



# Digital Viewer™ Digital Microscope

## User's Manual

(DA-70351)

### Welcome

Thank you for choosing Digital Viewer™ digital microscope!  
The Digital Viewer™ digital microscope is an exciting new device to clear micro objects and has a wide applications, such as,

- ✓ *Industrial Inspection*
- ✓ *Computer Parts Inspection*
- ✓ *Telecom Module Inspection*
- ✓ *Scientific Teaching Tool*
- ✓ *Medical Analysis*
- ✓ *School Research Tool*
- ✓ *Insect Dissection / Examination*
- ✓ *Plant Dissection / Examination*
- ✓ *Skin Examination*
- ✓ *Textile Inspection*
- ✓ *Collections / Coin/ Jewelry Inspection*
- ✓ *Printing Inspection*
- ✓ *...etc.*

Digital Viewer Digital Microscope

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**Welcome** \_\_\_\_\_ **1**

**Please read this manual carefully before using Digital Viewer Digital Microscope.**

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## Product Specifications

- ◆ *Operation system: Windows XP/Vista and Windows 7*
- ◆ *PC interface: USB 2. 0 interface*
- ◆ *Image Sensor:1/4 inches(5:4)*
- ◆ *Effective Pixels: 1280(H)x1024(V), 640(H)x480(V), 320(H)x240(V)*
- ◆ *Frame Rate:1280 x1024/15fps or 640 x480/30fps*
- ◆ *Magnification: 10X -230X(17"LCD display)*
- ◆ *White Balance: Auto.*
- ◆ *Exposure: Auto*
- ◆ *Illumination: 8 white adjustable LEDs*
- ◆ *Power Consumption:Max.0.75W*
- ◆ *Size: 102mm (L) X30mm (R)*

## Safety Cautions

- ◆ *Avoid touching the lens with finger to dirty it and protect the product from electrostatic damage.*
- ◆ *Do not attempt to disassembly any part of this product.*
- ◆ *Do not attempt to service this product yourself. Opening the covers may expose you to dangerous voltage points or other risks.*
- ◆ *Storing and operating Digital Viewer digital microscope at Temp: 0°C ~ 45°C, Humidity: 45% ~ 85%, as this will extend Product life and prevent damage to the product.*
- ◆ *Do not allow this product to have contact with water or other liquids. If water or other liquids enter the product interior, immediately unplug the product from PC. Continued use of the product may result in fire or an electrical shock.*
- ◆ *Do not use any detergent or volatile solution, which will damage the camera case, painted surfaces and lens. Only use a lens brush on soft cloth to wipe clean.*
- ◆ *Do not place this product near a heat source or expose direct flame, avoid the lens damaged by high temperature or humidity*
- ◆ *If the lens is dirty, please use a lens brush on soft cloth to wipe clean. Avoid touching it with your fingers. Exercise care to avoid scratching the lens.*
- ◆ *Need to read Digital Viewer digital microscope User's Manual before using and storing it.*
- ◆ *To avoid electric shock, remove all electricity source before moving PC.*

## Package Contents

*The Digital Viewer digital microscope package includes the following:*

1. *Digital Viewer Digital Microscope Device*
2. *CD (Driver)*
3. *Tripod Stand),Brick Stand*
4. *Travel bag*
5. *Calibration pattern x 2pcs*
6. *Dust cover x2pcs*
7. *Gift Box*



## System Requirements

### **PC's system requirements:**

- 1) *OS: Windows XP /Vista and windows 7*
- 2) *CPU: Pentium IV 1.0G, Celeron, AMD Athlon or above*
- 3) *CD-ROM driver*
- 4) *Available USB2.0 port*
- 5) *Above 256MB RAM*
- 6) *HDD storage space: at least 100MB  
(for driver and application software installation)*
- 7) *Graphic card: 16-bit or above support Direct 9.0C*

## Recommended specification for performance:

- 1) OS: Windows XP SP2 or Vista SP1 or above
- 2) CPU: Core2- 2.0GHz or , AMD Athlon 64x2- 2.0GHz above
- 3) CD-ROM driver
- 4) Available USB 2.0 port
- 5) 1.0Gb RAM or above
- 6) 10GB available hard disk space or above
- 7) Graphic card: 32-bit above support DirectX 10 or above

## Software Installation Process

*The following instructions will guide you to through the process of installing the Digital Viewer digital microscope:*

- *Power on PC and place installation CD into CD-ROM drive, do not connect USB Cable from Digital Viewer device to PC before software installation.*
- *Select software installation, and follow the instructions to complete installation.*
- *As driver installation completed, and if system asking for re-start, please re-start the windows OS.*

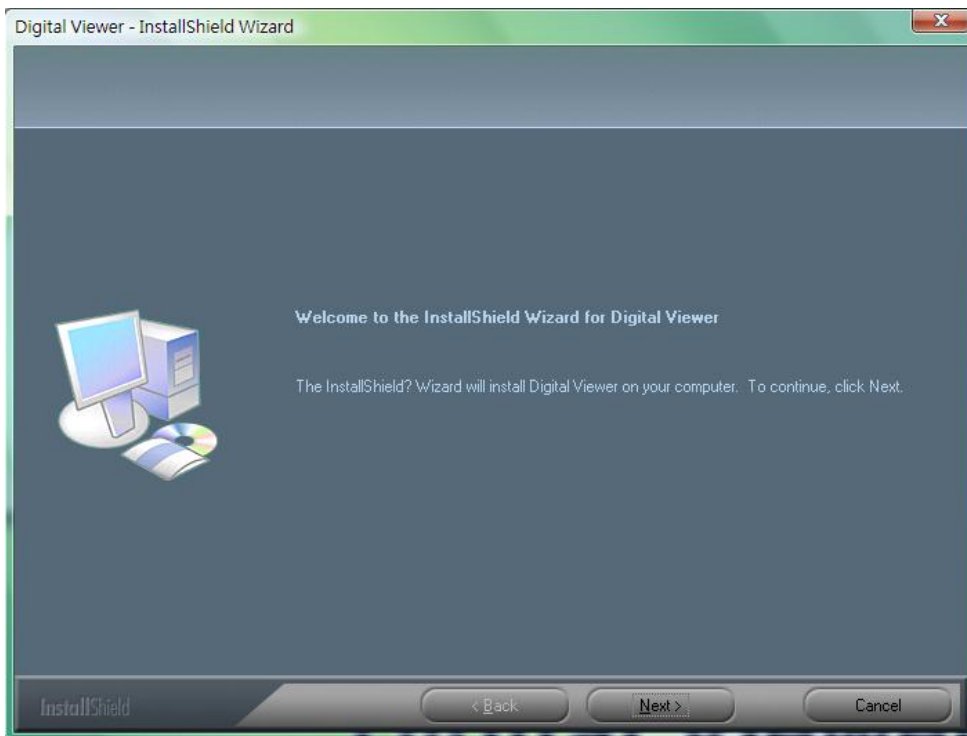
*Note: The driver needs to be installed only once for each computer.*

## Installation the Digital Viewer Application Software

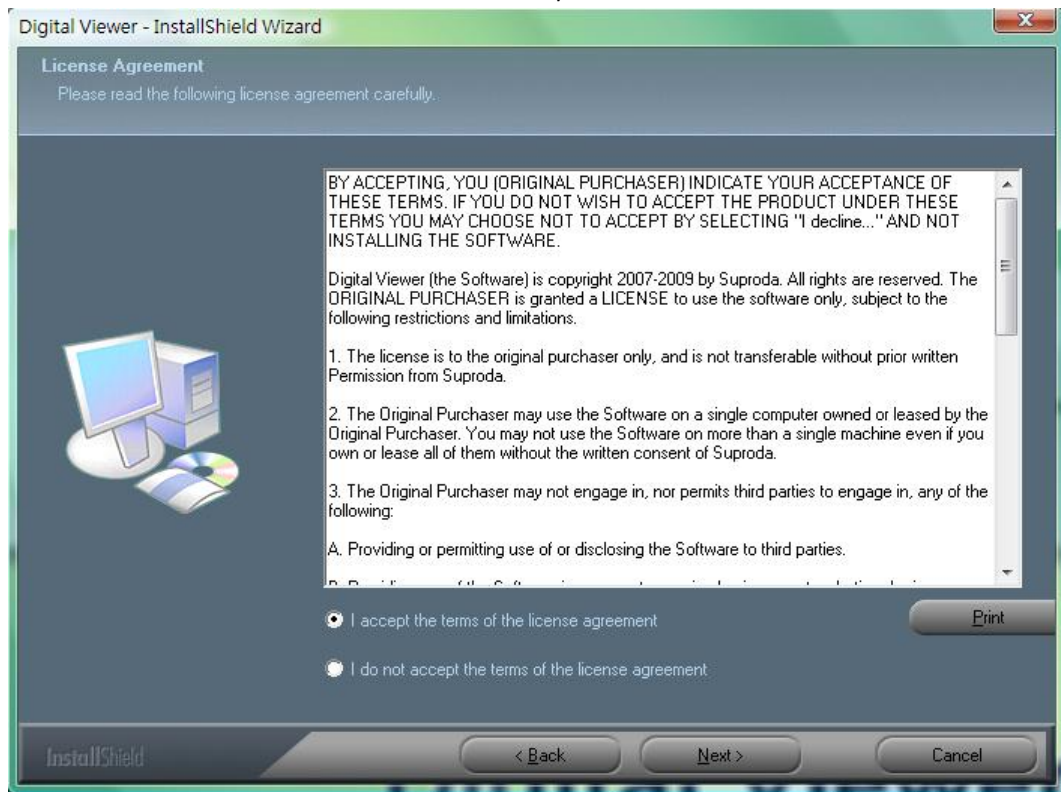
1. Place the installation CD into CD-ROM drive, the installation program should be started automatically. Otherwise, please execute the Digital Viewer.EXE directly from the CD.



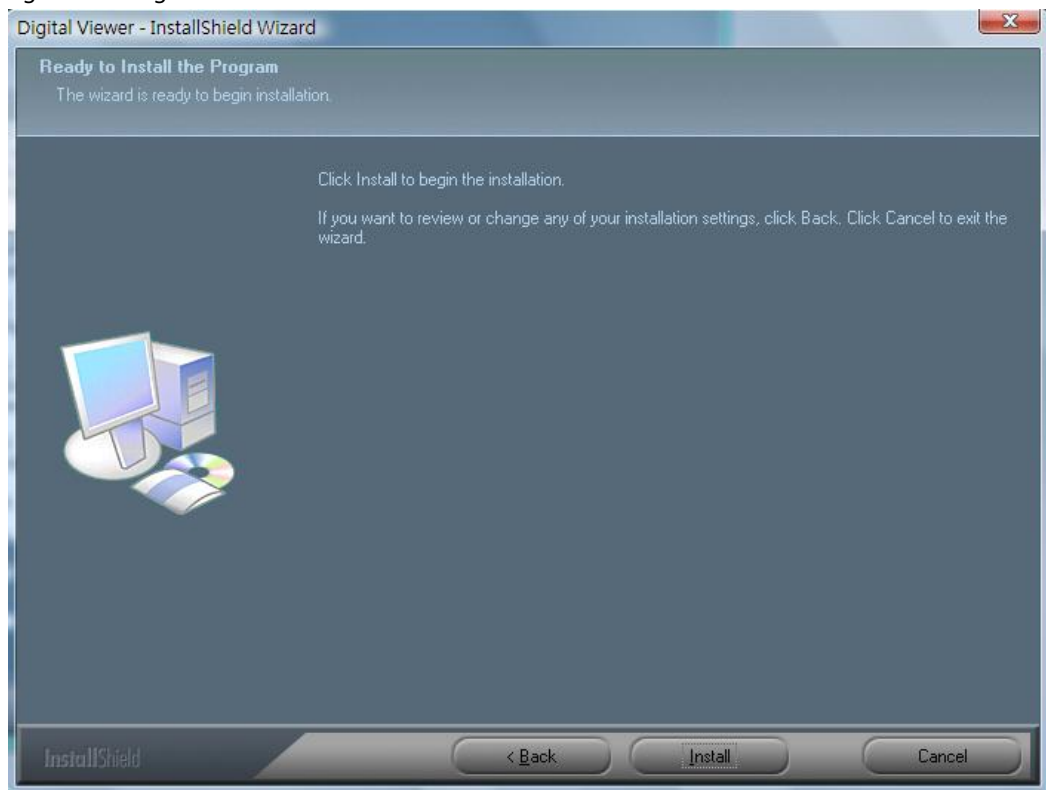
2. Press the key "Install Software", you will see the following popup .Press "Next" to proceed or "Cancel" to abort installation.



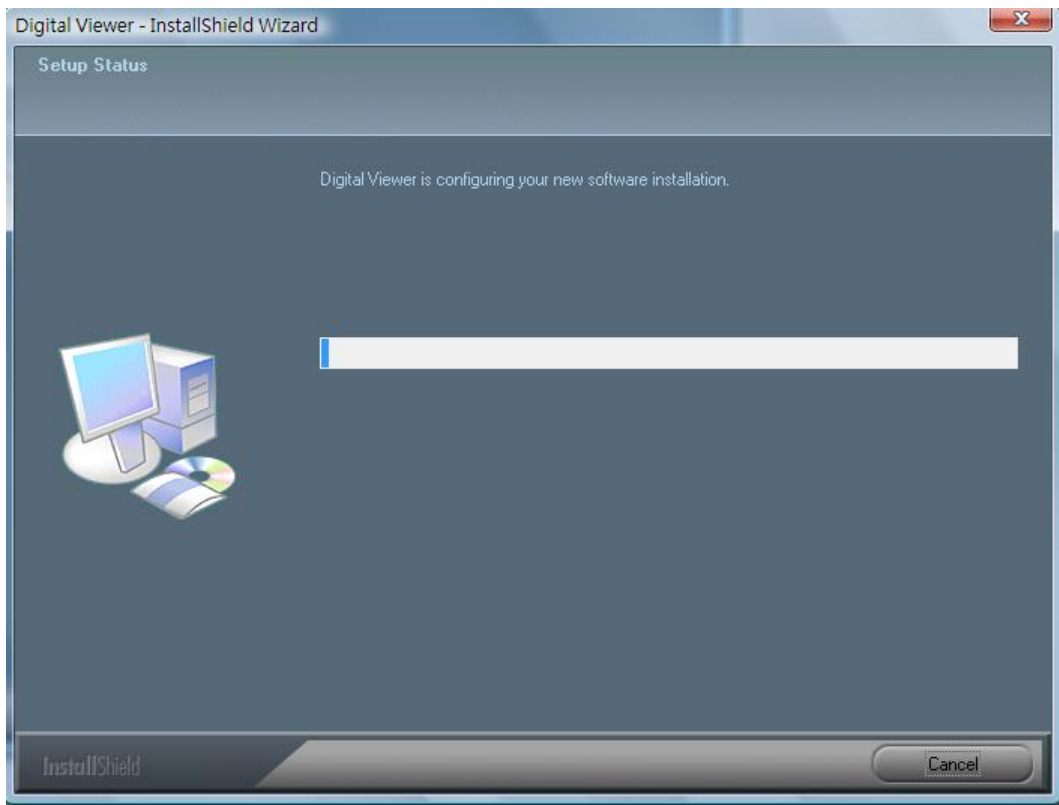
3. You will see the End User License Agreement. If you accept the License Agreement, then you can Click the “Next” button which is available to process, or “Cancel” to abort installation.



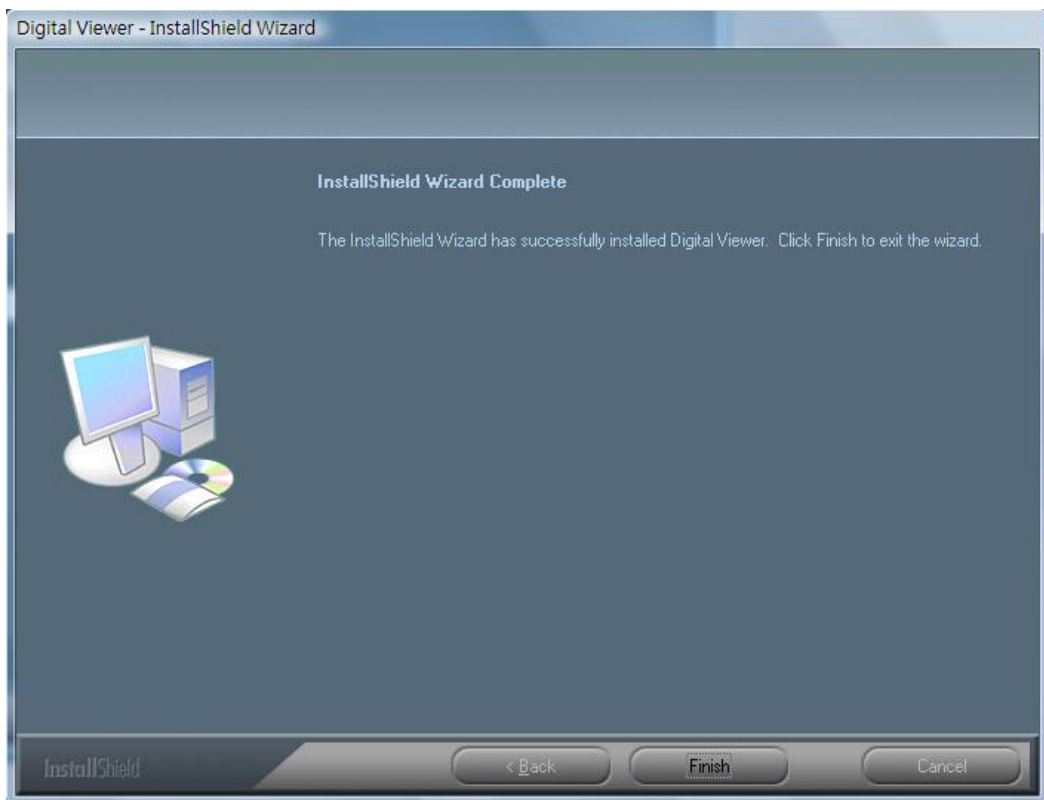
4. You will be able to install the application. Click “Install” to start to install, click “Cancel” button, it will abort installation. Click on “Back” if you wish to read the End User License Agreement again.



5. You will see the following progress bar below indicating that the installation is proceeding. If click "Cancel" button, it will abort installation.

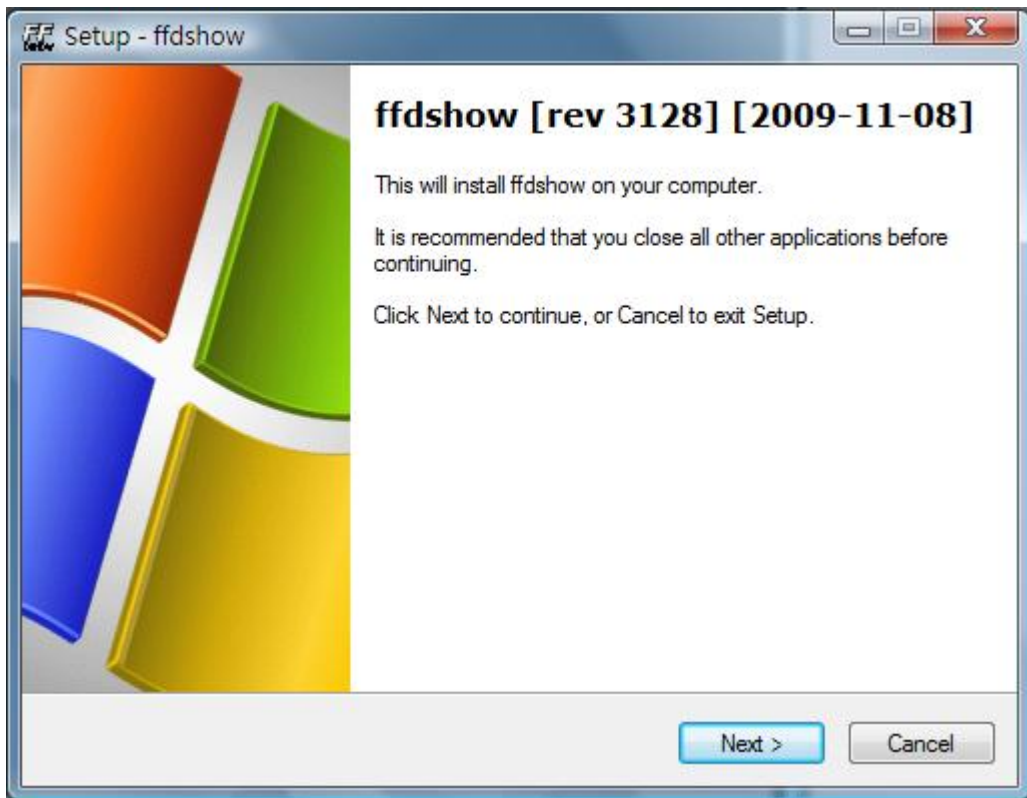


6. Wait until you see the following popup and press "Finish" button.





7. Please also install "ffdshow". And press "Next" to complete the installation.



8. Please plug USB cable to Digital Viewer digital microscope Device to connect with PC. System will automatically search and install the driver. Wait until you see this message that system show "Your new hardware is installed and ready to use".



Now the software installation was completed, you can use Digital Viewer digital microscope.

## Digital Viewer Digital Microscope Connection

*The following procedure will show you how to properly connect Digital Viewer digital microscope with your PC.*

*Connect USB Cable on Digital Viewer digital microscope to PC USB port*



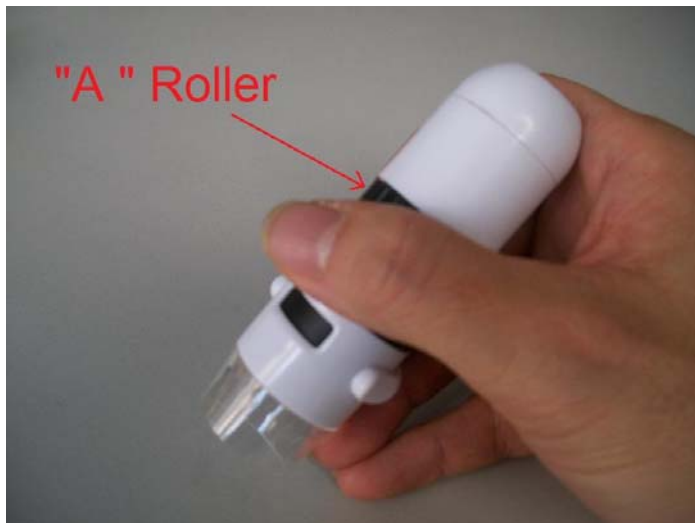
## Digital Viewer Digital Microscope Operation

The following process will show you how to operate Digital Viewer digital microscope.

- i. To have a right image, suggest holding Digital Viewer digital microscope as shown:



- ii. Put the to-be-observed object near the Digital Viewer digital microscope, the distance between both (object distances) don't exceed to 15CM.
- iii. Adjust the focus: Use any finger to rotate the "A" roller as shown, till the image is vivid.



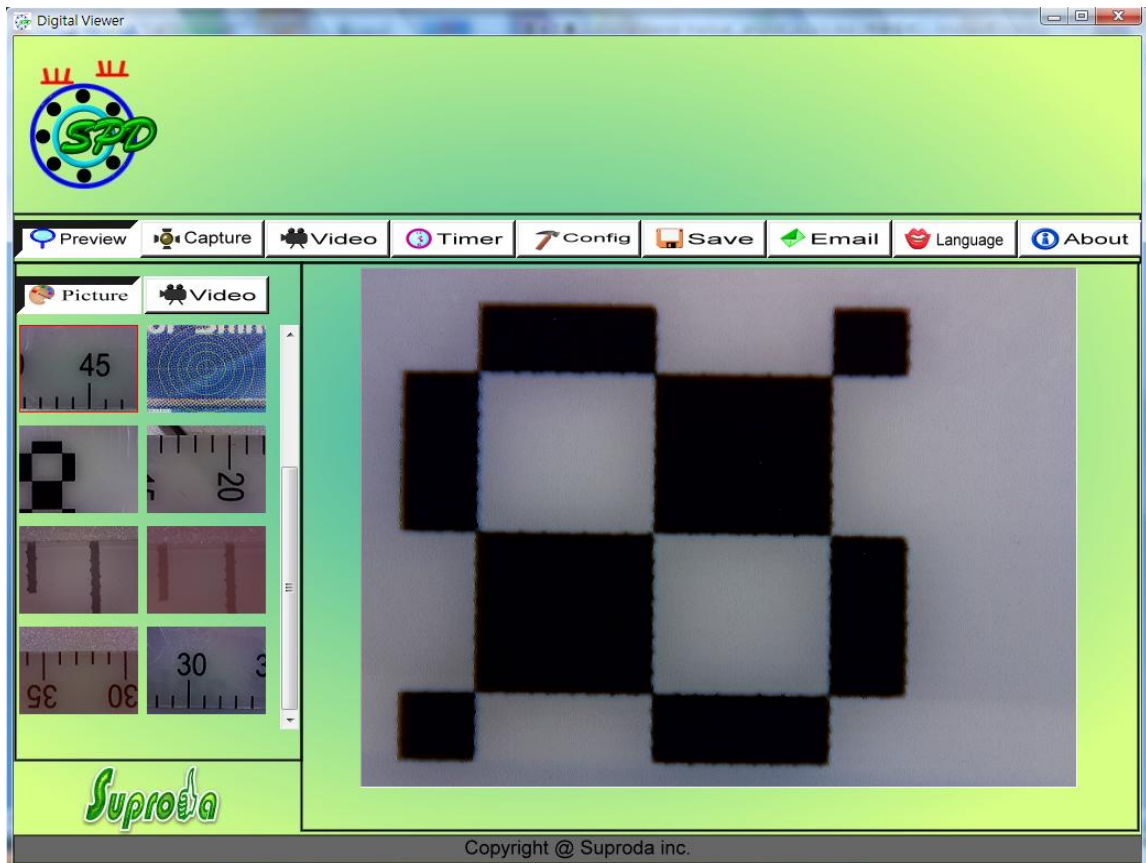
- iv. The Zoom times will be larger as Digital Viewer digital microscope is closer to the observed object.
- v. When the observed object is located at the top of the transparent cover, there are two focus positions, each with different zoom times (230x and 50X), can be found by rotating the roller. If you want 51X~229X and 231X~250X zoom times, you must take off the transparent cover to adjust the object distance.

# Digital Viewer Application Software

*Note: Before start Digital Viewer, please make sure Digital Viewer digital microscope has been connected to PC via USB line*



*Double-Click Digital Viewer icon on desktop, the Digital Viewer main screen will be shown as below:*



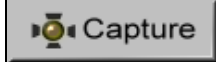
## Tool Bar Description

1. **PREVIEW** Button: Two statuses as below: Real-time images show on Preview area under the microscope viewing.



Ready to view Pictures or video has been taken.

2. : Take Picture



3. : Take Video




4. : Take time lapsed Pictures



5. : Setting--Picture and Video setting



6. : Save as--A took-picture can be saved as "jpg" or "bmp" to your specified disk.



7. : Email



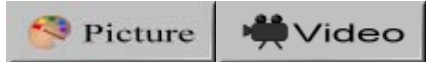
8. : Language



9. : About



10. : Picture / Video Folder




Picture/Video Folder is on the left side of the program, which contains the thumbnails of picture or video captured by the program.

The Pictures/video in the folder will not be automatically deleted when closing the program. Thus, it is suggested to save manually the needful picture or video, and then keep this folder clean for file security and program's performance concern.


## Take Picture



You can take picture by clicking the  icon on Tool bar or press this "Capture button-< C >" on Digital Viewer USB Cable Control device.

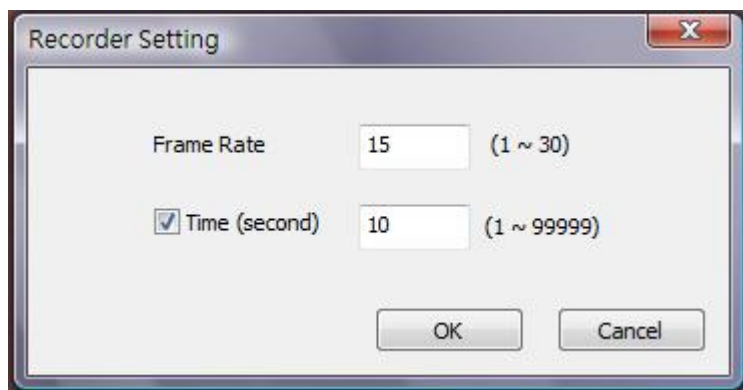
## Take Video



The Video can be taken by clicking  icon on Tool bar. (Note: This is Video folder as below).

Recorder setting:

1. *Frame rate: it is the number of frames or images that are projected or displayed per second. The number range is 1~30*
2. *Timer limit: it is the time of video recording to avoid video file size exceed to the space of disk. The number range is 1~99999*
3. *Stop: it is available to stop the video recording before the timer setting.*



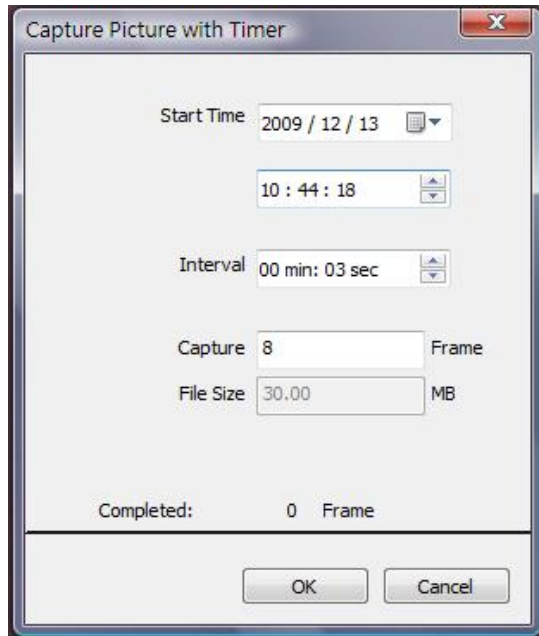
## Take time lapsed Pictures

You can take time lapsed Pictures by click the



icon of Tool Bar as below

shown.

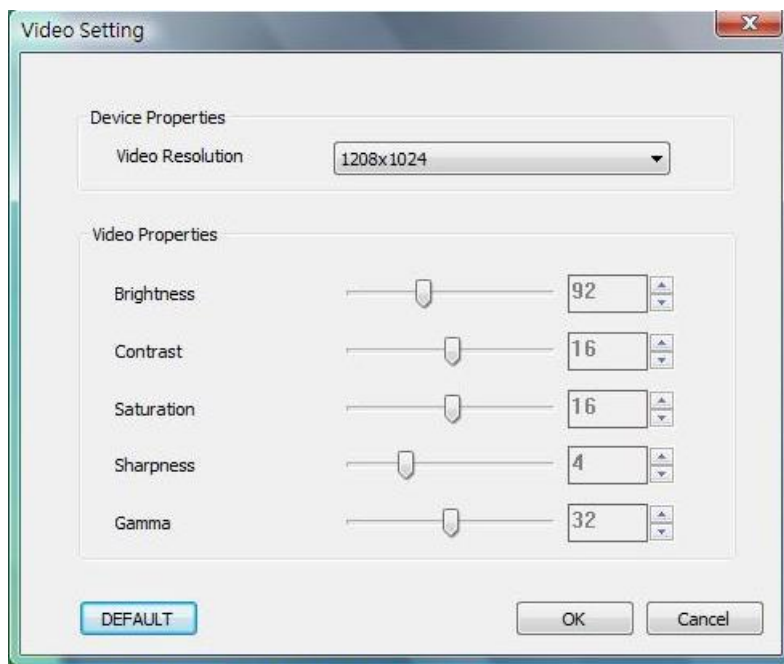


## Setting

You can select video resolution and set the parameter of video properties by click the



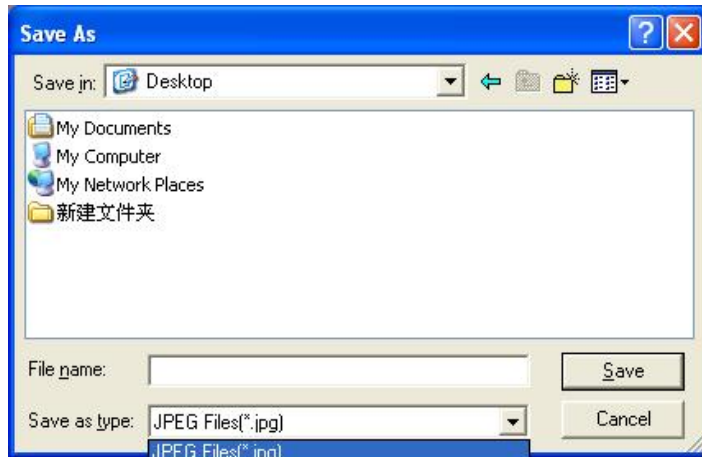
button.



## Save as



You can select a picture or video in Picture/Video folder, then click the  
Icon of Tool Bar, the file can be saved as “jpg” or “bmp” picture or video to your specified disk.  
Show as below.



## Email

You can send a selected picture or video as email attachment to other guy by clicking the




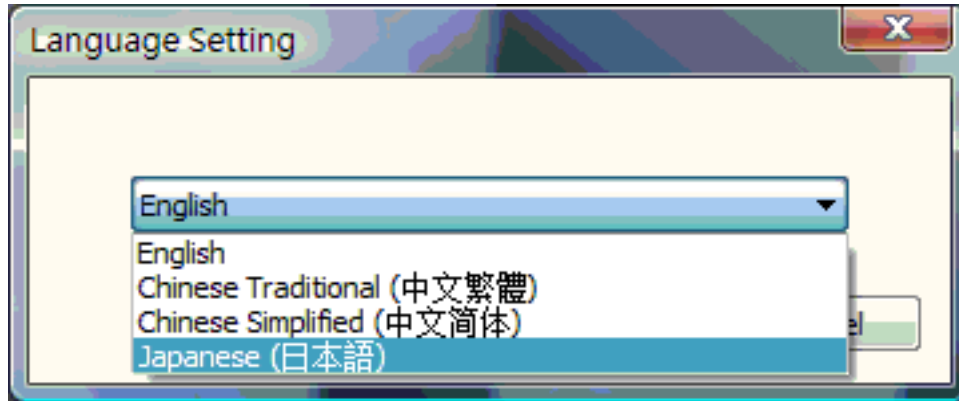
Icon of Tool Bar.






## Language

You can click the  icon to change the Application panel display language.




## About

You can click the  icon of Tool Bar for help. It will pop the following message:  
About Digital Viewer: you can check your present version via it as below shown:



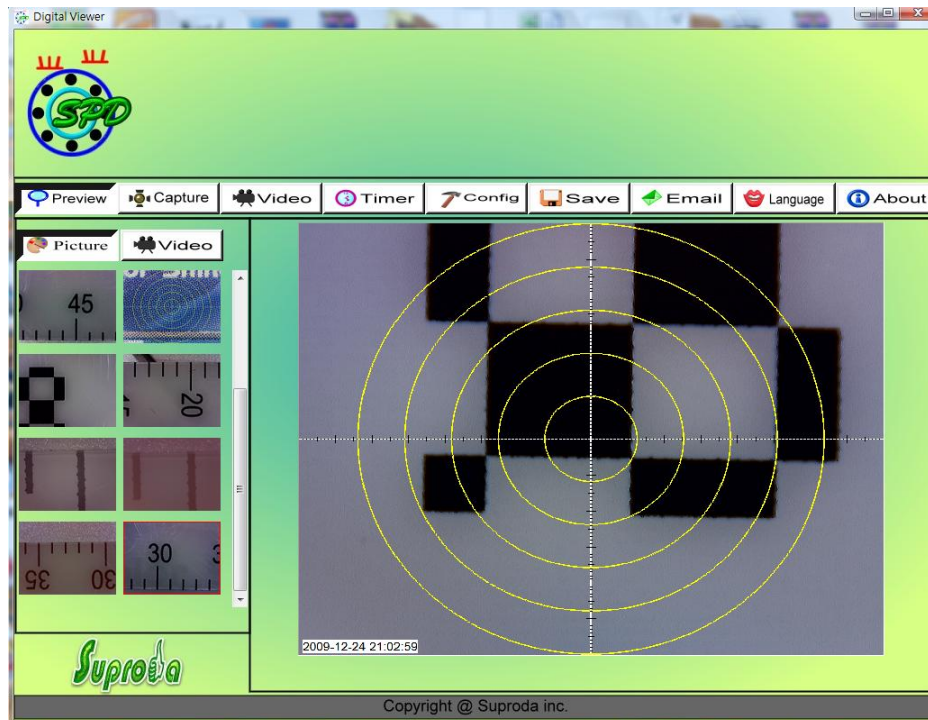
## Full Screen Display and Return

These displays of real time preview or picture view/video playback can be enlarged to full screen by clicking the  icon on right-top of program screen or double-clicking the left key of mouse in a site of the preview area.

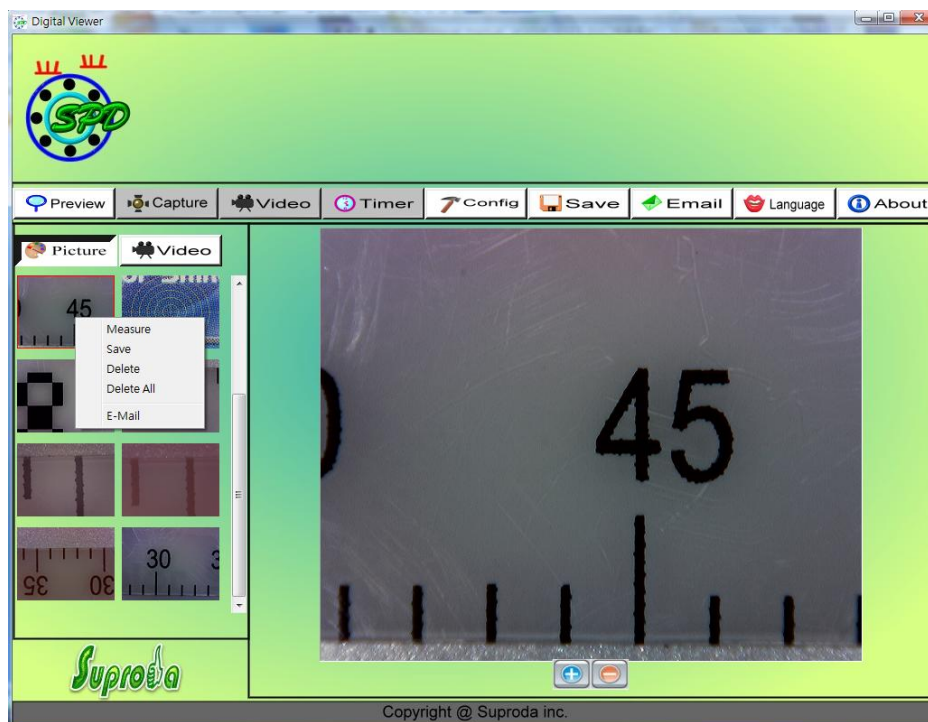
To return from full screen display mode, please press "ESC" key of keyboard or double-clicking the left key of mouse.

## Menu Function List

1. Add in cross line/coordinates/circles/timer on preview area: The mouse stay in the preview area, then click the right key and pop the menu as below. You can click the item you want. You also can capture the picture *with cross line/coordinates/circles/timer mark*.



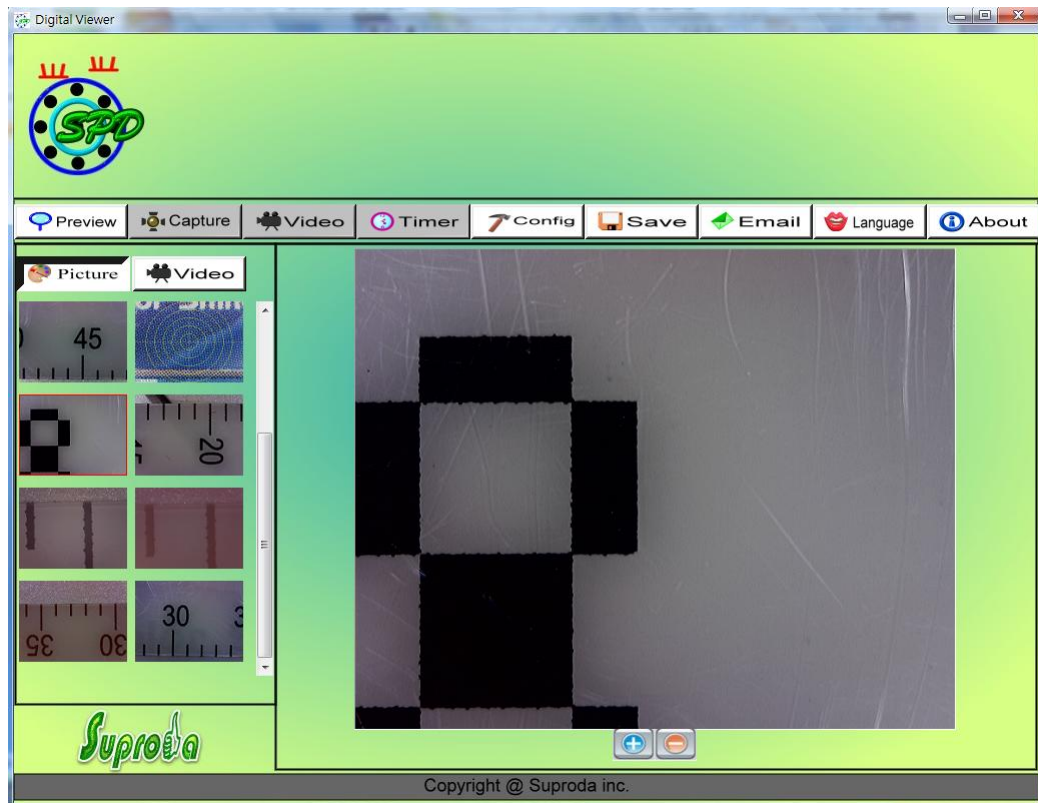
2. Select a file in picture/video folder, then clicking the right key of mouse and pop the menu as below.



Note: Open-- use "paint" to open it for picture file; use "windows media player" to open it for video file.

## View Picture

You can double-click the selected picture in Picture folder to view it as below shown;



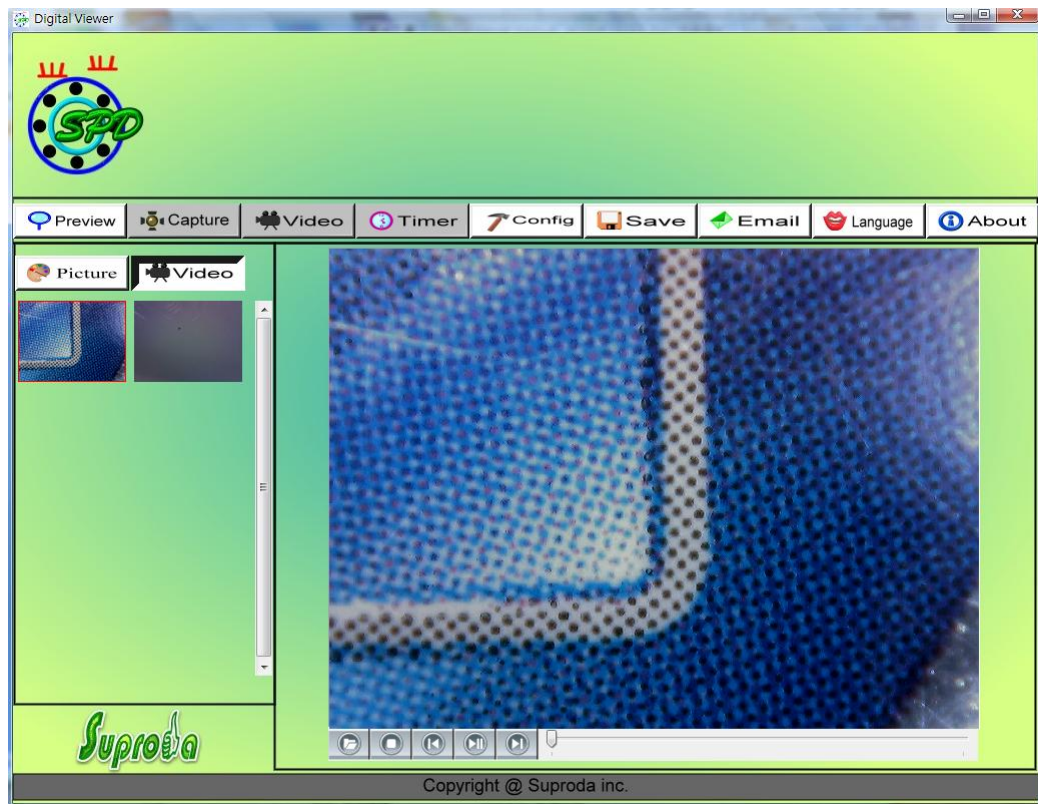
: Zoom In



:Zoom Out

## Video Playback

You can double-click the selected video in video folder to play back it as below shown



: Play/Pause



: Stop



: Open a avi file



: Start



: Last

# Troubleshooting

## Common Fix

- A. *If Digital Viewer device and Digital Viewer application were working OK and suddenly stops working properly, Please try the following:*
1. *Unplug or Power off Digital Viewer device from PC*
  2. *Close Digital Viewer program*
  3. *After waiting for 1 minute, plug or power on Digital Viewer device*
  4. *open Digital Viewer program*
- B. *For under Recommended PC specification (see 4th page), maybe Digital Viewer program does not work properly, Please use the application like AMCAP.exe: direct open it to work,(maybe need these steps: ToolBar->Device: select "Digital Viewer device; ToolBar->Option: select "Preview")*
- C. *For Vista first version OS system (Nor Vista SP1), maybe there is this issue: there are not any images (black screen) on preview area, please try: Toolbar->setting->default->Ok)*
- D. *After PC resume from standby or hibernate, maybe Digital Viewer will not work properly, please close it and re-open to try.*

## Q&A

Q1. *Why the object cannot be found on the display of the Digital Viewer microscope?*

- A: a. *Please check the all connection of all necessary cable and adapter are right*  
b. *Please check the power Led on Digital Viewer device is light.*  
c. *Please put power switch on LED, then the illumination LEDs are light.*

Q2. *Why cannot work when connect to PC?*

- A: a. *Check driver and Digital Viewer installation are completed.*  
b. *The USB cable is connected correctly to Digital Viewer Microscope and PC USB Port*  
c. *Please try to pitch all switches on varied status.*

Q3. *How to install Digital Viewer application and driver?*

- A: a. *Do not connect USB cable to Digital Viewer Microscope before driver installation completed.*  
b. *Place installation CD into CD-Rom drive, select a right product name of "driver installation".*

Q4. *How to connect "Digital Viewer"?*

- A: a. *complete driver installation, connect USB cable to Digital Viewer Microscope, and then Execute "Digital Viewer" application Program.*

*b. Please check: open Digital Viewer->setting to see if "Device name" item has an optional device.*

*Q5. How to uninstall driver and Digital Viewer software?*

*A: In order to uninstall driver and Digital Viewer software, click on the uninstall utility from the Start button ->Control Panel -> Add or Remove Programs.*

*Q6. When connecting to PC, why the real-time display is slow or unsmooth?*

*A: a. Probably your PC's configuration is not sufficient enough. Please check the Recommended PC specification as mentioned in this User's Manual.*

*b. Probably your PC's CPU or memory is overloaded by executing too many applications software. Try to shut down other applications and restart your PC to release the memory.*

*c. Probably your system has being attacked by virus, which may dramatically degrade your system's performance.*

*Q7. What should we do, if Digital Viewer Microscope is not working normally?*

*A: a. Please restart the system by disconnecting all the cables from Digital Viewer Microscope, Wait for about 10 sec., re-connecting the cables to restart.*