USB 2.0 DVI-I ADAPTER

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
- Support the multiple display devices on one PC
- Multi graphics display modes Primary, Extended, Mirror and Rotation
- USB 2.0 compliant and Plug-and-Play USB connectivity
- VGA and DVI outputs compliant

SYSTEM REQUIREMENTS

- Pentium 4 / Celeron Family, AMD K6 / Athlon / Duron Family. 1.0GHz or higher processor
- One on one display attaching structure: 256MB RAM or higher; Multi-display attaching structure: 512MB RAM or higher (Higher memory recommended for optimal performance)
- Available USB 2.0 port
- Windows 2000 SP4 / Windows XP SP2 / Windows Vista

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

Νοτε

- Unplug the USB 2.0 VGA Adapter to 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 DVI-I Adapters on one PC.
- Connect the display device to the DVI connector of USB 2.0 DVI-I Adapter and switch it on before plugging into an available USB 2.0 port of PC or Notebook.
- DO NOT reboot the computer until all of USB 2.0 DVI-I Adapters are installed.

DEVICE INSTALLATION ON WINDOWS 2000/XP

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

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.

Click "**Finish**" to exit the Driver Wizard.



Step 5.

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.

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.

After reboot the computer, the extended display will be shown on the 2^{nd} 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 installation of next USB 2.0 DVI-I Adapter.



- b. Connect another display device to the DVI connector of next USB 2.0 DVI-I Adapter and switch it on.
- c. Plug the USB 2.0 DVI-I Adapter into next available USB 2.0 port of your PC or Notebook. The driver installation will be proceeding automatically.
- 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 device.



VERIFYING DEVICE DRIVER INSTALLATION

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

Please right click "My Computer" \rightarrow "Properties" \rightarrow "Hardware" \rightarrow "Device Manager". Please double click "**Display adapters**", and "**Universal Serial Bus controllers**".

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

🔜 Computer Management	
📃 File Action View Window Help	
🗄 🐳 Disk drives	_
🖻 📲 Display adapters	_
Mobile Intel(R) 945GM Express Chipset Family	
USB 2.0 Graphics Device-1(Extend)	
USB 2.0 Graphics Device-1(Mirror)	
Hand Human Interface Devices	
The IDE ATA/ATAPI controllers	
E S IEEE 1394 Bus host controllers	
🗄 💩 Keyboards	
🗄 🖑 🐚 Mice and other pointing devices	
🗄 🦣 Modems	
🗄 📲 📴 Monitors	
∰ Network adapters	
E- R Processors	
	=
Hinton Storage volumes	
Here System devices	
E- C Universal Serial Bus controllers	
The Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27C8	
🕰 Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27C9	
🛶 🕰 Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27CA	
🕰 Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27CB	
🛶 Intel(R) 82801G (ICH7 Family) USB2 Enhanced Host Controller - 27CC	
USB 2.0 Graphics Device-1	
USB Mass Storage Device	
USB Root Hub	
USB Root Hub	
Ya	~

*** MULTIPLE USB 2.0 DVI-I ADAPTER INSTALLATION ON THE COMPUTER**

📇 Computer Management	
📃 File Action View Window Help	
🗄 🥪 Disk drives	~
Mobile Intel(R) 945GM Express Chipset Family	
USB 2.0 Graphics Device-1(Extend)	
USB 2.0 Graphics Device-1(Mirror)	
USB 2.0 Graphics Device-2(Extend)	
USB 2.0 Graphics Device-2(Mirror)	
USB 2.0 Graphics Device-3(Extend)	
DVD/CD-ROM drives	
🗄 🖾 Human Interface Devices	
E G IDE ATA/ATAPI controllers	
H way IEEE 1399 Bus nost controllers	
E Modems	
🗄 📲 Monitors	
Brossesser	
H	=
🗄 😼 System devices	
🖻 🍓 Universal Serial Bus controllers	
→ Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27C8	
Titel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27C4	
Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27CB	
Intel(R) 82801G (ICH7 Family) USB2 Enhanced Host Controller - 27CC	
USB 2.0 Graphics Device-1	
USB 2.0 Graphics Device-2	
USB 2.0 Graphics Device-3	
USB Root Hub	
USB Root Hub	
USB Root Hub	
Sector Hub	~

DEVICE DRIVER UN-INSTALLATION

Please make sure the USB 2.0 DVI-I Adapter is **unplugged** to your PC or Notebook before executing the device driver un-installation program.

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) driver version no." item. 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 uninstallation.



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

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.

USB 2.0 External Graphics Card with DVI Interface (Multiple) Driver Install		
License Agreement Please read the following license agreement carefully.		
SOFTWARE END USER LICENCE (EUL) AGREEMENT FOR USB GRAPHICS ADAPTER ENABLED DEVICES		
Magic Control Technology Corporation ("MCT"), a Taiwanese registered corporation, licenses Licensee to use the computer program (s) to which this license agreement ("Agreement") is attached (the "Program"), and related user documentation, subject to the following terms and conditions:		
 I accept the terms of the license agreement Print 		
InstallShield		

Step 4.

Setup is searching for installed features...



Setup is searching for installed features...

Step 5.

Click "**Finish**" to exit the Driver Wizard.



Step 6.

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.

Step 7a.

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.

After reboot the computer, you would see the extend display on the 2^{nd} display device.



Step 7b. 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 external display device to the DVI connector of next USB 2.0 DVI-I Adapter and switch it on.
- c. Plug the USB 2.0 DVI-I 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 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 device.

VERIFYING DEVICE DRIVER INSTALLATION

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

Please right click "Computer" \rightarrow "Properties" \rightarrow "Device Manager". Please double click "Display adapters", and "Universal Serial Bus controllers".

X SINGLE USB 2.0 DVI-I ADAPTER INSTALLATION ON THE COMPUTER



% Multiple USB 2.0 DVI-I Adapter installation on the computer

🔚 Computer Management	
File Action View Help	
	100
	^
Disk drives	
Mobile Intel(R) 945 Express Chipset Family	
USB 2.0 Graphics Device-1(Extend)	
USB 2.0 Graphics Device 2(Mirror)	
USB 2.0 Graphics Device-2(Extend)	
USB 2.0 Graphics Device 2(Mirror)	
USB 2.0 Graphics Device-S(Extend)	
DVD/CD-ROM driver	
EFE 1394 Bus host controllers	
Keyboards	
Mice and other pointing devices	
Modems	
H Monitors	
Network adapters	E
Processors	
SD host adapters	
Sound, video and game controllers	
E C Storage controllers	
⊕ - 🕵 System devices	
🖃 🖟 🖟 Universal Serial Bus controllers	
Intel(R) 82801GB USB Universal Host Controller - 27C8	
Intel(R) 82801GB USB Universal Host Controller - 27C9	
Intel(R) 82801GB USB Universal Host Controller - 27CA	
Intel(R) 82801GB USB Universal Host Controller - 27CB	
Intel(R) 82801GB USB2 Enhanced Host Controller - 27CC	
USB 2.0 Graphics Device-1	
USB 2.0 Graphics Device-2	
USB 2.0 Graphics Device-3	
USB Root Hub	
USB Root Hub	
USB Root Hub	+

DEVICE DRIVER UN-INSTALLATION

Please make sure the USB 2.0 DVI-I Adapter is **unplugged** to your PC or Notebook before executing the device driver un-installation program.

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) (driver version number)" item. Click "Uninstall" button.

Step 2.

Unplug the USB 2.0 DVI-I Adapter and click "**OK**" to continue.

USB 2.0 External Graphics Card with DVI Interface (Multiple) Confirm Uninstall	×
Do you want to completely remove the selected application and all of its features	5?
Please unplug your USB 2.0 External Graphics Card with DVI Interface (Multiple) then click <ok>.</ok>	
OK Can	:el

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.

- It can support the LCD or CRT monitor; it can attach the DVI interface LCD or CRT monitor and it supports 4 kinds of selections, Primary, Extended, Mirror and Rotate by "UD" 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.

Display Settings	1152X864X16	1000
Display Settings		
	1152X864X32	
Monitor	1280X768X16	
Drag the icons to match your monitors.	1280X768X32	
	1280X800X16	
	1280X800X32	View he
	1280X960X16	
1 5 3 4	1280X960X32	
	1280X1024X16	
	1280X1024X32	and the second
	1400X1050X16	O STATE O MARKET AND A STATE OF
3. Generic Non-PnP Monitor on USB 2.0 Graphics Device-1(Extend)	1400X1050X32	
Constant Constan	1440X900X16	Mr Carting
3. Generic Non-PnP Monitor on USB 2.0 Graphics Device-1(Extend)	1440X900X32	
5. Generic Non-PnP Monitor on USB 2.0 Graphics Device-2(Extend)	1600X1200X16	A 1/1
Low High Highest (32 bit)	1600X1200X32	800X600X16
1024 by 768 pixels	1680X1050X16	800X600X32
How do I get the best display? Advanced Settings	1680X1050X32	1024X768X16
	1920X1080X16	1024X768X32
OK Cancel Apply	✓ 1920X1200X16	High Resolution

"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. 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 DVI-I 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.



"Rotate" 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.



"OFF" Mode

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



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
16:10	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
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)

Q&A

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 DVI-I 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: 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 difficulties using our device. Contact your dealer for additional assistance 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.
- Try a different USB 2.0 port and/or computer
- 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 to restart your computer after the driver installation.
- Unplug the adapter and re-insert it.
- Check the website to make sure you have the latest drivers.
- Reset/refresh/resynchronize your monitor.
- For better performance on watching DVD on the secondary display, it is recommended to use the following license free software.

Media Player Classic:

http://sourceforge.net/projects/guliverkli/

- For better DVD movie file decoder complied with Windows Media Player, suggestion the following free software.

K-Lite: <u>http://www.free-</u>

codecs.com/download/K_Lite_Codec_Pack.htm

- Selecting Primary Mode may disable the main system display on certain Intel graphics solution based computer system.
- 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) 8.1.0.0521.0155 (the number means the driver version).

REGULATORY COMPLIANCE

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.

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