

# ***True3Di*** SDM-190M

## **User Guide**

*True3Di*

3D0



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High Resolution  
Stereoscopic 3D Monitor

# TRUE3Di

## CONTENTS

- Parts Included ..... 3
- Button Function description ..... 5
- Installation guide ..... 7
- Stereoscopic driver installation guide ..... 17
- Quadro Graphics Card Installation guide .. 30
- OSD Setting - Monitor Menu Setting ..... 34

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**Parts Included**

## Parts Included



19 " Monitor

DVI cable

Polarized glasses

Power cable and adapter

※ Parts included and its manufacturer may vary upon subject.

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**Button Function description**

## Function description on each part



## TRUE3Di SDM-190M

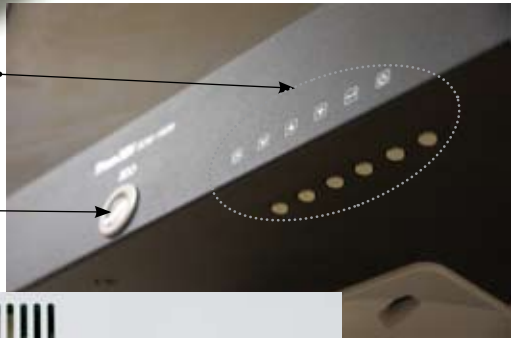


### Power button and OSD setting buttons

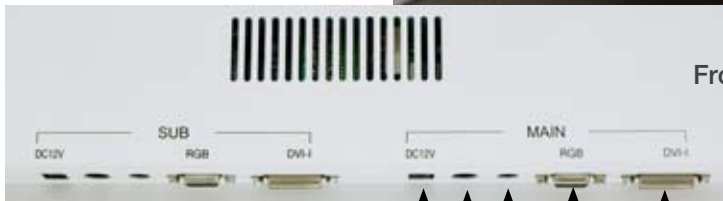
Menu buttons which enables to change configuration and value.

### 2D / 3D switch button

Button which enable to switch between 2D and 3D.



Front lower side



Rear side

- DVI input port
- RGB input port
- Video input port
- S-Video input port
- 12V adapter port

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**Installation guide**

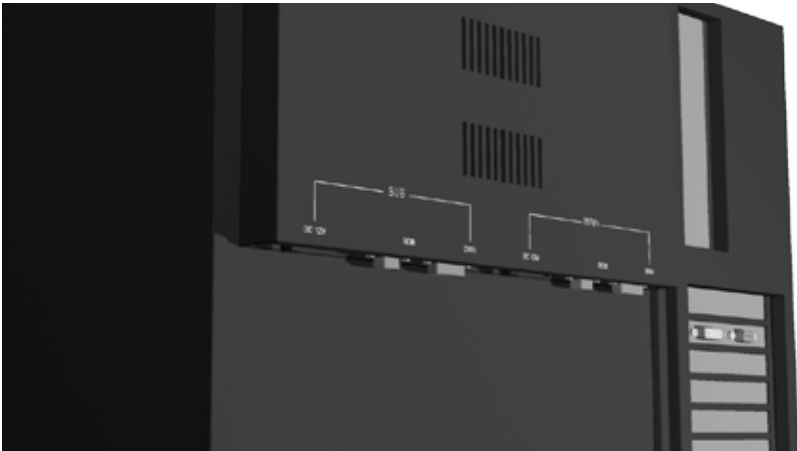
## Monitor and computer image which would be shown throughout this manual for the installation of monitor



Front image of a monitor and a computer



Rear image of a monitor and a computer



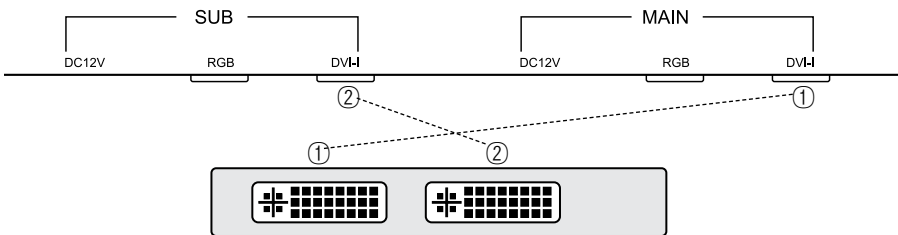
Above picture shows Video input port on the rear side of monitor and VGA port of graphic card installed in computer.

(For the specifications of our monitor, Graphic card must be compatible with "Dual output" )

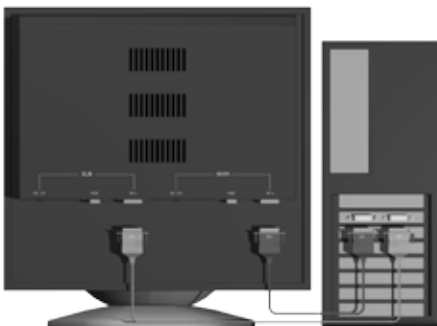
## 1. For Dual DVI output graphics card

### 1) When using 2 DVI-DVI cables to connect from computer to monitor

Connect left DVI port① from computer to Main Dvi-I port① from monitor using DVI-I cable. Connect right dvi port② from computer to SUB dvi-I port② from monitor using DVI-I cable.



① When look at computer's rear side, connect left DVI port from computer to Main Dvi-I port (right) from monitor.

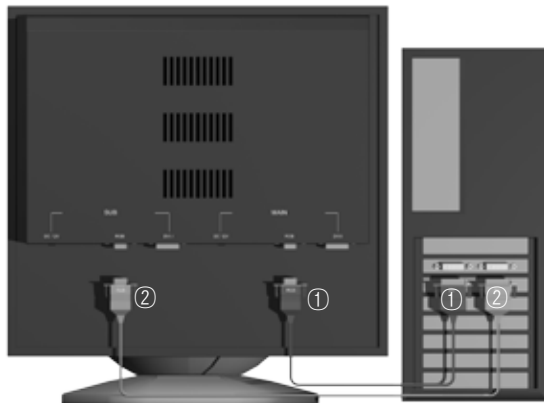
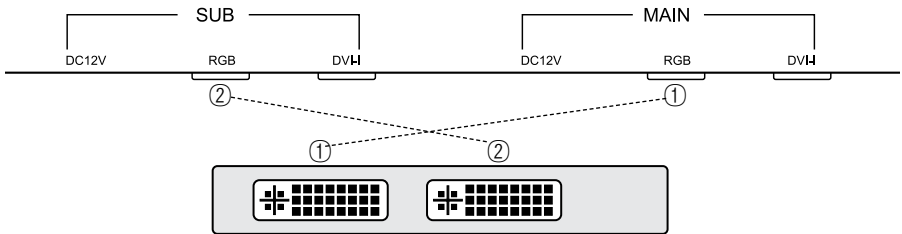


② When look at computer's rear side, Connect right dvi port from computer to SUB (left) dvi-I port from monitor.

## 2) When using DVI-RGB cables to connect from computer to monitor

As shown in the picture, cable has DVI and RGB port at each end. Connect computer to monitor in the same direction as DVI-DVI cable.

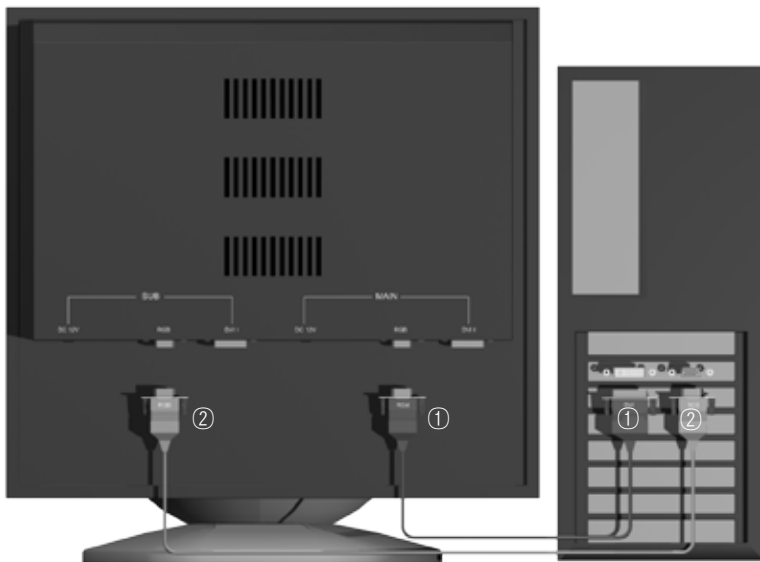
(Caution - On monitor, connect RGB port, not DVI port)



- ① Connect left DVI port① from computer to Main RGB port① from monitor,
- ② Connect right DVI port② from computer to SUB RGB port② from monitor,

## 2. For RGB and DVI output graphics card

- 1) When using 1 DVI-RGB cable and RGB-RGB cable to connect from computer to monitor



- ① connect DVI port① from computer to Main RGB port① from monitor.
- ② Connect RGB port② from computer to SUB RGB port② from monitor using DVI-I cable

2) When using 2 RGB-RGB cables to connect from computer to monitor

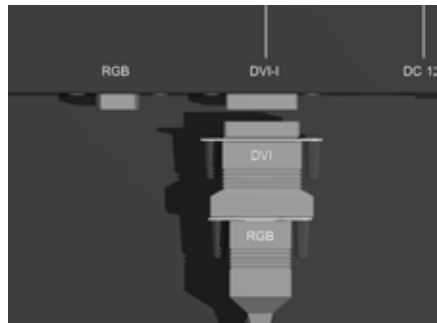
Order of the connection is the same.



As shown above, using a DVI gender to make DVI-RGB cable

3) Faulty Connection

As shown above, using DVI gender to an end that connects to monitor will not display anything.



### 3. Power cable

#### 1) Power & Adaptor Connection



- ◀ As shown in the left picture, Two adaptors are supplied when purchasing our monitor

- ▶ Correctly connect power cables to adaptors.

(caution : if either adaptor is connected incorrectly, it will not display 3D images. Please check them thoroughly)



- ◀ Connect power cable to DC 12V outlet on the rear side of monitor one by one.

(Don' t care the order of connection)



- ▶ Connect plugs to power outlet

(when using a multi-tab, please make sure to check on/off switch)



2) Check 3D switch button



◀ 2D/3D switch button is shown.

(When switching from 2D to 3D, press and hold the button for 3 seconds, then it will light up.)



◀ If it lights up, monitor is now showing 3D view mode.

(When switching from 3D to 2D, press the button once, then the light will go off.)

## 4. Check list after turn computer on

Check monitor and computer according to below list.

(Note - It may happen that due to alteration of specifications of monitor and(or) glasses, left and right image may be reversed. If happen, switch cables to make left to right and right to left.)

1. Turn on computer
2. Right click mouse on any desktop surface
3. Select “Properties” at the end of the list
4. Display Properties” window pops up
5. Click “Settings” tab at the end
6. Click “Advanced”
7. Click graphics card tab (nView)
8. Select “Dual View” from nView Display Mode
9. Click “Apply” at the right bottom
10. Click “OK” , then the window disappears
11. Click “OK” in the Display Properties” window



◀ Number 1 and 2 shows superimposed as shown



- ▲ Number 2 shows on the top monitor left-right flipped as shown. It means that the settings are done properly.



- ▲ Turn off the 2D/3D switch button, Number 2 disappears and number 1 still shows on the front monitor. It means that the settings are properly done. Now you are ready for the world of stereoscope.

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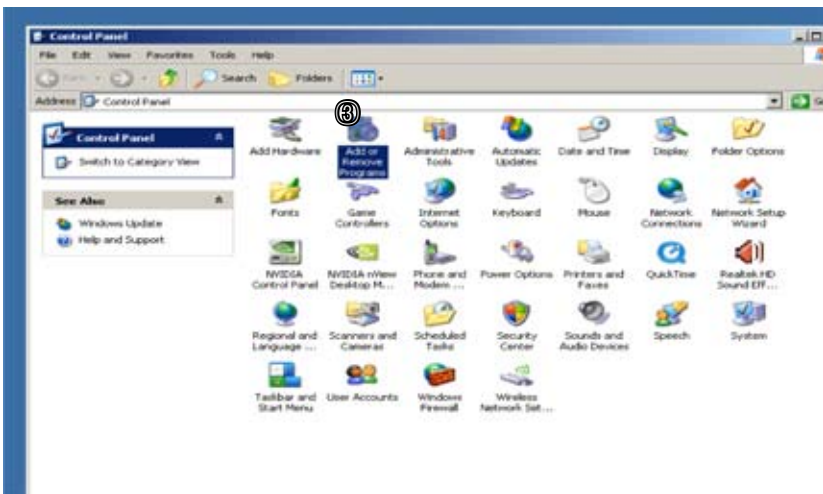
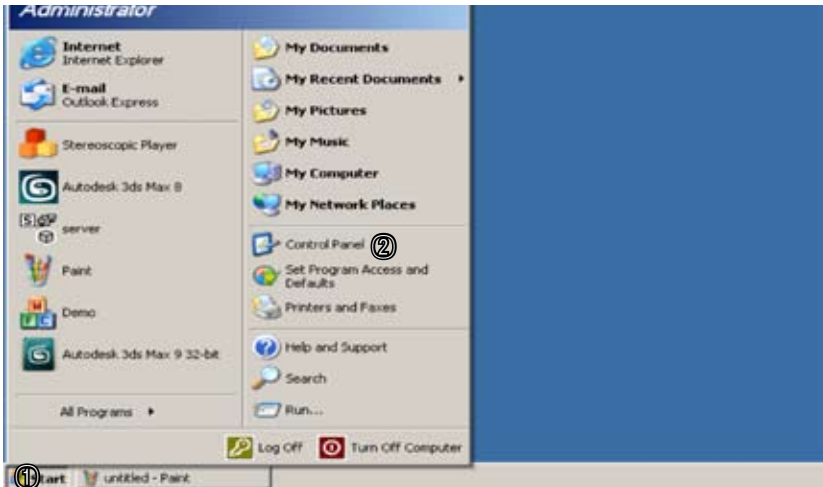
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**Stereoscopic driver  
installation guide**

# 1. (Uninstall) Existing graphics card driver

Nvidia Stereo Driver installation guide for Windwos XP.

(There is not a driver for Windows Vista yet, graphics card driver and stereographic driver for 91,31)



- 1) ① Click "Start" button -> ② Click "Control Panel" button  
-> Click "Add of Remove Programs"



2) Click “Change/Remove” button to remove existing graphics card.

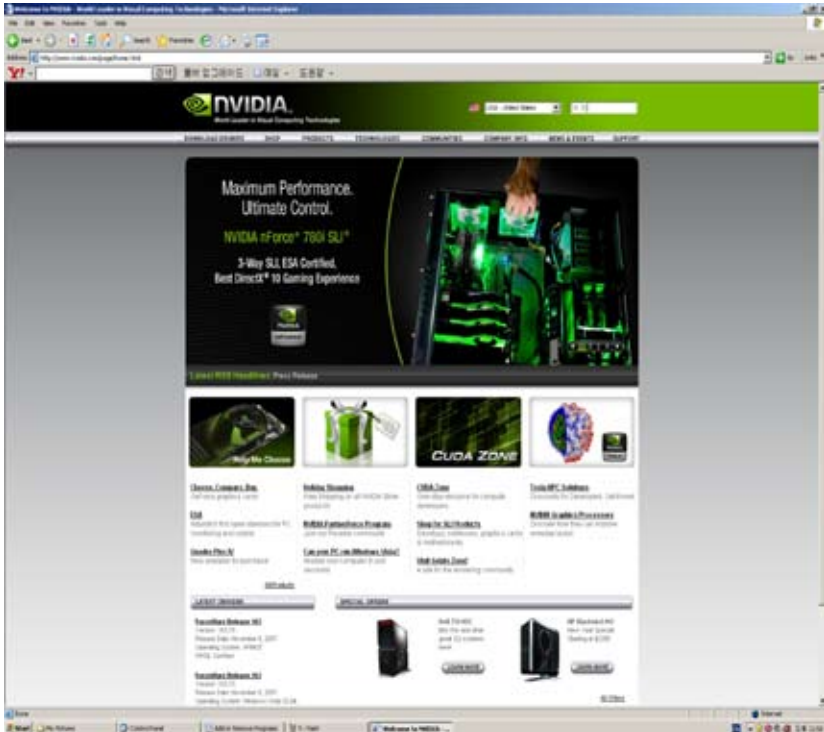
3) After uninstalling the driver, reboot the computer

## 2. Download and Install new driver

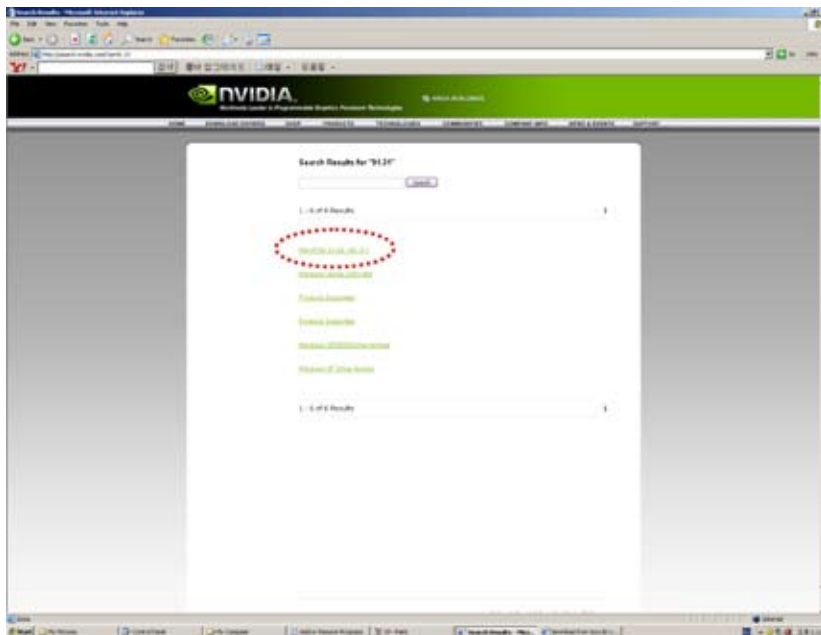
Due to frequent update of the nVidia website, actual website look may be different from time to time, Please read carefully and download files,

Install the driver from the CD provided with purchase of the monitor or download from Nvidia website ([www.nvidia.com](http://www.nvidia.com)) and install the driver, Install driver and follow steps one by one as according to this manual,

(Note: graphics card and stereographic driver must be installed with an identical version.)



- 1) Visit [www.nvidia.com](http://www.nvidia.com)
- 2) Type 91.31 at the top right search box and Search 91.31 for the driver.



3) Click “WinXP/2k 32 bit”

(To download and install 3D stereo driver, search as in previous step. Read next page)

Windows XP/2000 32-bit

**ForceWare Release 90**  
Version: 91.31  
Release Date: June 23, 2006  
WHQL Certified

Please make sure to read the [Driver Installation Help Document](#) before you install this driver.

**U.S. English**  
File Size: 40.3 MB

**Downloads**  
[Primary Download Site](#)  
= [Mirror Site 1](#)  
= [Mirror Site 2](#)  
= [Mirror Site 3](#)

**International**  
File Size: 50.8 MB  
Users without English US operating systems must download and install the **International Driver** available on our International Sites listed below:

- English UK
- French
- German
- Italy
- Japan
- Poland
- Russia
- Spain

**Release Highlights:**

- 4) Click "Primary Download Site" or one of "Mirror Site 1, 2 or 3."
- 5) Click "Accept" button on the license for customer use of nvidia software
- 6) Click "Save" button on the download window

### License For Customer Use of NVIDIA Software

**IMPORTANT NOTICE -- READ CAREFULLY:** This License For Customer Use of NVIDIA Software ("LICENSE") is the agreement which governs use of the software of NVIDIA Corporation and its subsidiaries ("NVIDIA") downloadable herefrom, including computer software and associated printed materials ("SOFTWARE"). By downloading, installing, copying, or otherwise using the SOFTWARE, you agree to be bound by the terms of this LICENSE. If you do not agree to the terms of this LICENSE, do not download the SOFTWARE.

#### RECITALS

Use of NVIDIA's products requires three elements: the SOFTWARE, the hardware on a graphics controller board, and a personal computer. The SOFTWARE is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The SOFTWARE is not sold, and instead is only licensed for use, strictly in accordance with this document. The hardware is protected by various patents, and is sold, but this LICENSE does not cover that sale, since it may not necessarily be sold as a package with the SOFTWARE. This LICENSE sets forth the terms and conditions of the SOFTWARE LICENSE only.

#### 1. DEFINITIONS



7) Install the driver on the computer and reboot the computer.

8) Next step is to download 3D Stereo driver.

### 3. Download and install 3D stereo driver



- 1) Hover mouse over “Download Drivers” from the top menu from the website and submenu comes up. Then click “Download Drivers”  
Click “GeForce 3D Stereo Driver” on other downloads and support

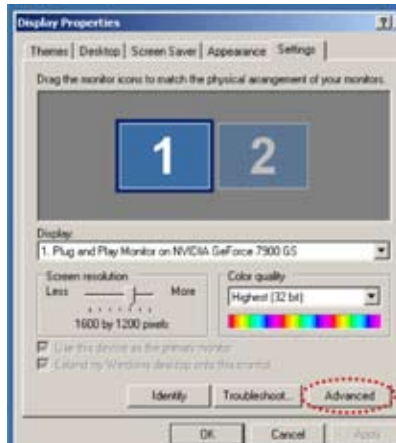


- 2) Click “Download Now” button for 91.31 driver at the “Legacy 3D Stereo Drivers” at the very bottom of the website  
(downloading the file is the same as previous step.)

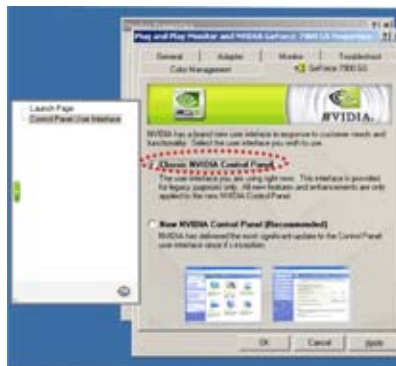
- 3) Install the 3D stereo driver
- 4) After Installation, reboot the computer.

## 4. Change Display Properties

- 1) Right Click the desktop anywhere. Click “Properties” at the bottom of the menu. Click “Settings” tab on the right side of the menu



- 2) Click “Advanced” button at the bottom of the menu,

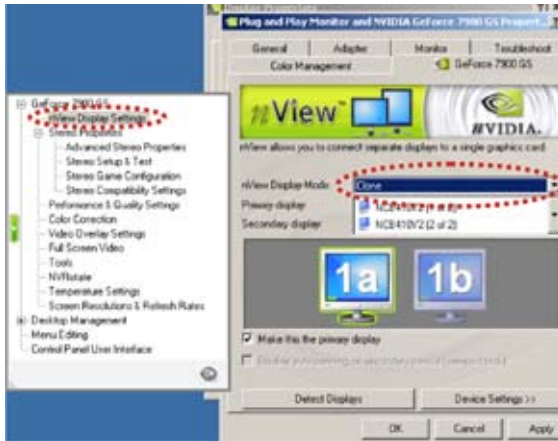


- 3) Click “nVidia Graphics tab. Then Click “Classic NVIDIA Control Panel”

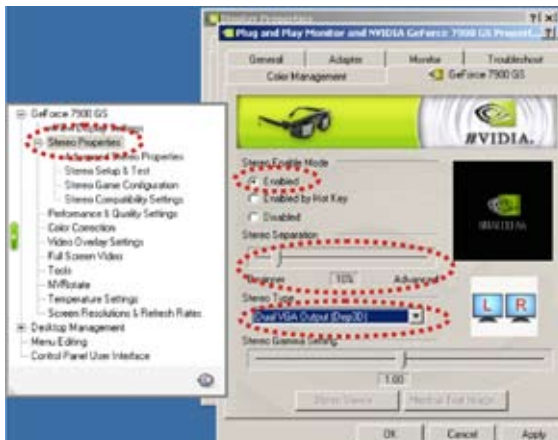
## 5. Stereo driver Settings

Proceed as following. DO NOT click “Apply” at anytime. These instructions must be done in specific order. Otherwise the device will not perform.

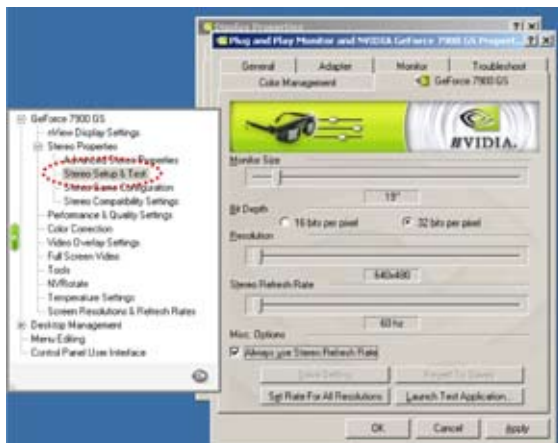
(※If something went wrong, reboot the computer in safe mode and uninstall graphics card driver and stereographic driver as well. Then start again from the start of this manual.)



Click “nView Display Settings” from the left text menu. Then select “Clone” from the drop down menu on the right.

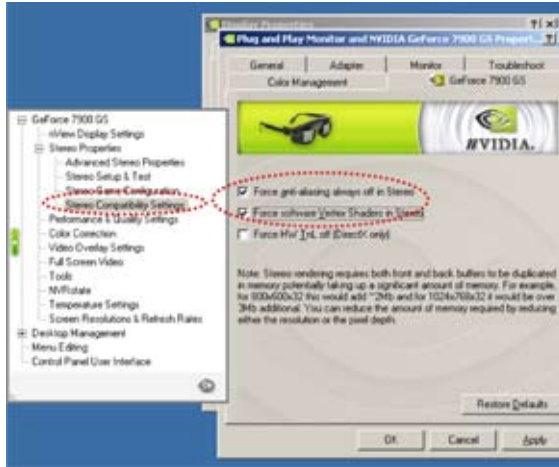


- 1) Click “Stereo Properties” from the left menu
- 2) Select “Enabled” from Stereo Enable Mode
- 3) Set the value to 10% on Stereo Separation bar
- 4) Select Dual VGA Output(Dep3D) in Stereo Type



- 5) Click “Stereo Setup & Test” from the left menu
  - ① Set the “Stereo Refresh Rate” to “60”
  - ② Click “Set Rate For All Resolutions”
  - ③ Click Always use Stereo Refresh Rate, Then Click “Apply” button

※ This procedure must be done in specific order otherwise the installation must start from the beginning, And it show “Out of Range” message,



- 6) Click “Stereo Compatibility & Settings”
- 7) Put check mark on “Force anti-aliasing always off in stereo”
- 8) Put check mark on “Force software Vertex Shaders in Stereo”
- 9) Click “OK”

Currently, there are some errors with Dual core CPU on few applications. It would be rectified with updated version of nVidia drivers. It is highly recommended to use single core CPU.

When using a dual core CPU, force to turn off one core as below steps.

- 1) Right click "My Computer"
- 2) Click "Properties". Then "System properties window" shows
- 3) Click "Hardware" tab
- 4) Click "Device Manager". Then device manager window shows
- 5) Double click "Computer" from the top of the list
- 6) Right click "ACPI Multiprocessor PC"
- 7) Select "Properties". Then "ACPI Multiprocessor PC properties" window shows
- 8) Click "Driver" tab
- 9) Click "Update Driver..." button, Then "Hardware update wizard" window shows
- 10) Click "No, not this time"
- 11) Click "Next >" button
- 12) Click "Install from a list or specific location (Advanced)"
- 13) Click "Next >" button
- 14) Click "Don't search, I will choose the driver to install."
- 15) Click "Next >" button
- 16) Select "ACPI (Advanced Configuration and Power Interface) PC"
- 17) Click "Next >" button
- 18) after re-configuration is done, reboot the computer

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**Quadro Graphics Card  
Installation guide**

## 1. Install Quadro graphics card driver

For Quadro graphics card driver, user can also download from [www.nvidia.com](http://www.nvidia.com),  
(For photogrammetry applications, it is highly recommended to use Quadro graphics card.)



Hover mouse over “Download Drivers” from the top menu from the website and submenu comes up. Then click “Download Drivers”



Select “Quadro” from Option 1 - Product Type menu”. Then select the right model from other menu. After all selection is made, click “Search”. Screen changes and click “Download Now” button. A small window shows and click “Save File” button.  
After download is done, install the driver.



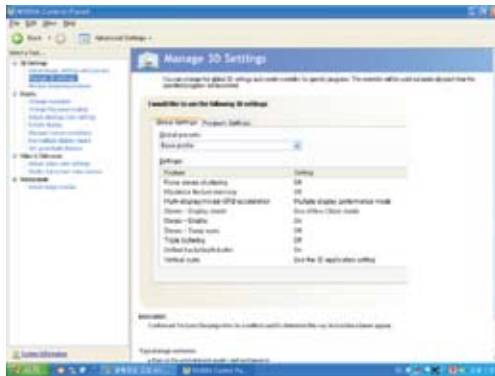
This step shows a step for 169.39 driver. For others, it is the same.



After the installation, Right click desktop then select "Properties". Then click "Settings" and then click "Advanced" at right bottom



Click graphics card tab. Then click "Start the NVIDIA Control Panel"



Click “Manage 3D settings”. Then turn on “Stereo - Enable” from the right list  
Change “Stereo - Display mode” to “Use nView Clone mode”



Click “Set up multiple display” from left list, Then click “The same on both displays (Clone)” from “1. Choose the nView display mode to use” question.

## Caution

1. When connect monitor to computer, please turn off monitor' s power,
2. When connecting True3Di monitor after other brand monitor is already connected, please check the frequency and resolution of the settings. Then connect.

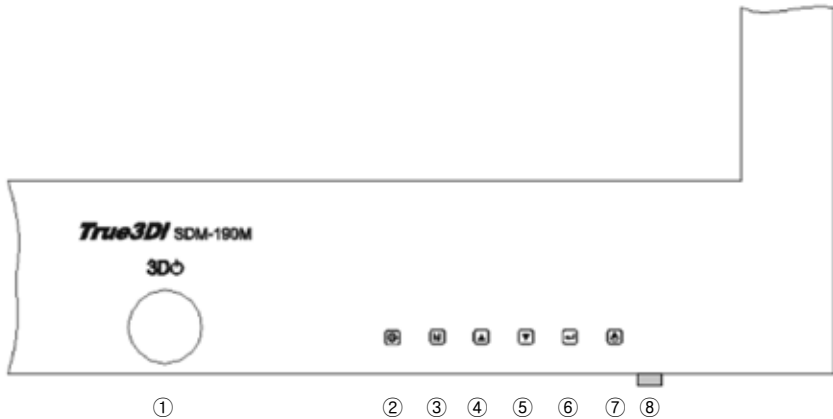
Note - for NuVision or other shutter glass type CRT monitors, frequency used for settings are either 100 Hz or 120 Hz, But for True3Di monitor has to be set at 60 Hz since it has LCD screens,

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**OSD Setting**  
**Monitor Menu Setting**

## 1. OSD Buttons



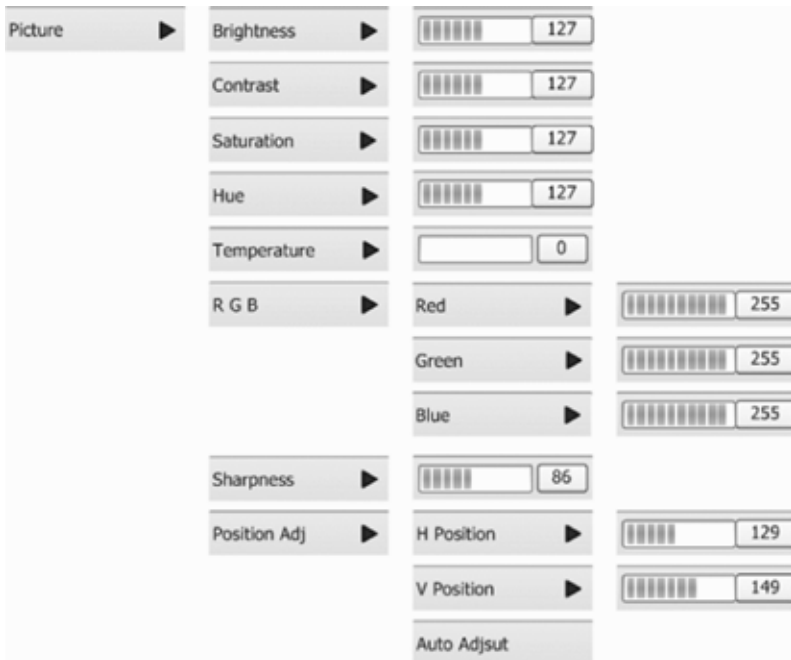
## 2. Button Description

- ① 2D/3D switch button : Power switch for top monitor.
- ② Input : Input signal selection button
- ③ Menu button - turn on and off menu screen.
- ④ Up button : move selection up on the menu list and (or) increase value on sub-menu list.
- ⑤ Down button : move selection down on the menu list and (or) decrease value on sub-menu list.
- ⑥ Enter : Execute the changes and (or) set selection.
- ⑦ Front monitor power button : Power switch for front monitor.
- ⑧ Front monitor LED indicator for power. Green - On, Red - Off.

### 3. Monitor menu Settings

#### 1) Picture Mode

- Press Menu button (④)
- Press Enter (⑦) to select. Then press up (⑤) and down (⑥) buttons to select desired sub-menu.
- Press Enter (⑦) to select desired sub-menu. Then change its value by pressing up (⑤) and down (⑥) buttons.
- After few seconds screen disappear. Or if you want to exit immediately, press Menu button (④).



## 2) Option Mode

- Press Menu button (④). Then “Picture OSD” shows.
- Press up (⑤) and down (⑥) buttons to select “Option Menu”
- Press Enter (⑦) to select “Option Mode” . Then press up (⑤) and down (⑥) buttons to select desired sub-menu.
- RGB Calibration is set from factory. DO NOT USE THIS MENU.
- Select “Factory Reset” only when Input source is selectable from the menu.
- H-Flip is set for Auto as default. When using a Mirror mode, change its value to “Manual” by pressing Enter (⑦) to enable.
- Test pattern may not be selectable.



## 3) Input Source Mode

- Press Input (③) to choose input source. Then press up (⑤) and down (⑥) buttons to select desired input source.
- Component may not be selectable.
- Press “Factory reset” from “Option mode” when “Input Source” is not selectable.



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**Important safety instructions**

## IMPORTANT SAFETY INSTRUCTIONS:

Important safety instructions shall be provided with each apparatus. These instructions shall be in a separate booklet or sheet, or be located before any operating instructions in an instruction for installation or use and supplied with the apparatus. This information shall be given in a language acceptable to the country where the apparatus is intended to be used.



The important safety instructions shall be entitled “IMPORTANT SAFETY INSTRUCTIONS”. The following safety instructions shall be included where applicable, and, when used, shall be verbatim as follows. Additional safety information is not prohibited from being included by adding statements after the end of the following safety instruction list. At the manufacturer’s option, a picture or drawing that illustrates the intent of a specific safety instruction is not prohibited from being placed immediately adjacent to that safety instruction.

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with a dry cloth.
- 7) Do not block any of the ventilation openings. Install in accordance with the manufacturer’s instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use the attachments/accessories specified by the manufacturer.
- 12) Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15) The socket-outlet shall be installed near the equipment and shall be easily accessible.

**WARNING:** TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

 <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p><b>CAUTION</b></p> <p>RISK OF ELECTRIC SHOCK DO NOT OPEN</p> </div> 	<p>The lightning flash with arrow-head symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.</p> <p>The exclamation point within a triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.</p>
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>	

**CAUTION:** TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

**WARNING:** FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

**CAUTION:** This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances such as radios and televisions, use shielded cables and connectors for connections.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to cause harmful interference in which case the user will be required to correct the interference at his own expense.





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