LW Scientific

d-VID

Instruction Manual

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 x1024/15ftps or 640 x480/30ftps
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

-Be sure to unplug all other USB ports so that your d-VID camera software operates correctly.

-Avoid touching the lens with finger to protect the product from electrostatic damage.

-Do not attempt to disassembl 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 d-VID digital microscope at Temp: 0°C ~ 45°C, Humidity: 45% ~ 85%, as this will extend pooduct life and prevent damage.

-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 soft lens cloth to wipe clean.

-Do not place this product near a heat source or expose direct flame

-If the lens is dirty, please use a soft cloth to wipe clean. Avoid touching it with your fingers. Exercise care to avoid scratching the lens.

Package Contents

1. d-VID Digital Microscope Device
2. CD (Driver)
3. Tripod Stand
4. Travel bag
5. Calibration pattern x 2pcs
6. Dust cover x2pcs

PC System Requirements and Recommended Specifications

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

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

1. Power on PC and place installation CD into CD-ROM drive. Do not connect d-VID USB Cable to PC before software is installed.
2. Select software installation, and follow the instructions to complete installation.
3. As driver installation completed, please re-start the Windows OS.

1   Place the installation CD into CD-ROM drive. The installation program should be start automatically. Otherwise, please execute the software directly from the CD.

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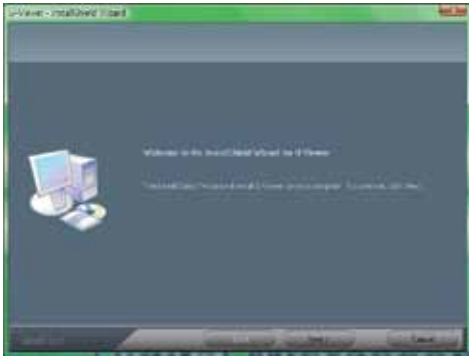

3   You will see the End User License Agreement. If you accept the License Agreement, then you can Click the "Next" button which is available to process, or "Cancel" to abort installation.
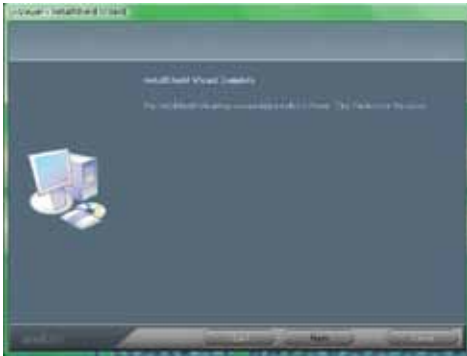

4   Click "Install" to start to install, click "Cancel" button, it will abort installation. Click on "Back" if you wish to read the End User License Agreement again.
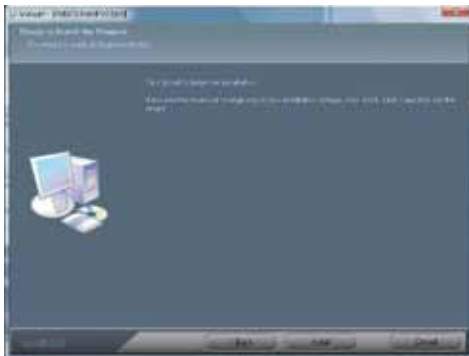
5   The following progress bar below indicates that the installation is proceeding. If click "Cancel" button, it will abort installation.
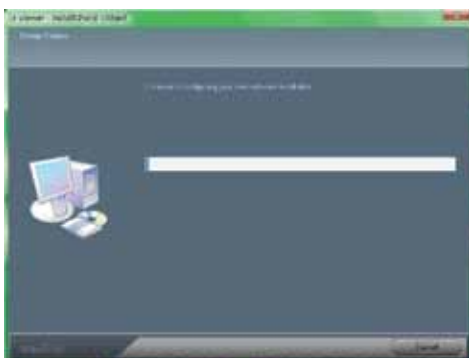
6   Wait until you see the following popup and press "Finish" button.

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

8   Please plug d-VID USB cable toyour PC. System will automatically search and install the driver. Wait until you see this message.

d-VID Operation

1   To have an upright image, hold the d-VID microscope camera as shown:

2   Place object near the d-VID digital microscope. The distance between the camera and the object should not exceed 15cm.

3   Adjust the focus: Use any finger to rotate the "A" roller as shown, until the image is vivid.

A

4   The zoom will be larger as d-VID digital microscope is closer to the observed object.

Application Software

Note: Before start d-VID, please make sure it has been connected to PC via USB line

Double click **Digital Viewer** icon on desktop, the d-VID main screen will be shown as below:
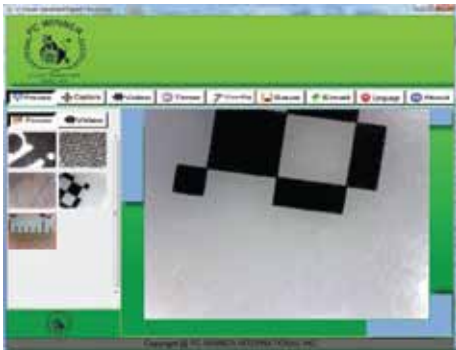
How To's

Take a picture:

You can take picture by clicking the **CAPTURE** icon on Tool bar or press this button on d-VID USB Cable Control device.

Capture video:

The Video can be taken by clicking the **VIDEO** icon on Tool bar. (Note: This is Video folder 15 shown on next page).

Recorder setting:

1. **Frame rate**: The number of frames or images that are projected or displayed per second. The number range is 1~30.

2. **Timer limit:** The time of video recording to avoid video file size exceeding disk space. The number range is 1~9999.

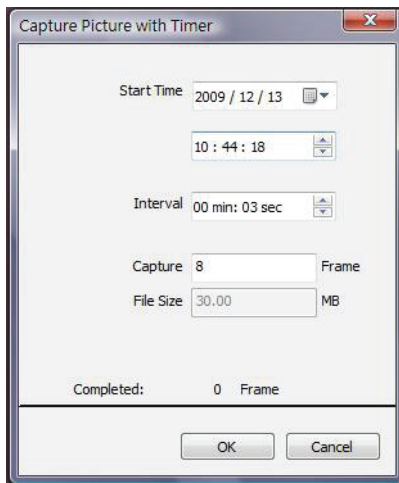3. **Stop**: it is available to stop the video recording before the timer setting.
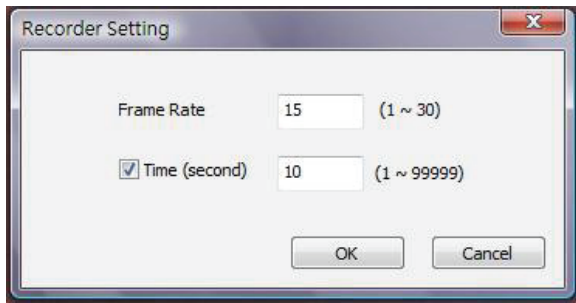
Take time lapsed pictures

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

Capture video:

You can take time lapsed Pictures by clicking the **TIMER** icon of Tool Bar as below shown.

Settings:

Select video resolution and set the parameter of video properties by click the **CONFIG** button.
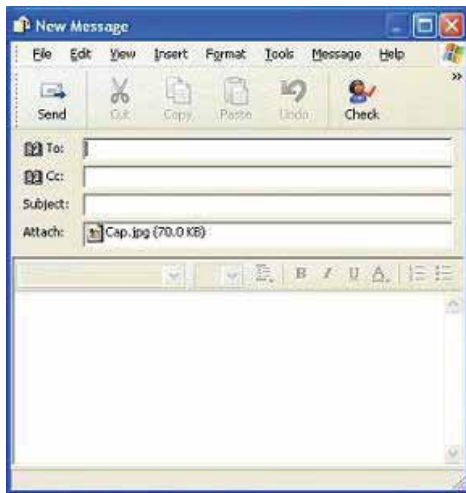
Save as:

To select a picture or video in Picture/Video folder, click on the picture. You can save the image by clicking the **SAVE** button or right-clicking on the image and select **SAVE**. The file can be saved as a "jpg", "bmp", "png" or "gif"

Email:

You can send a selected picture or video as email attachment by clicking the *EMAIL*.

Language:

You can click the *LANGUAGE* icon to change the Application panel display language.
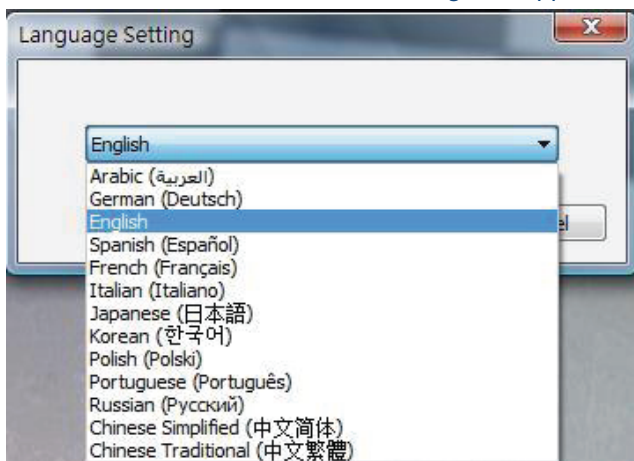
About:

You can click the **ABOUT** icon in the Tool Bar for help. It will pop the following message:

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] icon on right-top of program screen or double-clicking the left key of your mouse in a site of the preview area.

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

1 Add in cross line/coordinates/circles/timer on preview area:

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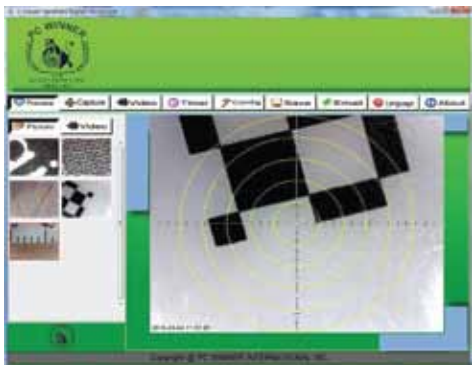
2 Select a file in picture/video folder, then clicking the right key of mouse and pop the menu as below.

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

View Picture:

Double-click the selected picture in Picture folder to view it as below shown:

  Zoom In

  Zoom Out

Video playback:

Double-click the selected video in video folder to play back it as below shown:

  Play/Pause   **Start**

  Stop   **Last**

  Open a avi file

If software suddenly stops working:
      1. Unplug or Power off d-VID device and disconnect from PC
      2. Close program
      3. After waiting for 1 minute, plug or power on d-VID device

There are no images or black screen. For Vista first version OS system (Nor Vista SP1):
      1. Toolbar->setting->default->Ok

Why can't I find the object on the display of the d-VID microscope?
      1. Please check the all connections of all the cables. Make sure the adapters are correct
      2. Please check the power LED on d-VID device
      3. Please put power switch on LED

Why can't the d-VID work when connected to my PC?
      1. Make sure the driver and installation are completed
      2. Check the USB cable and see if it is connected correctly to d-VID and PC USB port

How to install d-VID software and driver?
      1. Do not connect USB cable to d-VID mcroscope before driver installation is completed
      2.   Place installation CD into CD-Rom drive, select the correct product name of "driver installation"

How to connect d-VID?
      1. Complete the driver installation, connect USB cable to d-VID microscope, and then start Digital Viewer software

How to uninstall driver and d-VID software?
      1. Select on the uninstall utility from the Start button ->Control Panel -> Add or Remove Programs

When connecting to PC, why the real-time display is slow:
      1. Your PC's configuration does not have sufficient space. Please check the Recommended PC specification as mentioned in this manual
      2. 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
      3. Your system has being attacked by virus, which may dramatically degrade your system's performance

What should we do if d-VID Microscope is not working properly?
      1. Please restart the system by disconnecting all the cables from d-VID Microscope. Wait for approx. 10 seconds and then reconnect cables
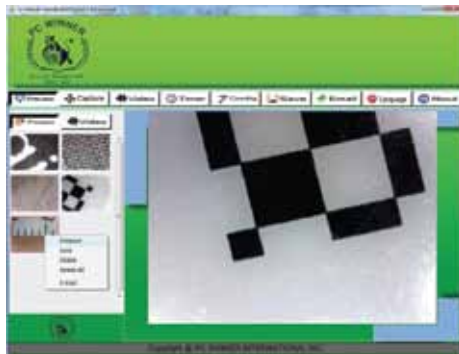
1   Select an image in preview browsing folder by right clicking the image. The following menu will appear, then click **MEASURE.**

2   Click the "Measure" key, then the measurement feature will open as seen below:

Calibration
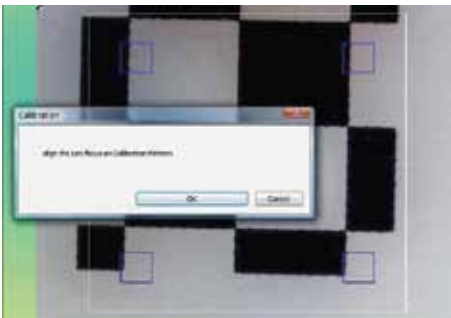
1   Click Calibration icon ⊕, and set the magnification to 50x for standard magnification.

**1** Click Calibration icon ⊞ , and set the magnification to 50x for standard magnification.

2 Put the d-VID microscope on the Calibration Pattern sheet, you can see the black/white block on the screen.

3 Align the Calibration pattern block (black and white) to the white rectangle edge (use the " PgUp" key on your key board to enlarge the white rectangle or push the "PgDn" to shrink the white rectangle).
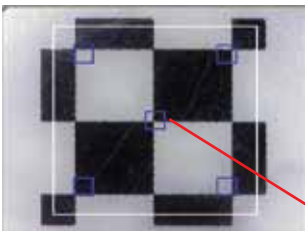
Use the PgUp key to enlarge the white rectangles.
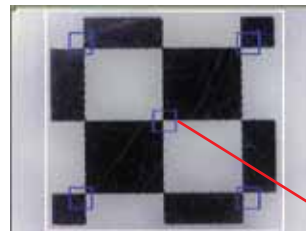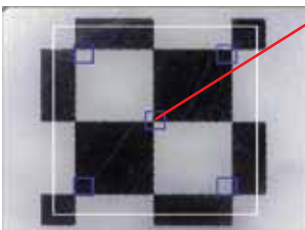
Use the PgDn key to shrink the white rectangles.
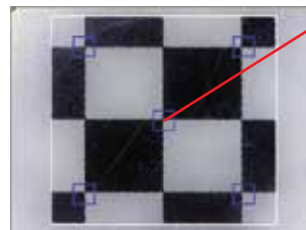
4   There are 5 blue rectangles in the inside of the white rectangles All of the blue rectangles have one red point. When the 5 red points align on the cross point of the black and white blocks, click "OK" or press "enter" key to run Calibration.
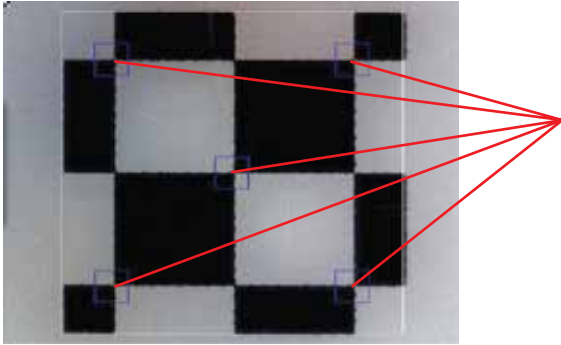
Drawing with Measurement

1   Click to define the "size" and "color" of line on right of the image window shown below:
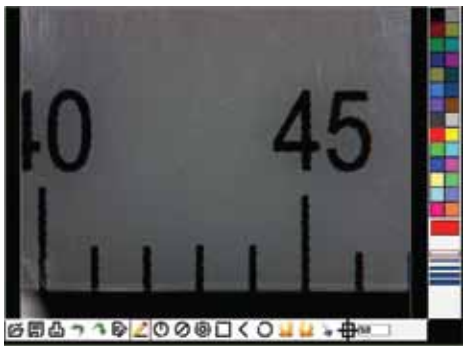
- Click to select one of the drawing tools on tool-bar above of the image window by drawing, and then start the drawing in image window.

- To show the measurement data on the image, left click on the image where you would like the data to be displayed. The data will then appear on the image in the colour and font selected. (Note: right click will escape the measurement.)

- Click the right key of the mouse to end this measurement.

Notice: you can cancel the drawing operation with "Esc" at any time.

Open: Open a file ("jpg" or "bmp" format is supported), that you want to edit or measured.

Save: Save the operating picture in the picture folder.

Print: Print the current picture on the current state.

Undo: Go back to the previous drawing state.

Redo: Forward to the next drawing state.

Text: Type text onto picture.

Line: Draw line and measure the length.

Radius Circle: Draw circle with radius and measure the area of the circle.

Diameter Circle: Draw circle with diameter and measure the area of the circle.

Three Point Circle: Draw a circle with three points and measure the area of the circle.

Rectangle: Draw a rectangle and measure the area of the rectangle.

Angle: Draw an angle and measure the degrees of the angle.

Polygon: Draw the polygon and measure the area in polygon. (Notice: complete the drawing with "C" or middle button-wheel of mouse.)

Clockwise: Allow to clockwise the picture in the editing window.

Counter-clockwise: Rotate the image counter-clockwise in the editing window.

Font: select the font, size or colors of characters.

Calibration: Semiautomatic calibration by Calibration pattern sheet.

Magnify: Key the correct magnification in the block according the "A" Roller indication.