALLATION OF MULTIPLE USB 2.0 DVI-I ADAPTERS**

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

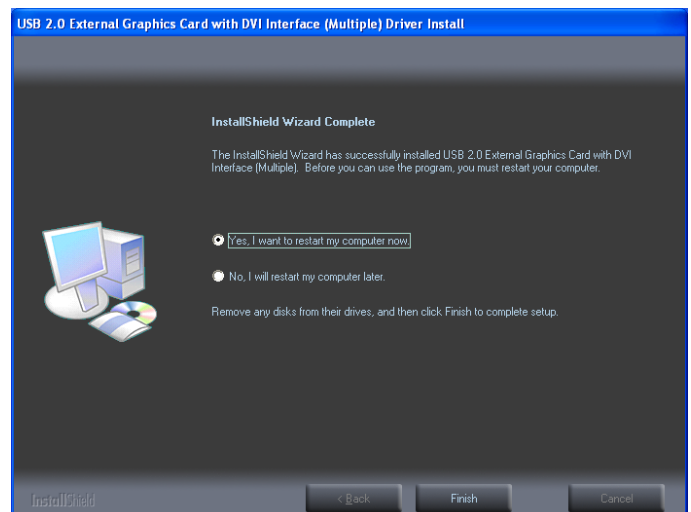


- b. Connect another display device to the DVI connector of next USB 2.0 DVI-I Adapter and switch it on. Then, plug the USB 2.0 DVI-I Adapter into next available USB 2.0 port of your computer.
- c. The driver installation will be proceeding automatically.  
*\*You may notice the screen flashed during hardware installation. It is part of the normal process.*



- d. If you wish to install additional USB 2.0 DVI-I 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.



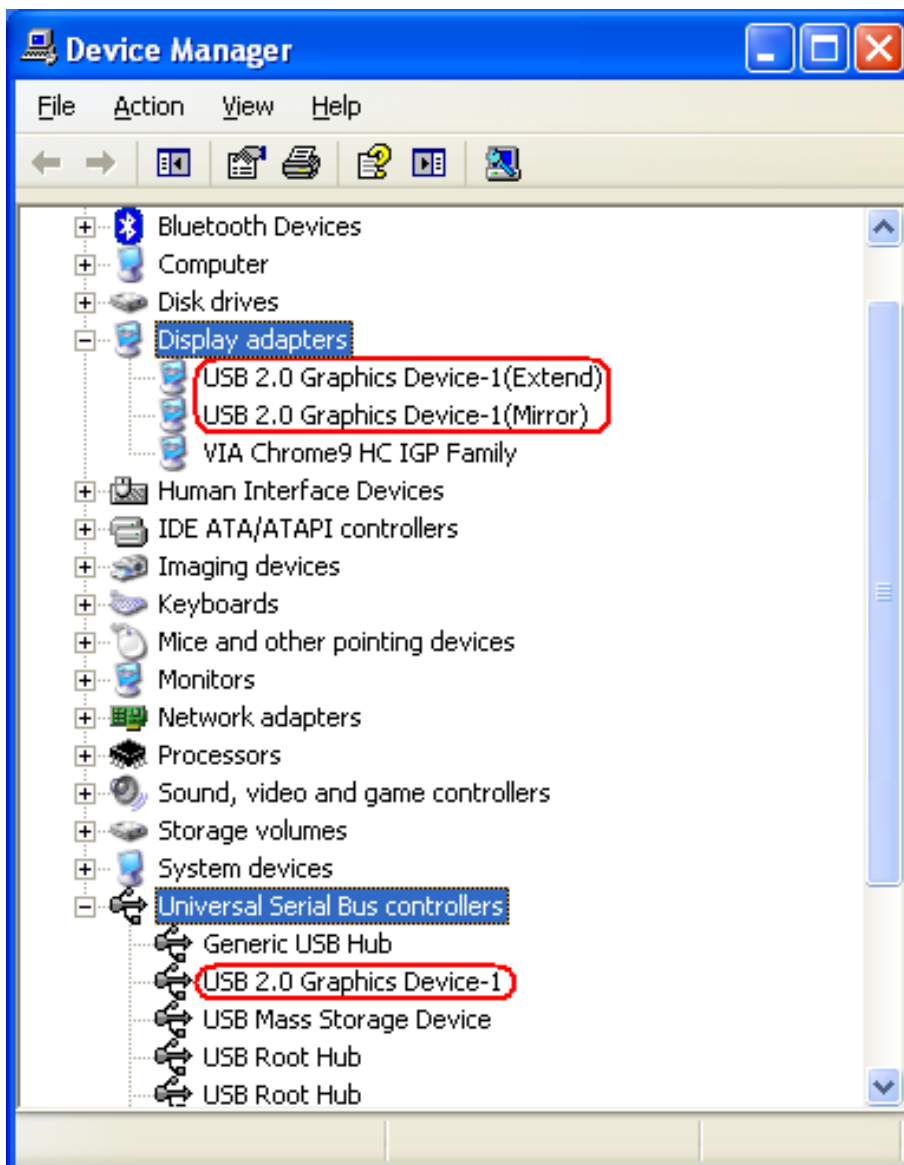
## VERIFYING DEVICE DRIVER INSTALLATION

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

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

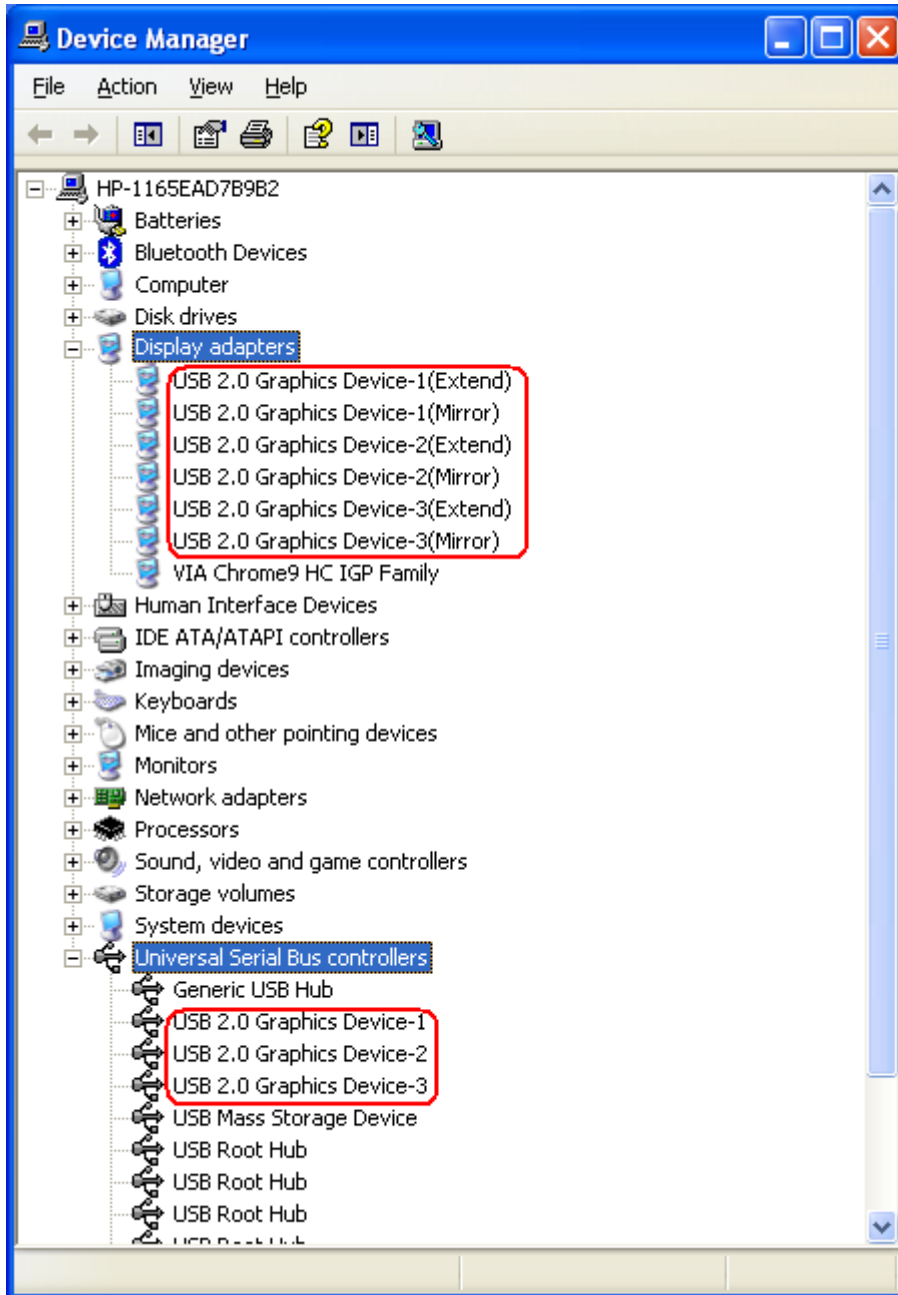
Plug-in the USB 2.0 DVI-I Adapter, then double click “**Display adapters**”, and “**Universal Serial Bus controllers**”. It will show the new directions as below,

### ※ SINGLE USB 2.0 DVI-I ADAPTER INSTALLATION ON THE COMPUTER





## ※ MULTIPLE USB 2.0 DVI-I ADAPTERS INSTALLATION ON THE COMPUTER



## DEVICE DRIVER UN-INSTALLATION

### Step 1.

**Start menu:**

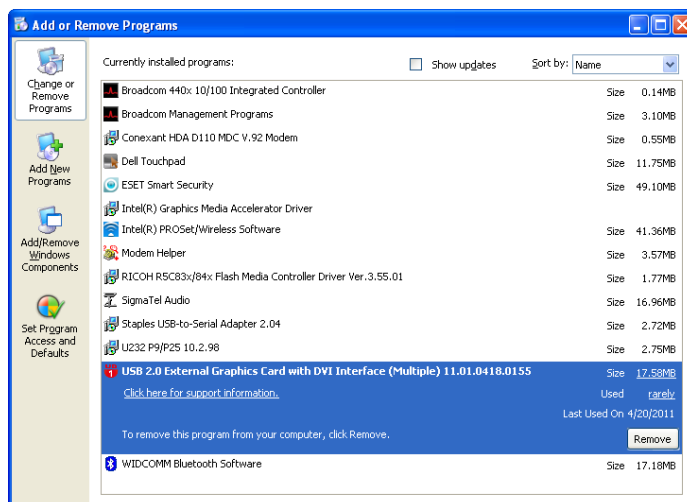
Click “Start” → “Control Panel” → “Add or Remove Programs”.

**Classic start menu:**

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

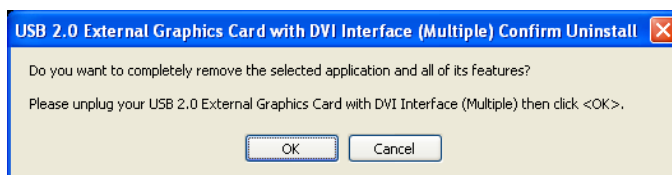
Select “USB 2.0 External Graphics Card with DVI Interface (Multiple)

11.x.x.xxxx.0155 (driver version number)”. Click “Remove” button.



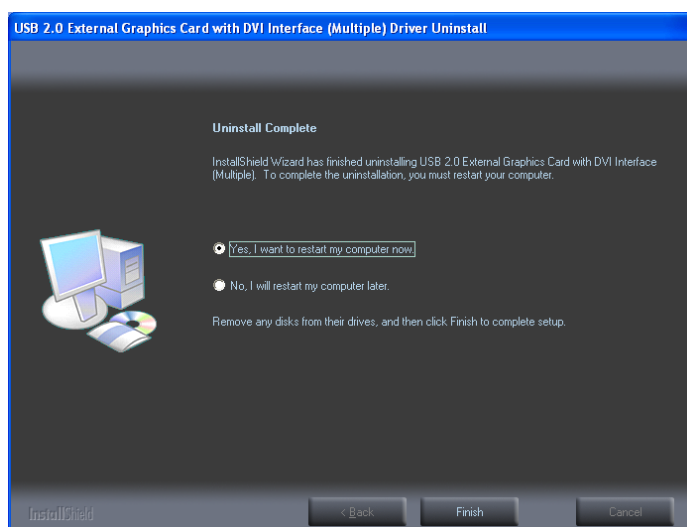
### Step 2.

Unplug the USB 2.0 DVI-I 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.

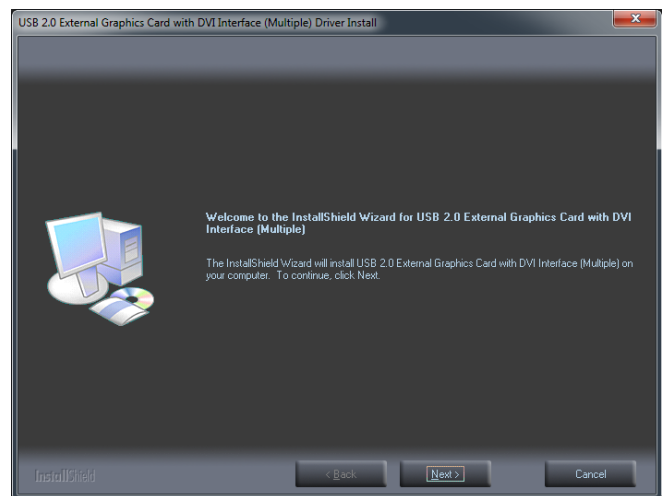
This section illustrates the simple device driver installation procedure for computer running Windows 7 operating system. **Please make sure the USB 2.0 DVI-I Adapter is unplugged from your PC or Notebook before executing the setup program.**

### 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).

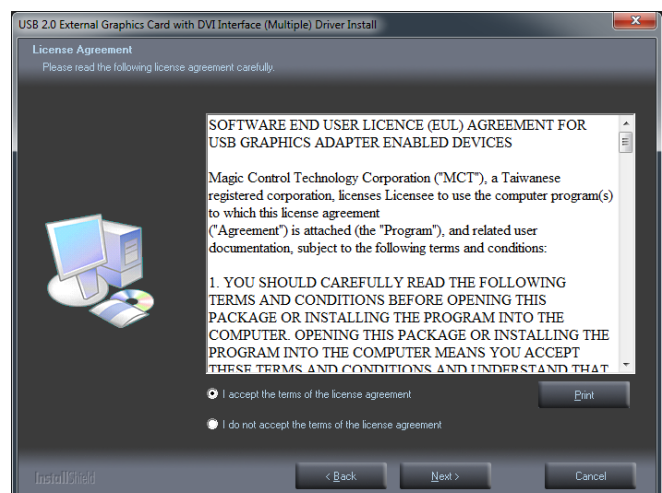
### Step 2.

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



### Step 3.

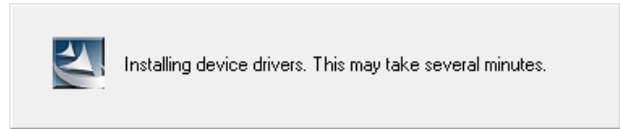
License Agreement; please review it and check "**I accept the terms of the license agreement.**" Click "**Next**" to accept the License Agreement.



#### Step 4.

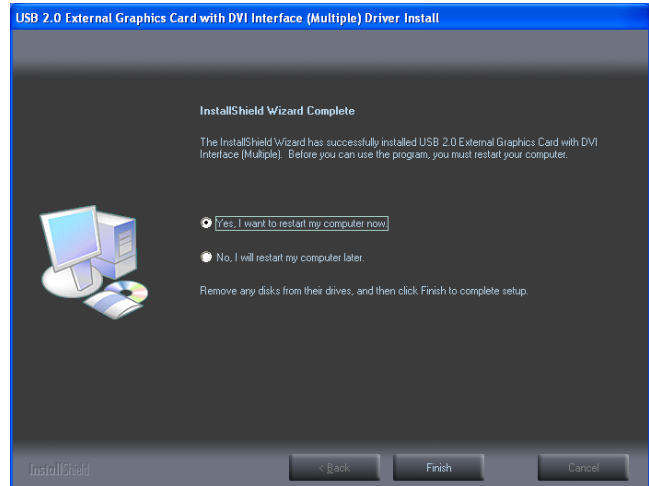
Installing device drivers...

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



#### Step 5.

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

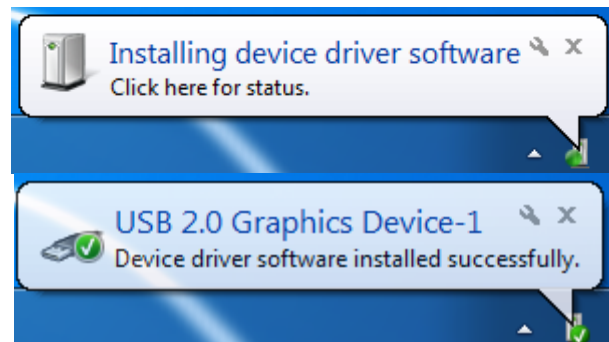


#### Step 6. (After system reboot).

Connect the external display device (monitor/projector) to the DVI connector of **USB 2.0 DVI-I Adapter** and switch it on.

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

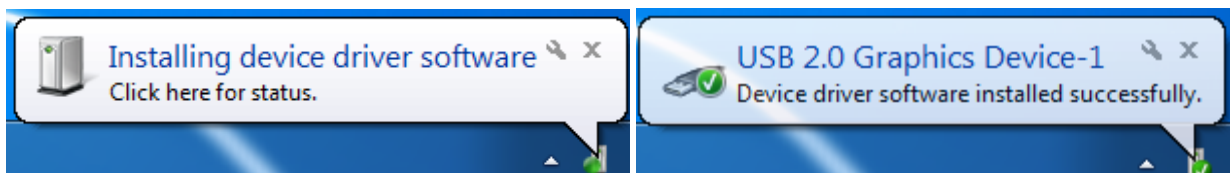
*\*You may notice the screen flashes during hardware installation. It is part of the normal process.*



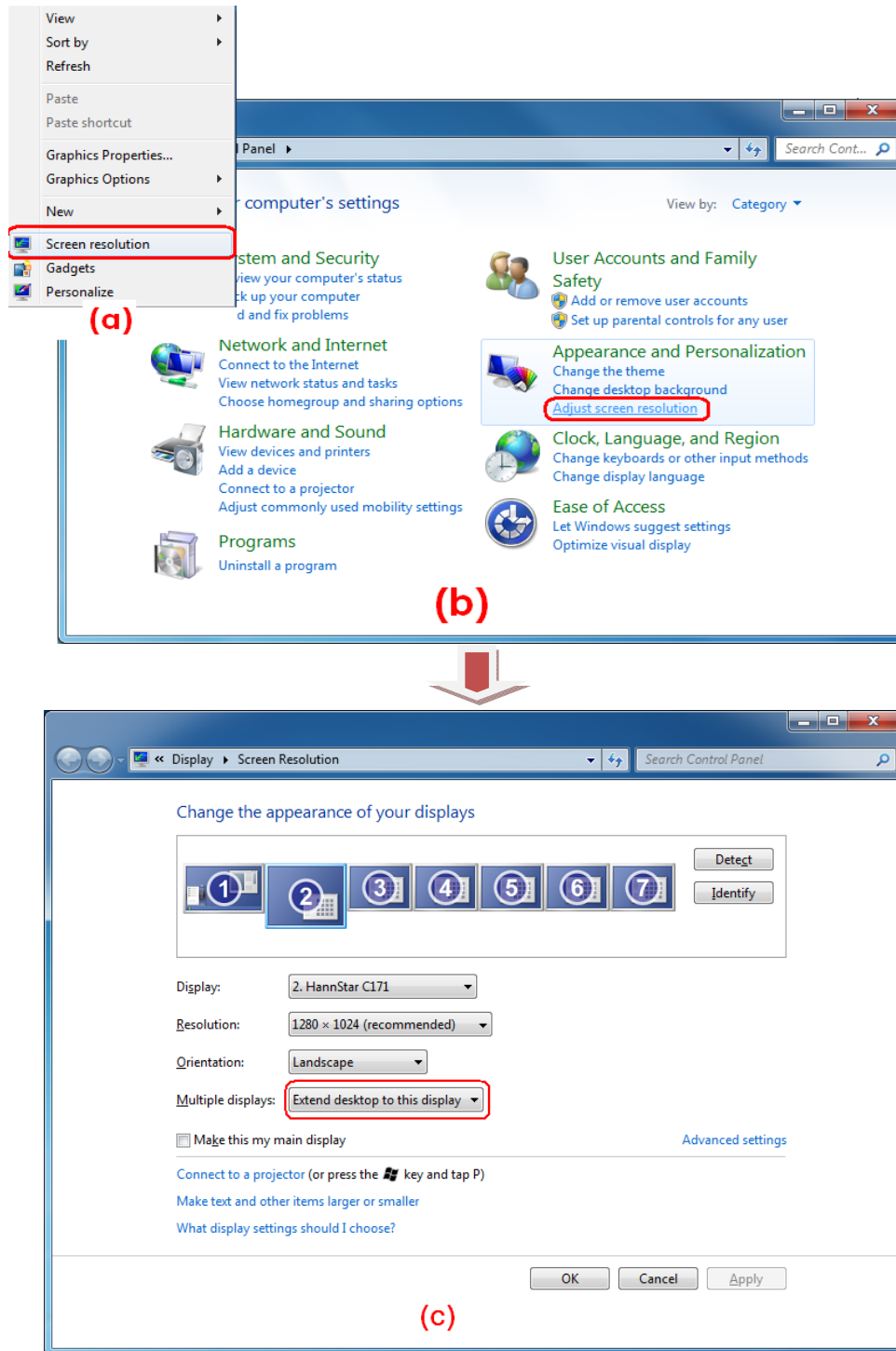
After the driver is configured, you may begin to use the USB 2.0 VGA Adapter with your display device.

#### Step 7. INSTALLATION OF MULTIPLE USB 2.0 DVI-I ADAPTERS

Please plug the additional **USB 2.0 DVI-I 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 DVI-I 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.



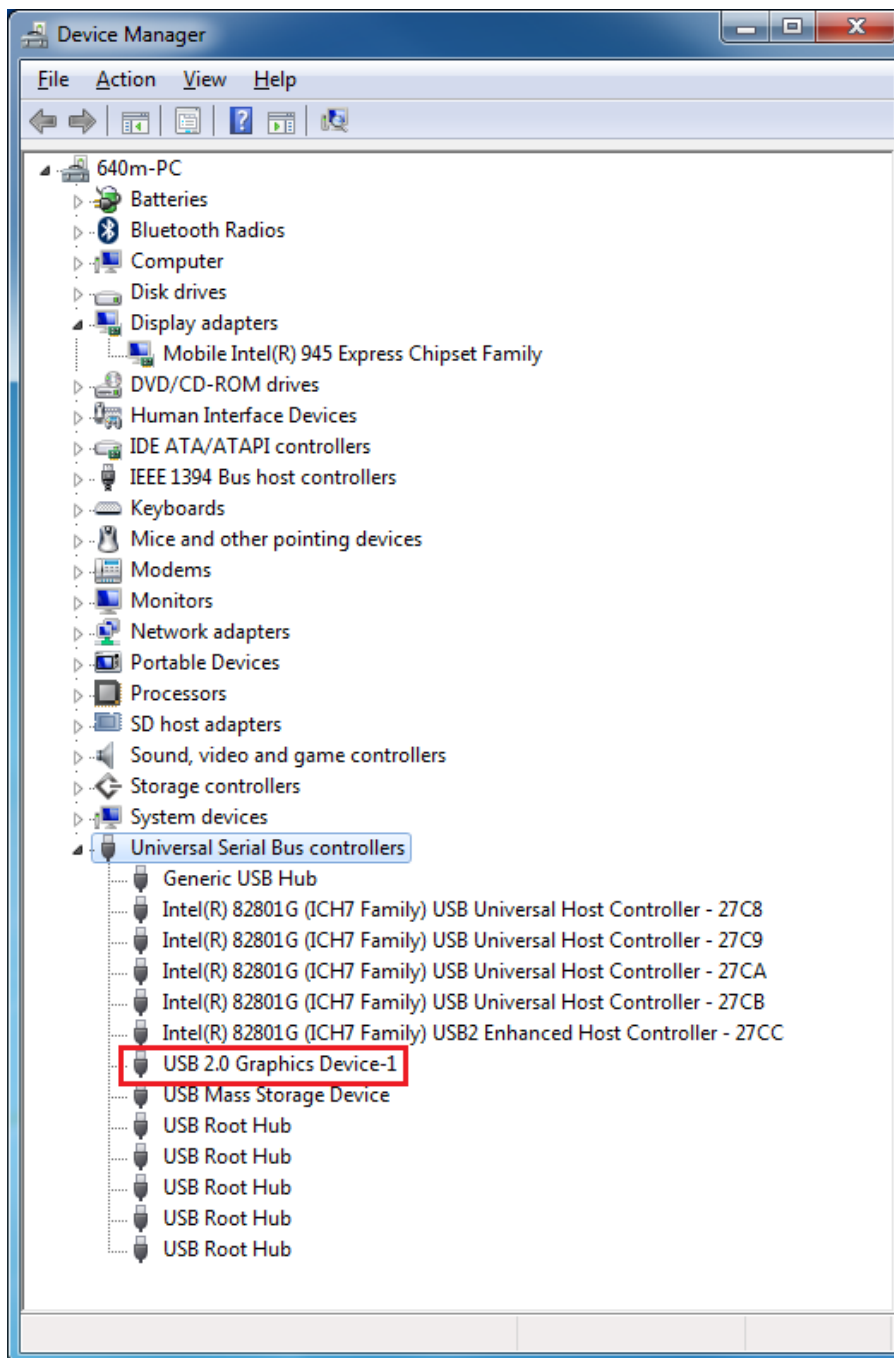
## VERIFYING DEVICE DRIVER INSTALLATION

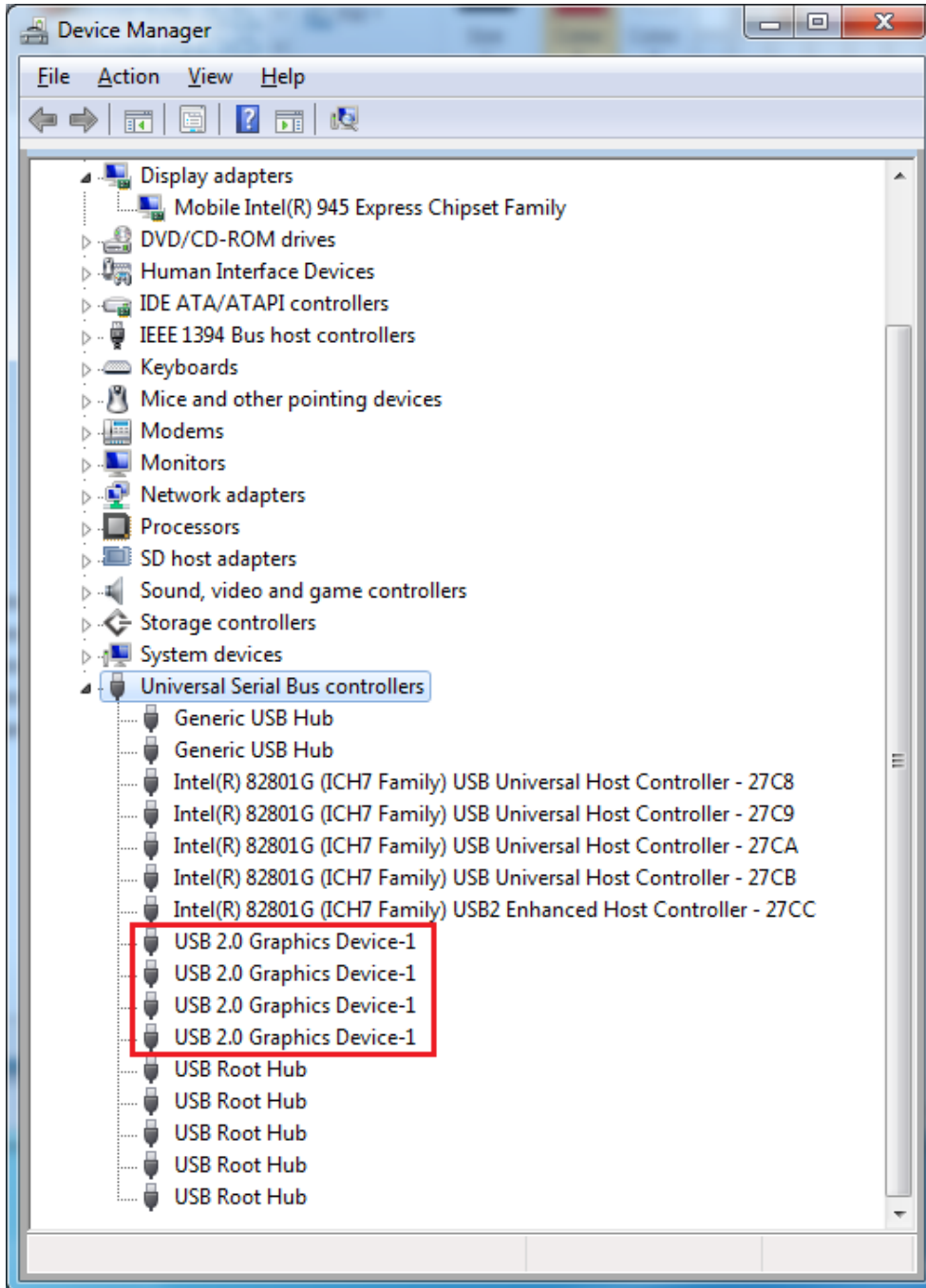
The following procedure allows you to verify the device driver installation.

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

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

### \*SINGLE USB 2.0 DVI-I ADAPTER INSTALLATION ON THE COMPUTER



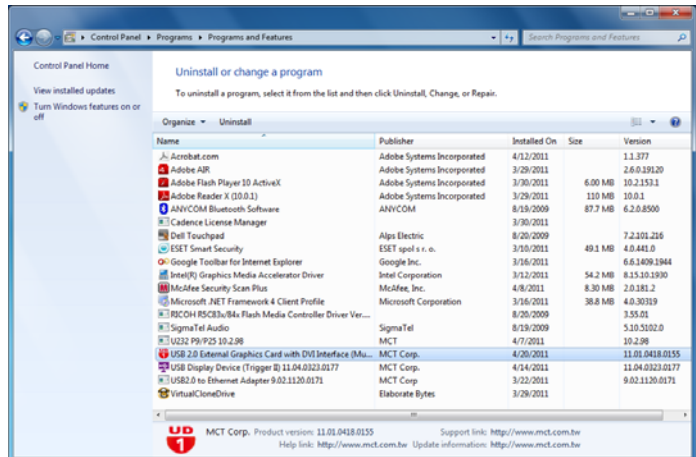
**\*MULTIPLE USB 2.0 DVI-I ADAPTERS INSTALLATION ON THE COMPUTER**



## DEVICE DRIVER UN-INSTALLATION

### Step 1.

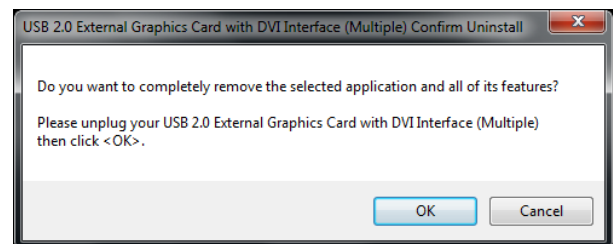
- ◆ **Start menu:**  
Please click “Start” → “Control Panel” → “Program and Features”.
- ◆ **Classic Start menu:**  
Please click “Start” → “Settings” → “Control Panel” → “Program and Features”.



Select “ USB 2.0 External Graphics Card with DVI Interface (Multiple) 11.x.x.xxxx.0155 (driver version number)” item. Click “Uninstall” button.

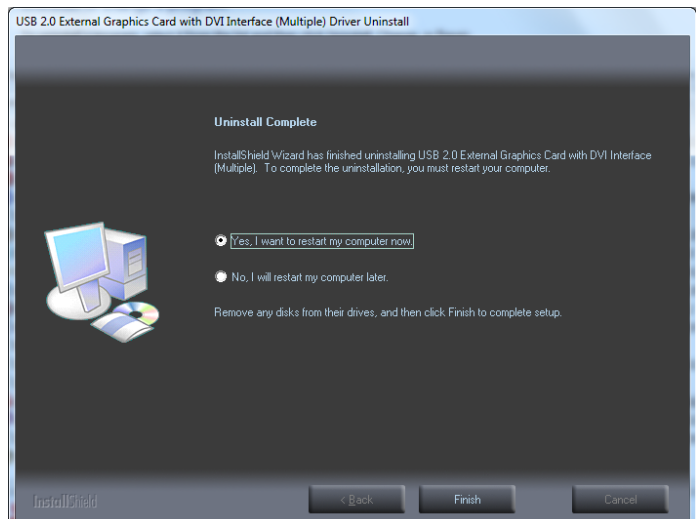
### Step 2.

Unplug the USB 2.0 DVI-I 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 DVI-I Adapter designed to ease your single or multiple USB display experience

### ACCESS USB-VGA ADAPTER UTILITY

Make sure the USB 2.0 DVI-I ADAPTER is attached to the PC.

Look for these two icons  &  at lower right toolbar on Windows 2000/XP/Vista, or an 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.

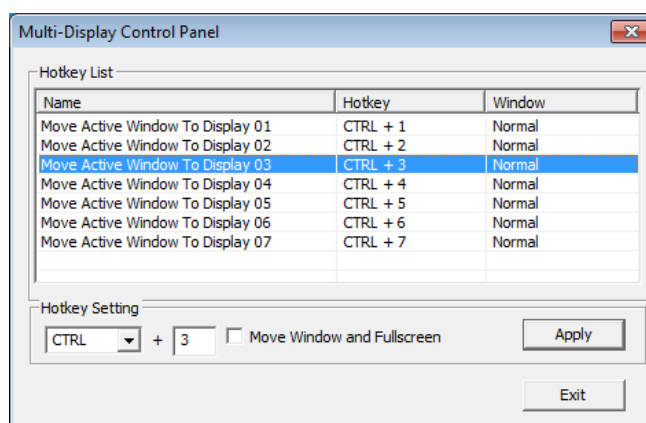


### ➤ MULTI-DISPLAY CONTROL PANEL

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).

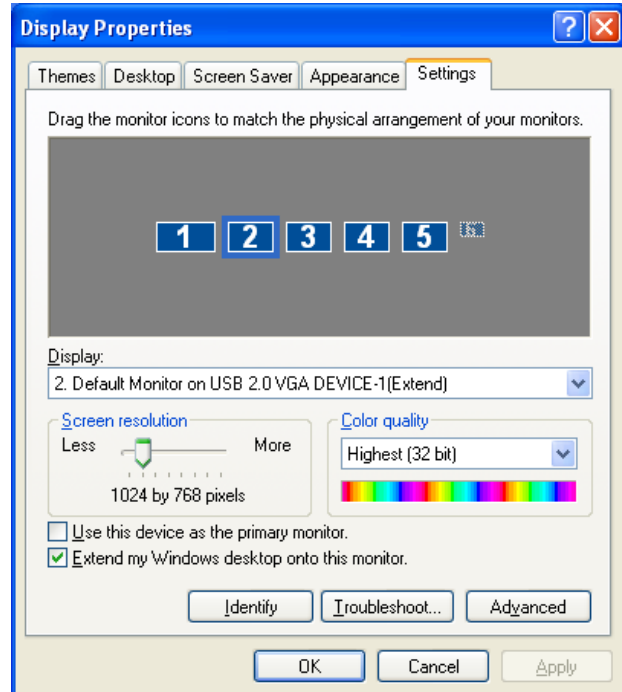
The default setting of hotkeys can be found on the Hotkey List of "Multi-Display Control Panel".

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



## ➤ DISPLAY SETTINGS

Fast access to the system “**Display Settings**”.

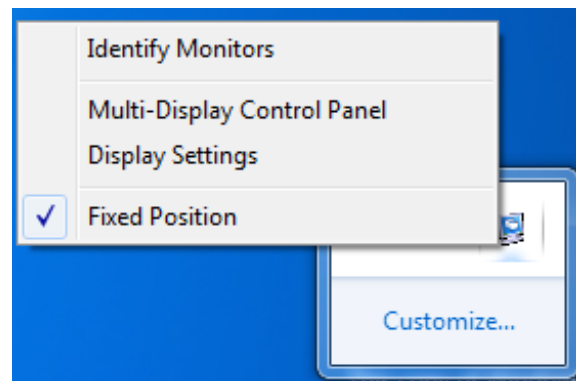


## ➤ FIXED POSITION

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”.

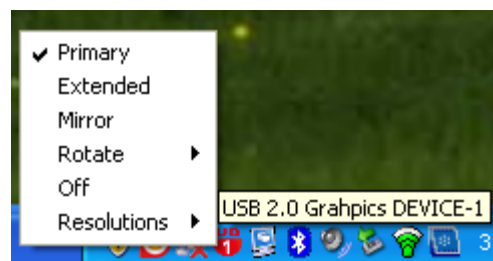
\*Make sure to remove the selection of “Fixed Position” before re-setting the new display location.



## DISPLAY MODES

### “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 DVI-I Adapter will now act as the primary Windows desktop.

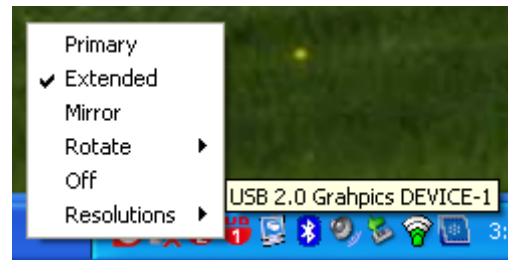


\*Please be advised that some display utility and drivers that shipped with certain AGP and built-in display adapters may prevent this option from working on some systems.

**“EXTENDED” MODE (DEFAULT)**

A default display mode; this feature allows the attached USB 2.0 DVI-I Adapter enables 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 under the Display Settings.

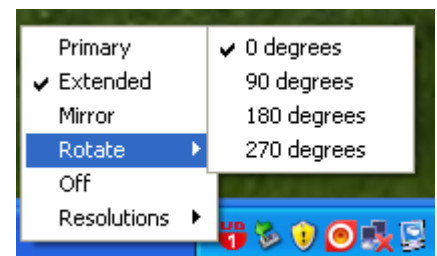
**“MIRROR” MODE**

By setting this mode, the Windows desktop will be mirrored / replicated to the secondary CRT/LCD monitor.

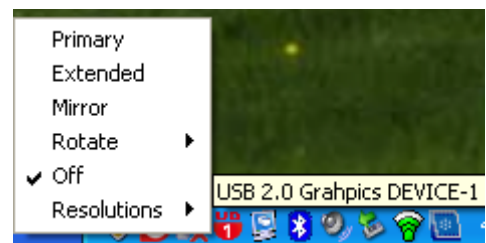
The screen resolution setting on the secondary monitor will follow the primary screen's resolution. For example, if the primary resolution is 1024x768x32bit, and the secondary monitor's resolution will be the same. But if the selected resolution setting is not supported by the primary screen, a warning dialogue box will be displayed and the suggested screen resolution will be shown.

**“ROTATION” MODE**

4 options available: “0°, 90°, 180°, 270°” under the Extended or Primary display modes. It is a useful function for some rotatable display device.

**“OFF” MODE**

This option disables the USB 2.0 DVI-I Adapter on the system.



## Q&A

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

**Q:** Why can't I make the USB 2.0 DVI-I 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 Graphics 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 resolved most of video playback compatibility issue under Windows 7.
- Direct 3D is not supported under Windows 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](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 External Graphics Card with DVI Interface (Multiple) 11.xx.xxxx.0155 (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 FCC rules Part 15 Subpart B § 15.109/15.107 Class B. 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 Class B (2006), EN 55024 (1998+A1:2001+ A2:2003),  
IEC/EN 61000-3-2 (2006), IEC/EN 61000-3-3 (1995+A1 :2001+A2 :2005),  
(IEC/EN 61000-4-2 (1995+A1 :1998+A2 :2001)/-3 (2006)/-4(2004)/-5(2006)/  
-6 (1996+A1 : 2001)/-11 (2004)

### C-Tick

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

EN 55022 (2006), AS/NZS CISPR22 © IEC: 2005.

### VCCI

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

CISPR22 © IEC: 2005.

### Disclaimer

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