

Cinema3D

User's Manual

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How to Contact Us

We also provide full range of 3D and Virtual Reality products. You are welcome to visit our web site at www.iart3d.com ; Call us for inquiry. We will offer you more information and service.

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Product Package

With this product package, you will find the contents as follows.

- | | |
|--|-----|
| 1. Cinema3D Card | x 1 |
| 2. Infrared Emitter Unit | x 1 |
| 3. Infrared LC Shutter Glasses | x 2 |
| 4. Cinema3D CD (including Cinema3D Player) | x 1 |
| 5. Power Cord | x 1 |
| 6. VGA Cable | x 1 |
| 7. RJ11 Cable | x 1 |
| 8. USB Security Dongle | x 1 |

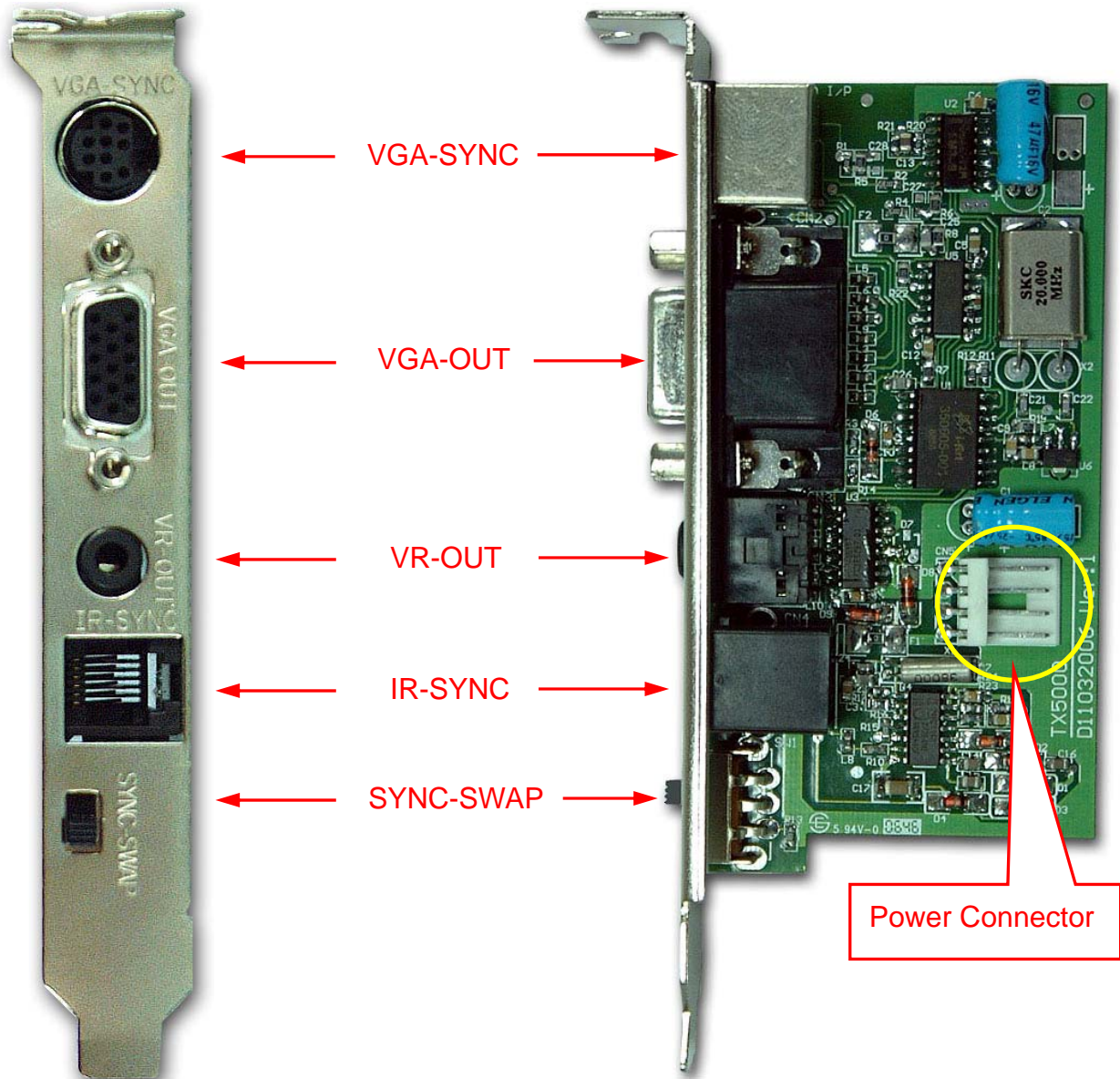
System Requirements

1. Pentium 4/3.0G Processor or faster
2. 512MB of System RAM or more
3. NVIDIA Graphics Card: GeForce 7 Series
4. NVIDIA Legacy 3D Stereo Driver V91.31 (Free Downloaded from www.nvidia.com)
5. Windows XP/XP Pro.
6. DLP Projector

Note: Regarding the DLP Projector, you should consult your local dealer or refer to "Readme.txt" for the DLP Supported List which we have tested.

Cinema3D Card

This is an interface card for Stereo 3D Synchronization. Basically, it must be equipped with a VGA cable which is directly connected to the PC VGA port to process the stereo 3D video signals which are a couple of possible 3D image formats (i.e. "Page-Flip" and "Above/Below"). Then its controller will automatically convert these 3D formats into stereo 3D synchronization signals for infrared transmitter.



VGA-SYNC

This is a 9-Pin DIN-Jack for connecting your display graphics card with the attached VGA cable to get the video signals.

VGA-OUT

This is a 15-Pin D-Sub connector for connecting your DLP projector.

VR-OUT

This is an output port for supporting i-Art's Wired LC Shutter Glasses (Optional).

IR-SYNC

This is the Stereo-Sync output port for connecting the Infrared Emitter Unit with RJ11 cable.

SYNC-SWAP

If you find the Stereo-Sync in reverse with Infrared LC Shutter Glasses, then you can set the SYNC-SWAP switch to either Up or Down side to swap the synchronization sequence of Left/Right for each LC Shutter Glasses to avoid the "Pseudo Stereo" effect.

Power Connector

With the attached Power Cord, you may connect the PC power to it.

Infrared Emitter Unit

The Emitter Unit is an Infrared Wireless Transmitter for Stereo 3D Synchronization. It is directly connected to the IR-Sync of Cinema3D Card with the attached RJ11 Cable.

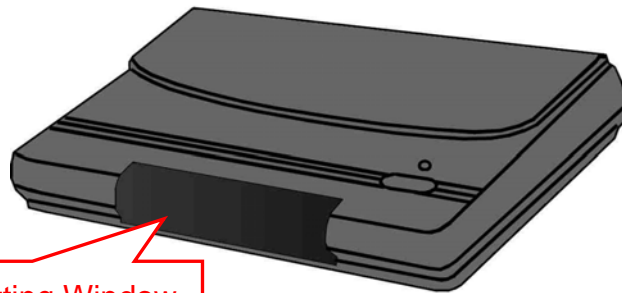
Basically, it is capable of the emitting range as follows.

Horizontal: 70 Degrees / 4 Meters

30 Degrees / 7 Meters

Vertical: 40 Degrees / 4 Meters

20 Degrees / 7 Meters



Infrared Emitting Window

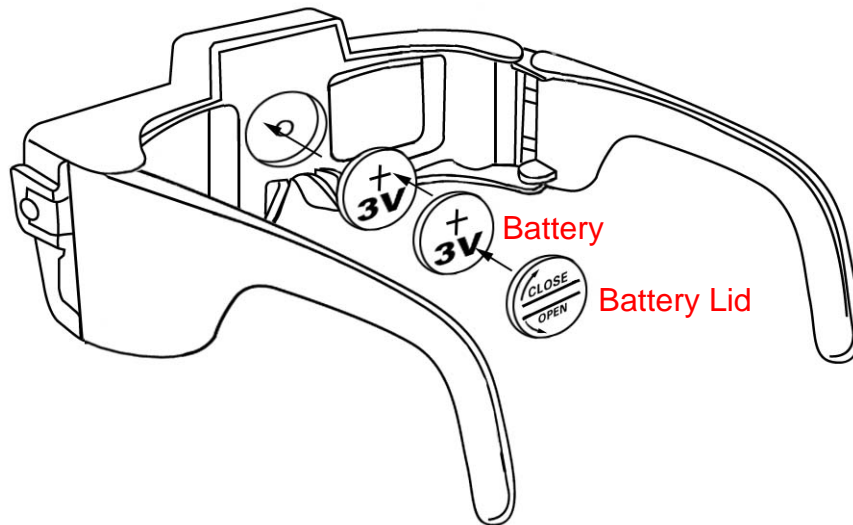
There is an Infrared Emitting Window on the front of Emitter unit, which can widely emit the infrared synchronized signal with the maximum 7-meter emitting range. All i-Art's Infrared LC Shutter Glasses can function very well within this effective range. Please make sure that there is no object which might block the signal, or the Infrared LC Shutter Glasses can not function normally. In order to get the best performance, it would be highly suggested that you should put this Emitter Unit in front of the audience seats and the Infrared Emitting Window should be set forward.

Infrared LC Shutter Glasses

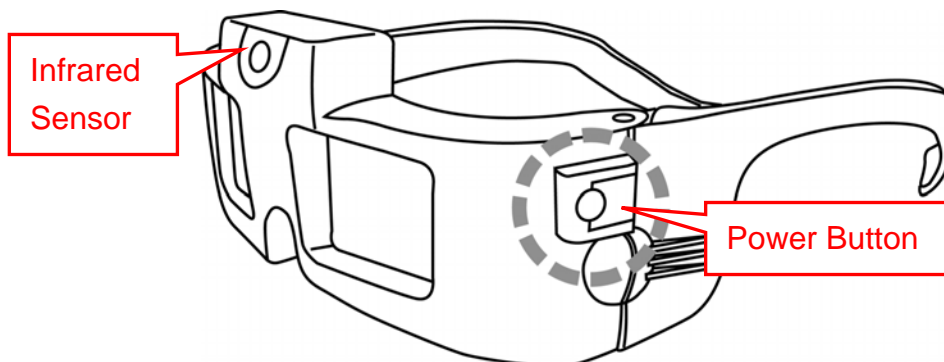
This is a Wireless LC Shutter Glasses System for viewing stereo 3D effects. It is capable of detecting the infrared signal emitted from Infrared Emitter Unit to enable its LC Shutter Glasses to be synchronized with each other.

How to Use

1. Firstly, please install the attached CR2032 lithium batteries as shown below.



2. Turn on the Infrared LC Shutter Glasses by using the push button which is located at the left side. This button is not only for power On/Off but also for swapping the synchronization sequence of Left/Right LC Shutter Glasses to avoid the “Pseudo Stereo” effect.



2-1 Turn On the Power

When the Infrared LC Shutter Glasses is in “Off” state, you may slightly click the Power/ Function Button to turn on the power. The LC Shutter Glasses will

flash 5 times to indicate that the Infrared Receiver System is normal. If you have activated the Infrared Emitter Unit and the Infrared Sensor is within the Infrared emitting range. At this time when you click the Power/ Function Button to turn on the power, the LC Shutter Glasses will flash only twice to indicate that the Glasses have received the Infrared signal and are ready to work.

2-2 Left/Right Eye's Synchronization Signal Change

After you activate the power of Infrared LC Shutter Glasses and it can normally receive the Infrared signal from the Infrared Emitter Unit, the LC Shutter Glasses will become dim. It is a normal phenomenon. As soon as you wear the glasses, you will immerse the unprecedented and unbelievable stereo 3D visual world. Whenever you click the Power/Function button, the left/right eye's synchronization signal will be reversed..

2-3 Turn Off the Power

To turn off the power of the Infrared LC Shutter Glasses, please hold down the Power/Function Button for over one second, the power will be turned off and the liquid crystal shutter glasses will become transparent without any flashing.

2-4 Automatic Power Off Function

When system is in working mode, the power of Infrared LC Shutter Glasses will be automatically turned off if it has not received the infrared signal for over 10 seconds in order to save the battery power.

The following table will show you how to function the power button under different situations.

LCS Glasses Status		Click Power Button	Remarks
Power OFF	With IR	1. Turned on the Power. 2. LC Shutter Glasses flash 2 times at the same time.	1. Power OFF: Press the Power Button for 0.5 sec or longer. 2. Auto OFF Function: If no Infrared signal is detected for 10 seconds, the LC Shutter Glasses will be automatically turned off.
	Without IR	1. Turned on the Power. 2. LC Shutter Glasses flash 5 times at the same time.	
Power ON	With IR	1. Still Power ON. 2. Swap the L/R image.	
	Without IR	1. Still Power ON. 2. LC Shutter Glasses flash 5 times at the same time. 3. Swap the L/R image.	

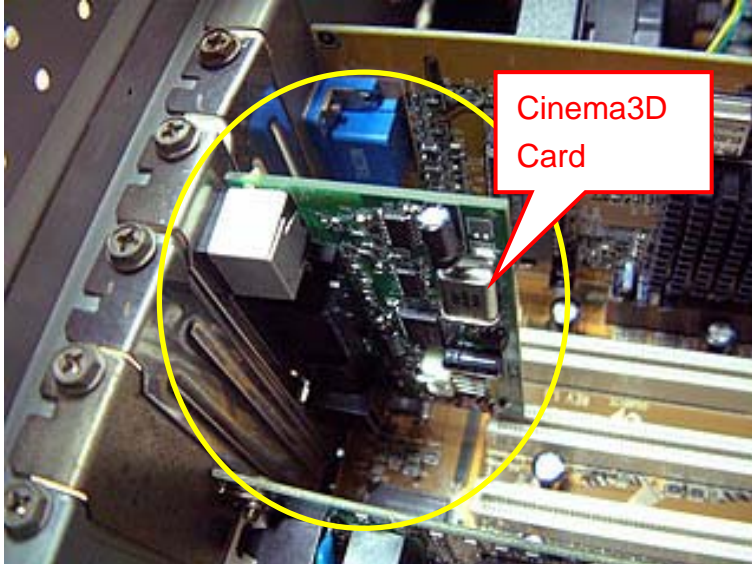
Hardware Installation

Before installation, please refer to the system configuration as shown below.



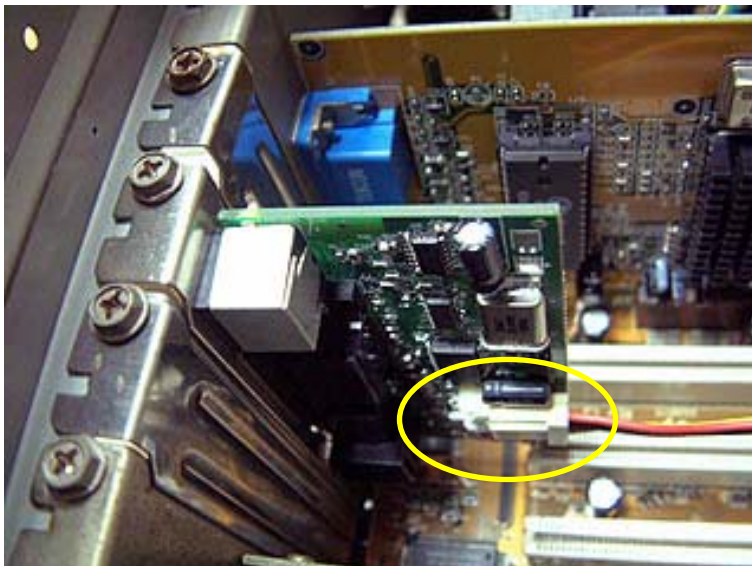
1. Install the Cinema3D Card into the PC

Install the Cinema3D Card into an available expansion slot inside your PC system as follows.



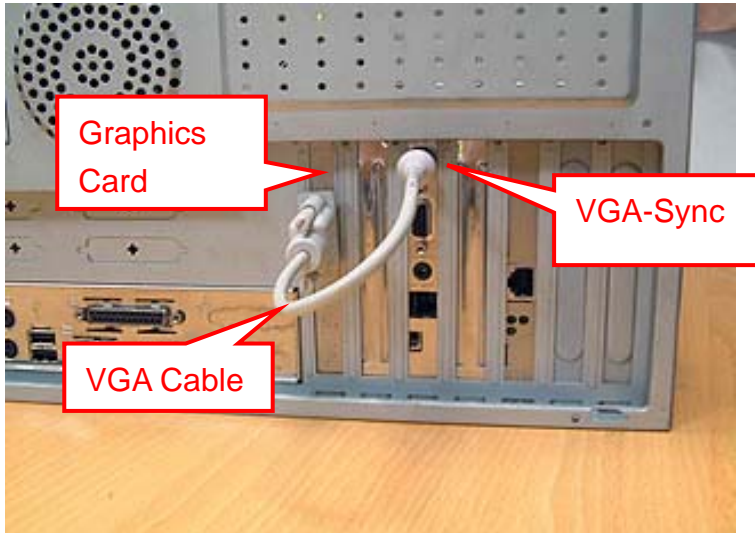
2. Connect the Power

Connect your PC power to the power connector of Cinema3D Card with the attached power cord.



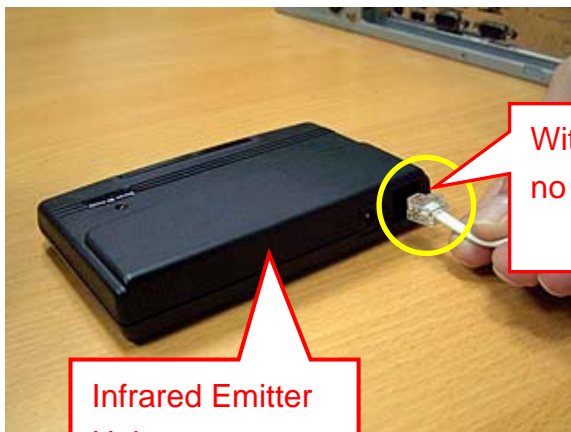
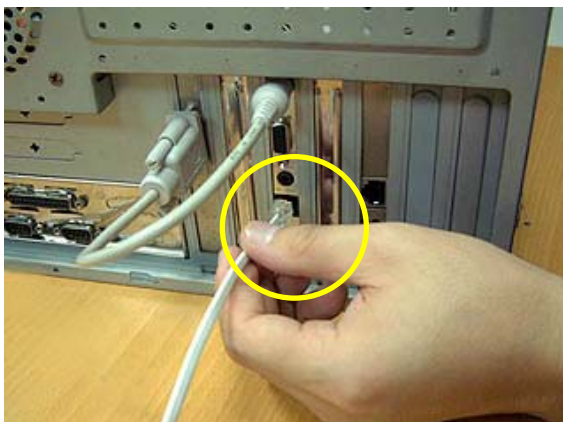
3. Connect Graphics Card

Connect the VGA-Sync of Cinema3D Card to the D-Sub 15-Pin connector of your graphics card with the attached VGA cable as follows.



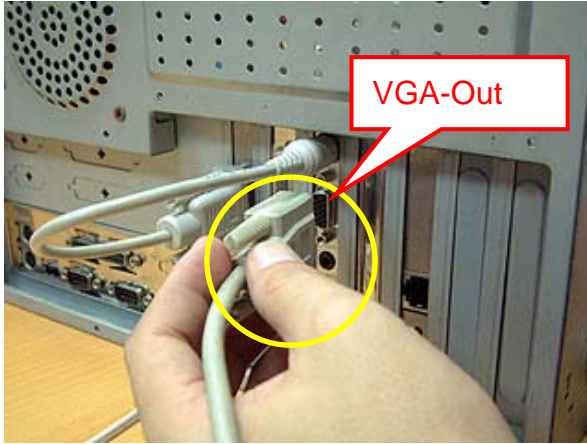
4. Connect Infrared Emitter

Connect the IR-Sync of Cinema3D Card and Infrared Emitter unit with the attached RJ11 Cable.



5. Connect DLP Projector

Connect the VGA-Out of Cinema3D Card and DLP Projector with the VGA cable which is attached with the DLP Projector.



Cinema3D Player

NVIDIA 3D Stereo Driver

Before using Cinema3D Player, you should firstly download the NVIDIA 3D Stereo Driver from www.nvidia.com as shown below and install it.

Note: The following web page would be subject to change without prior notice.

The screenshot shows the NVIDIA website interface. At the top left, the NVIDIA logo is followed by the number '1' and a red circle around the 'DOWNLOAD DRIVERS' link in the navigation menu. The main content area is titled 'NVIDIA Driver Downloads' and includes a 'GET DRIVERS BY PRODUCT' section. Under 'Option 1: Manually find drivers for my NVIDIA products. RECOMMENDED', there are dropdown menus for 'Product Type' (set to GeForce), 'Product Series' (set to GeForce 7 Series, circled in red with a '2'), 'Operating System' (set to Windows XP), and 'Language' (set to English (US)). A 'Search' button is located to the right. Below this, 'Option 2: Automatically find drivers for my NVIDIA products. PRERELEASE' is shown with 'Graphics Drivers' and 'Motherboard Drivers' buttons. At the bottom, the 'OTHER DOWNLOADS & SUPPORT' section lists various drivers, with 'GeForce 3D Stereo Driver' circled in red and labeled '3'. A green download icon is also visible next to the list.

Legacy 3D Stereo Drivers

4

These drivers are provided for download only and will no longer be supported.

Version: 91.31
Release Date: June 29, 2006
Operating System: Windows 2000/XP

Version: 61.76
Release Date: July 20, 2004
Operating System: Windows 9x/ME

5



Download 3D Stereo Driver

Please follow step1 to step5 as shown above to download the NVIDIA Legacy 3D Stereo Driver.

Once you have downloaded it, at the same place you should also download the ForceWare Graphics driver version 91.31 to replace your current one.

Note: Before installing the ForceWare Graphics Driver you just downloaded, it is highly suggested that you should completely uninstall the current graphics driver.

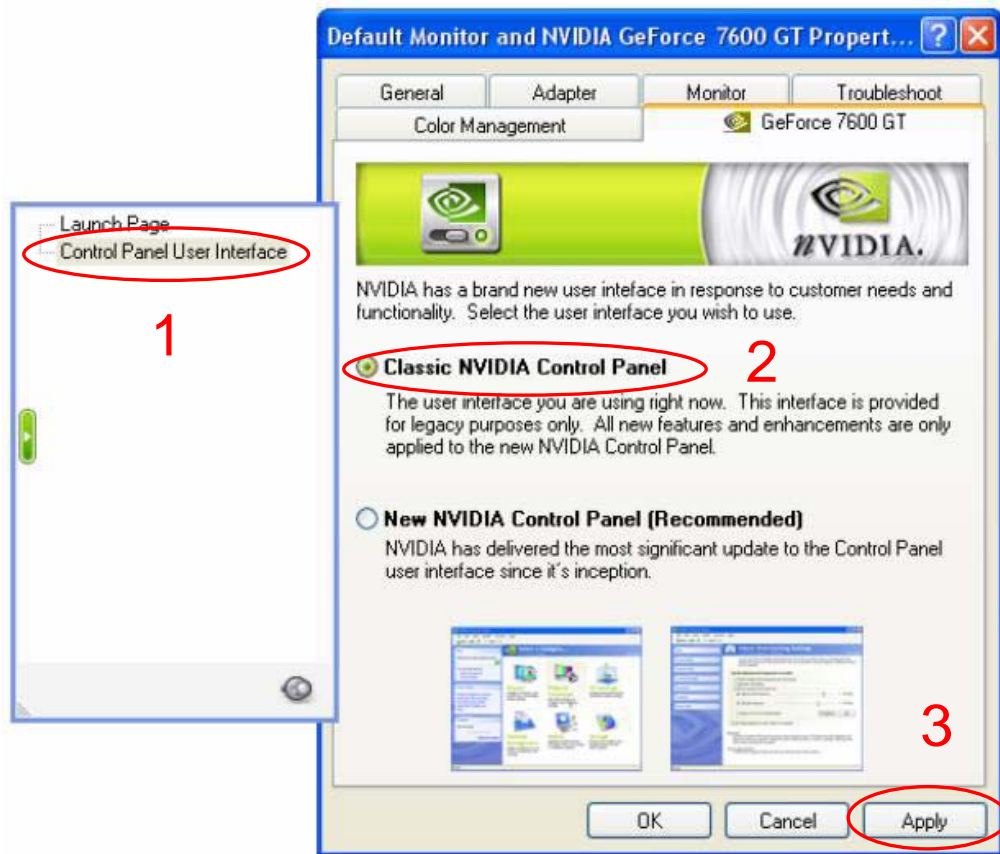
Install 3D Stereo Driver

Then, please install the NVIDIA 3D Stereo Driver and its corresponding ForceWare Graphics driver. When finished, reboot your PC system.

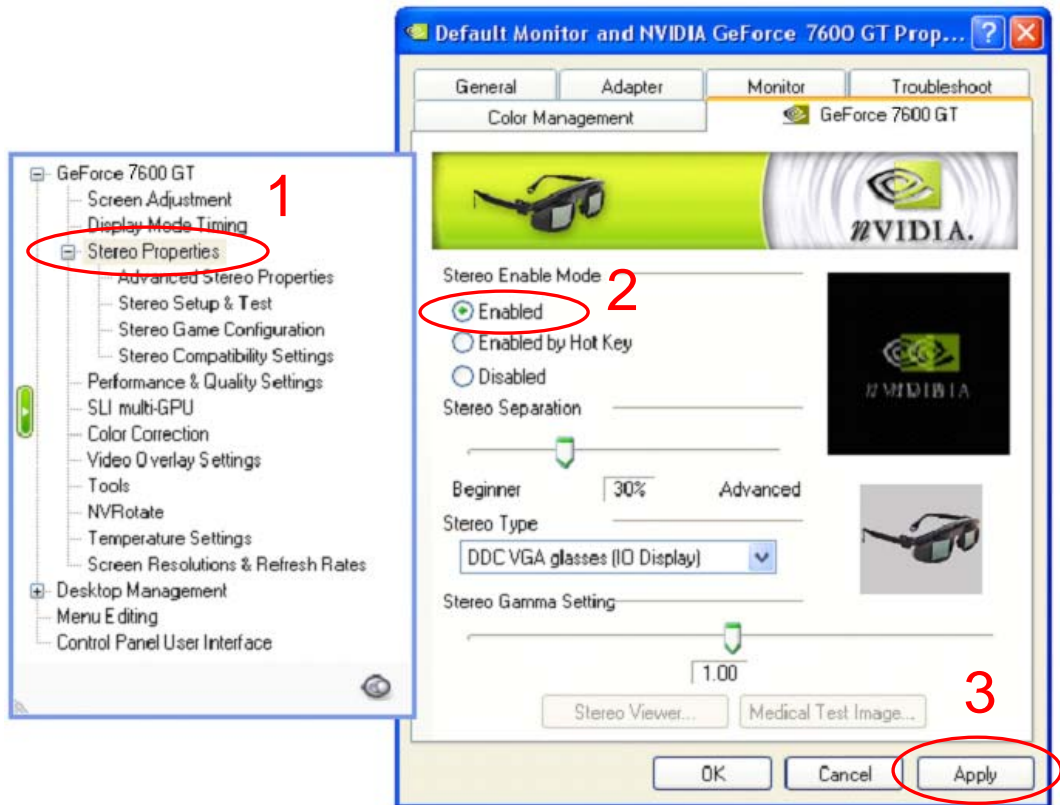
Set Up 3D Stereo Driver

By right clicking the “desktop”, you can invoke the “Display Properties”. Then, go to the “Setup” tab and click the “Advanced”. You will need to click “GeForce 7xxx”(i.e. GeForce 7600GT, for instance) tab to select the Control Panel for the setup.

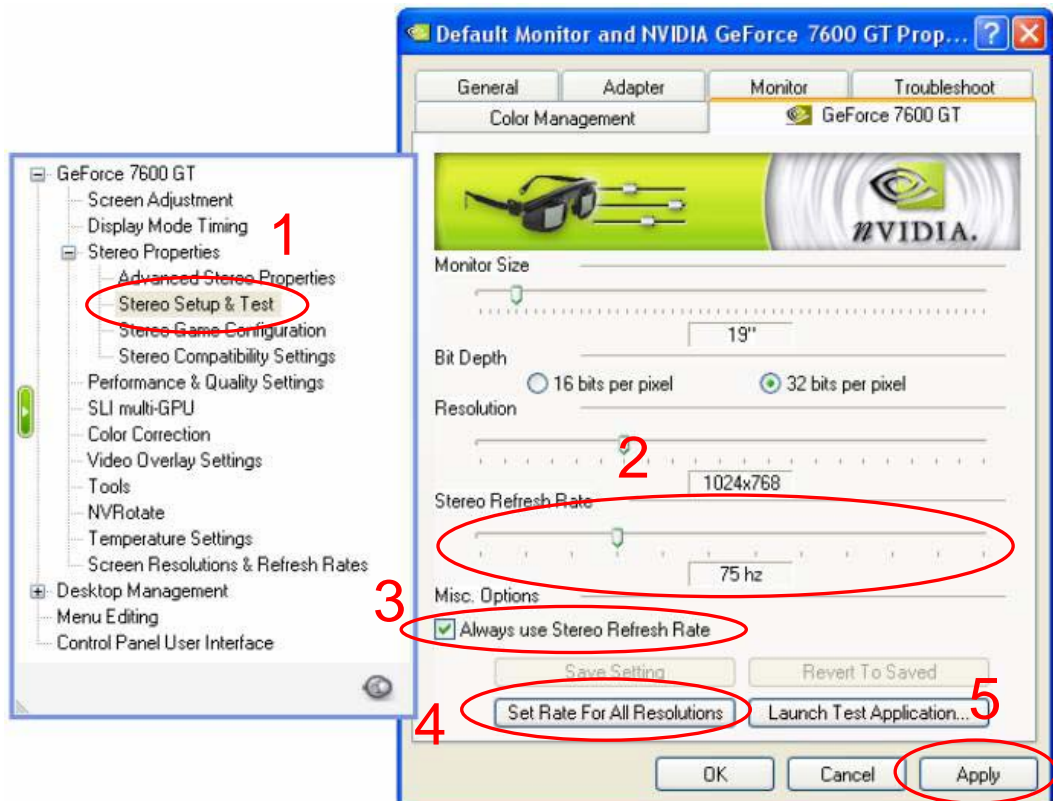
In this case, please select “Classic NVIDIA Control Panel” as shown below.



Later, please consult the user’s manual to enable the “Stereo 3D Mode” by using the Display Properties as follows.



Also, please go to the “Stereo Setup & Test” item to set up the “Stereo Refresh Rate” according to the highest Refresh Rate your DLP projector can support. The following is just an example to set up 75Hz for the Refresh Rate.



Install Security Dongle

Since Cinema3D Player is locked by a Security Dongle (connected to the USB Port) The security dongle is a hardware key bundled with Cinema3D.

Connect the Dongle when you install the program.

Installing the program without dongle, setup will proceed without any problem.

Connect the Dongle before you start the program after installation.

Start the program without dongle, program will not be launched and screen prompts “Security Dongle Not Found”.

Note : This security dongle MUST be always connected to the USB Port while Cinema3D Player is running, otherwise Cinema3D Player will be aborted.

Install Cinema3D Player

Then, you may install the Cinema3D CD, the Cinema3D Player will be installed accordingly. When “Cinema3D Player” is executed, it will then show you the following operating environment.



Currently, Cinema3D Player can play the 3D images and 3D videos are “JPS”, “BMS” and “MPG”, “AVI” files in “Side By Side”, “Interlaced” and “Above/Below” 3D formats at

maximum resolution of **1280x720** for 3D videos while there is no limitation for JPS and BMS 3D images. And, these files can be produced by i-Art's authoring tools like **3D Maker Plus**. Also, you may specify either "Type1" or "Type2" for the 2D videos to play "Pseudo 3D" with the Cinema3D Player.

Of course, you may use Cinema3D Player to play normal 2D images and 2D videos as well.

Note: If you'd like to play "MPG" files with Cinema3D Player, then you have to have a DVD software player installed inside your PC system in advance.

How to Use Cinema3D Player

Here, there are a couple of operation icons or buttons described as follows.



Add the 3D image (or 3D Video) files into the play list.



Remove the selected 3D image (or 3D Video) files from the play list.



Move the selected item upward in the play list.



Move the selected item downward in the play list.



Open a play list.



Save as a file for the play list.



Remove the current play list.



Play the 3D media.



Pause



Stop



Play Next Item



Play Previous Item



/  Sound On/Off

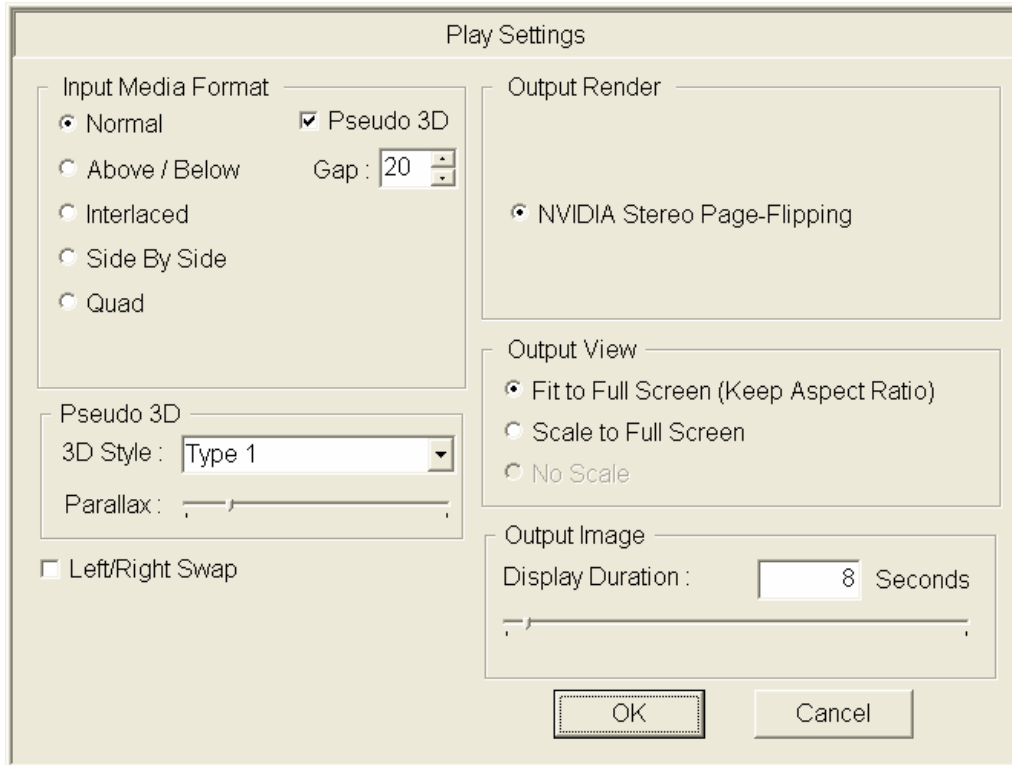


/  /  Repeat Current Item / Play All for once / Repeat All



Play Settings

Before playing the 3D media, you have to set up an appropriate “Input Media Format” for the 3D media which you will add to the play list by using the “Play Settings”.



As you can see the above “Play Settings”, there are some input formats to specify for your 3D media files so that Cinema3D Player can properly play them. If your input media files are produced by i-Art’s “3D Maker Plus V3.0” software, then Cinema3D Player will automatically detect their formats (or Headers) and ignore the settings to correctly play them individually.

Also, Cinema3D Player allows you to add both 3D videos and still 3D images into a play list for versatile play. If so, then your 3D media (both videos and images) **MUST** be produced by i-Art’s “3D Maker Plus v3.0” to add the necessary “**Headers**” for each 3D media in advance. Later, Cinema3D Player will recognize these headers and play them correctly.

Regarding “**Quad**” format, it is basically for “Parallax Adjustment” by changing stereo pairs. You may produce your 3D media in a 4-Tile format (in a sequence of from Tile1 to Tile4, or from Left to Right by increasing the parallax) as follows. Later, Cinema3D Player will play Tile1 with Tile2 as a stereo pair by default. Each time when press “→” key, you may change the stereo pair from default “Tile1 with Tile2” to “Tile1 with Tile3”, or from “Tile1 with Tile3” to “Tile1 with Tile4”. On the other hand, you may use “←” key to decrease the parallax by changing the stereo pair from “Tile1 with Tile4” to “Tile1 with Tile3”, or from “Tile1 with Tile3” to “Tile1 with Tile2”.

1	2
4	3

About “**Pseudo 3D**”, there are two types for your options. Also, you may adjust the corresponding parallax to your favorite one.

The “**Left/Right Swap**” is for exchanging the Left/Right orientation of 3D media during play. If you find the Stereo-Sync in reverse with Infrared LC Shutter Glasses, then you might need to check the “Left/Right Swap” to swap the synchronization sequence of Left/Right for each LC Shutter Glasses to avoid the “Pseudo Stereo” effect.

Hot Keys

There are a couple of Hot Keys for function controls during playing 3D media.

“**ESC**”, “**S**”: Stop Playing.

“**X**”: Swap the synchronization sequence of Left and Right LC Shutter Glasses.

“**N**”: Play Next Item

“**P**”: Play Previous Item

“**←**”, “**→**”: Adjust Parallax of Quad (4-Tile) 3D media. There are 3 steps to adjust.

“**Space Bar**”: Pause

Medical Warning

Please don't continuously use this product for a long time without any break to relax your eyes. The artificial stereoscopic images can possibly produce symptoms like headache, dizziness, and nausea for sensitive users. If such symptoms occur when you are using the glasses, you have to stop using this product immediately and wait for the discomfort to go away before using again.